HOW HIGH SCHOOL STUDENTS OF THREE LEVELS OF READING
ACHIEVEMENT PERCEIVE THE READING PROCESS

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CHAPTER 1

INTRODUCTION

Background of the Problem

Downing (1980) stated that whenever individuals
attempt to learn a new skill, their first reaction will
be to try to understand what they must do to become
skilled performers. This effort to comprehend the task--
its components, the functions of the skilled act, the
concepts needed for talking and thinking about the task--
seems to be characteristic of all skill development.
Moreover, the ability to think and reason about the tasks
involved in mastering the skill seems to be especially
important in verbal skills such as reading (pp. 167-168).

Canney and Winograd (1979) theorized that individuals
develop "schemata" about the nature and functions of the
reading process, just as they develop schemata about
other classes of events, situations, etc. Each person's
schemata about reading evolves from his or her experiences
with reading, including the instructional methodology to
which he or she has been exposed. These schemata influence
what individuals think they must do and learn to do in
order to become skilled readers. If Canney and Winograd
are correct (and Rumelhart in 1977 cautioned that schema

theory, although a promising and useful tool in guiding theoretical and experimental thinking, is still in its infancy), then "knowledge of 'what reading is' should have a potent influence on how and when a person utilizes reading skills and strategies to extract information from text" (Canney & Winograd, 1979, p. 1).

It is likely that good readers and poor readers have very different perceptions (schemata) of the reading process. The poor reader may possess faulty or incomplete schemata of the reading process, seeing it primarily as a passive, mechanical, teacher-centered activity, the goal of which is rapid, precise decoding of individual words. Good readers may voice similar perceptions; however, their reading performance typically does not reflect such an orientation. Inappropriate schemata of reading may contribute to ineffective reading performance; moreover, it is theorized that until the reader's schemata change, no amount of additional skill instruction will significantly improve reading performance. The reader's schemata must be modified so that he or she perceives reading as a language-based activity, the primary object of which is comprehension (Canney & Winograd, 1979).

Even a specious review of reading research reveals innumerable studies on the differences between the reading

performance of "good" and "poor" readers. An examination of Golinkoff's (1975-76) review of studies dealing with comprehension processes of good and poor readers confirmed the need for additional research on secondary level students in general, and on how they conceptualize the reading process in particular. While Golinkoff found no definitive factor emerges as the distinguishing one between good and poor readers, the pattern of differences in their reading behaviors seemed to support the notion that these two groups hold divergent orientations toward the reading process. Consequently, employing instructional methodologies which deliberately guide the poor reader (as well as the beginning reader) to develop an accurate, realistic schema of reading may prove to be a pivotal factor in helping them to become effective readers.

Statement of the Problem

This study was conceived of as basic, descriptive, heuristic research. It was guided by these research questions and null hypotheses:

Question 1

As measured by four tasks, are there differences in the perceptions of the reading process among three groups

of ninth graders who read at low, middle, and high reading levels?

With regard to the Open-Ended Interview and the Forced-Choice Questionnaire, the following null hypotheses were tested at the .01 level of significance.

Open-Ended Interview.

Hypothesis 1: There are no differences among the total number of responses low, middle, and high readers give in each of the Open-Ended Interview response categories for the first seven questions.

Hypothesis 2: There are no differences among the number of responses in each category that low, middle, and high readers give to each of the first seven Open-Ended Interview questions.

Forced-Choice Questionnaire.

Hypothesis 3: There are no differences among the total number of responses low, middle, and high readers give in each of the Forced-Choice Questionnaire response categories for the first seven questions.

Hypothesis 4: There are no differences among the number of responses in each category that low, middle, and high readers give in response to each of the first seven Forced-Choice Questionnaire questions.

With regard to the Silent Reading Task Cards and the Oral Reading Task Cards, the following questions were examined.

Silent Reading Task Cards.
Oral Reading Task Cards.

Question A: Are there differences among the total number of responses low, middle, and high readers give in each of the response categories in their ratings of the reading of the five Task Cards?

Question B: Are there differences among the number of responses low, middle, and high readers give in each response category in their ratings of the reading of the individual Task Cards?

Question C: Are there differences among the total number of responses low, middle, and high readers give in each of the response categories in their ratings of the comprehension of the five Task Cards?

Question D: Are there differences among the number of responses low, middle, and high readers give in each response category in their ratings of the comprehension of the individual Task Cards?

Question 2

As measured by four tasks, are there differences in the perceptions of the reading process within each of

three groups of ninth graders who read at low, middle, and high reading levels?

With regard to the Open-Ended Interview and the Forced-Choice Questionnaire, the following questions were examined.

Open-Ended Interview.

Question A: Are there differences within each group among the total number of responses given in each of the Open-Ended Interview response categories for the first seven questions?

Question B: Are there differences within each group among the number of responses given in each of the Open-Ended Interview response categories to each of the first seven questions?

Forced-Choice Questionnaire.

Question C: Are there differences within each group among the total number of responses given in each of the Forced-Choice Questionnaire response categories for the first seven questions?

Question D: Are there differences within each group among the number of responses given in each of the Forced-Choice Questionnaire response categories to each of the first seven questions?

With regard to the Silent Reading Task Cards and the Oral Reading Task Cards, the following questions were investigated.

Silent Reading Task Cards.
Oral Reading Task Cards.

Question A: Are there differences within each group among the total number of responses given in each response category in the ratings of the reading of the five Task Cards?

Question B: Are there differences within each group among the number of responses given in each response category in the ratings of the reading of each of the five Task Cards?

Question C: Are there differences within each group among the total number of responses given in each response category in the ratings of the comprehension of the five Task Cards?

Question D: Are there differences within each group among the number of responses given in each response category in the ratings of the comprehension of each of the five Task Cards?

Question 3

For each subject and within each group, will there be consistent information elicited by questions 1 through 7

on the Open-Ended Interview and the Forced-Choice
Questionnaire?

Question 4

Within each group, is consistent information
elicited by the Silent Reading Task Cards and the
Oral Reading Task Cards?

Question 5

According to responses elicited by questions 8 and
9 on the Open-Ended Interview and the Forced-Choice
Questionnaire, are there differences in the instructional
models of reading of low, middle, and high readers?

Rationale

Canney and Winograd (1979) have stated that

a reader's perception of the tasks of reading--
his/her schema of reading--guide [sic] his or
her behavior and influence [sic] how a reader
uses current knowledge, decoding proficiency,
and study strategies (p. 44)

and that

until we have a clearer perception of what each
child knows about the reading process, it will
be difficult to prescribe instructional tech-
niques which will reliably enhance students'
comprehension of text. (p. 49)

The diagnostic and resultant instructional usefulness in
knowing how a student perceives the reading task are
obvious. Canney and Winograd reported further that their

data supported the thesis that students' schemata of reading can be used to differentiate between higher and lower comprehenders. The need for studying children's perceptions of the reading process has been recognized for more than 30 years, and yet Canney and Winograd commented that they were "struck with the observation that so few educators have been interested in ascertaining how students perceive learning tasks in school" (p. 19).

Also striking is the need for meaningful research on secondary level and adult reading in general (Kavale & Lindsey, 1977; Kingston, 1972) and in the area of perceptions of the reading process in particular. Cramer (1978) reported that "research studies into beginning processes and instructional methods have been estimated to outnumber those dealing with the upper grades by a ratio of six to one" (p. 153), and described the amount of secondary school reading research as "disproportionately low" (p. 137). Existing research on readers' perceptions of the reading process and their metalinguistic awareness demonstrates this tendency of focusing research on the younger or beginning reader. Almost no research has been conducted on how secondary level or adult readers--both good and poor readers--perceive the reading process.

Increased knowledge in this area may help explain the gap between some students' competence to understand and their comprehension performance. Overall, progress in adult basic education (ABE) research has been disappointing. According to Kavale and Lindsey (1977), the ABE movement has made little progress in promoting adult literacy; few research studies have generated new insights about the nature of the individuals' reading processes. Present ABE classes may include an increasing number of high school graduates who are functionally illiterate. Canney and Winograd (1979) pointed out that interest and experience were necessary, but not sufficient conditions for reading to occur. Moreover, lack of progress by these poor readers could not be explained "solely by deficits in knowledge, syntactic complexity of text, or lack of instruction in reading" (pp. 10-11). The problem may stem partially from the type of instruction they received and their resultant inappropriate schemata of reading as a process: they may not perceive it as a meaning-centered activity. Therefore, they may not spontaneously employ the comprehension techniques which they do know because their schemata of reading does not include generalizing reading instruction to other (non-school or non-academic) reading situations (Canney &

Winograd, 1979, pp. 10-11). For the poor readers in
particular, their initial reading experiences may handicap
them: in the first three grades they learn that reading
is decoding. Upon entering fourth grade, no accommodation
(Anderson, 1977) occurs in schemata since they perceive
no need to modify them. Thus, they remain locked into
inappropriate schemata of reading. Moreover, if such
students have acquired only minimal decoding/word attack
skills and are relatively insensitive to whether compre-
hension has occurred (since it is not part of their
schemata), then the problem for these readers is compounded.
Many researchers have attested to the fact that poor
readers are less aware of when they have comprehended and
when they have not than are good readers (Buswell, 1920;
Clay & Imlach, 1971; Cromer, 1970; Fairbanks, 1937;
Golinkoff, 1975-76; Oaken, Wiener, & Cromer, 1971; Steiner,
Wiener, & Cromer, 1971; Weber, 1970). Research by Barr
(1974-75) and Harste and Burke (1978) strongly suggested
links between the reading instruction students encounter,
their perceptions of the reading process, and the ways in
which they ultimately attempt to deal with print.

Although research on secondary level students'
perceptions of the reading process has been neglected, this
area has been of interest to elementary reading researchers

for more than three decades. Many of these studies on children's perceptions of the nature and purpose of reading utilized an interview technique only (Denny & Weintraub, 1966; Downing, 1969; Edwards, 1958; Reid, 1966) and relied on an insufficient number of questions, many of which were too abstract for children to deal with effectively. Moreover, they did not attempt to relate the subjects' reading ability to their perceptions of reading. Even subsequent studies (e.g., Johns, 1970, 1972, 1974; Johns & Ellis, 1976) which attempted to relate perceptions of reading to reading achievement contained many uncontrolled variables or were clouded by methodological flaws that resulted in a large percentage of meaningless and/or "I don't know" responses from subjects (Canney & Winograd, 1979).

One notable exception is a recent research study by Canney and Winograd (1979). They utilized a concrete task to verify subjects' verbalized perceptions of the reading process. Their study, which firmly supported the theorized link between a reader's schema of reading and reading achievement, was designed specifically to overcome the inadequacies of earlier research studies. Of the other existing research, they wrote:

> Prior research has relied almost exclusively
> on abbreviated techniques to assess students'

concepts of reading. While researchers have
reported finding significant correlations
between reading achievement and reading
concepts, the procedures employed have been
open to serious criticism. (pp. 46-47)

In summary, the preponderance of research on

children's perceptions of the reading process, as related

to their reading achievement, must be evaluated cautiously

in light of the methodological weaknesses they contain.

Furthermore, research on secondary level readers'

perceptions of reading is conspicuously absent in the

literature. In order to help fill that gap with meaningful

findings, any contemplated research must take into

consideration the flaws found in analogous research

conducted with younger subjects and avoid incorporating

similar errors in its design. In particular, concrete

tasks need to be utilized to verify subjects' verbal

responses, or in cases where students' verbal production

ability is low, to elicit information.

Significance of the Problem

Increasing public concern over graduating high school

seniors who cannot "read," the national trend toward minimum

competency testing, and the "back-to-basics" movement

underscore the need for meaningful research on secondary

and adult readers who have been unable to achieve fluency

in reading. Tuinman, Rowls, and Farr (1976), in reviewing

research literature, public school and statewide records
on public school reading achievement, concluded that there
is no need for wholesale pessimism, but that

> the gradual improvement in reading competency
> over the four decades prior to 1965 may have
> lessened or halted; and . . . over the last ten
> years there may have been a very slight decline
> in reading achievement. (pp. 462-463)

Cook (1977) reported that illiteracy figures in the United
States had shown steady improvement, and yet there were
39 million citizens aged 14 or older who lacked the ninth-
grade education deemed necessary to meet the "functional
reading needs of a person living in the seventies" (p.
105). Moreover, it has only been in the last decade that
the true burden of this illiteracy has been realized
(p. ix) and that real strides and concentrated efforts have
begun to be made in the struggle to eradicate illiteracy.
Although much still remains to be done, Cook asserted
that more was learned about literacy education during the
1960s than in the total 60 years preceding that decade
(p. 118).

Part of the reason for the slow progress that has
been made may be the quality of research in the field of
reading. It has been criticized repeatedly as being
fragmentary, disappointingly inconclusive, and of poor
quality (Weintraub & Farr, 1976, p. 2). Weintraub and

Farr, seeking remedies to the situation, urged the
adoption of alternate research models (i.e., those other
than the classical empirical design) (pp. 3-4). Another
problem that has plagued much reading research, including
nearly all previous research on readers' perceptions of
the reading process (other than Canney and Winograd's,
1979),was their lack of a theoretical base. It is now
recognized that to be maximally useful, reading research
must be theory-based (Burke, 1969; Goodman, 1976a).
Burke has written:

> If the study of reading is conducted upon a basis
> of theory, the results can be used to substantiate,
> refute or revise the theory, as well as to suggest
> the relative value and significance of specific
> aspects of the reading process. To be of value,
> data must be examined against an organized back-
> ground. (p. 12)

The present study utilized as its framework psycho-
linguistic theory (Goodman, 1976b), information processing
theory (Rumelhart, 1976; Smith, 1971), and schema theory
(Anderson, 1977). The methodology of the present study
was grounded in these theories. Results from the study
were examined in light of these theories, and the research
findings contributed to the explication and verification
of them.

It is also generally accepted that research must
deal with the reading process as a whole, rather than

with isolated fragments of the process (Kolers, 1971). Because reading is a synergistic process, dissected parts of the process cannot be expected to appear or to behave in the same fashion they did when still parts of the whole. Huey (1908), at the beginning of the century, recognized the need for using techniques to gather data that do not fractionate the process. Current researchers (Cambourne, 1976-77; Goodman, 1976a) operating from a psycholinguistic orientation would concur. The "need to know just what the child normally does when he reads" (Huey, 1908, p. 9) remains today. It seems quite likely that each person's schema of reading influences or even controls what he or she "normally does" when reading.

The present study yielded useful information about the schemata of reading as related to the reading achievement of three groups of high school readers. It extended to an upper grade level research which had previously been confined almost exclusively to children in earlier grades. This study also made it possible to examine whether there was a relationship between the degree of retardation in reading in ninth graders and their schemata of reading. It explored the usefulness of four tasks designed to elicit information about individual's schemata of reading. In particular, this study incorporated both

silent and oral reading tasks, rather than just silent reading ones. It also improved upon existing studies by avoiding flaws contained in their designs, but it accomplished other broader purposes as well. Because it constituted basic, descriptive research, it expanded the knowledge base about the reading process, while also generating hypotheses and shedding light on psycho-linguistic, information processing, and schema theories. Finally, it seems to hold useful diagnostic implications, as well as instructional implications concerning readers' schemata of reading.

It is postulated that most children are equipped with all the skills needed in order to learn to read (Smith, 1971) and that visible language makes no demands upon children that are unique to reading (Burke, 1977). However, it is abundantly evident that not all children prosper in their attempts to learn to read. Understanding the variations in their conceptualizations of the reading process--their schemata--may provide a valuable clue to explaining the lag between their competence and their performance.

Assumptions

In conducting this study it was assumed that:

1. Standardized reading test scores, informal testing, and teacher judgments provided sufficiently accurate assessments of subjects' reading abilities.

2. All subjects had schemata of the reading process.

3. Even though verbal abilities of subjects may not be uniform, all subjects possessed sufficient ability to verbalize about their perceptions of the reading process.

Limitations of the Study

The present study recognized these limitations:

1. Sample size was restricted to a small number of students, all selected from one grade of one school.

2. Due to the nature of the study (basic, descriptive research), only subjects who met specific criteria were selected for inclusion. Because random sampling was not used, the results can only be generalized to similar types of ninth graders.

3. The data were gathered by one researcher.

4. Because data were collected in a school setting, subjects' responses may have reflected schemata of "school" reading, rather than reading in general.

5. Only expository material was used in the concrete tasks. Possibly, using material of a different genre would have elicited different responses.

6. The low readability of the test materials may have influenced subjects' responses since it may have seemed easier to subjects in the middle and high groups than to those in the low group. However, the fact that all students could comfortably decode the material should have helped dilute any negative influence the low readability might have had.

7. Although care was taken to build rapport and reduce or alleviate subjects' anxieties, it was impossible to assess precisely whether any of them felt uncomfortable in a testing situation related to reading or how such discomfort might have affected their performance during data collection.

8. In the concrete reading tasks, brief paragraphs were used. If lengthier, connected discourse had been used, perhaps different results would have been yielded.

9. It was possible that subjects' responses were valid indices of their perceptions of the reading process, but yet did not necessarily reflect all of their perceptions regarding it.

Definition of Terms

For the purposes of this study, the following terms were defined.

1. <u>Instructional model of reading</u>--how a reader believes his or her teacher perceives the reading process, as inferred from the instructional emphases the teacher places upon decoding and/or meaning.

2. <u>Naturalistic research</u>--research in which the investigator's intrusion into the research setting is minimal and where the subject deals with actual reading material by bringing his/her language competency to the task at hand.

3. <u>Process-oriented research</u>--utilization of research procedures which deal with reading as a process to be studied as a unitary whole, rather than treating it as a collection of discrete skills which can be examined individually.

4. The three <u>reading levels</u> of subjects were defined as follows:

    a. <u>Low reading level</u>--a total grade level score between 3.5 and 4.9 on the <u>Gates-MacGinitie Reading Test</u>, Form C (1965).

b. Middle reading level--a total grade level
score between 6.5 and 7.9 on the Gates-MacGinitie
Reading Test, Form D (1972).

c. High reading level--a total grade level
between 9.5 and 10.9 on the Gates-MacGinitie Reading
Test, Form E (1972).

Subjects whose total test scores fell within these
three ranges and who in the teachers' judgments read
within these ranges were referred to as low, middle, or
high readers and as belonging to the low, middle, or high
reading group.

5. Schema (pl. schemata)--a knowledge structure
containing slots or place holders, for each of the component
pieces of information subsumed under the more general
idea, or structure. A schema indicates the typical
relations among its component parts. Subschema can be
embedded within a dominant schema. Schemata can be
organized into a script (a dominant event sequence)
organized around a goal. It is knowledge of scripts for
recurrent events that enable learners to predict what,
when, and who in familiar situations (Nelson, 1977,
p. 222).

6. The four tasks used to ascertain a subject's
schema of reading are defined as follows:

a. Open-Ended Interview--a set of nine questions
designed to determine whether an individual views
reading as being primarily a decoding-centered or a
meaning-centered process.

b. Silent Reading Task Cards--a set of five
typed passages (one intact, a syntactically altered
within-sentence version, a graphophonically altered
version, a semantically altered version, a
syntactically altered across-sentences version)
which subjects are asked to evaluate as being readable
or unreadable and to explain their decision.

c. Forced-Choice Questionnaire--a typed version
of the interview in which subjects must decide
between bi-polar responses provided to each question
(one of which reflects a decoding orientation and
the other a comprehension orientation).

d. Oral Reading Task Cards--while listening to a
tape recording of five passages being read in
different ways (one intact and four other versions
corresponding to the altered versions noted in "b"),
subjects look at typed copies of the original
versions and evaluate each passage as good or poor
reading and explain their decision.

Procedures

Subjects

Fifteen ninth graders were selected from the population of a large urban school district in North Texas. The population of the school included students of both sexes, all socioeconomic levels, and three ethnic groups (Anglo, Black, Mexican-American). Five students were selected on the basis of teacher judgment and standardized test scores (Gates-MacGinitie Reading Test, Levels C, D, or E, administered by the school at the beginning of the Spring, 1980, school semester) as reading at each of three ranges of reading grade levels: third-fourth (low), sixth-seventh (middle), or ninth-tenth (high). All subjects spoke English as their first language and possessed at least average intelligence, according to test data in their cumulative folders.

Materials

Four experimental instruments were used to sample subjects' beliefs about and perceptions of the reading process. Each was either modified from existing instruments or developed by the researcher. They consisted of (a) a structured interview, (b) a silent reading task in which subjects were asked about the readableness of intact and linguistically altered passages, (c) a printed

form of the interview containing bi-polar (decoding-centered and comprehension-centered) responses from which subjects chose the one more nearly reflecting their beliefs; and (d) listening to taped oral reading task cards in which subjects evaluated as "good" or "poor" reading, a series of linguistically altered passages heard on a tape recorder.

Data Collection

All subjects were tested individually by the researcher in a quiet room away from their regular class-rooms. Subjects were administered the four instruments in the sequence listed above. Testing required approximately 20 to 30 minutes. Data collection sessions were tape recorded for subsequent analysis.

Data Analysis

Data were examined to detect across-group and within-group differences in perceptions of the reading process. Some portions of the data were analyzed statistically; others were presented in terms of response frequencies; the remainder was dealt with descriptively. Within-subject consistency of responses was examined and reported quantitatively and descriptively. Finally, group

differences in instructional models of reading were examined and presented in quantitative and narrative form.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Overview

Three separate but overlapping areas are discussed
in this chapter. The first is schema theory and factors
that contribute specifically to the development of an
individual's schema of reading. The second is a
chronological review of research studies which have
attempted to investigate how various groups of readers
conceptualize the reading process (i.e., their schemata
of reading). Finally, research findings on differences
between the reading performance of poor and good readers
are examined to see what implications are suggested about
how each group conceptualizes the reading process.

Schema Theory: the Development of a Schema of Reading and Its Relationship to Reading Performance

Schema Theory

Frank Smith (1975) stated that learning is a product
of experience and that

> like comprehension, learning is an interaction
> between the world around us and the theory of
> the world in our head. . . . We perceive the
> world through the mental filter of what we
> believe the world to be like. (p. 119)

In an information-processing framework, learning is seen as a process of problem solving, according to Smith. It is motivated by a desire to "make sense" of the world and to increase the match between the theory of the world in our head and our experience. "Everything we know, then--the current state of our cognitive structure-- is a consequence of all our previous attempts to make sense of the world" (Smith, 1975, p. 119).

To be meaningful, learning must be self-initiated. Because it is a process of testing cognitive hypotheses, it necessarily involves risk-taking: risk of being wrong, risk of having to modify one's existing cognitive structure, risk of failure, frustration, and inconvenience.

In this broader context of learning theory can be placed a "schema": a knowledge structure containing slots, or place holders, for each of the component pieces of information subsumed under the more general idea, or structure. A schema indicates the typical relations among its component parts. Subschemata can be embedded within a dominant schema. Schemata can be organized into a script (a dominant event sequence) and organized around a goal. It is knowledge of scripts for recurrent events that enables learners to predict what, when, and who in familiar situations (Nelson, 1977, p. 222). Nelson's

theoretical work suggested that events induce scripting;
from scripting, concepts can be fashioned; and from
concepts, skills are formed.

Schema and Reading

In reading, the notion of schema is a particularly
useful concept. It can be used to explain how individuals
process the elements of print, how they comprehend
connected discourse (i.e., by using a story structure),
and how they actually perceive the reading process per
se (i.e., their schema of reading).

Hypotheses at various levels of processing have
been postulated: letter level, lexical level, syntactic
level, and semantic level. Some theorists, such as
Rumelhart (1977), have suggested that hypotheses can be
generated at still higher levels in order to account for
processing stories. These high level hypotheses are
called schemata, generalized knowledge about a sequence
of events. In this framework, comprehension becomes
a matter of matching input with an appropriate schema
stored in memory. For this reason, if a reader understands
something, his or her interpretation will always be much
more than the comprehension of the sum of the words in
the input sentence (Rumelhart, 1977, pp. 164-167).

On a more elemental level, Rumelhart (1977) theorized that comprehension can be considered an extension of perception. In his interactive model of reading, he described the process thus:

> We take sensory features and attempt to account for them with low level hypotheses about, say, possible letters in a string. These hypotheses, in turn, are subsumed by others about possible words in a string. Hypotheses about words are then subsumed as constituents in hypotheses about possible sentences in a string. Then these sentences themselves are subsumed under even higher level hypotheses--or schemata. The processing is carried on both from the bottom up--that is, lower level hypotheses are "suggesting" higher level ones . . . and from the top down--that is, higher hypotheses are predicting (and inferring) [sic] the existence of lower level ones. (p. 168)

Although some information processing theorists and other researchers have explored how readers utilize schemata to help them organize and perceive text, the focus of the present study was on a larger scale--or at least approached the problem from the opposite direction--namely, how schema theory could be applied to how readers perceive and conceptualize the process of reading itself, based upon their experiences with reading, and their subsequent scripts about how it functions.

Students' and Teachers' Schemata of Reading

Canney and Winograd (1979) have contended a reader's perception of the tasks of reading (i.e., his or her schema) directs reading behavior, including how the reader uses current knowledge, his or her decoding proficiency and study strategies (p. 44). It seems likely that the term "reading" encompasses many definitions and is characterized by several distinguishing properties. According to Canney and Winograd, students probably have several different scripts that elicit different reading behaviors in various situations (pp. 5-6).

What factors help shape an individual's developing schema of reading? Two major influences seem likely: the individual's non-school experiences with print and the academic experiences (instructional methodologies) to which the individual has been exposed. Canney and Winograd (1979) have commented:

> It seems inconceivable that the daily
> experiences of a young student in "reading"
> do not have a significant part in the develop-
> ment of that child's schema of reading. As
> that schema is structured by daily events, it
> also operates to exclude actors, events, and
> other interactions perceived to be incidental
> to reading. If some students fail to perceive
> the central importance of actively seeking to
> make sense of text before, during, and after
> reading, the best comprehension instruction

> may lead to limited improvement. Until we
> have a clearer perception of what each child
> knows about the reading process, it will be
> difficult to prescribe instructional techniques
> which will reliably enhance a student's
> comprehension of text. (p. 49)

Canney and Winograd contended that many poor compre-

henders are passive readers who respond mechanically to

print, just as they have been taught to do in grades

one, two, and three. "No accommodation of their

schemata for reading occurs upon entrance to grade four

because no such drastic change is perceived necessary"

(Anderson, 1977, p. 8).

