

THE ESTABLISHMENT OF A REVISED WORD  
RECOGNITION ACCURACY AND ORAL  
COMPREHENSION CRITERIA FOR THE  
INSTRUCTIONAL LEVEL OF THE INFORMAL  
READING INVENTORY

by

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B.A., University of British Columbia, 1962

A THESIS SUBMITTED IN PARTIAL FULFILMENT  
OF THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF ARTS  
in the Department of  
EDUCATIONAL PSYCHOLOGY

We accept this thesis as conforming to  
the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

August, 1973

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## ABSTRACT

The main purpose of this study was to empirically establish criteria for the instructional level of an Informal Reading Inventory using oral sight reading. A secondary purpose was to investigate the relationship between oral word recognition, oral reading comprehension and silent reading comprehension on an I.R.I.

One hundred and twenty children were administered an Informal Reading Inventory in grades one through six. Twenty children in each of the six grades were randomly selected in a school that can be described as being populated by middle class children.

A 60 percent minimum was chosen in this thesis for oral reading comprehension. Each pupil's inventory was examined and the graded oral reading passage that had the greatest number of word recognition errors within this 60 percent minimum was the one used for future computations.

In the primary grades 60 percent comprehension was associated with 89 percent word recognition accuracy; and in the intermediate grades 60 percent comprehension was associated with 97 percent word recognition accuracy. Additionally, an unexpected finding was that the average silent reading comprehension percentage at all grades was statistically significantly lower than the average oral comprehension percent.

A multiple regression analysis conducted between word recognition accuracy, oral reading comprehension and silent reading comprehension and silent reading comprehension indicated that the  $R^2$  of .049 was not significant when all grades one through six were combined.

The first conclusion was that with the exception of Word Recognition Accuracy for the intermediate grades the traditional criteria presented by Betts and Killgallon and many subsequent investigators underestimated a pupil's reading ability. Second, it was hypothesized by this investigator

that perhaps there might be an overemphasis on oral reading as the pupil progresses into the intermediate grades which may in fact be interfering with his silent reading. Such an hypothesis of course could only be validated through further research. Third, that by knowing word recognition accuracy and oral comprehension, one could not accurately predict silent reading performance. It was therefore concluded that silent reading should be included as a necessary component of the I.R.I. for grades one through six.

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ACKNOWLEDGMENT

I wish to thank the members of my committee for their assistance given in the completion of this study: Dr. O. A. Oldridge (Chairman), Dr. J. L. Conry, Dr. K. Slade, Dr. R. Conry.



## CHAPTER 1

## STATEMENT OF THE PROBLEM

One of the critical issues facing reading teachers and others concerned with the diagnosis of reading difficulties, is what percentage of word recognition errors can a pupil make and still profit maximally from instruction at any given grade level. P. A. Killgallon (1942) recognized that an Informal Reading Inventory (I.R.I.) would be a useful guide for determining what level to begin instruction, and he was probably the first author to apply a performance criteria to determine reading achievement. William S. Gray (1920) had made comments previous to Killgallon on the usefulness of I.R.I.'s but did not advance a performance criterion. Instead of a performance criterion, reading achievement was based solely on the examiner's subjective judgment.

The I.R.I. can be best described as an individual structured reading interview in which a pupil reads both orally and silently, selections of increasing difficulty taken from classroom reading texts. As the pupil reads, the teacher notes word attack skills, comprehension errors based on teacher devised questions, and other behaviours related to reading. After the pupil is finished reading the teacher is able to compare the pupil's performances with a set of criteria which enables her to identify the pupil's functional reading levels: independent, instructional and frustrational.

Killgallon qualified the use of the I.R.I. by suggesting that individual differences in attitudes, interests, and capacity, as well as differences in reading programs, instructional material, and standards of achievement, make it unnecessary to develop a criterion which would be universally applicable. But a norm, interpreted and applied with the above

limitations in mind would have practical value. (P.A. Killgallon, 1942).