Work by Nelson (1977) seemed to corroborate this.

She postulated that schemata tend initially to be linked

with the context in which they were acquired, rather than

achieving a generality which would allow them to be

applied to a broad range of structurally similar

situations. For this reason, knowledge sometimes is not

or cannot be applied to an appropriate case that is

somewhat foreign to personal experience. Canney and

Winograd (1979) echoed this belief when they stated that

poor comprehenders may know techniques for comprehending

text, but may not spontaneously employ them since their

schema of reading does not include generalizing their

reading instruction to other reading situations. Poor

comprehenders may have to be told to apply the techniques (pp. 10-11).

The initial mind set toward reading which results in part from a child's formal introduction to reading in an academic context may explain to some degree why certain children fail to associate reading with meaning--or with pleasure. Research on children who learn to read early and in an apparently natural manner (C. Chomsky, 1972; Durkin, 1966; Forester, 1977; Hoskisson & Krohn, 1974; Huey, 1908; Torrey, 1973) indicated that these children frequently had adults or siblings who not only served as models, but who demonstrated what reading was all about and, equally important, were willing to answer their questions about reading. In elementary school, the reading achievement of the early, natural readers was significantly higher than children of equal intelligence who did not read early (Durkin, 1966). Perhaps this is because these early readers' initial schemata of reading were already set, based upon their own experiences, and were therefore, less subject to being shaped or altered by formal instruction.

The potent effect of inductively developing an accurate initial schema of the reading process was illustrated in the research findings of Tucker (1974).

In this study, English-speaking children in Montreal who were involved in a total immersion program of French (i.e., instruction in French and with French texts only) read not only French texts as well as their French-speaking counterparts at the end of the school year, but were also able to read English and at comparable levels. The significant fact is that once these children had grasped what reading was all about, there was no need for sight words or phonics instruction.

Paralleling the results of research on early, natural readers, Forester and Mickelson (1979) confirmed that children who inductively develop their own rules about how reading works make progress in learning to read. "Teaching" the rules does not result in the same gains, perhaps because children entering first grade are still in the intuitive phase of the preoperational stage of development and are not ready to deal meaning-fully with abstract lessons about reading (p. 85). "Explicit rules applied externally do not aid the reading process. Children will generate their own rules, much as they did when learning to speak, if given the opportunity" (p. 86). Despite structured lessons on letters, sounds, words, and "rules," the children used broader categories and tried to apply strategies that paralleled those

evident in language learning and cognitive development. Their research also revealed that children tried to apply these strategies independently, if given the chance to do so in the classroom. As a result of their active involvement in the reading process, they inductively developed and applied two fundamental rules of reading: (a) to read, one looks for meaning and (b) to abstract meaning, one looks for and uses patterns of language (p. 82). The authors noted that for many children, however, it will be necessary to demonstrate and convey to them the notion that reading and written language are supposed to make sense. They suggested this can be accomplished in part by immersion in interesting and appropriate reading materials, by teachers actively modeling reading and by providing expanded feedback for children about their oral reading. Forester and Mickelson's subjects demonstrated that development moves from whole to parts and from gross to fine (e.g., gross processing of meanings and words precedes fine discrimi- nation of letters). Since this pattern is typical of children's physical and cognitive development, as well as their learning, it may be that a synthetic, skills hierarchy (part to whole) approach actually militates against some children's learning to read.

Cohen's (1974-75) study on the effect of code emphasis on oral reading concluded that first graders' earliest strategies are only in part influenced by instructional method. "The learner also brings to reading his own prior awareness of what the process may be. This, then, may be confirmed or discredited by his contact with instruction" (p. 640).

Somewhat at variance with the above studies were the results of Barr's (1974-75) research. In her study of 32 first graders, half instructed by a phonics method and half with a sight-word emphasis, she found that the strategies of the individual children were, to a significant degree, determined by the instructional method. Moreover,

> most children who initially form a strategy different from the class instructional emphasis change their strategy to accord with the class method and/or materials by the end of first grade. (p. 555)

Barr also noted that the unit of reading--the letter or word units around which the materials and methods are organized--lead children to translate print to speech or meaning in quite different ways (p. 581).

Spiro (1979) hypothesized that misconceptions of reading as a primarily bottom-up process may be caused by a

> code over-emphasis in early reading instruction,
> reading texts that are insular and lacking in
> relevance to existence knowledge, and tests that
> stress literal text content rather than its
> integration with related prior knowledge.
> (p. 120)

It may also explain why, according to Spiro, some
children do not see knowledge-based processing as an
appropriate activity in reading. They suffer from what
he termed a "meaning is in the text" fallacy. They cannot
correctly answer questions about the text that require
extra-textual knowledge, although they can readily answer
them under informal questioning. This suggests that they
had the knowledge, but simply did not perceive the
appropriateness of utilizing it. It is worth noting that
for some children this fallacy applies only to their
reading for school.

Schwartz (1979) concurred that beginning readers seem
to focus on making word-level decisions rather than
semantic and syntactic level decisions. Canney and
Winograd's (1979) data on poor readers in grades two
through eight also indicated a sizable number of them
focused on lower level constituent codes (mainly word
recognition). Their lack of metacognitive awareness of
the goal of reading (comprehension) seemed to prevent
them from moving toward interactive process (Rumelhart,
1977) at a thematic level.

Adams, Anderson, and Durkin (1980) also pointed to the pejorative effects a child's early instructional experiences can have on his or her developing concept of reading. In particular, they identified "round robin" reading as leading children to observe that oral reading is halting and word-by-word. This hardly presents an ideal model for "anyone who is attempting to put an author's words together in a way that will assist in understanding them" (p. 158). They continued:

> The great emphasis put on oral reading in the primary grades might be encouraging still more problems related to comprehension, for it portrays reading as a performing art rather than an effort to understand what an author has written. The erroneous portrayal is undesirable because it could inhibit young readers from arriving at the understanding that reading is not saying something to another but is, instead, getting something from another. (p. 158)

The authors were careful to add that over-relying on bottom-up or top-down processing to an extreme can lead to problems for a reader. They viewed skilled reading as an interactive process entailing simultaneous bottom-up and top-down processing.

Besides perceiving reading as a "performing art," many poor readers may view reading as a teacher-centered activity: a process of calling words aloud, fluently and expressively, followed by teacher-initiated

low level recall questions. Good readers may verbalize similar beliefs, but not be restricted by them or confined to those beliefs alone. Poor readers seem to learn that reading is an activity separate from other content areas and language arts skills. Indeed the lack of substantive content and the artificial, unnatural language found in many basal readers may promote this perception of reading. "Pleasure" reading is frequently neglected, or worse, used as busy work or only for book reports. The situation does not improve in the inter-mediate grades: students are still not encouraged to relate reading to their own experiences or to reason about the significance of what they have read (Canney & Winograd, 1979, pp. 6-7).

Cazden (in press) reported on the role of classroom interaction in learning to read. She stated that in some cases, a focus on meaning and a focus on phonics may be separated in a single classroom, with the teacher utilizing a different instructional focus for the top and bottom reading groups. More importantly, she noted that it is possible that these teacher behaviors toward the low group may increase these children's reading problems (pp. 14-15).

Although the issue has not yet been resolved, there is some evidence that instruction has a lingering influence upon an individual's schema of reading. Stansell (1977) maintained that prior instruction in reading controls perception of the process and limits performance. The lasting influence of instruction was documented in DeSanti's (1976) study of four proficient readers, 62 to 82 years of age. His data indicated that readers probably never completely outgrow the influence of their instructional model.

Even with college level students, the beneficial effect of deliberately shaping the students' schemata of reading is suggested. Maxwell (1979) reported:

> Recent research suggests that if students in speed reading courses are given information on the nature of the reading process and current theories of memory and retention, not just spaced practice, they will show greater improvement. (p. 282)

Apparently, even capable students enrolled in speed-reading programs may benefit from an enhanced awareness of the reading process and how it operates.

Spiegel (1978), writing about beginning readers, stated that the set of strategies children develop (such as risk-taking, monitoring what they have decoded to see if it makes sense, and self-correcting) are as important as specific reading skills. These strategies,

she noted, "both cause and reflect the child's perception of what reading is and of his or her own role in the reading process" (p. 772).

There was evidence to support the belief that ideally students should experience what fluent reading is like before they can read fluently, so that they will understand what they are attempting to achieve. Cunningham (1978) urged the use of techniques that allow students to experience effective reading and, thereby, aid in their own improvement, rather than being completely dependent upon precise instruction. Methods that have been successful in helping students experience effective reading as a means of improving their reading included the imitative method (C. Chomsky, 1976; Huey, 1908), the impress method (Heckelman, 1969), and repeated readings (Dahl, 1974). Taylor (1977) echoed the need to help the older student who has not built the skills of reading well enough to be able to re-tell a story after reading, to establish the habitual demand for meaning (p. 670).

A teacher's model of reading not only suggests instruction, but may actually define it. Harste and Burke (1978) summarized it well: "Instructional strategies are directly related to alternate conceptions of the

reading process. How the process is conceived both extends and limits what is instructionally possible" (p. 11). They continued, however,

> Because readers encounter language in settings outside of instruction and each encounter provides the opportunity for language users to make their own personal discovery of how the process works, the reader's model of reading is never solely dependent upon instruction. Many readers have already discovered more about the process prior to formal instruction than is conceivable according to the instructional model which they encounter. Such individuals may abandon their more functional model--trading it in, so to speak, for the proposed instructional model. Others may see reading instruction as unrelated to reading. Many readers simply outgrow their instructional model. The in-process comprehending behavior of poor readers reflects and often appears more closely related to the instructional model than does such behavior in more effective readers. (p. 12)

Duffy (1978) examined classroom reading instruction from an econometric perspective. Intensive observations in elementary school classrooms revealed that the teachers deployed resources (time, materials, etc.) in ways that reflected their own "utility functions." In other words, their respective instructional patterns were shaped by their conceptualizations of the reading process. Duffy noted that "given similar inputs regarding pupil endowment and resources in the forms of materials and time, the teachers reflect distinctly different patterns of resource usage" (p. 16). Clearly, teachers

have different preferences regarding instructional strategies and techniques and these preferences mirror their own conceptualizations or schemata of reading.

Harste and Burke (1977) noted that

> What has become readily apparent and surprisingly persistent concerning the relationship between reading instruction and the reading process is that (1) despite atheoretical statements, teachers are theoretical in their instructional approach to reading, and (2) despite lack of knowledge about reading theory, per se, students are theoretical in the way in which they approach learning to read. Both students and teachers exhibit behavior which is sufficiently systematic to allow inferences about a theory which must underly (sic) that behavior. (p. 32)

It is significant that not only do both teachers and students have distinctive and identifiable theoretical orientations (schemata) toward reading, but that subsequent reading performance and classroom behavior are consistent with the model from which the person is operating (p. 32). Harste and Burke found that student reading performance at least partially mirrors instruction. "An instructional setting allows the student to either reinforce or create an alternate schema" (p. 33). They described three possible models or orientations toward reading that students and teachers may hold: a sound/symbol orientation, a skills orientation, or whole language orientation. They believed

> looking at reading instruction in terms of
> theoretical orientation (of both the student
> and the teacher) is more cogent, insightful,
> and accurate one than looking at reading
> instruction in terms of reading approaches.
> (p. 40)

They postulated that the key to understanding a person's

orientation toward reading (i.e., his or her schema) is

the corresponding size of the reading "unit" (letters,

words, or larger than word units) the reader focuses on.

A deliberately vague question, "What do you do when you

come to something you don't know when you are reading?"

was used to elicit the reader's perception of the reading

"unit."

Related to this is the fact that many students not

only fail to develop accurate, appropriate schemata of

the process of reading, but fail to perceive the functions,

usefulness, or purposes of reading, as well (Blom, 1978;

Cook, 1977; Denny & Weintraub, 1966; Downing, 1969;

Miller, 1976; Roettger, 1980). This may be the result of

home and/or academic environments which fail to communi-

cate or demonstrate the significance and value of reading.

Blom (1978) believes that teaching the functions of

reading still receives insufficient attention in this

country.

Miller (1976) theorized students' concepts about

the reading process may be culturally based. Subcultural

differences, in his opinion, may be responsible for differences in the way students value reading, as well as differences in the levels of information processing they bring to the task. He wrote:

> Students' conceptions of what reading is all about probably differ in different social strata. We need to know whether their conceptions significantly affect how they go about the activity of reading. The problem may not be that students do not know how to perform the various cognitive processes involved in reading comprehension, but that they simply do not recognize that those processes are relevant to the task they think they have been given. (pp. 726-727)

There is an obvious need for additional research on readers' schemata of reading, how it develops and the influence it exerts upon subsequent reading performance. Answers remain elusive since investigating these questions is complicated by at least two factors: (a) learning to read may in itself affect and facilitate linguistic awareness of print which, in turn, may influence progress in reading and (b) if a child receives instruction at school, it becomes almost impossible to disentangle the effects of this from what is learned at home or from that which the child has acquired by his own exploration (Mason, 1980, p. 207).

Finally, it is interesting to note that newer models of reading, such as those espoused by K. Goodman, Smith

and Rumelhart, evolved because of discrepancies they observed between readers' actual behavior and the existing, "logical" (i.e., hierarchic) conceptions of the reading process (Harste & Burke, 1978, p. 18). In other words, these models were precipitated by changes in these researchers' schemata of reading.

Reader Perception of the Reading Process

Although some inferences may be drawn about secondary-level readers' perceptions of the reading process by examining studies of the reading strategies they use, few studies have been conducted on their perceptions per se. There have, however, been numerous studies investigating younger readers' notions about the reading process. Since several studies involved replications or modifications of previous studies, the research is presented in chronological sequence. This sequencing also reveals the progressive sophistication which has evolved in the design of studies exploring this area. A discussion of flaws in some of the designs is also presented in this section.

In 1940, Brumbaugh explored 700 kindergartners' expectations about first grade. Half of the subjects surveyed said that they expected to learn how to read and that this would probably be a difficult undertaking.

Brumbaugh surmised that these negative expectations might be attributable to comments made by parents or older siblings. She also speculated that these children's negative perceptions might influence their performance and recommended providing the children with appropriate information about the reading process.

Another early study was that of Edwards (1958), who questioned 66 second-, third-, and fourth-grade remedial readers about what they thought "good" reading was. Edwards found that these children felt reading was basically a matter of speed and fluency (i.e., like an adult's reading), and that they often tried (to their detriment at times) to "read" smoothly and fluently, since that was the "reading" that was socially acceptable. The subjects perceived reading as an accurate decoding process rather than a meaning-seeking process and, further, believed that teachers and parents shared similar perceptions. Edwards advocated the direct teaching of the correct concepts about the meaning-centered nature of the reading process, as a means of making instructional efforts more productive.

Denny and Weintraub (1963, 1966) explored first graders' reasons for wanting to learn to read and what they felt they must do in order to learn how to read.

An examination of the 111 subjects' responses to the interview questions revealed that a fourth of them had either vague reasons or could give no reason for wanting to learn to read. Moreover, approximately one-third of the subjects offered no meaningful explanation of what one must do to learn to read. Denny and Weintraub pointed to the necessity of helping pupils see a reason for learning to read and how this can be accomplished. They also noted the need for investigating changes that may occur in a reader's concept of reading as a result of learning or failing to learn to read.

Reid (1966) employed interviews on three separate occasions during the first year of reading instruction of 12 British 5-year-olds. In general, Reid found that the children were greatly confused about the nature of reading. Their notions were hazy, although by the end of the year, the children said that to be a word, a group of letters must mean something. Reid observed the children's difficulty in dealing with the terminology of language and reading. He theorized that part of a child's success in attaining concepts about reading seemed to depend on whether the child possessed the vocabulary needed to grasp the various schemata which even an elementary discussion of language entails (i.e., "word,"

"letter"). For this reason, Reid felt it might be beneficial to help develop consciously and carefully an awareness of the terminology of reading and the nature of the reading process.

A replication of Reid's study by Downing (1969) yielded similar results: the subjects were unclear as to how or why people read. Their awareness of linguistic terminology was rather restricted. Downing suggested utilizing a language experience approach and related activities to help children inductively develop accurate perceptions of the reading process.

Johns (1972) found a significant positive corre- lation between children's reading achievement, as measured by a standardized reading test, and the maturity of their perceptions about reading. Three years later, Johns (1975) asked approximately 100 good and poor readers (fourth and fifth graders), "What is reading?" Although the good readers gave more answers that were meaningful, there was great diversity among their responses. Moreover, less than half of the good readers gave meaningful responses to the question. The surpris- ingly small number of meaningful responses given by the good readers highlights the fact that children may be able to perform a task effectively (i.e. read well),

and yet lack the metacognitive and/or metalinguistic ability to analyze what they are doing or verbalize about it.

In that same year, Downing, Ollila, and Oliver (1975) explored the effect of sociocultural factors on children's cognitive clarity about communication skills. Economically deprived Canadian Indian kindergarten children, whose culture was devoid of traditional written language, displayed much confusion about the nature of the reading process and the functions of speech, reading, and writing. This again suggested the need in some circumstances for instruction in these areas.

Laffey and Muia (1976) modified Reid's study to examine word identification strategies beginning readers use. Interviews on three occasions throughout the school year revealed that the children relied most frequently and consistently on phonic analysis. They postulated that the instructional methodology to which children were exposed was responsible for their reliance on this one primary strategy.

Tovey (1976) used tasks and interviews in a psycho-linguistic framework to investigate how first through sixth graders perceived the reading act with regard to (a) reading as a silent process, (b) reading as a way of

deriving meaning from written language, (c) reading as a predictive process of selecting the minimal cues necessary to derive meaning from print, and (d) how the three cueing systems operate in reading. Possibly as a result of instruction, all of the first and second graders and 89% of the other children read aloud when asked by the examiner to "read" three different passages. In response to the question "What do you think you do when you read?," 28% of the subjects indicated that reading had "something to do with meaning," while 43% of the responses emphasized words. The subjects seemed confused about the necessity of looking at every letter and every word: 63% changed at least one of their original responses in follow-up questioning. There were 83% who reported that they looked at every word when reading and 57% who said they looked at every letter in every word. (It should be noted that some of the younger subjects in the study may not have possessed sufficient metalinguistic awareness of such terms as "letter" and "word" to understand what they were being asked.) Although actual reading performance indicated that subjects were using unconscious knowledge of syntactic and semantic cueing systems, 93% of the subjects perceived graphophonic cues as the only strategy they used to

determine the pronunciation or meaning of unknown words. Tovey theorized that the children's perceptions of reading as an oral process between the reader and the listener (rather than a meaning-centered activity between reader and author) was a result of instruction which the children had received.

Schenckner (1976) examined first and third graders' concepts about reading in relation to their reading achievement. He found a significant, positive correlation between first graders' reading achievement and their concepts about reading, although correlations between concepts about reading and intelligence were not significant. The third graders' concepts about reading were more mature than those held by the younger children.

According to research by Hutson and Gove (1978), mature perceptions of the reading process are related to age. In their study, they asked 108 5- through 9-year-olds, "What is reading?" As age increased, so did the maturity of responses (i.e., reference to word recognition, meaning, or both). The most capable readers gave the most mature definitions of reading.

Pace (1979), in a discussion of metacomprehension, pointed out that readers can perform many planful actions of which they may not be fully conscious, possibly because

they have become automatic through habitual use. Moreover,
if a researcher requires an explicit verbal statement from
the reader acknowledging that he or she is cognizant of
what he or she is doing, then findings would probably
have to be restricted to upper elementary school-age
children, since self-reports in young children are not
common (although they do exhibit in reading behavioral
evidence of self-regulatory or planful activity). Pace
maintained that knowing about cognitive processes in
oneself is, in fact, a more sophisticated ability than
the regulation of them. In light of this, the findings
of many of the previously-cited studies must be inter-
preted cautiously. Younger children may not have been
able to verbalize what their schema is, even though they
had ideas about what reading entails. This is important
to consider since most of the subjects in these studies
were pre-school or elementary-grade children.

A verbal production deficiency in lower compre-
henders may account in large measure for the variations
in oral interview responses from subjects, as Denny and
Weintraub's (1963) study and Johns and Ellis' (1976)
study seemed to suggest. There is also a possibility,
as noted earlier, that some younger children may not have
possessed sufficient command of metalinguistic

terminology to understand the questions being asked by
the researchers.

Another area of concern in many of the studies cited
was the failure to allow subjects to "warm up" to
conceptually difficult interview questions. Furthermore,
many of the studies relied on one judge to evaluate the
responses and most failed to use any additional,
concrete tasks to support the interview. Finally, the
majority of the studies lacked (or failed to identify)
any theoretical framework, a prerequisite for meaningful
research.

Canney and Winograd (1979), mindful of the flaws
contained in the design of many previous studies on
readers' perceptions of the reading process, used
psycholinguistic theory (Goodman, 1976b) and schema
theory as a framework and combined an oral interview with
a concrete task to examine how good and poor readers in
grades two through eight conceptualize the reading process.
The researchers found at every grade level, the higher
comprehenders were more aware of the meaning-focused nature
of reading and that this awareness increased over the
grade levels more for higher comprehenders than for
lower comprehenders. Lower comprehenders attended more
to the decoding aspect of reading and believed that

"reading" could occur without comprehension. Finally, and perhaps most importantly, they concluded that students' schemata of reading can be used to differentiate between higher and lower comprehenders.

One of the few studies which touched even indirectly upon secondary level students' perceptions of the reading process was conducted by Olshavsky (1978a). Using a "survey or reading beliefs," she surveyed 100 randomly-selected eighth, tenth, and twelfth graders. The poor readers, as classified by a standardized reading test, believed that the good readers did not ever re-read, always read hard books, knew every word, and were able to read every textbook!

In summary, the majority of these studies dealt with younger subjects and may have been superficial in their attempts to ascertain students' perceptions of the reading process. Generally they were in agreement as to the facts that (a) younger children and poor readers exhibit confusion about the nature and functions of the reading process, and (b) older students and better readers have clearer and more accurate perceptions about reading. Many of the researchers suggested that direct instruction might help remedy children's distorted or incomplete schemata of reading.

Comparisons of the Performances of
Good and Poor Readers

Numerous investigations have been carried out in an attempt to identify salient differences in the strategies and reading performances of good and poor readers. Many of these lend support to the theory that good and poor readers conceptualize the reading process very differently from each other. If this is true, it could hold valuable implications for reading instruction.

In this section, good and poor readers will be compared on the following dimensions: decoding ability, text organization and comprehension, strategies and cognitive processing, linguistic awareness, and comprehension monitoring. A summary profile is presented for both the poor reader and the good reader. Finally, this information is linked with readers' schemata of reading.

Decoding Ability

One area in which good and poor comprehenders differ is in their decoding speed, particularly with unfamiliar words (Buswell, 1920; Cromer, 1970; Fairbanks, 1937; Golinkoff & Rosinski, 1976; Katz & Wicklund, 1971; Perfetti & Hogaboam, 1975). According to Weber (1970), poor comprehenders in first grade not only made more decoding errors, but they more frequently failed to self-correct

errors that altered sentence meaning. They may have failed to detect altered meaning since they were not comprehending to begin with. Fairbanks (1937) and Swanson (1937) reported the higher incidence of uncorrected, meaning distortion errors among older poor comprehenders, as well.

While the above studies dealt with oral reading, Buswell's (1920) study examined recognition errors in silent reading. He found that in silent reading, the eye "stumbled" over the same difficult words as in oral reading. Reading, whether oral or silent, remained a laborious word-by-word process for the poor comprehenders.

Recent research by Fleisher, Jenkins, and Pany (1979) on the effects on comprehension of increasing the decoding speed of poor readers suggested that their slowness in decoding is correlational rather than causal: "If decoding speed is implicated in comprehension, the relationship may be one of necessity rather than sufficiency" (p. 47). They found that decoding training, whether focusing on isolated words or on phrases, signifi-cantly increased the decoding speed of single words, yet did not improve comprehension performance. This was a significant finding in light of the fact that many children conceptualize "good" reading as consisting

primarily of speed and fluency (Edwards, 1958), and based on this inadequate schema of reading, may be expending great effort to acquire skills that will not in actuality improve their reading.

Goodman (1973) contended, however, that there are children who can decode adequately, but fail to associate any meaning with what they are reading. Based upon his extensive studies of oral miscues, Goodman theorized that children who are poor readers do not exploit the various sources of contextual and visual information in optimal proportions.

Text Organization and Comprehension

The reader's ability to process units of text larger than individual words also seems to differentiate good from poor comprehenders. Clay and Imlach (1971) found that poor comprehenders were less able to organize text. They described many poor comprehenders' oral reading as sounding as if they were reading a grocery list. They concluded that the reader's active processing of text was a necessary adjunct to the paragraph indentation and punctuation already provided by the author to help segment text. They theorized that poor comprehenders' difficulty in segmenting and organizing text could be due to poor

decoding, poor language comprehension or lack of insight
into the reading process.

Buswell's (1920) classic monograph on "eye-voice-
span" (EVS) chronicled the poor comprehenders' inability
to use sentential cues in determining the correct
pronunciation of ambiguous words. Buswell noted that for
the poor comprehenders

> The whole process [of reading] is a more or
> less monotonous repetition of words as they
> are encountered. The eye moves along at a
> regular rate and the voice follows. The end
> of a sentence creates no special disturbance
> for it is passed over with little attention.
> (p. 5)

The EVS of good comprehenders, in contrast, shrank at the
end of sentences since they perceived them to be the end
of a meaningful unit. Their EVS was controlled by
"thought units" and was not merely "a matter of the
mechanics of good construction" (p. 50). Because thought
units, rather than the physical organization of the text,
guide good readers, they seemed to perceive the sentence
as a unit of meaning. Moreover, they anticipated and
interpreted the meaning of the sentence in larger units.
They had fewer and briefer fixation pauses (i.e., they
did not read each and every word; they used context to
speed up word recognition). The poor readers, on the
other hand, seemed unable to use intraword and interword

redundancy to help read single words or to use a "scan-for-meaning" strategy. They regressed more frequently than the good comprehenders, who backtracked only after unsuccessful attempts to grasp the meaning of a larger segment of text. In short, good and poor readers seemed concerned with different aspects of the reading process: the good comprehenders sought to gain meaning from what they read, while poor comprehenders appeared more concerned with word identification.

Research by Cromer and Wiener (1966), utilizing cloze tests, supported Buswell's finding that poor comprehenders read word-by-word and do not take advantage of interword redundancies. Similarly, a study by Steiner, Wiener, and Cromer (1971) revealed that poor comprehenders seemed to be "identifying words as if the words were unrelated items unaffected by syntactical or contextual relationships" (p. 511). These readers failed to comprehend not because they lacked word identification skills, but because they did not integrate the meanings of separate words to arrive at the meaning of the entire sentence. This is congruent with Goodman's (1973) speculation about children who decode adequately, but do not comprehend.

Research was conducted by Isakson and Miller (1976) using fourth graders who possessed adequate, equivalent word recognition skills, but differed in their comprehension ability. Their study was done to correct difficulties in Cromer's (1970) study, which identified good and poor readers from one score on a standardized reading test, and studies supporting Cromer's, such as that of Oaken, Wiener, and Cromer (1970), who defined groups on the basis of comprehension ability alone, and that of Clay and Imlach (1971), who defined groups on the basis of one measure achieved by averaging three subtest scores. Isakson and Miller's findings indicated poor comprehenders apparently fail to utilize language structure to help derive sentence meaning.

> Instead of using semantic and syntactic cues
> to integrate the meanings of individual words
> into sentence meanings, they seem to ignore
> the cues and treat words as individual
> entities. (Isakson & Miller, 1976, p. 791)

The good readers, in contrast, were sensitive to language constraints in sentences. The difference between the good and poor comprehenders was apparent in the use they made of language structure, rather than in their abilities to read individual words (since this variable was controlled). Kolers (1975) also noted that effective readers do not

try to respond to the structure of words, but use language
to anticipate the text's meaning.

Readers' Strategies and Cognitive Processing

In 1975, Olshavsky used introspective techniques to
gather data about the reading strategies of ninth graders,
as they relate to reading achievement (high vs. low)
interest (high vs. low) in the material and writing style
(concrete vs. abstract) of the material. She found that
the poor readers frequently reported a failure to under-
stand individual words, whereas the proficient readers
were more likely to report difficulty with larger units
of textual material. The proficient readers seemed to
expect the material to make sense; they were knowingly
interacting with text, and they were not concerned with
getting every word as long as they were comprehending.
Olshavsky found that although both groups had the same
strategies available to them, the skilled readers
utilized the strategies more appropriately and more
frequently. The proficient readers were extremely adaptive
and gave evidence of planning strategies to meet their
goals. In sum,

> Different patterns of reading responses were
> found to be used by proficient and non-
> proficient readers, by readers with high
> and low interest in the material and by

readers with two styles of short stories.
(p. 130)

Ngandu (1977) used a retrospective interviewing technique to examine the reading behavior of remedial high school sophomores. She also reported that when the number and diversity of reading behaviors increased, so did the readers' comprehension of the specific selection being read. Her subjects also indicated that the writing style (narrative) and a high interest level of the material had a positive effect on comprehension.

In a similar vein, Harste and Burke (1978) theorized that the amount of cognitive activity, rather than the type of cognitive processing or the correctness/ incorrectness of the responses, may be the distinguishing factor between good and poor readers. In examining the profiles of good readers, they reported that they have found,

> [There is] a constant movement between textual
> information and their own information. Once
> a reader has completed the uninterrupted
> retelling and questioning is introduced, quite
> different patterns of cognitive processing
> appear. Many poorer readers appear dependent
> upon questioning to become cognitively active.
> (p. 24)

Stansell (1977) examined six proficient ninth-grade readers' perceptions of the reading process and their impact upon strategies when used in dealing with narrative

and expository material. He utilized introspection, retrospection, retelling, miscue analysis, and interview techniques to gather data. He found, somewhat surprisingly, that they tended to characterize their reading strategies as attending to words; that they mentioned contextual strategies, but saw them as less preferred than word-centered ones; that they acknowledged skipping words was a deliberate strategy, but viewed it as a bad one; that they saw the primary goal of reading to be accurate, exact word recognition and believed that good readers could apply this ability with great speed (cf. the "automatic decoding" of Samuels, Begy, & Chen, 1975-76). It seems highly likely that some of Stansell's findings may be artifacts of his research design: the nature of the interview questions and the fact that students read the material orally in the experiment. Stansell also pointed out the salient role that instruction may play in molding and limiting readers' self-reported concepts about the reading process, which may not actually be exhibited in their reading performance. Finally, Stansell concluded that a reader's prior knowledge (his or her schemata in general) may be a more influential factor than differences in the mode (expository or narrative) of writing.

Inadequate prior knowledge seemed to limit readers to the use of relatively ineffective strategies (p. 105).

However, Canney and Winograd (1979) contended that an individual's schema of the reading process itself will influence how he or she uses current knowledge. In short, some readers may not perceive it as appropriate to associate extra-textual knowledge with the reading task.

Sullivan (1978) also found that poor readers at the sixth- and eighth-grade levels had difficulty relating past knowledge to reading materials. When evaluating the truth or falsity of conclusive statements, they tended to rely on their own judgment, rather than being able to identify supporting material in the text as the good readers could. Sullivan speculated that the poor readers' sense of restructuring makes them intolerant of ambiguity or lack of closure. Consequently, they will draw conclusions hurriedly in order to complete a task. Harker (1974), reviewing introspective-retrospective case studies, stated similar findings: low-level readers tended to impose upon selections personal opinions and ideas which distorted the meaning. Good readers, however, did not allow "extraneous, personal, subjective, and emotional responses" to interfere with the clear determination of meaning (p. 91).

Raisner (1978) explored the reading strategies 14 non-proficient college readers utilized when attempting to deal with materials from four content areas. She combined miscue analysis with retrospective techniques in which subjects listened to tape recordings of their reading and commented on their miscues. In general, the subjects failed to take full advantage of the available cueing systems. Raisner noted,

> These subjects seemed to have been taught that reading consists of pronouncing words and did not seem to sense that reading is a process in which all their language knowledge can be put to use. . . . Students should be taught that reading is a language process, and that since they know language, they have cues in the sentence structure that they might employ in drawing meaning. They should be made aware of prediction and confirmation as legitimate strategies, and should not be made to feel guilty for regressing and correcting. Instruction should embrace the knowledge of the reading process which psycholinguistics has yielded, in order to loosen the bond that "pronouncing the word" appears to have on adults. (p. 46)

The question of whether good or poor comprehenders use the same strategies, but in different proportions or to different extents, or whether they differ in how appropriately they apply certain strategies, remains unresolved.

Linguistic Awareness

Another area in which good and poor readers seem to differ is in what Blachowicz (1978) termed "metalinguistic awareness"--awareness of the language and linguistic concepts that comprise the terminology frequently used in reading instruction. Blachowicz speculated that inadequate metalinguistic awareness may hamper young children's efforts to learn to read. Downing (1980) noted that ". . . there is growing evidence that children develop linguistic awareness in learning to read and that this awareness is associated with literacy achievements" (p. 167). Recently Tovey (1980) investigated the ability of children in grades two through six to deal with what DeStefano (1972) called the "language instruction register"--the specialized language used in talking and thinking about teaching and learning language skills, including the technical language of reading instruction. Although children often "have a poor grasp of the meaning of phonics terms, yet a far better grasp of applied phonics," (p. 432), it is possible that the use of and emphasis upon metalinguistic terminology in instruction obscured rather than elucidates the process of reading for some children and could contribute to the development of misleading or non-productive schemata of

the reading process. Focusing the learner's attention on the technical labels for concepts, rather than upon the concepts themselves and their application, may be detrimental to certain children. Although many children learn to read in spite of poor instruction, Downing (1969) contended that teaching formal phonics rules is unnecessary at best and may even cause long-term reading difficulty.

It is possible for students to apply certain metalinguistic concepts in their reading even though they were unable to verbalize about the concepts or define them (e.g., the child gives a memorized definition that "a consonant is any non-vowel," but cannot point out a consonant on a page of print). Teachers may frequently equate the ability to define a term with the ability to apply the concept. Consequently, the teacher may also erroneously assume that communication has taken place in the classroom instructional process when, in fact, it has not. This seems especially likely in the case in which the teacher accepts the child's ability to define a term as being tantamount to his or her understanding the term.

Comprehension Monitoring

A final area in which good and poor readers may differ is in comprehension monitoring ability. Olshavsky (1978b) noted that the poor readers in her study seemed less sensitive to when comprehension had (or had not) occurred. They also had less insight into the procedures they used in reading and were less likely to seek clarification of information they understood poorly.

Baker (1979) theorized that comprehension monitoring (evaluating and regulating on-going comprehension processes) is a critical component of comprehension. Comprehension can be monitored on many levels (e.g., words, ideas, how ideas relate to what a reader already knows). Ideally, monitoring should be a process that can be adapted flexibly to the reader's purposes for reading and the characteristics of the material (pp. 1-3). It is important to know how students monitor comprehension, not just whether they monitor it. Because school curricula generally do not include instruction in comprehension monitoring, children are left on their own to acquire it (p. 11). Baker indicated that additional research was being planned to investigate differences in comprehension monitoring by good and poor readers.

A Profile of the Poor Comprehender

As noted earlier, there may be more than one type of poor reader or comprehender. Wiener and Cromer (1967) suggested four possible models of poor comprehension:

1. The defect model, in which a non-function or dysfunction (such as a sensory impairment) causes reading problems.

2. The deficit model, in which there is an absence of some function or ability needed for reading (such as a deficiency in vocabulary or word identification skills). This more typical poor comprehender can be identified by poor oral reading.

3. The disruption model, in which interference (such as anxiety or hyper-emotion) hinders the reading process.

4. The difference model, in which there exists a mismatch between the reader's mode of responding (e.g., word-by-word) and the response pattern assumed necessary for adequate reading (e.g., in word groups). In other words, this reader might have word identification skills equal to those of a good reader, but yet not adequately comprehend sentence or passage meanings. This reader may experience difficulty mostly at the test organization level of process.

The "deficit" and "difference" models describe the majority of poor comprehenders. Subsequent research on reading comprehension and aural comprehension suggested that poor readers do not possess a general language deficit that could account for their reading difficulties (Oaken, Wiener, & Cromer, 1971).

In summary, poor comprehenders appear to have inadequate decoding skills and/or decoding speed. They appear to have less ability to organize text flexibly into units larger than a single word. They are preoccupied with word identification and seem to read in a word-by-word manner, often failing to utilize sentential markers, and interword and intraword redundancies. They may fail to utilize the available cueing systems adequately or appropriately. They may not utilize extra-textual knowledge to help them comprehend. They are seemingly less able to alter their reading style to meet task demands. This may be attributable to the fact that they are less aware of what it means to comprehend text. Their comprehension monitoring ability may be vastly inferior to that of the good comprehenders. They are not sensitive to when comprehension has (or has not) occurred (at least with elementary school students), and,

consequently, they are more likely to make substitutions which distort or destroy meaning.

A Profile of the Good Comprehender

Collectively, from the studies previously cited, the proficient comprehender emerges as one who is able to use prior knowledge in order to read in large (at least as large as phrases), flexible units, according to the task at hand. This reader selectively utilizes information between and within words to minimize fixations and word-by-word decoding. The good comprehender scans for meaning and actively attempts to gain meaning from what is being read and is sensitive to whether comprehension has occurred. He or she actively attempts to bring to bear his or her knowledge of the world (schemata) and of the particular topic of the text.

Schema of Reading

An examination of the factors (reported above) that distinguish good and poor readers and affect comprehension reveals that

> There is a lag between student's competence to understand and their comprehension performance that is not explained solely by deficits in knowledge, syntactic complexity of text, or lack of instruction in reading. (Canney & Winograd, 1979, pp. 10-11)

This as yet unexplained lag may be due in part to a reader's inappropriate schema of reading. Canney and Winograd were of the opinion that these inappropriate schemata of reading contributed to many students' failure to comprehend text.

> An inappropriate schema for reading, encouraged by an over-emphasis on phonics instruction and teacher-centered activities labeled "reading," might explain why many poor readers are able to acquire specific word analysis skills, including some sight vocabulary, but seem incapable of synthesizing such knowledge into effective strategies for reading. It is as though such readers have never gotten the big idea--the correct perception--that reading is a language-based activity in which the reader attempts to make sense of text. (pp. 10-11)

Possibly because of iatrogenic instruction in reading, many poor readers do not grasp the importance of top-down processing. Consequently, they "do not bring their linguistic competencies to bear on text, fail to perceive the relevance of skill instruction in reading" (p. 4) and thus remain locked into a mechanical, ritualistic way of responding to text. Additional instruction will be fruitless until students' schemata of reading are properly modified (Canney & Winograd, 1979).

CHAPTER 3

DESIGN AND PROCEDURE

Subjects

Subjects in this study were 15 ninth graders from a large, urban school district in North Texas. Because this study constituted basic, descriptive research on one specific area of interest, subjects were selected only if they met certain criteria. Waldrop (1976) urged researchers to select sample subjects "from a clearly defined population in which there is reason to believe that there is variability among persons with respect to the skills being measured" (p. 32). Subjects were chosen if they met the following criteria, and not on the basis of gender, socioeconomic status, ethnicity, or race.

Reading Level

Subjects were selected to represent three different reading levels, as determined by Forms C, D, and E of the Gates-MacGinitie Reading Test (administered by the high school at the beginning of the Spring, 1980, semester) and the judgment of the school's reading specialists. Five subjects were selected who read at approximately the third-fourth grade level, five at the

sixth-seventh grade level, and five at the ninth-tenth grade level. The third-fourth grade level readers were enrolled in a compensatory English class designed for students whose reading levels range from kindergarten through third grade. The sixth-seventh grade level readers were enrolled in a compensatory English class designed for students whose reading levels range from fourth- through sixth-grade level. Students who read at the ninth-tenth-grade level were enrolled in regular freshman English.

Intellectual Ability

All subjects possessed at least average intelligence (IQ of 85 or above), as measured by the California Short-Form Test of Mental Maturity (1965) score in their cumulative records. This helped eliminate any influence subnormal intelligence might exert on the development of individuals' schemata of reading.

Oral Language

All subjects spoke English as their first language. This helped preclude problems arising from subjects whose developing schemata of reading might have been affected by differences between their initial oral

language and that used in instruction (by teachers and in materials).

Grade Level

Subjects were selected from one grade level only: the ninth grade. Using subjects from a single grade level helped to some extent to control for the effect number of years in school and age might have. Also, only one previous study included subjects as old as eighth grade and none has used high school students. This study extended the research to a higher grade level.

There were several reasons for this particular selection of high school students as subjects. First, there is a relative dearth of research on reading at the upper grade levels and beyond (Kavale & Lindsey, 1977; Kingston, 1972), particularly with regard to how individuals perceive or conceptualize the reading process. Moreover, most research has focused on exploring the way in which skilled reading functions (Cohen, 1974-75; Ngandu, 1977; Williams, 1973), although the media continue to report great public concern and indignation about high school graduates who cannot read. Selecting subjects who were required to attend school may also have helped control the role motivation might play. Presumably, an adult who reads poorly and who has chosen voluntarily

to enroll in an "open door" community college or an ABE class, might possess perceptions of reading and its value that are atypical from most other adults who read poorly. In addition, it would have been more difficult to obtain information about their intellectual abilities and educational backgrounds. Finally, choosing subjects within one grade level who possess different reading abilities made it possible to observe any changes in subjects' response patterns across reading levels.

Summary Description of Sample Subjects

The sample consisted of 15 ninth graders from a large urban high school. Subjects possessed normal or above average intelligence and spoke English as their first language. Table 1 presents the composition of the sample groups by sex, ethnicity, and reading levels. Table 2 details the sex, ethnicity, and reading level of each subject.

Letter of Explanation to Parents and Written Consent to Participate

A copy of the letter of explanation sent to subjects' parents is displayed in Appendix A. Participation by subjects was voluntary and written consent was obtained from both the parent or guardian and the subject before any subject was allowed to participate in the study.

Table 1

Composition of Sample Groups by Sex,
Ethnicity, and Reading Levels

Reading Level	Black	Anglo	Mexican-American	Total
Males				
Low	3	1	0	4
Middle	1	2	0	3
High	0	1	0	1
Females				
Low	1	0	0	1
Middle	0	1	1	2
High	1	3	0	4
Total	6	8	1	15

Table 2

Sex, Ethnicity, and Reading Level
of Individual Subjects

Subject Number	Sex	Ethnicity	Reading Level
031	Male	Anglo	3.9
032	Female	Black	4.1
033	Male	Black	3.7
034	Male	Black	3.8
035	Male	Black	4.9
061	Male	Anglo	7.1
062	Male	Blank	7.1
063	Male	Anglo	7.1
064	Female	Mexican-American	6.5
065	Female	Anglo	6.5
091	Male	Anglo	10.6
092	Female	Anglo	10.6
093	Female	Anglo	10.9
094	Female	Black	10.8
095	Female	Anglo	10.9

Development of Assessment Instruments

Pilot testing was conducted to examine potential data collection instruments and refine them into a usable form. A total of four instruments comprised the assessment battery. All four of the instruments were designed to elicit information about readers' schema of the reading process. The study also attempted to examine the consistency among the types of response give by each subject as measured by the four instruments. A high degree of consistency may suggest that any one (or two) could be used alone to determine adequately an individual's schema of reading. Knowledge of a reader's schema of reading would be useful both diagnostically and instructionally.

The four instruments and their evolution are detailed below. Two of them were modified forms of the Burke Reading Interview (Burke, 1976). One form of the Interview was open-ended, whereas the other was a printed format containing bi-polar, forced-choice responses. In the other two tasks, the subject (a) decided whether each of several typed passages he or she had read was readable and explained why or why not, and (b) evaluated the oral reading of several passages heard on tape as being "good" or "poor" reading and explained his or her choice.

With regard to methodology, Canney and Winograd (1979) determined that an interview procedure can yield valid information even from young subjects if a sufficient number of questions (more than two or three) and appropriate, nonleading probes were used. They also concluded that a series of passages, altered in systematic ways to reduce meaningfulness and written at levels that subjects can easily decode, can be used to distinguish between subjects who perceived reading as accurate decoding and those who conceptualized it as entailing comprehension. They also concluded that the combination of interview and task evoked more reliable information about students' schemata than either procedure by itself.

The inclusion of concrete tasks involving both silent and oral reading, along with the interviews (which require no reading on the subject's part), was intentional. Newman (1977) stated that data from both oral and silent reading are necessary to assess reading behavior in a meaningful manner. He noted that many experts regard silent reading comprehension as the better way of investigating comprehension skills (p. 885). Silent reading allows a person more time to think about what has been read. Oral reading, on the other hand, may distract some students or make them self-conscious, whereas

hearing the material aids others in processing and retaining information. Therefore, it is not possible to generalize safely "that for all individuals either oral or silent reading is easier or more difficult, less productive or more productive" (Newman,1977, p. 883). For this reason, tasks involving both silent and oral reading, in a manner that does not require subjects to "perform," were incorporated in this study. The tasks (a) encompassed many divergent schemata of reading, (b) minimized problems stemming from possible limited verbal production or shyness in subjects, and (c) provided a concrete means of eliciting information in the event that there were discrepancies between what subjects think they do (i.e., verbalize) and what they actually do. To strengthen explorations of the relationship between reading achievement and perceptions of the reading process, Canney and Winograd (1979) urged the inclusion of concrete tasks as data-gathering instruments.

Canney and Winograd's (1979) suggestion that easily decodable material be used has also been adopted in this study. Support for this also comes from Kibby (1979) who stipulated that "a reader must be able to identify a certain number of words in the passage before there is any specific language or content to interact with" (p. 390).

Kibby found that utilizing difficult material (as is routinely done in miscue analysis in order to elicit a sufficient number of miscues) may not provide a true picture of the syntactic and contextual strategies a reader normally uses when dealing with easier material. Stated Kibby,

> A child's ability to apply experience and language facility is not likely to be affected by the difference in the syntactic, semantic, and content difficulty of second and third grade material, since these differences are only moderate (especially when the student is an older disabled reader). The difference in performance is likely due to the amount of the information the reader is able to obtain from the author's message; the key to that information is that the child must be able to automatically, or at least very easily, read a significant proportion of the words in the passage. (p. 391)

In this study, material which subjects were required to read silently was written at a second-grade readability.

The four instruments were:

Open-Ended Interview (Appendix B)

This instrument, a modification of the Burke Reading Interview (Burke, 1976), consisted of nine questions. Seven questions were designed to elicit information about the subject's schema of reading (based upon what the subject perceived to be the focus of the reading process--the reading "unit"--and his or her opinion as to what constituted good and poor reading). The other two

questions concerned the subject's instructional model of
reading (based upon the instructional methodology to which
he or she had been exposed and how the subject would try
to instruct someone else in reading).

The final set of questions and their wording resulted
from pilot testing using a large pool of possible questions,
worded in various ways. Questions which were vague,
difficult for subjects to understand, or which led primarily
to attribute responses ("reading is fun . . . boring . . .
hard," etc.) or function responses ("reading is to learn
. . . to obtain information . . . for pleasure," etc.)
were discarded, since the object was to ascertain what the
subject actually thought the reading process is (i.e.,
how the process works). When necessary, grammatical rules
were violated to obtain a wording of the questions which
sounded similar to the subjects' normal speech.

The questions were sequenced in such a way as to
allow the subject to gather confidence and allow him or
her time to warm up to the topic. Global, abstract
questions (e.g., "What is reading?" or "What constitutes
good or poor reading?") were avoided. Such questions
tended to make subjects feel that there was "a" right
answer, or else the complexity of the questions over-
whelmed them. In previous research studies, it was found

that these questions lead to a high percentage of vague, meaningless, or "I don't know" responses.

Directions to the subject were:

I'm interested in high school students' views on reading. I'd like to ask you some of your opinions. There are no right or wrong answers. If it's all right with you, I'm going to tape record our conversation so that I won't have to take time to stop and write down what you are saying. Any time you don't understand something--the directions or a question--please feel free to tell me.

Silent Reading Task Cards (Appendix C)

This task was based on progressive modifications of a similar task developed by Canney and Winograd (1979). It consisted of five passages of comparable length, style (expository), interest level, and readability (second grade level) in their original forms. With the publisher's permission, these passages were adapted from Getting the Facts, Level B (Boning, 1976). They were selected for several reasons. First, they were relatively interesting to a wide range of ages. Second, they sounded like natural language to a far greater degree than most material written at this level of readability. This allowed subjects to bring their language competencies to bear on the task. Third, their low readability insured every subject of being able to decode/pronounce all of the words contained in them.

The directions for this task were:

Now I'm going to show you some cards. Each
card has some writing on it. I'd like for
you to look at each card, one at a time.
You may look at it as long as you like. You
don't have to read the card outloud. After
you finish looking at the card, please tell me
whether you think a person could read the
card or not and then tell me why.

The five passages consisted of an intact passage and
four linguistically altered versions. These versions,
listed in sequence of presentation, were:

1. Syntactic-WS version: Changes in syntax within
sentences (WS) were made by re-typing the sentences
with the words rearranged in random order. The words
from each sentence were typed on separate, equal-sized
slips of paper. These were then mixed and selected one
at a time. The words for each sentence were re-typed
in the order in which they were drawn. The resultant
sentences and paragraph were no longer meaningful,
although all of the words in it were decodable.

2. Intact version: This consisted of a complete,
coherent, meaningful paragraph.

3. Graphophonic version: The letter sequences of
the original words were rearranged so that decodable
nonsense "words" resulted. The letters were resequenced
so that the rules of English orthography were not violated.
Words consisting of single vowels (i.e., "a" and "I")

were replaced with other single vowels. Punctuation from the original version was preserved and capitalized letters in the original were replaced with other capital letters. The resulting passage consisted of pronounce-able "words" which were not meaningful.

4. <u>Semantic version</u>: Every other noun and every other verb in this passage were replaced with other nouns and verbs selected from the Harris-Jacobson Short Readability Word List (Harris & Sipay, 1975, pp. 666-675). The list is a compilation of words which occur with high frequency in first-and second-grade level books from widely used basal reader series. Intransitive verbs and pronouns were not altered. Each noun and verb to be altered was replaced with the first noun or verb given in the Harris-Jacobson list which began with the same letter as the noun or verb it was replacing. The resulting paragraph was not meaningful since it was composed of "deviant sentences," a linguistic term which describes sentences which appear strange or unusual to a native speaker for semantic reasons (Wardhaugh, 1977).

5. <u>Syntactic-AS version</u>: Changes in syntax <u>a</u>cross <u>s</u>entences (AS) were made by preserving original word order, but altering the placement of sentential boundary markers (periods). The number of sentences remained the

same. Capitalization and spacing were corrected so that the paragraph looked as if it were a normal paragraph. Periods were moved so that the new sentences still contained both subjects and verbs and were comprehensible. The meaning, however, was different from that of the original sentences in the unaltered version.

Each passage was typed in pica type, in the form of a single paragraph on a 5" x 8" white card. No titles were used. The passages (cards) were sequenced so that neither the Intact passage nor the Graphophonic passage (the two extremes in terms of readableness) occurred at the beginning or end of the series. Putting the Intact passage first might have influenced subjects to expect all of the passages to be meaningful. If left for last, some subjects might have anticipated its being correct since that was the only kind not yet presented. The Graphophonic version, which was meaningless and contained no real words, was also placed within the sequence for similar reasons: to avoid an initial mind set and to avoid the appearance of an apparent progression of increasingly meaningful passages.