How then could a normative level be accurately determined that would be most appropriate for beginning instructional reading? Many authorities have presented percentages for the lower limits of needed accuracy in word recognition and in oral reading comprehension. William R. Powell (1968) has provided the following citations where word recognition is first and oral reading comprehension second: E.A. Betts and P.A. Killgallon (1942), 95% and 75%; A.J. Harris (1947), 95% and 75%; M. Botel (1961), 95% and 75%; R.A. Kress and M.S. Johnson (1965), 95% and 75%; M.C. Austin and M.H. Huebner (1961), 95% and 75%; L.R. Wheeler and E.H. Smith (1957), 95% and 70%; L. Cooper (1952), 98% and 70% (Primary), and 96% and 60% (Intermediate; and W.R. Powell (1968), 85% and 70% (Primary), and 91% to 94% and 70% (Intermediate).

Additional researchers such as J.L. Williams (1963), C.M. Davis (1964), S.R. Brown (1963), D.L. Patty (1965), P. Obrien (1970), and M. Botel (1968) generally concluded that an informal reading inventory more effectively placed a pupil at his instructional level than the standardized reading tests. However, there were varying opinions as to what the criterion should be. To a large extent it appeared evident that the authors had chosen their criterion on the basis of intuition, opinion, or from the original Bett's-Killgallon criteria.

The criteria controversy was further compounded by the fact that some proponents (Cooper, 1952, and Killgallon, 1942) used silent reading along with oral sight reading in determining the functional reading levels, while some (Powell, 1968) did not. From the first criterion advanced by Killgallon (1942) in his dissertation, his cautionary note that the criterion for the instructional level would not be universally adaptable has gone largely unheeded. With the exception of the Cooper and Powell studies there

has been no provision for a differential criterion to be applied to primary and intermediate grades. W.R. Powell (1968) presents the notion that all the criteria to date have been based on the intermediate grades and have been generalized to include the lower grades.

#### THE PURPOSE

The purpose of this study was twofold:

1. To empirically establish a differential criteria in the primary and intermediate grades, for word recognition and oral reading comprehension at the instructional level.
2. To investigate the relationship between oral word recognition, oral reading comprehension, silent reading comprehension.

#### OPERATIONAL DEFINITIONS

While the terms employed assumed conventional usage it seemed useful to provide operational definitions for the three functional levels of an I.R.I. - Independent, Instructional, Frustration, as well as to define Word Recognition Error and Oral and Silent reading Comprehension because there was a subtle variance among authors as to meaning and application. It was previously mentioned that different authors presented considerable variations in their word recognition accuracy, and oral reading comprehension criterion; however operationally the following three functional levels advanced by Beldin, Utsey and Wallen (1965) will be used in this thesis.

1. Independent Reading Level. This is the level where the pupil has mastered such skills as word attack, language structure, vocabulary and comprehension to the point that he can read without assistance. It is at this level that the pupil reads for recreation, pursuing information and for the fulfillment of his personal interests (Beldin, Utsey and Wallen, 1965).
2. Instructional Reading Level. This is the level at which instruction

should be initiated or, "that level of reading at which a child is able, with the aid of systematic instruction to make successful progress in learning to read." (Beldin et al, 1965).

3. Frustration Reading Level. It is at this level that the pupil demonstrates an inability to read by blocking on words. His vocabulary, word attack skills and comprehension are inadequate for dealing with the reading material. (Beldin et al, 1965).

4. Word Recognition Error. Lyman Hunt (1969) felt there was an inherent danger in focusing on word recognition errors. He suggested that a teacher could easily become preoccupied with counting errors which tend to interfere with meaningful reading. His observation, accentuating the positive and eliminating the negative has validity when one considers the overall reading process along with the ultimate goal of reading to get ideas from print.

Even though focusing on word recognition errors may interfere to some extent with the reading process, one is faced with few alternatives when attempting to assess a pupil's reading difficulties. To properly place a pupil at his instructional level one must be concerned with errors. With this in mind the following word recognition errors were applied as Killgallon (1942) and Spache (1964) defined them:

Words aided. When a pupil blocks on a word and the examiner has to help him because he cannot or will not pronounce the word.