Forced-Choice Questionnaire (Appendix D)

This instrument consisted of a typed copy of the same nine questions subjects were asked initially.

However, beneath each question two sets of responses were typed. One set of responses was typical of responses given by top-down, meaning-centered processors (i.e., a composite of responses given previously to the oral Interview by other good readers in pilot testing). The second set of responses under each item consisted of those typical of bottom-up, decoding-centered processors (i.e., a composite of responses given by poor readers in pilot testing.) In pilot testing, the interview was given to approximately 40 high school and community college students who were selected on the basis of reading test scores. All students had taken either the Nelson-Denny Reading Test, Form D or the Gates-MacGinitie, Form E. Approximately half of the students read at or above the 50th percentile; the other half scored below the 25th percentile. Responses from these two groups of students were chosen deliberately since they reflect two opposite ends of a continuum, although it is obvious that in reality, readers probably utilize both types of processing in an interactive manner (Rumelhart, 1976). The order of the two sets of responses beneath each question was randomized. This was accomplished by the throw of a die. An even number on the die led to the "top-down" answer being listed first; an odd number resulted in the

"bottom-up" response in the left-hand position beneath the question.

Instructions to the subjects were:

Next, I'm going to show you the same questions
I asked you at the beginning, but beneath each
question are two sets of answers that other
students have given. While we're looking
at it together, I'll read each question and
the two sets of answers outloud. Then
I'd like you to tell me which answer comes
closest to your opinion.

Other formats which could circumvent the problem of possible low verbal production or lack of metalanguage in subjects were explored in pilot testing, but found unsatisfactory. One such experiment consisted of having subjects view two videotaped interviews of two subjects. The same questions as those on the initial interview were used. One set of responses represented top-down, meaning-centered reading; the other was typical of bottom-up, decoding-centered processing. Because subjects became confused in remembering who had said what in the video-tapes, and were preoccupied with the visual aspects of the presentation, this approach to data collection was ruled out.

Oral Reading Task Cards (Appendix E)

This instrument consisted of a set of five cards with a typed passage on each and a cassette tape with a recorded version of each passage. On white 5" x 8" cards,

which subjects looked at while listening to the oral readings of the passages, were typed the intact, unaltered forms of the passages. They were typed in pica type, in paragraph form, with no titles. The passages were recorded by the researcher. In pilot testing, no subject indicated any awareness of that fact or inquired about the identity of the speaker.

The passages were adapted from the same source as those used for the silent reading task cards (Getting the Facts, Level B). The passages contained approximately the same number of sentences and words per sentences, were of uniform writing style (expository) and interest level, and had a second-grade readability. The low readability assured all subjects of being able to decode the words in the passages. Despite the low readability, the passages reflected relatively natural (i.e., spoken) language patterns.

Each taped passage contained five miscues of one particular type (graphophonic, syntactic, or semantic), except for the Corrected version. The Corrected version contained a total of seven miscues (of all types), but miscues which altered the meaning were self-corrected by the speaker on the tape. In all taped versions, the first sentence was kept intact.

Directions for this task were:

People have different ideas about what's
good reading and what's bad reading, so the
last thing we're going to do is to have you
listen to some passages that are being read in
different ways. I'll give you an exact copy
of the card the person on the tape was reading
from. Listen to the tape of how the person
reads each of the passages on the cards. After
you've heard each card, we'll stop the tape
player and I'll ask you your opinions about
their reading. There are no right or wrong
answers--I'm interested in your opinions
only. We'll do a couple of sample passages
first to be sure you understand what we're
doing. Feel free to ask questions if you
don't understand.

The five altered versions which subjects heard on

tape were:

1. Syntactic-WS verson: Word additions, omissions,

and transpositions within sentences (WS) were used to

disrupt passage meaning.

2. Graphophonic version: Five uncorrected grapho-

phonic miscues (transposed letters, accent on wrong

syllable) served to disrupt passage meaning. The

miscues were selected from ones poor readers made in

reading the passage during pilot testing.

3. Corrected version: Miscues of the types exhibited

in the other versions were represented in this passage.

However, those which would distort the meaning were

corrected by the reader on the tape so that meaning was

preserved.

4. <u>Semantic version</u>: Five nouns in the passage were replaced with five other nouns randomly selected from the Harris-Jacobson Short Readability List (Harris & Sipay, 1975, pp. 666-675), described earlier. A table of random digits (Dayton, 1970, pp. 379-383) was used to select words from the Harris-Jacobson list.

5. <u>Syntactic-AS version</u>: Syntactic changes were made <u>a</u>cross <u>s</u>entences (AS). Word order and sequence were preserved; however, sentential boundary markers (periods) were moved and inserted at subsequent points. Periods were placed so that the resulting sentences contained both subjects and verbs and were comprehensible. The meanings of the resultant sentences differed from the original ones, making a somewhat bizarre paragraph.

The sequence of the passages was structured so that the Corrected version was placed within the sequence rather than at the beginning or end. This was to avoid an initial mind set in the subject, the expectation of progressively "better" or "worse" oral reading of the passages, or the anticipation on the subjects' part that the last passage must be the best one if all previous ones seemed to them to have typified poor reading.

Two sample passages were used to be sure that the subject grasped the task. One trial passage contained

five miscues of various types, all of which distorted the meaning. After completion of both trials and the examiner's determination that the subject understood the task, the first passage was presented. If the subject did not comprehend the task after two trials, the two trials were repeated. Pilot testing indicated that the two trials were generally more than adequate to demonstrate to subjects what was to be done.

If the subject had trouble getting started, the examiner after one minute asked "In your opinion, is this good or poor reading?" If the subject did not explain his or her choice, the examiner after one more minute asked, "Why do you think it's good/poor reading?" If the following information was not included in the subject's response, the examiner asked, "Do you think the person understood what she was reading?" "Why do you think so?"

Other Pilot Testing Results

Pilot testing was carried out using 15 students from three high schools and one community college. On the basis of this work, modifications were made which led to the final format of the instruments, the directions to be read to subjects, and the sequencing of the tasks.

A summary of the last pilot test results is given in Appendix F. Three students from the school where the actual testing was conducted participated in this pilot testing. These students were not part of the actual study, however. All three subjects were females, two Anglo and one Black, reading at three different grade levels: third, sixth, and ninth grade.

Results indicated that there was a high degree of correspondence (83%) between each subject's oral Interview responses and those given on the Forced-Choice Questionnaire. This indicates that both instruments seemed to yield approximately the same information and that subjects were consistent in their response patterns.

There was also a pattern of sharp differentiation among the three readers' orientations to reading. For the third-grade level reader, only 3% of her responses to the Forced-Choice Questionnaire reflected a meaning focus; whereas this figure jumped to 71% for the sixth-grade level reader and 100% for the ninth-grade level reader.

On the Silent Reading Task Cards, all subjects accepted the Intact version as readable and rejected the graphophonically altered version as unreadable. Since this original Graphophonic version did not differentiate

among subjects of various reading levels, it was modified
to make the nonsense words pronounceable (decodable).
This was achieved by resequencing the actual letters of
each word so that, although they were nonsense words,
they did not violate normal letter sequences of English
orthography. There was a sharp differentiation among
the subjects on the Syntactic-WS and Semantic versions
(no Syntactic-AS version, altered by changes in the
sentence boundaries, was used in the Silent Reading task
in this pilot test). The poorest reader felt that both
of these versions were readable, but did not make sense.
The sixth-grade level reader rejected the Syntactic-WS
version as unreadable and found the Semantic version
readable, but not sensible. The best reader was meaning-
focused and stated that a person could read the versions
if he knew the "code" to unscramble the Syntactic-WS
version or if he knew the context from which the
bizarre Semantic version had been taken. (She speculated
that it could have come from a "fantasy" story.)

In the Oral Reading task, a primary distinction
between the poor reader and the other two subjects was
her inability to judge accurately whether comprehension
had occurred or not. She accepted all versions, other
than the Graphophonic, as being good or "pretty good"

reading. She accepted the Syntactic-AS version (rapid, accurate, sequential decoding, but periods ignored and passage meaning altered) as being understood by the reader on the tape. She also believed the reader on the tape understood the Semantic version, even though the substitution of some nouns for others had completely altered the meaning of the passage.

These data suggested sufficiently strongly both that subjects of varying reading abilities seemed to have different orientations toward the reading process (i.e., different schemata). Moreover, these differences were reflected in their responses to these instruments.

Administration of Assessment Instruments

Data were gathered between April 29 and May 9, 1980. Each subject who returned a consent form signed by both the parent and subject was escorted by the examiner to an unused classroom. The examiner visited briefly with the student about an on-going school activity to help establish rapport and reduce any anxiety the subject might have. The examiner and the subject sat at right angles at the corner of a table so that materials could be easily manipulated and passed back and forth. The examiner reconfirmed the subject's earlier approval to

tape record the session, explaining that this minimized the need for the examiner to take notes during the session.

The sequence of the tasks was the same as the order in which they were described previously: (a) the Open-Ended Interview; (b) the Silent Reading Task Cards; (c) the Forced-Choice Questionnaire; and (d) the Oral Reading Task Cards. This arrangement alternated the forms of the Interview with two concrete tasks. The Open-Ended Interview was placed first so that the subject's responses would not be biased by any of the other tasks. A concrete task, determining the readableness of several passages, was placed next to provide a buffer between the two forms of the Interview in order to erase the subject's short-term memory of his or her responses to the initial interview. Also, the Silent Reading Task was positioned second because it was the simpler of the two concrete (non-interview) tasks and should, therefore, have helped subjects feel confident and at ease in verbalizing responses. The third instrument was the printed form of the Interview, the Forced-Choice Questionnaire, which required no reading on the part of the subject since the examiner read it aloud. Finally, the taped oral readings of the five different passages was presented. Since this

task was somewhat more complicated, and involved the application and integration of various information the subjects may have given earlier, it was placed last. The time required to administer the four instruments was approximately 20 to 30 minutes per subject.

Data Analysis

After the data collection sessions were completed, the examiner transferred subjects' responses to Subject Response Sheets (see Appendix G) and transcribed any additional comments which they made. Data yielded by this study were primarily descriptive and were dealt with as follows.

Open-Ended Interview

Each of the subject's responses was classified as having (a) a decoding-focus, (b) a meaning-focus, (c) both decoding and meaning focuses, or as (d) non-classifiable. Canney and Winograd's (1979) descriptors and pilot test data were used as the bases for classification of responses. (See Appendix H for descriptors for each category.) The frequency of each type of response was computed for each subject to see if there was a predominant pattern or orientation. Within each

group of subjects reading at the same level, an examination was made to see if group patterns seemed to emerge.

For all statistical procedures, the more conservative .01 level of significance was used. Because of the large number of tests that were run, this level of significance was selected to help control the Type I error rate.

In order to examine statistically the frequencies of each type of response (A, AB, and B) selected by each group, the chi-square test of independence (Stanley & Glass, 1970) was computed for the responses to each of the first seven Interview questions. The total number of A responses and B responses yielded by each group were analyzed using the one-way analysis of variance (ANOVA) procedure (Dayton, 1970) to see if differences existed across groups. A significant ratio was found, so post hoc pairwise comparisons using the Duncan multiple range procedure (Dayton, 1970) were made to determine where significant differences existed. The total number of AB responses (given by the middle and high groups only) was analyzed for differences using a two-sample t-test (Glass & Stanley, 1970). The final two questions, which pertained to the instructional methodology the

student initially received, were not included in these computations.

After the examiner classified the responses to the Open-Ended Interview, an independent rater classified the responses to be sure that a reliable classification had been achieved. The independent rater, a graduate student in reading, was supplied with descriptive information on the four categories of responses (see Appendix H). Using these descriptive guidelines, the rater categorized subjects' responses to the nine Interview questions. The rater was given unmarked, unidentified sets of responses from which to work. The percent of agreement for questions 1-7 only, 8 and 9 only, and 1-9 was calculated for the low, middle, and high groups and for the sample as a whole. The initial, overall interrater reliability on the classification of subjects' responses to the nine Interview questions was .93. The percentages of agreement on questions 1-7 and for questions 8-9 only were also .93. After the initial, independent ratings were carried out, the two raters were able to resolve the nine conflicted ratings, thereby achieving 100% agreement in the final categorization of responses.

Forced-Choice Questionnaire

The subject's choices of responses were marked on the Subject Response Sheet. On the Questionnaire, the responses printed on the left were the A responses and the responses on the right, the B responses. These were listed on the Subject Response Sheet (Appendix G) under columns headed "Decoding" and "Meaning," to indicate the type of response each represented on each question. The frequencies of decoding responses and meaning responses were computed to detect any pattern within groups. Similar comparisons were made across groups, as well.

As with the Interview responses, the chi-square test of independence was used to determine whether the frequencies of A responses and B responses for the first seven questions differed significantly across groups. The total frequencies of A responses and B responses per group were compared using a one-way analysis of variance (ANOVA) to detect significant differences across groups. Since a significant F ratio resulted, Duncan multiple range post hoc comparisons were run to determine where significant differences existed.

Finally, for each item, a comparison was made to see if subjects' oral answers given previously on the Interview and their Forced-Choice Questionnaire answers were consistently of the same type. Responses to the Interview were rated as having a decoding-focus (A), a meaning-focus (B), both a decoding and meaning-focus (AB) or as non-classifiable (NC). Criteria for each category are given in Appendix H. Responses to the Questionnaire were classified as having either a decoding-focus (A) or a meaning-focus (B). To compare subjects' responses on the two tasks, the following criteria were applied to responses to questions 1-7 on both instruments: (a) the two responses were rated Y (Yes), "consistent," if the subjects gave the same type of answers on both tasks (i.e., A/A or B/B); (b) the two responses were rated N (No), "inconsistent," if they gave a decoding response to one task and a meaning response to the other (i.e., A/B or B/A); (c) the responses were rated Y/N (Yes/No), "partially consistent," if they gave a decoding and meaning response (AB) to the Interview question and either a decoding response (A) or meaning response (B) to the Forced-Choice question (i.e., AB/A or AB/B); (d) the rating CC (cannot compare) was used when subjects gave a non-classifiable response (NC) to

the Interview, since there was not a comparable response category on the Questionnaire (i.e., NC/A or NC/B).

The percentage of consistent answers was computed for each subject. The collective responses for each group were then examined for within-group and across-group consistency.

The final two questions were used to explore the instructional methodology to which subjects had been exposed and to examine its subsequent impact on subjects within groups and across groups. Frequencies of each type of response were tabulated so that comparisons could be made between subjects who had experienced a decoding model of reading in instruction and those who had been taught primarily by a comprehension-centered approach.

Silent Reading Task Cards

Subjects' responses to the questions "Could a person read this?" were classified under one of three categories: Yes (it can be read); No (it cannot be read); or Yes/But (indicating that the subject had more than one schema of "reading"). These categories parallel those of Canney and Winograd (1979). The collective frequencies of responses for each group were compared

for each version to identify any trends within groups and across groups.

Oral Reading Task Cards

Subjects' responses to each of the five versions were recorded under one of these categories: "Good" (it represents good reading); "Poor" (it represents poor reading); "Good and Poor" (conditional responses in which the subject indicates that certain things about it were good or poor; typical of such answers would be "it's good, but . . .," "pretty good," "fair," "medium," etc.). It was noted for each passage whether the subject felt the reader on the tape understood what was being read. This made it possible to determine whether the subject thought "reading" could still be "good" in the absence of comprehension. The frequencies of responses for the three groups were examined for differences within and across groups as to the types and number of passages accepted as representing "good" reading.

Summary

Fifteen ninth graders were grouped on the basis of teacher judgment and standardized test scores into three equal groups having low, middle, or high levels of reading achievement. Four instruments (an Open-Ended Interview,

Silent Reading Task Cards, the Forced-Choice Questionnaire, and Oral Reading Task Cards) were developed, piloted, and then individually administered to each subject between April 29 and May 9, 1980. The purpose was to gain information about (a) differences in perceptions of the reading process within groups and across groups, (b) the consistency of the responses yielded by the instruments, and (c) each group's instructional model of reading. Results were recorded and analyzed both statistically and descriptively.

CHAPTER 4

FINDINGS OF THE STUDY

The primary purpose of this study was to investigate how ninth graders of three levels of reading ability perceive the reading process. The study focused mainly on differences within and among groups of subjects. Another purpose of the study was to examine the usefulness of the four data-gathering instruments and the consistency of the responses the instruments elicited. A final purpose was to gain insight as to any possible relationship between the instructional methodology to which subjects had been explosed and their conceptualizations of the reading process.

Data from the four instruments were transcribed and then analyzed using a combination of quantitative and descriptive procedures. The findings to the research questions and hypotheses are presented below.

Question 1

As measured by four tasks, are there differences in the perceptions of the reading process among three groups of ninth graders who read at low, middle, and high reading levels?

With regard to the Open-Ended Interview and the Forced-Choice Questionnaire, the following null hypotheses were tested at the .01 level of significance.

Open-Ended Interview

Hypothesis 1. There are no differences among the total number of responses low, middle, and high readers give in each of the Open-Ended Interview response categories for the first seven questions.

Decoding (A) Responses: A one-way analysis of variance computed on the total number of decoding (A) responses given by each group indicated that there were significant differences among the groups. Therefore, the null hypothesis was rejected for decoding responses (see Table 3).

Table 3

ANOVA Summary Table: Total Decoding (A)
Responses on Interview

Source	df	SS	MS	F ratio
Among	2	34.53	17.27	8.49*
Within	12	24.40	2.03	
Total	14	58.93		

*$p < .01$

Subsequent Duncan multiple range post hoc comparisons indicated the differences between the low group and each of the other groups were significant at the p < .01 level. The q' value of 4.78 for the low and middle groups exceeded the shortest significant range (SSR) of 2.75. The q' value of 5.65 for the low and high groups exceeded the SSR of 2.87. The q' value of 1.57 for the middle and high groups failed to exceed the SSR of 2.75. Although the low group gave significantly more decoding responses than either of the other groups, the number of decoding responses given by the other groups did not differ significantly.

Meaning (B) Responses: One-way ANOVA results on the number of B responses given by the various groups also resulted in a significant F ratio. Therefore, the null hypothesis was rejected for the meaning responses (see Table 4).

Post hoc comparisons using the Duncan multiple range test indicated the differences were significant at the p < .01 level between all pairs of groups, with the number of meaning responses increasing as the reading levels of the groups increased. The q' values for the low and middle groups (3.24) and for the middle and high groups (2.92) exceeded the SSR of 2.66. The q' value of

Table 4

ANOVA Summary Table: Total Meaning (B)
Responses on Interview

Source	df	SS	MS	F ratio
Among	2	36.13	18.07	9.51*
Within	12	22.80	1.90	
Total	14	58.93		

*$p < .01$

6.16 for the low and high groups exceeded the SSR of
2.78.

Decoding and Meaning (AB) Responses: Since the
low group gave no AB responses, a two-sample t-test was
used to examine the distribution of total AB responses
given by the middle and high groups. The computed value
($t = .97$, $df = 8$) was not significant at the .01
level. Therefore, there were no significant differences
between the two groups in the number of AB responses
given by them.

Hypothesis 2. There are no differences among the
number of responses in each category that low, middle,
and high readers give to each of the first seven Open-
Ended Interview questions.

Chi-square tests of independence were used to examine the distribution of A, AB, and B responses to each of the first seven questions across the three groups. Since question 2 yielded a significant chi-square value, the null hypothesis was rejected. Question 2 dealt with characteristics subjects attributed to good readers' reading. Table 5 displays the computed chi-square values for each question.

Table 5

Computed Chi-Square Values for Responses to
Interview Questions 1-7

Question	x^2	df	Significance
1	7.66	4	NS
2	16.42	4	S*
3	2.25	2	NS
4	6.66	2	NS
5	7.81	6	NS
6	2.50	2	NS
7	4.23	4	NS

*$p < .01$

No post hoc comparison was run on question 2 since an examination of the Summary of Frequencies of Responses Table (Appendix O) indicated where significant differences

lay. On question 2, low readers gave decoding responses; middle readers gave decoding and meaning responses; and the high readers gave meaning responses.

Of interest too was question 3, whose chi-square value approached significance. Question 4, which asked how the subjects believed "good" readers would deal with "something they didn't know," elicited only decoding strategies from the low group.

Forced-Choice Questionnaire

Hypothesis 3. There are no differences among the total number of responses low, middle, and high readers give in each of the Forced-Choice Questionnaire response categories for the first seven questions.

A one-way ANOVA computed on the total number of decoding (A) responses across groups resulted in a significant F ratio (see Appendix D). Since this questionnaire required subjects to choose between bi-polar responses, the stated number of B responses was also significant. Therefore, the null hypothesis was rejected (see Table 6).

Post hoc comparisons using the Duncan multiple range test revealed that significant differences existed at the .01 level between all pairs of groups for decoding responses and meaning responses. The q' values for the low and middle groups (2.78) and for the middle and high groups

Table 6

ANOVA Summary Table: Total Decoding (A)
Responses on Questionnaire

Source	df	SS	MS	F ratio
Among	2	29.20	14.60	11.53*
Within	12	15.20	1.27	
Total	14	44.40		

*p < .01

(3.98) exceeded the SSR of 2.17. The q' value of 6.76 for the low and high groups exceeded the SSR of 2.67. The low group selected predominantly decoding responses; whereas the middle group's responses were more evenly divided between the decoding and meaning categories. In contrast, the high group selected six times as many meaning responses as decoding responses.

Hypothesis 4. There are no differences among the number of responses in each category that low, middle, and high readers give in response to each of the first seven Forced-Choice Questionnaire questions.

Chi-square tests of independence were applied to the distribution of the A, AB, and B responses across the three groups. There were no significant differences at the .01 level of significance. However, questions 1 and 2

approached significance. (See Appendix L for summary frequencies of all responses to the questionnaire.) Question 1 dealt with what subjects do when they are reading and "come to something [they] can't figure out." All of the low readers and four of the five middle readers gave decoding strategies. Four of the five high readers, however, gave meaning responses. Question 2 concerned the characteristics subjects attribute to the reading of good readers. In response to question 2, all of the middle group and the majority of the low group selected the A answer, indicating that to them, skilled readers were characterized by their decoding ability.

With regard to the last two tasks, the Silent Reading Task Cards and the Oral Reading Task Cards, the following questions were examined.

Silent Reading Task Cards

Question A. Are there differences among the total number of responses low, middle, and high readers give in each of the response categories in their ratings of the reading of the five Silent Reading Task Cards?

Subjects were asked to determine whether each passage could be "read" and to explain why they felt it could or could not be read. Responses fell into three categories: No (it was unreadable); Yes (it was readable); Yes/But (it

was readable, but with one or more qualifications added or limitations noted. These included comments such as "if you spoke that language," "if you knew the kind of story it came from," "but it wouldn't make sense," etc.).

Within each group, five of the Yes (Y) ratings were given correctly to the Intact passage. (The Intact passage was the only one that was meaningful.) The totals reflected the differences between the high group and the other two groups, which were more similar to each other. The low and middle groups gave nearly the same number of Yes (Y) responses (13 and 14, respectively). The high group gave five Yes responses. The number of qualified-yes responses (Y/B) increased across groups from the low group to the high group (3 to 5 to 7). The high group gave the most No (N) responses, 13, as compared with 6 from the middle group and 9 from the low group.

In summary, differences did exist between the high group's accuracy in judging the readableness of the passages and the lesser degrees of accuracy exhibited by the other two groups.

Question B. Are there differences among the number of responses low, middle, and high readers give in each response category in their ratings of their reading of the individual Silent Reading Task Cards?

In general, a shift from focusing on decoding
aspects towards focusing on comprehensibility as the key
to readableness was evident in the data. Subjects of
all three groups recognized the Intact version as being
readable. However, their ratings of the remaining
passages were more divergent. On the Syntactic-WS
passage, more subjects in the middle group accepted the
passage as Y/B (readable with certain qualifications),
than either of the other two groups. On the Graphophonic
version, no subjects in the high group rated this meaning-
less passage as readable, whereas one subject in each of
the other groups found it somewhat readable (i.e., accepted
it as Y/B).

The two passages which seemed to distinguish most
clearly the high group from the middle and low groups
were the Semantic and Syntactic-AS passages. The
Semantic passage, a meaningless passage comprised of real
words, was accepted as being completely readable (Y) by
four of the five subjects in each of the two lower groups
and as Y/B by the remaining subject in each group. In
contrast, no subject in the high group rated the passage
as completely readable (Y). Rather, all five high
readers rated it Y/B, with four of the five stating that
it "could be read, but it wouldn't make sense."

On the final passage, Syntactic-AS, four subjects in each of the lower groups accepted these altered sentences as readable (Y), with one subject in each group rejecting them completely as unreadable (N). In distinct contrast, four subjects in the high group rejected this passage as unreadable (N), with the remaining subject accepting it on a conditional basis (Y/B). The responses to the last two passages seemed to delineate the high group from the other two groups, with the lower two groups perceiving readableness as consisting to a large extent of pronounceability.

Question C. Are there differences among the total number of responses low, middle, and high readers give in each of the response categories in their ratings of the comprehension of the five Silent Reading Task Cards?

A record was kept of the number of specific references each group made to the comprehensibility of each passage and an indication of whether the comments suggested that the passage "made sense," "did not make sense," or "made partial sense." These data reflect only verbalizations about comprehensibility that were volunteered by subjects. It is possible that some subjects might have had opinions about passage comprehensibility, and yet not expressed them.

An examination of the total number of references showed 14 from the low group, 9 from the middle group, and 10 from the high group. Whereas the number of references across groups did not seem to differ appreciably, the groups did vary in the accuracy of their assessments of passage comprehensibility. The high group was better able to assess passage comprehensibility than either of the other two groups were.

Question D. Are there differences among the number of responses low, middle, and high readers give in each response category in their ratings of the comprehension of the individual Silent Reading Task Cards?

All references to comprehension on the Syntactic-WS passage, except one, correctly identified the passage as being incomprehensible. The single exception was a middle group subject's comment indicating that it was partially comprehensible, but would require "a couple of" readings. Across all groups, subjects who referred to the comprehensibility of the Intact passage noted correctly that it "made sense." Only low and middle group readers mentioned comprehension in relation to the Graphophonic passage's readableness. Both were correct in stating that it did not make sense.

The final two passages, the Semantic and the Syntactic-AS ones, provided the sharpest contrasts among the three groups. On the Semantic version, three low readers and one middle reader rated the passage as readable and comprehensible. Of the four high readers who mentioned comprehensibility with respect to the Semantic passage, not one of them accepted it as meaningful (although all five stated that it could be "read").

The last passage, the Syntactic-AS version, also elicited sharply divergent responses from the three groups. The most significant responses were from the low group: two low readers felt the passage "made sense." Of the middle group, one subject reported the passage "made sense" and one saw it as making partial sense. Of the high readers, the one subject who made a direct reference to comprehension commented it could be understood "much better" if the punctuation were "fixed."

The low and middle groups' assessment of the comprehensibility of the Semantic and Syntactic-AS passages suggested that although they see a relationship between readableness and comprehensibility, some of them may have difficulty determining what makes sense and what does not. (Appendix K displays summary frequencies of all responses given to the Silent Reading Task Cards.)

Oral Reading Task Cards

Question A. Are there differences among the total
number of responses the low, middle, and high readers
give in each of the response categories in their ratings
of the reading of the five Oral Reading Task Cards?

Subjects were asked to evaluate the way the taped
passages had been read. Responses fell into three
categories: G (it was good reading); G/P (it was good
in some respects, poor in others, i.e., fair), or P (it
was poor reading). (See Appendix I for a description of
each category.)

The collective ratings of each group's assessment of
the oral reading of five different passages revealed that
the number of G ratings decreased across groups from six
in the low group to one in the middle group to none in the
high group. The middle group showed the most ambivalence,
selecting 14 G/P ratings. The high group gave approxi-
mately twice as many (21) "poor" ratings as either the
middle group (10), or the low group (12) (see Table 7).

If subjects considered meaning to be a prerequisite for
"good" reading, then five of each group's total (25)
responses should have been "good" (G) ratings. (The
meaning of the four other passages was altered by the way
they were read.) In light of this, the ability to evaluate

oral reading increased across reading levels from the low group to the high group.

Table 7

Group Ratings of Oral Reading Task Cards

Group	Syntactic-WS	Corrected	Grapho-phonic	Semantic	Syntactic-AS
Low					
G	3	-	1	-	2
G/P	1	3	3	1	2
P	1	2	1	4	1
Middle					
G	1	-	-	-	-
G/P	4	5	2	-	3
P	-	-	3	5	2
High					
G	-	-	-	-	-
G/P	-	3	-	-	1
P	5	2	5	5	4

G = Good reading

G/P = Good/Poor (fair) reading

P = Poor reading

Question B. Are there differences among the number of responses the low, middle, and high readers give in each response category in their ratings of the reading of the individual Oral Reading Task Cards?

Table 7 shows that the low group rated the reading of every passage except the Corrected version more highly than the middle group. The middle group rated the reading of every passage as highly or more highly than the high group. The entire high group rated the reading of the Syntactic-WS, Graphophonic, and Semantic versions as "poor" (see Appendix M). These results indicated that as the reading level of the group increased, so did the ability to judge accurately the oral reading of the passages.

Question C. Are there differences among the total number of responses low, middle, and high readers give in each of the response categories in their ratings of the comprehension of the five Oral Reading Task Cards?

After hearing the passages on tape and evaluating the way they were read, subjects were asked whether they felt the person on the tape comprehended what was being read. Responses fell into three categories: Y (Yes, the reader comprehended it); Y/N (Yes and No, the reader partially comprehended it); and N (No, the reader did not comprehend it). With a meaning-centered orientation, the passage

which should have been identified as having a Y rating
was the Corrected version, since the reader would not
have made the corrections had she not comprehended what
was being read. The alterations (left uncorrected) in
the other versions distorted the passages' meanings.

There was a differential shift across groups with
the higher groups increasingly recognizing that compre-
hension had not occurred in the majority of the passages.
The high group gave 21 N ratings, the middle group 11,
and the low group 10. The high group gave 2 Y ratings;
whereas the middle group gave 5, and the low group gave
11. The middle group again retained a transitional
stance, recording the greatest number of Y/N responses
(9) compared with 4 from the low group and 2 from the
high group.

Question D. Are there differences among the
number of responses low, middle, and high readers give
in each of the response categories in their ratings of
the comprehension of the individual Oral Reading Task
Cards?

Table 8 shows that more than half of the subjects
in the low and middle groups believed the person reading

Table 8

Group Ratings of Individual Oral
Reading Passage Comprehension

Group	Syntactic-WS	Corrected	Grapho-phonic	Semantic	Syntactic-AS
Low					
Y	2	3	3	-	3
Y/N	1	2	-	1	2
N	2	-	2	4	-
Middle					
Y	2	3	-	-	-
Y/N	2	1	3	-	3
N	1	1	2	5	2
High					
Y	-	2	-	-	-
Y/N	-	1	-	-	1
N	5	2	5	5	4

Y = Yes (the reader comprehended the passage)

Y/N = Yes/No (the reader partially comprehended the
passage)

N = No (the reader did not comprehend the passage)

the Syntactic-WS, Graphophonic, and Syntactic-AS passaged
comprehended them either partially or completely. In
contrast, four of the five subjects in the high group

rejected these as not being understood by the reader. One low group subject believed the reader partially comprehended the Semantic version, although no subjects in other groups believed this. On the Corrected passage, three of the low readers and three of the middle readers believed that the person understood the passages; whereas two high readers thought this to be true. In this instance, the low and middle readers were more accurate (from a meaning-centered orientation) in their appraisals since the reader would not have corrected the miscues had comprehension not been occurring. (Appendix M presents a compilation of all responses given in the Oral Reading Task Cards.)

Summary of Findings to Question 1

The data from all four tasks indicated that differences existed across groups in the ways selected ninth graders perceived the reading process. According to data from the Interview and the Questionnaire, the groups differed in their orientations to the reading process and in their conceptualizations of good reading. Significant differences were reflected in the groups' total frequencies in the response categories to the two tasks, with the number of meaning responses increasing across levels of reading achievement from the low group to the high group. There was a significant difference

in their responses to question 2 on the Interview. This question dealt with the characteristics subjects attributed to good readers. The low group appeared more concerned with the decoding aspects of the process and characterized good readers primarily as rapid, accurate decoders. Moreover, they reported using graphophonic cues as their major strategy in dealing with unknown words, as well as relying on external sources of help (teacher, parent, dictionary). The middle group maintained a transitional stance between the low group and the high group. Their answers reflected a concern for both decoding and comprehending as a part of their schema of reading. The majority of them included the ability to comprehend as part of their conceptualization of good readers. The high group seemed more concerned with the central role of comprehension in reading. In general, they characterized good readers as being high comprehenders. Some of them implied that their schemata of reading included flexible strategies for dealing with print. Several of them may have had more than one schema of reading since they indicated that a nonsense passage could be "read," even though it was not comprehensible.

Data from the Silent Reading Task Cards and the Oral Reading Task Cards also indicated certain differences across the groups in their responses to the instruments as

a whole, as well as to certain passages contained in each.
The three groups differed in their evaluations of the
reading of passages and the comprehension of passages. The
low group, more often than the other groups, stated that
linguistically-altered material was comprehensible and that
the oral reader had comprehended what had been read. Some
low group subjects rated the reading of certain passages
"fair," although they stated the reader had not compre-
hended them. The low group tended to give higher ratings
than the other groups on the readableness of passages which
were not meaningful. The middle group also rated some
non-meaningful passages as readable. The high group
tended to reserve "readable" ratings for comprehensible
passages and gave more No ratings when assessing the oral
reader's comprehension of linguistically-altered passages.

Question 2

As measured by four tasks, are there differences in
the perceptions of the reading process within each of
three groups of ninth graders who read at low, middle, and
high reading levels?

With regard to the Open-Ended Interview and the
Forced-Choice Questionnaire, the following questions were
examined.

Open-Ended Interview

Question A. Are there differences within each group among the total number of responses given in each of the Open-Ended Interview response categories for the first seven questions?

The high group showed the greatest internal consistency, followed by the low and middle groups, respectively. The middle group's responses spanned all four categories and were more evenly distributed between the decoding (A) and the meaning (B) categories than either the low or high group's. The low group gave approximately two-and-one-half times as many decoding (A) responses (24) as meaning (B) responses (9) and no decoding and meaning (AB) responses. The middle group gave primarily B responses (19), followed by A responses (11) and AB responses (4). The high group overwhelmingly selected B responses (28), followed by A responses (6) and AB responses (1).

Question B. Are there differences within each group among the number of responses given in each of the Open-Ended Interview response categories to each of the first seven questions?

In the low group, all five subjects gave decoding (A) responses to questions 1, 2, and 4. The three classifiable responses to question 5 were also A responses. Questions

3, 6, and 7 each elicited two A and three B responses. (See Appendix B for Interview questions.)

In the middle group, there was a consensus on one question: all subjects gave a meaning (B) answer to question 6. Answers were relatively evenly split between A and B responses to questions 3, 4, and 7. On the remaining three questions (1, 2, and 5), there was an even greater diversity among the A, B, and AB responses within the group.

Within the high group, there was a consensus of B responses to questions 2, 3, and 5. Responses to the other questions spanned only two categories (usually A and B), with the B category predominant in every case.

Forced-Choice Questionnaire

Question C. Are there differences within each group among the total number of responses given in each of the Forced-Choice Questionnaire response categories for the first seven questions?

Within the low group, there was a preference for decoding (A) responses (22) over meaning (B) responses (13). Within the middle group, the A responses and B responses were more evenly split (15 and 19, respectively), with a slight preference for B responses. Within the high group, there was a definite preference for B responses over A responses (30 to 5).

Question D. Are there differences within each group among the number of responses given in each of the Forced-Choice Questionnaire response categories to each of the first seven questions?

Table 9 shows that within the low group, there was unanimity in choosing the decoding (A) response to question 1. (See Appendix D for questions.) On five questions, the low group was nearly evenly split between A and B responses. On one question, four of the five subjects selected the same answer. On five of the questions, the majority of the low group subjects selected the decoding (A) response. This group exhibited the least within-group consistency.

Within the middle group, the responses were not so evenly divided between the decoding (A) and meaning-focused (B) answers. Subjects were in agreement in their responses to one question and nearly evenly split on one. However, four of the five subjects were in agreement in their responses to the remaining five questions. The middle group displayed more within-group consistency than the low group.

Within the high group, there was a consensus on two of the questions and on the remaining six questions, four of the five subjects selected the same responses. The within-group consistency in responses in the high group was the greatest of the three groups.

Table 9

Group Responses to Questionnaire Questions 1-7

Group	1	2	3	4	5	6	7
Low
A	5	3	2	4	3	2	3
B	-	2	3	1	2	3	2
Middle
A	4	5	2	4	1	1	1
B	1	-	3	1	3	4	4
AB	-	-	-	-	1	-	-
High
A	1	1	-	1	1	-	1
B	4	4	5	4	4	5	4

A = Decoding focus

B = Meaning focus

AB = Decoding and Meaning focus (subject's response
was that he would do what was indicated in the
A answer and then do what was indicated in the
B answer)

With regard to the Silent Reading Task Cards and the
Oral Reading Task Cards, the following questions were
investigated for each.

Silent Reading Task Cards

Question A. Are there differences within each group among the total number of responses given in each response category in the ratings of the reading of the five Silent Reading Task Cards?

In each group there were responses given in every category, although in each group the preponderance of the responses was confined to a single category: Yes (Y) for the low and middle groups; No (N) for the high group. The low and middle groups displayed within-group consistency in the large number of passages each accepted as readable (Y). The high group was internally consistent in rejecting the majority of the passages as unreadable (N).

Question B. Are there differences within each group among the number of responses given in each response category in the ratings of the reading of each of the five Silent Reading Task Cards?

The low group was in agreement on the readableness (Y) of the Intact passage. Their evaluations of the remaining four passages spanned two categories, with four of the five subjects choosing the same category. These figures suggest considerable consistency within the low group.

The middle group's responses were also in agreement on the Intact passage's readableness (Y). Their evaluations of the other four passages spanned two categories each. On three of these passages, four out of five subjects gave identical evaluations. On the fifth passage, (Syntactic-WS), the five subjects were nearly evenly divided in their ratings. On the task, the middle group demonstrated the least within-group consistency.

The high group had the greatest within-group consistency. On three passages (Intact, Graphophonic, and Semantic), all subjects were in agreement. Of the remaining two passages, four of the five subjects gave the same response (N).

Question C. Are there differences within each group among the total number of responses given in each response category in the ratings of the comprehension of the five Silent Reading Task Cards?

Within the low group, two of the seven Comprehensible (C) ratings were correct. (The two correct references were the ones made to the Intact passage.) Within the middle group, two of the four C ratings were correct, showing slightly more accurate judgments about a passage's meaningfulness. Within the high group, both references to a passage's being comprehensible pertained (correctly)

to the Intact passage. As inferred from these gratuitous comments, the high group was superior to the other groups in correctly assessing the comprehensibility of the passages.

Question D. Are there differences within each group among the number of responses given in each response category in the ratings of the comprehension of each of the five Silent Reading Task Cards?

Differences within each group were reflected mainly in their assessments of the Semantic and the Syntactic-AS passages. Some groups in the low group were unaware or unable to judge that the Semantic and Syntactic-AS passages were not meaningful. These same passages elicited similar results from some middle readers, but with about half as many inaccurate judgments. Within the high group, one subject found the Syntactic-AS passage partially comprehensible. Overall, the high group's assessments were the most accurate on all five passages.

Oral Reading Task Cards

Question A. Are there differences within each group among the total number of responses given in each response category in the ratings of the reading of the five Oral Reading Task Cards?

The low group's ratings were the most evenly distri-
buted among the three categories (G, good; G/P, fair;
P, poor), showing more variability within the group than
either of the other two groups. The middle group gave
the greatest number of "fair" responses (14) and one
"good" rating. In contrast, the high group had the
least variability. Those subjects found the reading of
none of the passages representative of "good" reading,
giving four "fair" ratings, and the remainder (21)
"poor."

Question B. Are there differences within each group
among the number of responses given in each response
category in the ratings of the reading of each of the five
Oral Reading Task Cards?

The low group's ratings of the Oral Reading passages
reflected more variability within the group than the middle
group (see Table 7). The middle group reflected more
variability in its responses than did the high group. The
low group was not in agreement in its ratings of any of
the passages, but four of the subjects concurred on their
ratings of the Semantic passage, rating it "poor."
Within the middle group, the subjects unanimously rated
the reading of the Corrected passage "fair" and the
reading of the Semantic passage "poor."

Within the high group, there was the greatest consensus among the ratings. All subjects agreed that the reading of the Syntactic-WS, Graphophonic, and Semantic passages was "poor."

Question C. Are there differences within each group among the total number of responses given in each response category in the ratings of the comprehension of the five Oral Reading Task Cards?

Within each group, total answers spanned the three categories (Y, Y/N, N). However, a different pattern of distribution existed within each group. Within the low group, there were almost equal numbers of Y and N responses given (11 and 10, respectively). Within the middle group, there were almost equal Y/N and N answers selected (9 and 11, respectively). The high group gave almost exclusively N ratings (21). (Twenty of the total 25 responses for each group should have been N ratings.) The high group most accurately assessed comprehension and showed the most within-group agreement.

Question D. Are there differences within each group among the number of responses given in each response category in the ratings of the comprehension of each of the five Oral Reading Task Cards?

Within the low group, subjects were almost evenly split between two response categories on three of the passages. On the Syntactic-WS passage, their responses spanned the three categories, indicating the least amount of agreement. On the Semantic passage, four subjects correctly stated that the person on the tape had not comprehended what was being read (see Table 8).

The middle group unanimously rated the Semantic passage as not being understood by the oral reader (N). Their answers were almost evenly divided between two categories (Y/N and N) on the Graphophonic and Syntactic-AS passages. On the Syntactic-WS and Corrected versions, however, subjects showed the greatest diversity in their ratings, covering three categories for each.

The high group's evaluations of comprehension were, overall, the most accurate and the most consistent within any of the groups. All subjects rated the Syntactic-WS, Graphophonic, and Semantic passages as not being comprehended by the reader. Four of the five subjects rejected the Syntactic-AS passage, rating it N. Finally, the Corrected version elicited the most varied responses, with two of the subjects incorrectly choosing the N rating.

Summary of Findings to Question 2

Results from the four tasks indicated that the high group had the greatest within-group agreement in its responses. As a group, the subjects were concerned with comprehension as the goal of reading. Moreover, they collectively demonstrated the ability to assess accurately the comprehensibility of material and an oral reader's comprehension of material read.

The low group also demonstrated within-group agreement in its responses to the four instruments, although less than and different from that of the high group. Subjects' responses indicated a decoding orientation to the reading process. As a group, the subjects made less accurate assessments of both text comprehensibility and an oral reader's ability to comprehend material that had been read.

The middle group manifested the most within-group variability in its answers. Subjects tended, however, to select more "middle-of-the-road" responses (AB, Y/N, and G/P) to the various instruments.

Question 3

For each subject and within each group, will there be consistent information elicited by questions 1 through 7 on the Open-Ended Interview and the Forced-Choice Questionnaire?

In general, there was consistency in subjects'
responses to the first seven questions on the Interview
and Questionnaire. Table 10 reflects the percent of
agreement for each subject, reading across the rows, and
the average percent of agreement for each group at
bottom of the Y column. Overall, the low group and the
high group were the most consistent in their responses
(approximately 83% each). The middle group had a lower
average percent of agreement (approximately 71%).

Within groups, the low group reflected the least
within-group variability in the percent of agreement for
individual subjects. The middle and high groups both
had the same range of variability, although the direction
of the variability differed. Two of the middle group
subjects answered two questions differently, whereas two
of the high group subjects answered all of the questions
the same way on both tasks.

The table in Appendix N shows the consistency of
responses among all subjects (by group) for the individual
questions 1-7. In the low group, there was less consis-
tency in subjects' responses to questions 2 and 5. Some
of the middle group changed responses on all questions
except 1, 4, and 7. The high group's responses remained
nearly the same on all questions, except 2 and 7.

Table 10

Percent of Consistent Responses Per Subject and Group
on Interview and Questionnaire, Questions 1-7

Subject	Y	N	Y/N	CC
Low				
031	85.7	14.3	--	--
032	85.7	14.3	--	--
033	85.7	--	--	14.3
034	71.4	28.6	--	--
035	85.7	14.3	--	--
$\overline{X}_1$ =	82.8			
Middle				
061	82.7	--	14.3	--
062	42.9	42.9	14.3	--
063	85.7	--	--	14.3
064	71.4	28.6	--	--
065	71.4	28.6	--	--
$\overline{X}_2$ =	71.4			
High				
091	100.0	--	--	--
092	42.9	57.1	--	--
093	85.7	--	14.3	--
094	85.7	14.3	--	--
095	100.0	--	--	--
$\overline{X}_3$ =	82.9			

Y = Yes (Answers same on Interview and Questionnaire)

N = No (Answers differed on Interview and
Questionnaire)

Y/N = Yes/No (AB response on Interview, A or B
response on Questionnaire)

CC = Cannot Compare (NC on Interview, A or B response
on Questionnaire)

Summary of Findings to Question 3

The Interview and the Questionnaire did elicit consistent responses from the groups. On the average, subjects in the three groups answered 79% of the questions the same way on both instruments. The high and low groups displayed virtually the same degree of consistency (approximately 83%), followed by the middle group (71%).

On an individual level, 10 of the 15 subjects gave consistent responses to 85% or more of the questions: three other subjects were consistent in approximately 71% of their responses; and two deviated substantially (42.9%). Of the two subjects where responses deviated substantially on the two tasks, one was a member of the middle group and the other was in the high group.

Question 4

Within each group, will there be consistent information elicited by the Silent Reading Task Cards and the Oral Reading Task Cards?

These two instruments cannot be compared as directly as the other two, even though both dealt with subjects' perceptions of what reading is and how they feel reading relates to the comprehensibility and/or comprehension. The Silent Reading Task Cards contained a completely intact (unaltered) passage; the Oral Reading Task Cards'

counterpart to this was a corrected passage. On the
Silent Reading Task Cards, subjects' gratuitous comments
on passage comprehensibility were noted; on the Oral
Reading Task Cards, subjects were asked if they thought
the person reading the passage had comprehended it.
(See Appendix O for summaries of response frequencies to
Silent Reading Task Cards and Oral Reading Task Cards.)

Table 11 shows that there was a shift between the
lower two groups and the high group toward rejecting the
four non-meaningful Silent Reading Task Cards as
unreadable. Subjects who included comprehensibility as an
essential component of readableness gave more No (N)
responses to these cards since only the Intact version
was sensible. A similar trend occurred in subjects'
ratings of the Oral Reading Task Cards: as the reading
level of the groups increased, so did the number of Poor
(P) ratings, indicating the high group's greater awareness
of the fact that meaning was lost in the way four of the
passages were read. Subjects who required the oral
reader to read the passages in such a way as not to distort
the meaning tended to assign lower overall ratings, since
only the Corrected passage met this requirement.

Table 11

Group Responses to Silent and Oral Reading Task Cards

| | Silent Reading Task Cards | | | | Oral Reading Task Cards | | |
| | Group | | | | Group | | |
Response	Low	Middle	High	Response	Low	Middle	High
Y	13	13	5	G	6	1	0
Y/B	3	5	7	G/P	10	14	4
N	9	7	13	P	9	10	21

Y = Yes (passage is readable)

Y/B = Yes/But (passage is readable, but with certain qualifications)

N = (passage is not readable)

G = Good reading

G/P = Fair reading

P = Poor reading

The Silent Reading Task Cards responses show that all groups displayed similar within-group consistency, although their responses were concentrated in different categories. The low and middle groups each gave 13 Yes (Y) responses, while the high group gave 13 No (N) responses. The Oral Reading Task Cards responses show that the high group exceeded the other groups in within-group consistency. The low group showed the greatest within-group variability, followed by the middle group. The low and middle groups

showed slightly less, although nearly equal, consistency in their responses to the two tasks than did the high group.

Summary of Findings to Question 4

The two tasks, although not precisely comparable, did reveal consistent orientations toward the reading process from each of the groups. On both tasks, the responses of the low and middle groups were more similar to each other, and both differed from the high group. The high group's responses indicated that subjects' assessments of readableness were predicated upon the comprehensibility of the material. Their ratings of oral reading were predicated in large measure upon the oral reader's comprehension or lack of comprehension of the material being read. The responses of the low and middle group indicated that they were either less aware of or less concerned with the role of comprehension in the reading process.

Question 5

According to responses elicited by questions 8 and 9 on the Open-Ended Interview and the Forced-Choice Questionnaire, are there differences in the instructional models of reading of low, middle, and high readers?

Questions 8 and 9 of these instruments dealt with subjects' instructional models of reading. Question 8 was "How do you think a teacher would try to help someone who was having trouble with their reading?" Question 9 was, "Do you remember how you first learned to read?"

Table 12 shows each group's individual and collective responses to questions 8 and 9 on the Interview and the Questionnaire. Subjects' responses to the Interview could be classified as decoding/meaning (AB) or non-classifiable (NC), two categories of responses which did not exist for the Questionnaire. Because subjects had to select either the A (decoding) or B (meaning) response (whichever came closer to their own beliefs), the Questionnaire yielded more specific information.

Interview responses to questions 8 and 9 contained several AB or NC responses. The dotted lines in Table 12 reflect shifts in subjects' responses from their answers on the Interview to the answers they selected on the Questionnaire. Five of the six shifts which occurred in the low group became A responses. All six of the middle group's shifts became A responses. One of the three high group's shifts became an A response. Several other points of interest emerged from the data. First, the majority of the AB and NC responses came from the low

Table 12

Shifts in Responses to Interview and
Questionnaire Questions 8 & 9

Group	Question 8		Question 9	
	Interview	Questionnaire	Interview	Questionnaire
Low	B	B	NC . . . . . . A	A
	A	A	NC . . . . . . A	A
	A	A	NC . . . . . . B	B
	A	B	NC . . . . . . A	A
	NC . . . . . . A	A	AB . . . . . . A	A
	3A/1B̅/1NC	3A/2̅B	1AB/4̅N̅C	4A/1̅B̅
Middle	AB . . . . . . A	A	NC . . . . . . A	A
	AB . . . . . . A	A	A	B
	NC . . . . . . A	A	A	A
	AB . . . . . . A	A	B	B
	B	B	NC . . . . . . A	A
	3AB/1̅B̅/1NC	4A/1̅B̅	2A/1B̅/2NC	3A/2̅B̅
High	AB . . . . . . B	B	B	B
	NC . . . . . . B	B	NC . . . . . . A	A
	A	A	B	B
	A	A	A	A
	B	B	A	A
	2A/1A̅B̅/1B/1NC	2A/3̅B	2A/2B̅/1NC	3A/2̅B̅

A = Decoding focus

B = Meaning focus

AB = Decoding and meaning focus

NC = Non-classifiable

and middle groups. The high group, in contrast, tended

to give more definite, clear-cut responses. Second,

four of the five low group subjects gave NC responses when

asked how they "first" learned to read. Finally, the

majority of the middle group readers initially responded to question 8 by indicating the teacher would help troubled readers by utilizing both decoding and meaning strategies. However, when forced to choose one, they unanimously shifted to the A response.

Using the more specific results produced by the Questionnaire, the total of the group responses in terms of decoding (A) and meaning (B) responses were: low group, seven A and three B; middle group, seven A and three B; and high group, five A and five B. The low and middle groups both gave more than twice as many decoding responses as meaning responses, but only slightly more decoding responses than the high group. These data suggested that slightly more subjects in the low and middle group had experienced a decoding instructional model of reading and might believe that this is how the teachers perceive the process. Fewer subjects in the high group seemed to have experienced an approach to reading that was as strongly oriented toward a decoding approach.

Summary of the Findings of the Study

The major findings of this study were:

1. As measured by four tasks, there were differences in the perceptions of the reading process among three groups of selected ninth graders who read at low, middle,

and high reading levels. The low group perceived the process primarily as decoding; the high group, a meaning-centered process. The middle group reflected a concern for both decoding and meaning, seeing both as parts of the process. The ability to evaluate accurately the comprehensibility of written material and to assess correctly an oral reader's comprehension of material that had been read decreased across groups from the high group to the low group.

2. As measured by four tasks, the high group manifested the greatest within-group agreement as to perceptions of the reading process. The low group demonstrated slightly less within-group agreement, and middle group subjects showed the least within-group agreement in their perceptions of the reading process.

3. The first seven questions of the Open-Ended Interview and the Forced-Choice Questionnaire elicited consistent information from the majority of the subjects. Two-thirds of the subjects gave the same responses to 85% or more of these questions. Of the remaining five subjects, three were consistent in their responses to 71% of the questions, while the other two subjects answered less than half of the questions the same way on both instruments. The average within-group consistency of

responses was approximately 83% for the low and high groups and 71% for the middle group.

4. Responses to the Silent Reading Task Cards and the Oral Reading Task Cards indicated that both instruments had elicited consistent information regarding subjects' perceptions of the reading process. High group subjects generally demonstrated more within-group consistency in their responses. The low and middle groups showed less, but approximately equal, consistency in their responses to the two tasks.

5. Interview and Questionnaire data revealed that when subjects shifted ambiguous or nonspecific responses on the Interview task to more precise responses on the Questionnaire, the low group emerged as having a decoding instructional model, the middle group a decoding and meaning model, and the high group a meaning-centered instructional model.

CHAPTER 5

SUMMARY AND DISCUSSION

This chapter consists of two major sections: a
summary and a discussion. A summary of the investigation
and of the results of this study are presented first.
Next, in the discussion, are sub-sections dealing with
(a) reading achievement and perceptions of the reading
process as related to findings of previous studies, (b)
subjects' instructional models of reading, (c) the data-
gathering instruments, (d) implications of the study, and
(e) recommendations for further study.

Summary

Summary of Investigation

In this study, four tasks were used to investigate
how 15 selected ninth graders perceived the reading
process and to determine their instructional models of
reading. According to a standardized reading test score
and teacher judgment, five subjects read at the third-
fourth grade level (low group); five read at the sixth-
seventh grade level (middle group); and five read at the
ninth-tenth grade level (high group). All subjects
possessed at least normal intelligence and spoke English

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as their first language. Both sexes and three ethnic groups were represented in the study.

The four tasks were: (a) the Open-Ended Interview, (b) the Silent Reading Task Cards, (c) the Forced-Choice Questionnaire, and (d) the Oral Reading Task Cards. The Interview and Questionnaire, which contained the same nine questions, were modified from the Burke Reading Inventory as a result of a pilot test. The sets of task cards consisted of passages altered linguistically to reduce their readableness and comprehensibility. The Silent Reading Task Cards were modified from a similar instrument developed by Canney and Winograd (1979). The Oral Reading Task Cards were developed by the researcher to parallel the Silent Reading Task Cards. All passages were of similar length, were expository in style, were of similar interest level, and readability (second grade level). The four instruments were administered individually to subjects between April 29 and May 9, 1980. Data-gathering sessions were tape-recorded so that subjects' responses could be transcribed for analysis.

Data were analyzed to detect across-group, within-group, and within-subject variations in responses. Analysis procedures included one-way ANOVA's, Duncan

multiple range tests, chi-square tests of independence, and a t-test. Where appropriate, results were reported descriptively in terms of frequencies and trends.

Summary of Findings

In terms of the research questions, the findings of this study are summarized below.

Question 1. As measured by four tasks, are there differences in perceptions of the reading process among three groups of ninth graders who read at low, middle, and high reading levels?

Open-Ended Interview

Hypothesis 1: There are no differences among the total number of responses low, middle, and high readers give in each of the Open-Ended Interview response categories for the first seven questions.

The null hypothesis was rejected on the basis of a significant result in a one-way ANOVA. Subsequent post hoc comparisons using the Duncan multiple range test indicated significant differences in the large number of decoding responses chosen by the low group and fewer decoding responses given by either of the other two groups. There were also significant differences among all pairs of groups in the number of meaning responses. As

reading levels increased, so did the number of meaning responses. A t-test indicated that there were no significant differences between the middle group and the high group in the number of decoding-and-meaning responses, the only two groups giving decoding-and-meaning responses.

Hypothesis 2: There are no significant differences among the number of responses in each category that low, middle, and high readers give to each of the first seven Open-Ended Interview questions.

Chi-square tests of independence revealed that the three groups gave significantly different answers to question 2. This question dealt with characteristics subjects attributed to good readers. Low readers gave decoding responses; middle readers gave decoding and meaning responses; and the high group gave meaning responses.

Forced-Choice Questionnaire

Hypothesis 3: There are no differences among the total number of responses low, middle, and high readers give in each of the Forced-Choice Questionnaire response categories for the first seven questions.

A significant one-way ANOVA and subsequent post hoc comparisons revealed significant differences between all

pairs of groups. The low group selected predominantly decoding responses. The middle group chose slightly more meaning responses than decoding responses. The high group overwhelmingly chose meaning responses.

Hypothesis 4: There are no significant differences among the number of responses in each category that low, middle, and high readers give in response to each of the first seven Forced-Choice Questionnaire questions.

Chi-square tests of independence indicated that the groups did not differ at the .01 level of significance in their responses to individual questions. However, the low group gave predominantly decoding responses to five questions. The middle group gave more meaning responses to four questions. The high group gave a preponderance of meaning responses to every question.

Silent Reading Task Cards

Question A: Are there differences among the total number of responses low, middle, and high readers give in each of the response categories in their ratings of the reading of the five Silent Reading Task Cards?

The high group was far more accurate in appraising the readableness of the Intact passage and the linguistically altered passages. In contrast to subjects in the

other groups, they tended to use comprehensibility as the determinant of a passage's readability.

Question B: Are there differences among the number of responses low, middle, and high readers give in each response category in their rating of the reading of the individual Silent Reading Task Cards?

All groups recognized the Intact passage as being readable. Answers varied in response to the other passages, but the Semantic and Syntactic-AS passages most clearly delineated the high group from the other two groups. The majority of subjects in both of the lower two groups accepted these meaningless passages as readable; whereas high group subjects rejected them as unreadable or accepted them as able to be "read," but not as making sense.

Question C: Are there differences among the total number of responses low, middle, and high readers give in each of the response categories in their ratings of the comprehension of the Silent Reading Task Cards?

As inferred from gratuitous remarks made by subjects, the high group was better able than either of the other groups to assess the comprehensibility of the passages.

Question D: Are there differences among the number of responses low, middle, and high readers give in each

respone category in their ratings of the comprehension of the individual Silent Reading Task Cards?

Again, the Semantic and Syntactic-AS passages provided the sharpest contrasts among the groups. Although comments from all of the groups suggested that they had some awareness of a relationship between readableness and comprehensibility, some subjects in each of the lower groups seemed to have difficulty in determining whether the passages made sense or not. Subjects in each of these groups declared that these two meaningless passages were comprehensible.

Oral Reading Task Cards

Question A: Are there differences among the total number of responses the low, middle, and high readers give in each of the response categories in their ratings of the reading of the Oral Reading Task Cards?

In terms of frequencies of responses, the number of "poor" ratings increased across reading levels from the low group to the high group, indicating that the ability to assess accurately oral reading ability increased as the reading levels of the groups increased. Because meaning was altered or destroyed in the way four of the passages were read, a maximum of five "good" ratings should have been elicited from each group.

Question B: Are there differences among the number
of responses low, middle, and high readers give in each
response category in their ratings of the reading of the
individual Oral Reading Task Cards?

The low group rated the reading of every passage
except the Corrected passage more highly than the middle
group. The middle group rated every passage as highly or
more highly than the high group. Therefore, the high
group was most accurate in recognizing the poor reading
of the majority of the passages.

Question C: Are there differences among the total
number of responses low, middle, and high readers give in
each of the response categories in their ratings of the
comprehension of the five Oral Reading Task Cards?

There was a differential shift across groups with
the higher groups increasingly recognizing that compre-
hension had not occurred in the majority of the passages.

Question D: Are there differences among the number
of responses low, middle, and high readers give in each
of the response categories in their ratings of the compre-
hension of individual Oral Reading Task Cards?

More than half of the subjects in the low and middle
groups believed the person reading the Syntactic-WS,
Graphophonic, and Syntactic passages had understood them

either partially or completely. Only one subject in the high group believed comprehension had occurred. In contrast to the other passages, the Corrected passage was rated as not being understood by more of the high readers than readers in the other groups.

Question 2. As measured by four tasks, are there differences in the perceptions of the reading process within each of three groups of ninth graders who read at low, middle, and high reading levels?

Open-Ended Interview

Question A: Are there differences within each group among the total number of responses given in each of the Open-Ended Interview response categories for the first seven questions?

The high group showed the most internal consistency, selecting meaning responses overwhelmingly. The low group, which chose predominantly decoding responses, was next in within-group consistency. The middle group ranked last in consistency, selecting mainly meaning responses, but also a fair number of decoding responses and more decoding-and-meaning responses than either of the other groups.

Question B: Are there differences within each group among the number of responses given in each of the Open-Ended Interview response categories to each of the first seven questions?

The low group gave primarily decoding responses to four of the questions. The middle group was more divergent in its responses to the majority of the questions. The high group gave only meaning responses to three of the questions. On the remaining questions, the high group's answers spanned only two categories, with the meaning category predominant in each case.

Forced-Choice Questionnaire

Question C: Are there differences within each group among the total number of responses given in each of the Forced-Choice Questionnaire response categories for the first seven questions?

The low group favored decoding responses; the middle group's responses were more evenly split, with a slight preference for meaning responses; the high group demonstrated a definite preference for meaning responses.

Question D: Are there differences within each group among the number of responses given in each of the Forced-Choice Questionnaire response categories to each of the first seven questions?

The low group demonstrated the least within-group consistency in their responses to individual questions. The middle group subjects surpassed the low group in their agreement in responses to the individual questions. The high group displayed the greatest within-group consistency in subjects' responses to the individual questions.

Silent Reading Task Cards

Question A: Are there differences within each group among the total number of responses given in each response category in the rating of the reading of the five Silent Reading Task Cards?

Although each group gave answers in every category, the low group and middle group exhibited within-group consistency in the large number of passages each accepted as readable, and the high group reflected consistency in rejecting the majority of the passages as unreadable.

Question B: Are there differences within each group among the number of responses given in each response category in the rating of each of the five Silent Reading Task Cards?

The low group demonstrated considerable within-group consistency in their responses to every passage. The high group, however, showed the greatest within-group consistency in rating identically three of the passages

and rating the remaining two passages with 80% agreement. Middle group subjects, in contrast, exhibited the largest spread in their response categories they chose for individual passages.

Question C: Are there differences within each group among the total number of responses given in each response category in the ratings of the comprehension of the five Silent Reading Task Cards?

As inferred from the gratuitous comments of subjects, the high group was the most accurate in assessing the comprehensibility of the passages, followed by the middle and the low group, respectively.

Question D: Are there differences within each group among the number of responses given in each response category in the ratings of each of the comprehension of the five Silent Reading Task Cards?

Differences within each group were reflected mainly in their assessments of the Semantic and Syntactic-AS passages. Some low and middle readers were either unaware or unable to judge that these passages were not meaningful. High group subjects were more accurate in their assessments of all the individual passages, except the Corrected passage.

Oral Reading Task Cards

Question A: Are there differences within each group among the total number of responses given in each response category in the ratings of the reading of the five Oral Reading Task Cards?

The low group showed the most variability among the response categories. The middle group selected mainly "fair" ratings and the high group demonstrated a predilection for overwhelmingly choosing "poor" ratings.

Question B: Are there differences within each group among the number of responses given in each response category in the ratings of the reading of each of the five Oral Reading Task Cards?

On all passages, the low group showed more variability than the middle or high group. Within the middle group, subjects unanimously rated the reading of the Corrected passage "fair" and the Semantic passage "poor." The high group had the greatest consistency, with all subjects rating the Syntactic-WS, Graphophonic, and Semantic passages "poor."

Question C: Are there differences within each group among the total number of responses given in each response category in the ratings of the comprehension of the five Oral Reading Task Cards?

Within each group, answers spanned all categories, but with different distribution patterns. The low group gave nearly equal numbers of "yes" and "no" responses. The middle group chose almost equal numbers of "yes/but" and "no" responses. The high group gave almost exclusively "no" ratings, showing the most accurate assessment of comprehension and the greatest within-group agreement.

Question D: Are there differences within each group among the number of responses given in each category in the ratings of the comprehension of each of the five Oral Reading Task Cards?

On three passages, low readers' responses were nearly evenly split between two categories; their responses covered three categories on the Syntactic-WS passage; four of the five agreed in their ratings of the Semantic passage. The middle group unanimously rated the Semantic passage "no" and were nearly evenly divided between "yes and no" and "no" in their ratings of the Graphophonic and Syntactic-AS passages. Their ratings of the remaining passages reflected even more diversity. The high group readers all rated the Syntactic-WS, Graphophonic, and Semantic passages "no" and four of the five rated the Syntactic-AS passage "no." The Corrected passage elicited the most varied responses from them.

Question 3. For each subject and within each group, will there be consistent information elicited by questions 1 through 7 on the Open-Ended Interview and the Forced-Choice Questionnaire?

In general, there was consistency in subjects' responses to the first seven questions on both instruments. The low and high groups had the same approximate percent of agreement (83%); the middle group showed agreement on approximately 71% of the questions. Two-thirds of the subjects in the study answered approximately 86% of the questions the same on both instruments; however, one middle reader and one high reader answered fewer than half of the questions the same way on both instruments.

Question 4. Within each group, will there be consistent information elicited by the Silent Reading Task Cards and the Oral Reading Task Cards?

Even though these two tasks could not be compared as directly as the other two, certain trends were still evident. On both sets of task cards, there was a shift upward across groups towards including comprehensibility as a prerequisite of readableness and comprehension by the reader as a prerequisite of good oral reading. The three groups displayed similar within-group consistency in

their Silent Reading Task Cards responses, although their responses were concentrated in different categories and the assessments became more accurate as the group reading levels increased. The high group was the most consistent within group, as well as the most accurate, in evaluating the reading and comprehension on the Oral Reading Task Cards.

Question 5: According to responses elicited by questions 8 and 9 on the Open-Ended Interview and the Forced-Choice Questionnaire, are there differences in the isntructional models of reading of low, middle, and high readers?

When shifts from subjects' ambiguous or non-classifiable responses to these questions on the Interview to their more specific responses on the Questionnaire were examined, the low and middle groups emerged as each having seven decoding responses and three meaning responses. The high group produced five decoding responses and five meaning responses. These numbers suggested that slightly more subjects in the lower groups had experienced a decoding instructional model of reading and might believe that this is how teachers perceive the reading process as well.

Major Findings of the Study

Within the limitations of this study, these major findings seem warranted.

1. There were differences in the ways selected low, middle, and high ninth-grade readers perceived the reading process. More specifically, the low readers appeared to conceptualize reading as a decoding process; the middle readers viewed it as consisting of decoding and comprehension; and the high readers perceived it as a meaning-getting process. In more general terms, there was a shift from a decoding orientation to a meaning orientation as the reading levels of the groups increased.

2. The data-gathering instruments elicited consistent information. The Open-Ended Interview and the Forced-Choice Questionnaire educed consistent information. The Silent Reading Task Cards and the Oral Reading Task Cards also elicited similar types of information.

Discussion

Reading Achievement and Perceptions of the Reading Process

Insight into the Reading Process. Olshavsky (1976-77) reported that poor readers seemed to have less insight into the procedures they use when reading than do the good readers. The findings of this study suggest that either this was the case or that they suffered from what Canney

and Winograd (1979), Denny and Weintraub (1963, 1966), and Johns and Ellis (1976) have described as a verbal production deficiency. The low group readers gave more "I don't know" and "I don't know, but . . ." responses, indicating either a lack of awareness (and a lack of confidence in some of their answers) or else a lack of appropriate terminology with which to explain their perceptions. In general, it seemed more difficult for them to articulate their thoughts and/or formulate responses. As the reading levels of the groups increased, so did the amount and quality of verbalization produced by the subjects in each group. For example, a high group subject commented about the Syntactic-WS Silent Reading Task Card,

> I'd have trouble [reading this]. The words
> are out of order. If I sat down and took each
> sentence and the words for those specific
> sentences were there, but out of order, I
> could put them in order if I had time.

More often than subjects in the other groups, the low readers stated, "I don't know how to explain/say it, . . ." or "I can't put it into words." Pace (1979) has pointed out, however, that students are sometimes capable of performing metacognitive tasks (such as reading) even though they cannot consciously analyze or discuss them. On the other hand, the low readers may have been unable to verbalize about what they were doing because they

themselves were not clear about what they were doing. These two possibilities must be kept in mind when considering the results of the present study.

Metalinguistic Awareness/Verbal Production

Deficiencies. Assuming that subjects were consciously aware of their perceptions of the reading process, some low group readers had difficulty expressing their beliefs and perceptions about it. One reason, related to a verbal production deficiency, might have been what Blachowicz (1978) termed "metalinguistic awareness," an awareness of the language terminology and linguistic concepts typically used in reading instruction. Blachowicz, and more recently Downing (1980), have suggested that there may be a relationship between children's levels of metalinguistic awareness and their success in learning to read. In the present study, all of the subjects except one correctly utilized the metalinguistic terms they spontaneously employed in their answers. It should be noted, however, that these terms consisted mainly of very commonly used terms (e.g., "word," "syllable," "letter," "sentence"), rather than more specialized reading and phonics terms (e.g., "blend," "digraph," etc.). The one subject who exhibited great confusion, although he seemed unaware of it, was a

member of the low reading group. In explaining the readableness of the paragraph that constituted the Intact passage of the Silent Reading Task Cards, he said, "You can read that good. It rhymes. It start (sic) with the right paragraph and end (sic) at the right paragraph and tell (sic) you what happened." In describing some other passages, he again used the terms "rhyme" and "paragraph" incorrectly, although he later used the term "sentence" to correctly describe what he had been calling a "paragraph" in previous answers. The only specific references to reading terminology came from the upper two groups. One middle and one high group reader mentioned "skimming" and two high group readers used the term "context" (although several subjects in these two groups indicated they used the context, but did not use that term to describe it). In summary, it appears that the results of this study, although not designed to examine the relationship between increased metalinguistic aware- ness and higher reading achievement per se, supported the findings of previous studies in this area.

The Focus of the Reading Process: The Unit of Reading. Harste and Burke (1977) have postulated that a person's orientation toward reading corresponds to what he or she perceives to be the size of the reading "unit."

In this study, the low readers were more preoccupied
with decoding the letter, syllable, and word level
constituents of reading material. The high group also
gave word-level strategies, but the focus was on deter-
mining the word's meaning rather than its pronunciation.
Middle group subjects' answers varied, with some subjects
concerned with pronunciation and others with meaning.
The majority, however, were concerned with both.

In this study, the first question on both the Inter-
view and the Questionnaire was, "When you are reading and
you come to something you can't figure out, what do you
do?" In response to the Interview question, the high
group was the only group in which any of the subjects
realized that the "something" did not necessarily have
to be a word. On the Questionnaire, four high group
subjects selected the larger unit of meaning response
(i.e., the "something," by implication, was a sentence,
passage, paragraph, or concept which was not understood).
This is consistent with Olshavsky's (1975) findings that
ninth-grade poor readers more frequently reported a
failure to understand individual words, whereas proficient
readers were more likely to report difficulty with
larger units of textual matter. In the present study, all
subjects in the lower two groups, except one middle group

subject, selected the syllable/word unit of reading answer to the first question on the Questionnaire.

When asked specifically about the necessity of looking at every letter and every word in order to read something, the majority of the high group said "no" or gave a qualified response (stating that it was a function of the difficulty of the material and/or their purposes for reading). Some of the subjects in each of the other groups answered these questions affirmatively. In particular, two low readers maintained that it was necessary to look at each letter. This is consistent with the findings of Tovey (1976) in his research with younger subjects in first through sixth grade: 83% said they looked at every word when reading and 57% said they looked at every letter of every word. Also significant was the fact that 63% changed one of their original responses in follow-up questioning. In the present study, the Forced-Choice Questionnaire served as a "follow-up" to the Interview to see if subjects changed their answers or gave consistent responses. All subjects gave relatively consistent responses. However, two subjects in the middle group subsequently reversed their original answers on the need to look at every letter. This suggested that some subjects in the middle group

might have been unsure or confused in their beliefs. One possible explanation is that these subjects are in a transitional stage of shifting from a primarily decoding focus to a more meaning-centered conceptualization of the reading process.

Reading and Comprehension. One distinction among the perceptions of reading held by the three groups in the study was the role they assigned to comprehension in the reading process. Two instruments, the Silent Reading Task Cards and the Oral Reading Task Cards, were particularly helpful in explicating these relationships.

When evaluating the Silent Reading Task Card which had been altered semantically to destroy meaning, four of the five subjects in the high group stated that it could be "read," but that "it wouldn't make sense." (This suggested that they might have a subsidiary schema of reading as pronouncing words in addition to a primary meaning-centered one.) In the middle group, four of the five subjects accepted the semantically altered passage as completely readable because "it was real easy," "you could understand it," and "it's in sentences." In the low group, three of the five subjects accepted it as readable on the basis that "you can understand it." Apparently, even though some of the low and middle group readers were

aware of comprehension as an aspect of "reading," they may have lacked the ability to distinguish meaningful material from nonsense. This might imply a more general comprehension deficit that is not necessarily peculiar to reading. It is possible, however, that these subjects may have assumed that although some of the passages did not make sense to them, a "good" reader would have been able to comprehend them and rated them comprehensible for this reason. In addition, subjects' ratings of meaningless passages as comprehensible might suggest that these students have been exposed previously to "reading" materials which did not sound like natural language or make a great deal of sense (e.g., "The fat cat sat on the mat with a rat"). Consequently, they may have learned that material does not necessarily have to make sense in order to be read. If these subjects actually could not distinguish comprehensible from incomprehensible material, then knowing that "comprehension" is important in reading does not actually benefit them since they cannot apply the concept accurately.

A similar pattern of responses existed in the Oral Reading Task Cards. Two of the five subjects in the low group and two of the five in the middle group gave "fair" ratings to the way the passages had been read on the

tape, and yet stated that they did not think the reader had comprehended what had been read. To these subjects, readers can evidently do a "fair" job of reading something even though they do not say precisely what is written or understand what they are "reading." Canney and Winograd (1979), using a similar task, found some of the poorer readers in their study believed good reading could occur in the absence of comprehension. In contrast to these poor readers, no high group readers in the present study gave "fair" ratings unless they believed the reader had at least partially comprehended the material.

Comprehension Monitoring. As noted previously, some poor readers in the study seemed unable to ascertain whether textual material was sensible (i.e., comprehensible). If this is so, their ability to monitor comprehension, and hence correct miscues, is severely inhibited. Olshavsky (1976-77) has already reported that poor readers seemed less sensitive to whether comprehension had or had not occurred. Weber (1970) noted that poor comprehenders not only made more decoding errors, but failed to self-correct meaning-altering errors because they were not comprehending to begin with. The present study supported both of these observations.

On the Corrected passage of the Oral Reading Task Cards, subjects from all groups noted that the reader had gone back to make corrections. In the low and middle groups, all comments were negative: rereading was viewed as a fault in the reader. Only in the high group were there comments to indicate that this could be a positive strategy since the reader had not comprehended initially. One high group reader said, "She realized her mistakes and re-pronounced them." Another commented, "This was better. When she made a mistake, she went back and corrected it." Responses from the low and middle group were consistent with a result of Olshavsky's (1978) survey of "reading beliefs" among 8th, 10th, and 12th grade poor readers. In her study, poor readers believed that good readers did not ever reread or need to reread.

Text Organization and Comprehension. The present study supported previous research (Buswell, 1920; Clay & Imlach, 1971; Cromer & Wiener, 1966; Isakson & Miller, 1976; Steiner et al. 1971) on good and poor comprehenders' ability to organize text. These studies chronicled the "grocery-list"-like quality of many poor comprehenders' reading, even by those who possessed adequate decoding skills.

Clay and Imlach pointed to lack of insight into the reading process and poor language comprehension as possible causes. Steiner et al. theorized that these readers failed to integrate the meanings of separate words to arrive at the meaning of the sentence as a whole. Isakson and Miller also suggested that poor comprehenders failed to utilize semantic and syntactic cues to achieve this integration. Buswell (1920) implicated the ability to use sentential cues effectively. He observed that the "eye-voice-span" (EVS) of good comprehenders shrank at the ends of sentences (i.e., the ends of meaningful units). He speculated that their EVS was guided by "thought units," rather than the physical organization of the text. He reported, however, that for poor comprehenders, "The end of a sentence creates no special disturbance for it is passed over with little attention" (p. 5). This was strongly supported by the data from the present study. In the Silent Reading Task Cards, four of the five subjects in both the low and middle groups believed the passage which had been altered syntactically across sentences (by moving the end punctuation so that meaning was destroyed) was "readable" (and some felt it was comprehensible, as well). Their reasons for declaring it readable included, "it was in

sentences," "the words were in order," and "it's easy."
Four of the five high readers rejected it as unreadable,
and the one who accepted it on a qualified basis noted,
"The punctuation is wrong. You could understand it much
better if it were fixed." Similarly, on the Oral Reading
Task Card altered syntactically across sentences, the
majority of the low group subjects rated the reading
of it "good" or "fair" and the majority of the middle
group rated it "fair." Presumably these subjects did so
because the reader read the words in the order in which
they appeared on the card, despite the fact that
punctuation was ignored and stops were made at syntacti-
cally inappropriate junctures. Four of the five high
group subjects rated this "poor" reading. The remaining
subject, who gave it a "fair" rating, commented, "She
didn't read the punctuation right. It made sense, but
different from what was on the card."

These results support the previously cited studies
on text organization and comprehension. Further, they
accord with evidence elicited by the other tasks that the
poor readers were preoccupied with the correct pronuncia-
tion of words in serial order, as opposed to the high
group's concern for meaning of larger units of text.

Flexible Reading Strategies. Since poor readers in this study perceived reading mainly in terms of accurate word-calling, they gave no evidence that they had need for any reading strategies other than those associated with determining "what a word is." Several high readers, however, qualified their answers based on their purposes for reading and/or the difficulty of the material. This suggested that they perceived reading to be a more complex process which required a repertoire of approaches in order to handle different types of materials successfully. This supports the findings of Olshavsky's (1975) introspective examination of proficient and nonproficient ninth graders' reading strategies. She found the proficient readers were adaptive in their use of strategies and reflected the planning of strategies to achieve their purposes for reading. One subject each, in the middle and high groups, gave skimming as an example of a situation in which it was unnecessary to look at every letter and/or word. One high group subject also made the distinction between reading for pleasure and reading for school, indicating she used different strategies for handling unknown "things" when reading these two types of materials.

The Role of the Teacher. A survey of the responses to the Interview revealed another difference across the groups that was not reflected in the tabular data: the role of the teacher/adult in the subjects' schemata of reading. Cazden (in press) has pointed out that some teachers use different instructional emphases when dealing with good and poor readers. More specifically, some tend to stress decoding with poor readers and to foster instructional dependency in them. With the good readers, the opposite is true: the teachers tend to stress comprehension and independence in reading behavior. Harste and Burke (1978) have also noted that "many poorer readers appear dependent upon questioning [by the teacher] to become cognitively active" (p. 24). Results of this study accord with Cazden's and Harste and Burke's observations. Subjects in the low group indicated a stronger dependence on the teacher (or parent or older sibling) in helping them deal with unknown words they encountered when reading. In fact, asking someone or using graphophonic cues to determine a word's pronunciation were the two primary strategies poor readers viewed as options when dealing with unfamiliar words. Furthermore, they perceived "good" readers as using similar strategies (although the responses, "look it up"

and "skip it" were also mentioned as strategies "good"
readers used). Middle and high group readers sometimes
included "ask someone" or "sound it out" as strategies,
but typically in conjunction with other strategies.
Most middle and high group readers reported using the
context as their first recourse in dealing with unfamiliar
words.

Schemata of Reading and "Good" Reading. The data
from this study indicated that there was a relationship
between the ninth graders' levels of reading achievement
and their perceptions (schemata) of the reading process.
This is consistent with the findings of Canney and Winograd
(1979), Hutson and Gove (1978), Johns (1972), and
Schenckner (1976), although their studies dealt with
younger subjects. Hutson and Gove, working with 5-
through 9-year-olds, found maturity of perceptions about
reading to be related to both reading ability and age.
In the present study, the nature of subjects' perceptions
were related to reading achievement, but not to age
(since all subjects were approximately the same age).

Low group readers generally conceptualized reading
as the act of decoding and pronouncing words correctly.
Those who did include comprehension as an aspect of
reading seemed unable to identify comprehensible material

or effectively evaluate an oral reader's ability to monitor comprehension. Their responses suggested that they had a limited repertoire of reading strategies, which were used inflexibly, and that these entailed a reliance on external help if their own attempts proved inadequate. The low group characterized "good" readers as being good on the basis of their decoding abilities. Their comments implied that they believed good readers were doing essentially the same things that they were, but were doing them more rapidly and/or accurately. Furthermore, they believed good readers shared these same perceptions of the reading process. They described good readers as being able to "pronounce everything right," "go straight through without stopping or stumbling at a word" and "read fast." These findings correspond to those of Edwards (1958), who reported that remedial second, third, and fourth graders viewed "good" reading primarily as a matter of speed, fluency, and accurate decoding.

One low reader in the present study acknowledged that she did not know what good readers were doing that made their reading "good." This accords with Cunningham's (1978) theory that because many poor readers have never

experienced fluent reading, they lack accurate notions
about it.

The middle group seemed to incorporate decoding and
meaning in their schema of reading. Only one subject
in the middle group characterized "good" reading solely
in terms of decoding ability. The remaining four subjects
mentioned the ability to comprehend as a distinguishing
trait, although two of the subjects mentioned both
meaning-getting and decoding abilities as characteristic
of good readers. One subject, for example, described
a good reader who was reading aloud as being able
"to flow through and understand what he's reading."

The high group's schemata of reading appeared to
center around comprehension. Although their schemata
encompassed decoding as well, it was a subsidiary
component. Every subject in this group characterized
"good" readers in terms of their abilities to comprehend
(or to comprehend accurately or rapidly) and/or to convey
meaning to others if they were reading aloud. For
example, one subject described a good reader as one who
"reads alot and knows what he's read." Others described
good readers as being able to paraphrase what they had
read.

Instructional Models of Reading. The instructional model (i.e., the teachers' model) of reading can be inferred from subjects' responses. Some middle group subjects, however, had abandoned or modified their initial decoding model for one that entailed comprehension as well. Only one of the three high readers who had been exposed initially to a decoding instructional model still gave predominantly decoding-centered responses to the other items on the Questionnaire. Of the subjects in the entire study, there were two who mentioned learning to read at home prior to enrolling in school, and more specifically, mentioned being read to at home. Both subjects' (subjects #091 and #093) responses to the data-gathering tasks reflected an almost total preoccupation with meaning as the goal of reading. These subjects' reading achievement supports findings on the superiority of the reading of "natural," early readers (C. Chomsky, 1972; Durkin, 1966; Forester, 1977; Huey, 1908).

When questioned on the Interview about how they thought a teacher would help those who were having trouble with their reading, the majority of the low group responded with decoding focus responses. The majority of the middle group gave the combination decoding-and-meaning response. The high group's responses spanned all

categories. In response to the same question on the Questionnaire, in which subjects were forced to select either the decoding or meaning focus answer, the majority of the middle group subjects gravitated to the decoding orientation. The high group, in contrast, gave primarily meaning focused responses, despite the fact that three of them had initially encountered a decoding instructional model.

When queried as to how they (the subjects) would try to help others with their reading (i.e., when they were cast in the role of the teacher), a similar pattern of results emerged. In their responses to both the Interview and the Questionnaire (question 5), the low group favored a decoding approach; the middle group was somewhat mixed in its approaches; and the high group preferred a meaning-centered approach.

Several previous researchers (e.g., Brumbaugh, 1940; Edwards, 1958; Reid, 1966) have advocated the direct teaching of concepts about the nature of the reading process. In the present study, four of the five subjects who were poor readers had been exposed to initial reading instruction which emphasized decoding. A shift was evident among the middle group readers, who had attained higher reading levels. It is impossible to determine

whether this shift occurred as a result of direct instruction about the importance of comprehension, or whether subjects determined this by themselves, or both. Correlation does not imply cause, but it is conceivable and logical that the failure to perceive comprehension as the goal of reading may have led the poor readers to strive continuously for mastery of a single inadequate component of the reading process--decoding--as the key to becoming effective readers. Moreover, if older poor readers should be taught by a teacher who emphasizes meaning and assigns decoding a subordinate role, they may at first be both confused and frustrated. They may even insist that the teacher is not teaching "reading."

The Data-Gathering Instruments

The Interview and Questionnaire served as effective cross-checks on subjects' answers. The Interview had the advantage of allowing subjects a full range of responses. The Questionnaire, while it might have precluded some types of responses, yielded more precise, quantifiable information and avoided problems stemming from low verbal production in some subjects. The two instruments appeared to yield consistent information.

The Silent Reading Task Cards and the Oral Reading Task Cards were not as directly comparable as the other

two tasks. Their comparability could have been enhanced
by including a comprehension probe on the Silent Reading
Task Cards, although to do so would possibly have caused
subjects to include comprehensibility as an aspect of
readableness, when they would not otherwise have done so.
Despite some differences in the nature of the two tasks,
they did make it possible to explore subjects' perceptions
about both silent and oral reading. They did indicate
each group's concept of readableness and of "good"
reading, as well as what each considered comprehensible
and comprehended by an oral reader. In evaluating the
way the Oral Reading Task Cards were read, subjects'
ratings may have been influenced by the difficulty of
the passages (second-grade level) relative to their
own reading level. This may account for the increased
number of "poor" ratings the high group gave to the
passages in this task: they expected most people would
be able to read such "easy" passages with few or no
errors. Using different sets of passages written just
below each group's reading level might have evoked
different ratings from the middle and upper groups.

Because of their brevity, the least satisfactory
components of the instruments were the Interview and
Questionnaire items concerning subjects' instructional

models of reading (questions 8 and 9). Additional
questions could have provided more detailed information
not only on initial reading instruction and experiences,
but on subsequent instruction during elementary school,
junior high, and high school, as well. This might have
made it possible to determine whether instruction was
in part responsible for the shift toward comprehension
which occurred in some middle and high group readers,
as well as for the perseveration in a decoding orienta-
tion by the low readers.

Since these two sets of instruments yielded similar
results, either the Interview or the Questionnaire could
be used in combination with the Silent Reading Task
Cards or the Oral Reading Task Cards to obtain a fairly
complete picture of a subject's schema of reading. The
Questionnaire and the Silent Reading Task Cards are the
simpler ones to work with, however. A classroom teacher
could evaluate students' perceptions to identify those
who perceive reading mainly as decoding and who conse-
quently may employ limited strategies when reading.

Implications of the Study

Within the constraints and limitations noted earlier,
this study seems to hold these educational implications.

1. Teachers need to become aware of their theoretical orientation toward reading, as well as how this manifests itself in the instructional methodologies and materials they use.

2. Teachers should informally assess students' (particularly low-achieving readers') perceptions of the reading process.

3. Teachers should seek out interesting, comprehensible materials and employ procedures and activities that illustrate the use of flexible strategies to achieve various purposes for reading. Students should be led inductively to understand that the goal of reading is comprehension and that people read for both information and pleasure.

4. Teachers need to avoid making poor readers instructionally dependent. Teachers can remove themselves from the center of instructional activities and foster the independent use of strategies by students.

5. Teachers should examine whether they are using different methodologies and/or orientations with students of different reading levels. More specifically, they need to determine whether they are directing poor readers' attention and efforts primarily toward decoding aspects of reading and the proficient readers' toward comprehension.

Recommendations for Further Study

1.   Research should be conducted to investigate what changes occur in beginning readers' concepts of reading as a result of learning or failing to learn to read.

2.   Research should be conducted to explore the relationship between students' grasp of metalinguistic terminology and their levels of reading achievement.

3.   A study similar to the present one should be carried out with teachers to examine their schemata of reading in relation to the instructional procedures and methodologies they use in teaching reading.

4.   Research should be conducted to investigate the value of direct teaching about the nature of the reading process.

5.   Longitudinal research should be conducted with students who are one to two years below grade level in reading who are in a transitional stage between decoding and comprehension as the primary focus of the reading process. More specifically, these students' subsequent achievement (or lack of achievement) needs to be tracked in light of changes in their schemata of reading.

6.   The present study should be replicated with a larger group of subjects to validate the results.

APPENDIXES

APPENDIX A

April 17, 1980

Dear Parent:

With the cooperation of   High School, I am investigating high school students' opinions and views about the reading process. As a former teacher and a graduate student at Texas Woman's University, I am hopeful that the information I gather can help in planning future reading programs.

With your permission, your child will have an opportunity to participate. The activities should take approximately 20 minutes and students should find them both interesting and enjoyable.

To assure the protection of each subject's privacy, the names of individual students, the school, and the school district will not be identified in a report of the results.

Please help by reading and signing the attached permission form. Your child should return the signed form to his or her English teacher as soon as possible.

Thank you for your help. Please feel free to contact me (234-3932, evenings) if you have questions or would like additional information.

Sincerely yours,

Janet Elder

JE
Attachment

APPENDIX B

OPEN-ENDED INTERVIEW

DIRECTIONS TO SUBJECTS

"I'm interested in high school students' views on reading. I'd like to ask you some of your opinions. There are no right or wrong answers. If it's all right with you, I'm going to tape record our conversation so that I won't have to take time to stop and write down what you are saying. Any time you don't understand something--the directions or a question-- please feel free to tell me."

OPEN-ENDED READING INTERVIEW

1. When you are reading and you come to something you can't figure out, what do you do?

2. Think of someone you know who is a good reader. (Pause) What is it about the way they read that makes it good reading?

3. Do you think (that person) ever comes to something s/he doesn't know when s/he's reading?

4. If s/he did come to something s/he didn't know when s/he was reading, what do you think s/he'd do?

5. How would you try to help someone who was having trouble with their reading?

6. Does a person have to look at every <u>letter</u> in order to read something?

7. Does a person have to look at every <u>word</u> in order to read something?

8. How do you think a teacher would try to help someone who was having trouble with their reading?

9. Do you remember how you first learned to read?

APPENDIX C

SILENT READING TASK CARDS

DIRECTIONS TO SUBJECTS

"Now I'm going to show you some cards. Each card
has some writing on it. I'd like you to look at each
card, one at a time. You may look at it as long as
you like. You don't have to read the card outloud.
After you finish looking at the card, please tell me
whether you think a person could read the card or not
and then tell me why."

SYNTACTIC-WS VERSION

Silent Reading/Syntactic-WS   Subject's Card

   Weeks flea two takes a circus to a ready get it to in be. Pull it learn can wagon to a. Ball learn kick a can it a to. Even dance it to learn can. It girl sometimes up look a is dressed be a to or boy like. Sometimes neck collar gold put its around is a.

Silent Reading/Unaltered Syntactic-WS

   It takes two weeks to get a flea ready to be in a circus. It can learn to pull a wagon. It can learn to kick a ball. It can even learn to dance. Sometimes it is dressed up to look like a boy or a girl. Sometimes a gold collar is put around its neck.

INTACT VERSION

Silent Reading/Intact   Subject's Card

    What animal builds the biggest home? It
is the pack rat. It is no bigger than your
hand, but its home sometimes weighs a ton.
A pack rat never stops building. Eyeglasses
and mirrors have been found in the walls of
its home.

Silent Reading/Unaltered Intact

    What animal builds the biggest home? It
is the pack rat. It is no bigger than your
hand, but its home sometimes weighs a ton.
A pack rat never stops building. Eyeglasses
and mirrors have been found in the walls of
its home.

GRAPHOPHONIC VERSION

Silent Reading/Graphophonic   Subject's Card

Stom phelasten rea gyra. Lyon i wef rea
ithew. I ithew phelasten si ont nese ryve nofte.
Goln oag o ithew phelasten swa katen ot eth gink.
Lyon u gink uclod heva i ithew phelasten. Hewn
noe swa fodun, eth popele thugoth ti swa funderlow.

Silent Reading/Unaltered Graphophonic

Most elephants are gray. Only a few are
white. A white elephant is not seen very
often. Long ago a white elephant was taken
to the king. Only a king could have a white
elephant. When one was found, the people
thought it was wonderful.

SEMANTIC VERSION

Silent Reading/Semantic   Subject's Card

The airplanes earn five meals at one
table. First they put eggs inside a face.
Next they paint the fish inside a cage.
Then they put the chicken inside a safe.
All of this is opened inside a cake. It
is cooked. Then it is time to eat.

Silent Reading/Unaltered Semantic

The Arabs eat five meals at one time.
First they put eggs inside a fish. Next they
put the fish inside a chicken. Then they put
the chicken inside a sheep. All of this is
put inside a camel. It is cooked. Then it
is time to eat.

SYNTACTIC-AS VERSION

Silent Reading/Syntactic-AS

    Kamala was a little baby who lived in
a far-away land one day. Her mother put her.
Outside the house a wolf came. Along it took
Kamala. To its den the wolf took care. Of
Kamala soon she began to act just like a wolf.

Silent Reading/Unaltered Syntactic-AS

    Kamala was a little baby who lived in a
far-away land. One day her mother put her
outside the house. A wolf came along. It
took Kamala to its den. The wolf took care
of Kamala. Soon she began to act just like
a wolf.

APPENDIX D

FORCED-CHOICE QUESTIONNAIRE

DIRECTIONS TO SUBJECTS

"Next I'm going to show you the same questions I asked you at the beginning, but beneath each question are two sets of answers that other students have given. While we're looking at it together, I'll read each question and the two sets of answers outloud. Then I'd like you to tell me which answer comes closest to your own opinion."

Which answer to each question comes closer to what you believe?

1. WHEN YOU ARE READING AND YOU COME TO SOMETHING YOU CAN'T FIGURE OUT, WHAT DO YOU DO?

Sound it out.
Try to divide it into syllables.
Ask somebody else, a teacher.
Skip it.

Go back and read that part again.
Ask someone to explain.
Keep going to see if it makes sense later on.

2. THINK OF SOMEONE YOU KNOW WHO IS A GOOD READER AND TELL WHAT IT IS ABOUT THE WAY THEY READ THAT MAKES IT GOOD READING.

He knows what's important and what isn't.
He can make sense out of what he's
    reading; he understands it really well.

He pronounces all of the words right.
He knows phonics, rules about vowels and
    consonants, and can sound out almost any word.

3. DO YOU THINK HE EVER COMES TO SOMETHING HE DOESN'T KNOW WHEN HE IS READING?

Probably; sometimes.

No, I doubt it.

4. IF HE DID COME TO SOMETHING HE DIDN'T KNOW WHEN HE WAS READING, WHAT DO YOU THINK HE'D DO?

Sound it out.
Look it up in a dictionary.
Ask a teacher or another person.

Reread it; go over it again.
Use all of the rest of the information in the
    sentence or paragraph to help figure it out.

5. HOW WOULD YOU TRY TO HELP SOMEONE WHO WAS HAVING TROUBLE WITH THEIR READING?

Listen to them read or read to them.
Ask them to tell me about it to see if
    they understood what they read.
Give them interesting books to read
    at home.

I would see what the word was and help them sound
    it out.
I would also tell the teacher that they needed
    some extra help.

6. DOES A PERSON HAVE TO LOOK AT EVERY LETTER IN ORDER TO READ SOMETHING?

Sure. How else can you tell what the
    word is?

I don't think so.

7. DOES A PERSON HAVE TO LOOK AT EVERY WORD IN ORDER TO READ SOMETHING?

Of course.

No, you can usually skip some and still tell
    what's going on.

8. HOW DO YOU THINK A TEACHER WOULD TRY TO HELP SOMEONE WHO WAS HAVING TROUBLE WITH THEIR READING?

Mostly have him read alot.
Help him learn to find main ideas and
  see how they fit together.
Have him discuss things he's read.
Let him listen to stories on tape.

Start with letters and sounds, then go to books
  with easy words and work up to harder ones.
Use workbooks, drills, flashcards.
Give him extra helps with phonics.

9. DO YOU REMEMBER HOW YOU FIRST LEARNED TO READ?

In first grade we took turns reading
  outloud in a group. We learned about
  the alphabet and phonics. We used
  some workbooks.

My mother read to me alot when I was little.
  After awhile I could read those books and
  then I could read other books, too.

Note: The "Decoding" and "Meaning" columns on the Subject Response Sheet (Appendix G) indicate
which answers to each question (the left one and the right one) were decoding-focused (A)
and meaning-focused (B).

APPENDIX E

ORAL READING TASK CARDS
DIRECTIONS TO SUBJECTS

"People have different ideas about what's good reading and what's bad reading, so the last thing we're going to do is to have you listen to some passages that are being read in different ways. I'll give you an exact copy of the card the person on the tape was reading from. Listen to the tape of how the person reads each of the passages on the cards. After you've heard each card, we'll stop the tape player and I'll ask you your opinion about their reading. There are no right or wrong answers . . . I'm interested in your opinion only. We'll do a couple of sample passages first to be sure you understand what we're doing. Feel free to ask questions if you don't understand."

TRIAL 1

Trial 1: Oral Reading/Unaltered   Subject's Card

      People say hello in many ways. In one land
the people jump up and down when they see a friend.
That is their way of saying hello. Some people
just fall down on the ground when they meet.
Some rub their hands together. Other people put
one foot into the air when they see one another.

Trial 1: Oral Reading/Taped Version

      People say hello in many ways. In
     one land the people jump up and down when

1.   they see a friend. That is <u>the way they say</u>

2.   hello. Some <u>folks</u> just fall down on the ground

3.   when they meet. Some <u>just</u> rub their hands

4.5.6. together. Other<u>s</u> (_____) put one foot <u>up</u>

     in the air when they see one another.

TRIAL 2

Trial 2: Oral Reading/Unaltered   Subject's Card

        Long ago people went to feasts for fun.

    At a single feast, thousands of people might

    be present. Herds of cattle were killed for

    meat. There might be 20,000 kinds of food

    to choose from! These feasts lasted for

    days or even weeks.

Trial 2: Oral Reading/Taped Version

            Long ago people went to feasts for fun.

1.2.   At a <u>signal</u> feast, <u>thew·snads</u> of people might

3.4.   be <u>pre·sent</u>. Herds of <u>cat·luh</u> were killed for

        killed for meat. There might be 20,000 kinds

5.   of food to <u>chose</u> from. These feasts lasted

        for days or even weeks.

SYNTACTIC-WS

Oral Reading/Unaltered Syntactic-WS   Subject's Card

      People who walk in their sleep are called
sleepwalkers. Some sleepwalkers do really funny
and unusual things. One man got up in the middle
of the night, went outside and cut down a tree.
He was asleep the whole time. One woman got out of
bed, went into the kitchen and began to cook. She
fixed a big, fine meal and never woke up.

Oral Reading/Syntactic-WS   Taped Version

Miscue & Type	
	People who walk in their sleep are
	called sleepwalkers. Some sleepwalkers do
1. addition	
2. addition	<u>not</u> really <u>do</u> funny and unusual things.
	One man got up in the middle of the night,
3. omission	went outside and cut (_____) a tree. He
	was asleep the whole time. One woman got
	out of bed, went into the kitchen and
4. omission	(_____) to cook. She fixed a big <u>meal</u>
5. transposi- tion	<u>fine</u> and never woke up.

GRAPHOPHONIC

Oral Reading/Unaltered Graphophonic   Subject's Card

At one time a city in the South was
overrun by rats. A man offered rattraps for
sale. He promised the traps would catch a
rat a day. People were surprised when they
paid their money. All they received was a
cat. At first they were angry. But the cats
chased all the rats away and then the people
were happy.

Oral Reading/Graphophonic   Taped Version

           At one time a city in the South was

1.   overrun by rats. A man offered <u>rattarps</u>

2.3.   for sale. He <u>por·mīsed</u> the <u>tarps</u> would

      catch a rat a day. People were surprised when

4.   they paid their money. All they <u>ruh·kev'd</u>

5.   was a cat. At first they were <u>an·gri</u>. But

      the cats chased all the rats away and then

      the people were happy.

CORRECTED

Oral Reading/Unaltered Corrected   Subject's Card

     People once thought that names had a lot
to do with luck. They thought it was bad luck
to meet someone who had the same name as theirs.
They would run away from them. Some Indian
children thought that if they said their own
names, they would never grow up.

Oral Reading/Corrected   Taped Version

	People once thought that names
	had a lot to do with luck. They
1. graphophonic	taught it was . . . thought it was
	bad luck to meet someone who had
2. syntactic-WS*	a name the same as theirs. They would
3. syntactic-WS**	
4. syntactic-AS	run (_____) from them some . . . from
5. semantic	them. Some Indian kids thought that
6. semantic	if they spoke their own names, they
7. graphophonic	would never gor up . . . grow up.

 *transposition
**omission

SEMANTIC

Oral Reading/Unaltered Semantic   Subject's Card

Some animals have very strange jobs.
In Scotland, geese are used as police. They
are placed in stores because they make loud
noises if anyone tries to break in. Another
strange job is that done by baboons. In
South Africa they sometimes act as babysitters
for people's children.

Oral Reading/Semantic   Taped Version

Some animals have very strange jobs.

1.   In Scotland, <u>chairs</u> are used as police. They

2.3.   are placed in <u>jars</u> because they make loud <u>nests</u>
        if anyone tries to break in. Another strange

4.   job is that done by <u>sailboats</u>. In South
        Africa they sometimes act as babysitters for

5.   people's <u>fingers</u>.

SYNTACTIC-AS

Oral Reading/Unaltered Syntactic-AS   Subject's Card

Some people say that the cat is the most
important animal that ever lived. In Egypt the
cat was believed to be a god. No one was allowed
to take a cat out of that country. The Egyptians
did not want other nations to learn about cats.

Oral Reading/Syntactic-AS   Taped Version

Some people say that the cat is the most
important animal that ever lived in Egypt. The
cat was believed. To be a god, no one was
allowed to take a cat out. Of that country, the
Egyptians did not want other nations to learn
about the cat.

APPENDIX F

PILOT STUDY: SUMMARY OF RESULTS

March, 1980

OPEN-ENDED INTERVIEW and FORCED-CHOICE QUESTIONNAIRE

In the pilot study, these instruments consisted of 10 questions. The first and second question were collapsed into one question; question 7 dealt with the teachers' instructional methods; question 10 was replaced since it was confusing to subjects.

	Low		Middle		High	
Question	Interview	Question-naire	Interview	Question-naire	Interview	Question-naire
1	A	A	B	B	B	B
2	A	A	B	B	B	A
3	NC	B	B	B	B	B
4	B	A	B	B	B	B
5	A	A	B	B	B	B
6	A	A	A	B	A	B
7	A	A	B	A	A	A
8	A	A	B	B	B	B
9	A	A	A	A	B	B
10	A	B	NC	AB	NC	B
	8A/1B/1NC	8A/2B	2A/7B/1NC	2A/1AB/7B	2A/7B/1NC	2A/8B

A = Decoding Response   AB = Decoding and Meaning
B = Meaning Response   NC = Non-classifiable

SILENT READING TASK CARDS

Passage	Low	Middle	High
Syntactic-WS	Y/B	N	Y/B*
Intact	Y	Y	Y
Graphophonic	N	N	N
Semantic	Y/B	Y/B	Y/B**
Syntactic-AS+	--	--	--
	1Y/2YB/1N	1Y/1YB/2N	1Y/2YB/1N

+Not used in pilot testing

   Y = Yes (Passage can be read)
   N = No (Passage cannot be read)
   Y/B = Yes/But (Passage is readable, but with certain qualifications)

The high reader was pre-occupied with comprehension:
   *Could be read "if words were rearranged in correct order"
  **Could be read "if reader knew the context it was taken from" (subject
     suggested it could possibly make sense in the context of "a fantasy story")

ORAL READING TASK CARDS

Passage	Rating of Reading			Reading Comprehension		
	Low	Middle	High	Low	Middle	High
Syntactic-WS	G/P	P	G/P	Y	N	N
Graphophonic	P	P	P	N	N	N
Corrected	G/P	P	G/P	Y	Y	Y/N
Semantic	G/P	P	P	Y	N	N
Syntactic-AS	P	P	P	Y	N	N
	3GP/2P	5P	2GP/3P	4Y/1N	1Y/4N	1YN/4N

```
   G = Good reading      Y = Yes (Reader comprehended it)
   P = Poor reading      N = No (Reader did not comprehend it)
 G/P = Fair reading    Y/N = Yes/No (Reader partially comprehended it)
```

The primary distinction between the low reader and the other two was that she was unable to judge whether comprehension had occurred or not; she felt that in every condition except the Graphophonic, the reader had comprehended. The other major difference was on the Syntactic-AS version: the low reader accepted accurate, rapid decoding as being "good" reading, even though the reader violated all the punctuation marks and completely distorted the meaning by doing so.

APPENDIX G

SUBJECT RESPONSE SHEET

Subject #_____ Sex_____ Ethnic Group_____ Date 5/ /80 RL__

I.   OPEN-ENDED INTERVIEW

     (A = Decoding focus; B = Meaning focus; AB = Decoding
     & Meaning Focus; NC = Non-classifiable)

     __ 1. _____
     __ 2. _____
     __ 3. _____
     __ 4. _____
     __ 5. _____
     __ 6. _____
     __ 7. _____
                    ****
     __ 8. _____
     __ 9. _____

     A:_____   B:_____   AB:_____   NC:_____

II. SILENT READING CARDS

     (Y = Yes; N = No; Y/B = Qualified "Yes")

                      Readable   _____ Reason _____

     1. Syntact-WS   Y   N   Y/B   _____

     2. Intact   Y   N   Y/B   _____

     3. Grapho-   Y   N   Y/B   _____
        phonic

     4. Semantic   Y   N   Y/B   _____

     5. Syntact-AS   Y   N   Y/B   _____

     Y:_____   N:_____   Y/B:_____

III. FORCED-CHOICE QUESTIONNAIRE

(Y = Yes; N = No; Y/N = Partial; CC = Cannot compare)

		Decoding	Meaning	Consistent with # I				
1.		Left	Right	Y	N	Y/N	CC	
2		Right	Left	Y	N	Y/N	CC	A:____
3.		Right	Left	Y	N	Y/N	CC	B:____
4.		Left	Right	Y	N	Y/N	CC	Y:____
5.		Right	Left	Y	N	Y/N	CC	N:____
6.		Left	Right	Y	N	Y/N	CC	Y/N:____
7.		Left	Right	Y	N	Y/N	CC	CC:____

****

	Decoding	Meaning				
8.	Right	Left	Y	N	Y/N	CC
9.	Left	Right	Y	N	Y/N	CC

IV. ORAL READING CARDS

(G = Good; P = Poor, G/P = Fair; Y = Yes; N = No; Y/N = Partial)

Trial 1:_____   Trial 2:_____

		Comprehended			Rating			Reason
1.	Syntact-WS	Y	N	Y/N	G	P	G/P	_____
2.	Grapho-phonic	Y	N	Y/N	G	P	G/P	_____
3.	Corrected	Y	N	Y/N	G	P	G/P	_____
4.	Semantic	Y	N	Y/N	G	P	G/P	_____
5.	Syntact-AS	Y	N	Y/N	G	P	G/P	_____

G:_____   P:_____   G/P:_____   Y:_____   N:_____   Y/N:_____

APPENDIX H

OPEN-ENDED INTERVIEW RESPONSES: DECODING FOCUS (A)

     In general, these are responses which suggest that
reading is primarily decoding; that it is a teacher-
centered, teacher-directed activity; that it is primarily
a mechanical/physical process; that meaning is embedded
in the material rather than the reader. The focus is on
letters and words and their pronunciation, rather than on
word meaning or meaning in general. Reading is viewed
as a precise process.

The following responses typify those embodying a decoding
focus.

1. When you are reading and you come to something you
    can't figure out, what do you do?

        sound it out
        break it down/break it into syllables
        blend the letters/sounds together
        spell it out
        try to pronounce it (correctly)
        use phonics

        look it up)   (when given as the sole answer or in
        ask someone }   combination with the answers above
        skip it   )   or with each other)

2. Think of someone you know who is a good reader. What
    is it about the way they read that makes it good
    reading?

        never misses a word/reads without stumbling or making
        mistakes
        reads fast/fast and accurately (no mention of compre-
        hension)
        keeps their eyes on the book (or other physiological
        references)

3. Do you think s/he ever comes to anything s/he doesn't
    know when s/he's reading?

        no
        (negative responses)

4. If s/he did come to something s/he didn't know when s/he was reading, what do you think s/he'd do?

   the same as I would do
   (same answers as for #1, above)

5. How would you try to help someone who was having trouble with their reading?

   tell them the word
   read it to them/read it for them
   help them sound it out, break it down, pronounce it, etc.

6. Does a person have to look at every <u>letter</u> in order to read something?

   yes

7. Does a person have to look at every <u>word</u> in order to read something?

   yes

8. How do you think a teacher would try to help someone who was having trouble with their reading?

   (same answers as for #1, above)

9. Do you remember how you first learned to read?

   learned the alphabet first
   learned the sounds of the letters
   learned syllables
   learned phonics
   learned the symbols

   (Complete answer must consist of these types of responses only; if additional information pertaining to comprehension is included, the "AB" rating is appropriate.)

OPEN-ENDED INTERVIEW RESPONSES: MEANING FOCUS (B)

In general, these responses indicate that meaning is the primary concern; the reader takes an active role in seeking meaning; the reader brings meaning to the material; reading is viewed as a cognitive process rather than a strictly mechanical/physical one. Reading is seen as a flexible process in which the reader uses different strategies for different types of materials for different purposes. Reading is not viewed as a precise process.

1. When you are reading and you come to something you can't figure out, what do you do?

    use the context/see what fits/use the rest of the sentence
    skip it and then come back
    try to figure out its meaning/figure out the definition
    see what makes sense
    (Use any other explanatory information on the page or in the text.)

    look it up ⎫   (when given in combination with any
    ask someone ⎬   of the answers above)
    skip it ⎭

2. Think of someone you know who is a good reader. What is it about the way they read that makes it good reading?

    comprehend well/comprehend accurately/comprehend it fast
    grasp or understand what they read
    think about what they are reading
    others can tell the meaning when they read
    read (aloud) with feeling/read with expression

    read fast ⎬   (when mentioned in combination with
              any of the above)

3. Do you think s/he ever comes to anything s/he doesn't know when s/he's reading?

   yes
   sometimes/probably
   (any answer that acknowledges that there are or may be occasions when the reader does encounter unknown things, even though these occasions may not be frequent ones)

4. If s/he did come to something s/he didn't know when s/he was reading, what do you think s/he would do?

   the same thing I would do
   (same answers as for #1, above)

5. How would you try to help someone who was having trouble with their reading?

   have them read alot
   help them to understand
   teach them word meanings/definitions
   teach them to use the context

6. Does a person have to look at every <u>letter</u> in order to read something?

   no
   most of the time, no
   not if you're skimming (indicates awareness of flexible strategies)
   not if you're familiar with it
   only when you don't know what it is
   (any negative response)
   sometimes

7. Does a person have to look at every <u>word</u> in order to read something?

   (same answers as for #6 above)

8. How do you think a teacher would try to help someone who was having trouble with their reading?

   (same answers as for #5, above)

9. Do you remember how you first learned to read?

   my (mother/relative/etc.) read to me alot when I was
   little
   by reading easy books (at home) and asking (someone)
   when I had questions
   by memorizing books/stories that were read to me and
   then being able to read them myself
   (no mention of phonics or direct instruction should
   be made)
   by reading picture books and then moving on to
   stories

OPEN-ENDED INTERVIEW RESPONSES: DECODING

AND MEANING FOCUS (AB)

In general, an answer must contain items from both list
A and list B.

1. When you are reading and you come to something you
    can't figure out, what do you do?

    (items from both lists must appear)

2. Think of someone you know who is a good reader. What
    is it about the way they read that makes it good
    reading?

    uses punctuation marks
    (items from both lists)

3. Do you think s/he ever comes to anything s/he doesn't
    know when sh/he's reading?

    (see other lists; answer will be either affirmative
    or negative)

4. If s/he did come to something s/he didn't know when
    s/he was reading, what do you think s/he would do?

    (items from both lists)

5. How would you try to help someone who was having
    trouble with their reading?

    (items from both lists)

6. Does a person have to look at every letter in order
    to read something?

    (See A, B, or NC)

7. Does a person have to look at every word in order to
    read something?

    (See A, B, or NC)

8. How do you think a teacher would try to help someone who was having trouble with their reading?

   start with easy things and work up ("things" must be unspecified)

   (items from both lists)

9. Do you remember how you first learned to read?

   (answer must indicate that student received the kinds of help found on the other two lists: both decoding and meaning emphasis)

OPEN-ENDED INTERVIEW RESPONSES: NON-CLASSIFIABLE (NC)

If combined with an A or B answer, use the A or B answer.

1.   When you are reading and you come to something you can't figure out, what do you do?

try to figure it out
I don't know

2.   Think of someone you know who is a good reader. What is it about the way they read that makes it good reading?

they concentrate on it
they try hard
I don't know

3.   Do you think s/he ever comes to anything s/he doesn't know when s/he's reading?

I don't know

4.   If s/he did come to something s/he didn't know when s/he was reading, what do you think s/he'd do?

try to figure it out
I don't know

5.   How would you try to help someone who was having trouble with their reading?

I don't know
try to help them
go over it with them/read along with them/have them read aloud
take it slow
start with easy things and work up ("things" must be unspecified)

6.   Does a person have to look at every <u>letter</u> in order to read something?

I don't know

7. Does a person have to look at every <u>word</u> in order to read something?

    I don't know

8. How do you think a teacher would try to help someone who was having trouble with their reading?

    (same as #5)

9. Do you remember how you first learned to read?

    I don't remember
    I can't remember
    in first grade
    (any mention of basal readers since there is no way to determine the instructional approach used with them)

APPENDIX I

ORAL READING TASK CARDS: RESPONSE CATEGORIES

The following descriptors apply to subjects' ratings
of the taped oral reading passages:

G = Good: any response indicating that the subject felt
   it was good reading (e.g., "fine," "good," "great,"
   etc.)

P = Poor: any response indicating the subject felt was
   poor reading (e.g., "bad," "terrible," "awful,"
   "no good," etc.)

G/P = Fair: any response indicating the subject felt it
   was between good and poor or was good in some
   respects and poor in others; acceptable, but with
   certain qualifications (e.g., "fair," "so-so,"
   "in between," "not too bad")

APPENDIX J

OPEN-ENDED INTERVIEW: SUMMARY OF RESPONSE FREQUENCIES

Subject Number								Question									
	1	2	3	4	5	6	7	A	B	AB	NC	8	9	A	B	AB	NC
031	A	A	B	A	NC	B	A	4	2	–	1	B	NC	4	3	–	2
032	A	A	A	A	A	B	B	5	2	–	–	A	NC	6	2	–	1
033	A	A	B	A	NC	A	A	5	1	–	1	A	NC	6	1	–	2
034	A	A	B	A	A	A	B	5	2	–	–	A	NC	6	2	–	1
035	A	A	A	A	A	B	B	5	2	–	–	NC	AB	5	2	1	1
Total A	5	5	2	5	3	2	2	24				3		27			
B	–	–	3	–	–	3	3		9			1	–		10		
AB	–	–	–	–	–	–	–			–		–	1			1	
NC	–	–	–	–	2	–	–				2	1	4				7
061	AB	AB	B	B	AB	B	B	–	4	3	–	AB	NC	–	4	4	1
062	A	AB	B	A	A	B	A	4	2	1	–	AB	A	5	2	2	–
063	A	A	B	A	NC	B	A	4	2	–	1	NC	A	5	2	–	2
064	B	B	A	B	B	B	B	1	6	–	–	AB	B	1	7	1	–
065	A	B	B	A	B	B	B	2	5	–	–	B	NC	2	6	–	1
Total A	3	1	1	3	1	–	2	11				–	2	13			
B	1	2	4	2	2	5	3		19			1	1		21		
AB	1	2	–	–	1	–	–			4		3	–			7	
NC	–	–	–	–	1	–	–				1	1	2				4
091	B	B	B	B	B	B	B	–	7	–	–	AB	B	–	8	1	–
092	A	B	B	A	A	B	B	3	4	–	–	NC	NC	3	4	–	2
093	B	B	B	B	B	B	AB	–	6	1	–	A	A	1	7	1	–
094	A	B	B	A	A	B	B	3	4	–	–	A	A	5	4	–	–
095	B	B	B	B	B	B	B	–	7	–	–	B	A	1	8	–	–
Total A	2	–	–	2	2	–	–	6				2	2	10			
B	3	5	5	3	3	5	4		28			1	2		31		
AB	–	–	–	–	–	–	1			1		1	–			2	
NC	–	–	–	–	–	–	–				–	1	1				2

Responses: A = Decoding Focus; B = Meaning Focus; AB = Decoding & Meaning;
             NC = Nonclassifiable

APPENDIX K

SILENT READING TASK CARDS: SUMMARY OF RESPONSE FREQUENCIES

Subject Number	Syntact-WS	Comp	Intact	Comp	Grapho-phonic	Comp	Semantic	Comp	Syntactic-AS	Comp	Total Y	Y/B	N	Refs. to Comp
031	Y/B	I	Y	X	N	X	Y/B	X	Y	C	2	2	1	2
032	N	I	Y	C	N	I	Y	C	Y	C	3	–	2	5
033	N	I	Y	C	N	I	Y	C	N	I	2	–	3	5
034	N	X	Y	X	N	I	Y	C	Y	X	3	–	2	2
035	N	X	Y	X	Y/B	X	Y	X	Y	X	3	1	1	–
Total Y	–	3	5	2	–	3	4	3	4	3	13			14
Y/B	1				1		1		–			3		
N	4				4		–		1				9	
061	Y/B	P	Y	X	Y/B	X	Y	X	Y	X	3	2	–	1
062	N	X	Y	X	N	X	Y	X	Y	X	3	–	2	–
063	Y/B	X	Y	C	N	X	Y	X	Y	X	3	1	1	1
064	N	I	Y	C	N	I	Y	C	N	P	2	–	3	5
065	Y/B	X	Y	X	N	X	Y/B	P	Y	C	2	2	1	2
Total Y	–	2	5	2	–	1	4	2	4	2	13			9
Y/B	3				1		1		–			5		
N	2				4		–		1				7	
091	Y/B	I	Y	C	N	X	Y/B	I	Y/B	P	1	3	1	4
092	N	I	Y	X	N	X	Y/B	I	N	X	1	1	3	2
093	N	I	Y	C	N	X	Y/B	I	N	X	1	1	3	3
094	N	X	Y	X	N	X	Y/B	X	N	X	1	1	3	–
095	N	X	Y	X	N	X	Y/B	I	N	X	1	1	3	1
Total Y	–	3	5	2	–	–	–	4	–	1	5			10
Y/B	1				–		5		1			7		
N	4				5		–		4				13	

Readable: Y = Yes; N = No; Y/B = Yes/But

Comprehension: C = Said it made sense; I = Said it did not make sense; P = Said it made partial sense;
X = Made no reference to comprehension.

APPENDIX L

FORCED-CHOICE QUESTIONNAIRE: SUMMARY OF RESPONSE FREQUENCIES

Subject Number	1	2	3	4	5	6	7	A	B	AB	8	9	A	B	AB
031	A	B	B	A	A	B	A	4	3	–	B	A	5	4	–
032	A	A	A	A	A	B	B	4	3	–	A	A	6	3	–
033	A	A	B	A	B	A	A	5	2	–	A	B	6	3	–
034	A	B	B	A	A	A	A	5	2	–	B	A	6	3	–
035	A	A	A	A	B	B	B	4	3	–	A	A	6	3	–
Total A	5	3	2	4	3	2	3	22			3	4	29		
B	–	2	3	1	2	3	2		13	–	2	1		16	–
061	A	A	B	A	AB	B	B	3	3	1	A	A	5	3	1
062	A	A	B	B	B	B	B	2	5	–	A	B	3	6	–
063	A	A	B	A	B	B	A	4	3	–	A	A	6	3	–
064	A	A	A	A	A	A	B	3	4	–	A	B	4	5	–
065	B	A	A	A	B	B	B	3	4	–	B	A	4	5	–
Total A	4	5	2	4	1	1	1	15			4	3	22		
B	1	–	3	1	3	4	4		19		1	2		22	
AB	–	–	–	–	1	–	–			1	–	–			1
091	B	B	B	B	B	B	B	–	7	–	B	B	–	9	–
092	B	B	B	B	B	B	A	1	6	–	B	A	2	7	–
093	B	B	B	B	B	B	B	–	7	–	A	B	1	8	–
094	A	A	B	A	A	B	B	4	3	–	A	A	6	3	–
095	B	B	B	B	B	B	B	–	7	–	B	A	1	6	–
Total A	1	1	–	1	1	–	1	5			2	3	10		
B	4	4	5	4	4	5	4		30	–	3	2		33	–

Responses: A = Decoding Focus; B = Meaning Focus;
              A & B = Decoding and Meaning

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APPENDIX M

ORAL READING TASK CARDS: SUMMARY OF RESPONSE FREQUENCIES

Subject Number	Syntactic-WS Rating	Comp	Correct Rating	Comp	Graphophonic Rating	Comp	Semantic Rating	Comp	Syntactic-AS Rating	Comp	G	G/P	P	Y	Y/N	N
031	G	Y/N	G/P	Y	G/P	Y	P	N	P	Y/N	1	2	2	2	2	1
032	P	N	G/P	Y	P	N	P	N	G/P	Y	-	2	3	2	-	3
033	G/P	N	P	N	G/P	Y	P	N	G	Y	1	2	2	2	-	3
034	G	Y	G/P	Y	G	Y	G/P	Y/N	G/P	Y/N	2	-	3	3	2	-
035	G	Y	P	N	G/P	N	P	N	G	Y	2	1	2	2	-	3
Total G	3		-		1		-		2		6					
G/P	1		3		3		1		2			7				
P	1		2		1		4		1				12			
Y		2		3		3		-		3				11		
Y/N		1		2		-		1		2					4	
N		2		-		2		4		-						10
061	G/P	Y	G/P	Y	G/P	Y/N	P	N	G/P	Y/N	-	4	1	2	2	1
062	G/P	N	G/P	Y	P	N	P	N	P	N	-	2	3	1	-	4
063	G	Y	G/P	N	P	Y/N	P	N	P	N	1	1	3	1	1	3
064	G/P	Y/N	G/P	Y/N	P	N	P	N	G/P	Y/N	-	3	2	-	3	2
065	G/P	Y/N	G/P	Y	G/P	Y/N	P	N	G/P	Y/N	-	4	1	1	3	1
Total G	1		-		-		-		-		1					
G/P	4		5		2		-		3			14				
P	-		-		3		5		2				10			
Y		2		3		-		-		-				5		
Y/N		2		1		3		-		3					9	
N		1		1		2		5		2						11
091	P	N	G/P	Y	P	N	P	N	G/P	Y/N	-	2	3	1	1	3
092	P	N	G/P	Y	P	N	P	N	P	N	-	1	4	1	-	4
093	P	N	G/P	N	P	N	P	N	P	N	-	1	4	-	-	5
094	P	N	P	Y/N	P	N	P	N	P	N	-	-	5	-	1	4
095	P	N	P	N	P	N	P	N	P	N	-	-	5	-	-	5
Total G	-		-		-		-		-		0					
G/P	-		3		-		-		1			4				
P	5		2		5		5		4				21			
Y		-		2		-		-		-				2		
Y/N		-		1		-		-		1					2	
N		5		2		5		5		4						21

Rating: G = Good; G/P = Fair; P = Poor
Comprehension: Y = Reader understood; N = Reader did not understand; Y/N Partial

APPENDIX N

CONSISTENCY OF RESPONSES BETWEEN ITEMS ON INTERVIEW AND QUESTIONNAIRE

Subject Number	Question																
	1	2	3	4	5	6	7	Y	N	Y/N	CC	8	9	Y	N	Y/N	CC
031	Y	N	Y	Y	CC	Y	Y	5	1	–	1	Y	CC	6	1	–	2
032	Y	Y	Y	N	Y	Y	Y	6	1	–	–	Y	CC	7	1	–	1
033	Y	Y	Y	Y	CC	Y	Y	6	–	–	1	Y	CC	7	–	–	2
034	Y	N	Y	Y	Y	Y	N	5	2	–	–	N	CC	5	3	–	1
035	Y	Y	Y	Y	N	Y	Y	6	1	–	–	CC	Y/N	6	1	1	1
Total Y	5	3	5	4	2	5	4	28				3	–	36			
N	–	2	–	1	1	–	1		5			1	–		6		
Y/N	–	–	–	–	–	–	–				–	–	1			1	
CC	–	–	–	–	2	–	–				2	1	4				7
061	Y	Y/N	Y	Y	Y	Y	Y	6	–	1	–	Y/N	CC	6	–	2	1
062	Y	Y/N	Y	Y	N	N	Y	4	2	1	–	Y/N	N	4	3	2	–
063	Y	Y	Y	Y	CC	Y	Y	6	–	–	1	CC	Y	7	–	–	2
064	Y	Y	N	Y	Y	N	Y	5	2	–	–	Y/N	Y	6	2	1	–
065	Y	N	N	Y	Y	Y	Y	5	2	–	–	Y	N	6	3	–	–
Total Y	5	2	3	5	3	3	5	26				1	2	29			
N	–	1	2	–	1	2	–		6			–	2		8		
Y/N	–	2	–	–	–	–	–			2		3	–			5	
CC	–	–	–	–	1	–	–				1	1	1				3
091	Y	Y	Y	Y	Y	Y	Y	7	–	–	–	Y/N	Y	8	–	1	–
092	N	Y	Y	N	N	Y	N	3	4	–	–	CC	CC	3	4	–	2
093	Y	Y	Y	Y	Y	Y	Y/N	6	–	1	–	Y	Y	8	–	1	–
094	Y	N	Y	Y	Y	Y	Y	6	1	–	–	Y	Y	8	1	–	–
095	Y	Y	Y	Y	Y	Y	Y	7	–	–	–	Y	Y	9	–	–	–
Total Y	4	3	5	4	4	5	3	29				3	4	36			
N	1	2	–	1	1	–	1		5			1	–		5		
Y/N	–	–	–	–	–	–	1			1		–	–			2	
CC	–	–	–	–	–	–	–				–	1	1				2

Rating: Y = Yes; N = No; Y/N = Partial (used with an AB response in the
Interview); CC = Cannot compare (used with an NC response in the
Interview)

APPENDIX O

SUMMARY OF FREQUENCIES OF RESPONSES

	Question 1			2			3			4			5			6			7			Total			8			9		
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
I. OPEN-ENDED QUESTIONNAIRE																														
A	5	3	2	5	1	0	2	1	0	5	3	1	3	1	2	2	0	1	2	2	0	24	11	6	3	0	2	0	2	2
AB	0	1	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	4	1	0	3	1	1	0	0
B	0	1	3	0	2	5	3	4	5	0	2	4	0	2	3	3	5	4	3	3	4	9	19	28	1	1	1	0	1	2
NC	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	2	1	0	1	1	1	4	2	1
III. FORCED-CHOICE QUESTIONNAIRE																														
A	5	4	1	3	5	1	2	2	0	4	4	1	3	1	1	2	1	0	3	1	1	22	18	5	3	4	2	4	3	3
AB	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
B	0	1	4	2	0	4	3	3	5	1	1	4	2	3	4	3	4	5	2	4	4	13	16	30	2	1	3	1	2	2

	Card Syntactic-WS			Intact			Graphophonic			Semantic			Syntactic-AS			Total		
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
II. SILENT READING PASSAGES: READABLENESS																		
Y	0	0	0	5	5	5	0	0	0	4	4	0	4	4	0	13	13	5
Y/B	1	3	1	0	0	0	1	1	0	1	1	5	0	0	1	3	5	7
N	4	2	4	0	0	0	4	4	5	0	0	0	1	1	4	9	7	13

	Syntactic-WS			Corrected			Card Graphophonic			Semantic			Syntactic-AS			Total		
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
IV. ORAL READING CARDS: RATING OF READING																		
G	3	1	0	0	0	0	1	0	0	0	0	0	2	0	0	6	1	0
G/P	1	4	0	3	5	3	3	2	0	1	0	0	2	3	1	10	14	4
P	1	0	5	2	0	2	1	3	5	4	5	5	1	2	4	9	10	21
IV. ORAL READING CARDS: COMPREHENSION																		
Y	2	2	0	3	3	2	3	0	0	0	0	0	3	0	0	11	5	2
Y/N	1	2	0	0	1	1	0	3	0	1	0	0	2	3	1	4	9	2
N	2	1	5	2	1	2	2	2	5	4	5	5	0	2	4	10	11	21

A = Decoding Focus; B = Meaning Focus; AB = Decoding & Meaning; NC = Nonclassifiable

Y = Yes; N = No; Y/B = Yes/But

G = Good; G/P = Fair; P = Poor

Y = Reader understood; N = Reader did not understand; Y/N = Reader partially understood

Reading level: L = Low; M = Middle; H = High

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