Omissions. Example: "The black dog ran after the cat" is read "The dog ran after the cat."

Substitution. Example: "The puppy ran," is read "The dog ran."

Substitution Subcategories.

Initial consonant error. This is used in the sense of over dependence upon initial consonants as a means of word recognition. The pupil

reads some for song; red for ring.

Letter reversals. Example: put for but.

Partial reversals. Example: cat for act.

Contextual transposition. Example: "The cat caught a rat" is read, "The rat caught a cat."

Complete reversals. Example: saw for was.

Insertion. Example: "He jumped the ditch," is read, "He jumped over the ditch."

Repetition. Repetitions of two or more words only are counted.

As Spache (1964) stated:

We do not believe that the overall estimate of the child's reading should be unduly penalized by counting every single repetition he makes. After all, the habit of analyzing new, hard words while reading is a very desirable one. Therefore we count repetitions only when two words or more are involved, to reduce the artificial frequency of this error. (Spache, 1964).

Comprehension. Comprehension was defined as Barrett outlined in his Taxonomy of the Cognitive and Affective Dimensions of Reading Comprehension (cited in Clymer, 1968). Barrett's classification makes a distinction between literal and inferential comprehension. Literal comprehension "focuses on ideas and information which are explicitly stated in the selection." Whereas, inferential comprehension "is demonstrated by the student when he uses the ideas and information explicitly stated in the selection, his intuition, and his personal experience as a basis for conjectures and hypotheses." Reading comprehension was determined by presenting to the pupil questions that have been developed on the basis of the above two definitions. Literal comprehension, in part, required the pupil to recall the following:

Details. The pupil was asked to produce from memory factual information such as the names of characters, the time or place of the story.

Main Ideas. The pupil was required to state a main idea of a paragraph or a larger portion of the selection from memory when the main idea is explicitly stated in the selection.

Sequence. The pupil was asked to provide from memory the order of incidents or actions explicitly stated in the selection.

Comparisons. The pupil was required to recall from memory the likenesses and differences in characters, times, and places that were explicitly stated in the selection.

Cause and Effect Relationships. The pupil was requested to produce from memory explicitly stated reasons for certain happenings or actions in the selection.

Character Traits. The pupil was asked to recall from memory explicit statements about characters which illustrate the type of persons they are.

Inferential questions on the other hand required the pupil to infer the following from the presented material:

Main Ideas. The pupil was required to provide the main idea, general significance, theme, or moral which was not explicitly stated in the selection.

Comparisons. The pupil was required to infer likeness and differences in characters, times, or places. Such inferential comparisons revolve around ideas such as "here and there," "then and now," "he and she," "he and he," and "she and she."

Character Traits. In this case the pupil was asked to hypothesize about the nature of characters on the basis of explicit clues presented in the selection.

#### LIMITATIONS

There were several limitations to this study. The first was that only one of the three functional levels of the I.R.I. were dealt with, namely

the instructional level. Since the major concern of the teacher is to select reading materials with which she may initiate instruction, it was felt that a priority should be given to an empirical investigation of this level. It is not to be assumed however that one should accept the independent and frustration level standards as suggested by Killgallon (1942), nor does it necessarily mean that one should interpolate a standard for these levels from the instructional level data assessed in this research. Certainly separate studies are required before any valid inference can be made.

Informal Reading Inventories can be administered at two different levels for two different purposes. The classroom teacher can administer the test for grouping the children for instructional purposes. Such a procedure requires the teacher to observe and quantitatively record the word recognition errors and comprehension results. However, the reading clinician needs considerably more information beyond what is simply provided by the criteria. Powell (1971) felt that the real value of the I.R.I. is at this level since it provides the examiner with the opportunity to gather information on reading behaviours in depth. As Beldin (1969) pointed out, "Gathering this information accurately requires detailed knowledge of the reading process, knowledge of child behaviour and considerable experience in test administration." Every teacher cannot be expected to be a Psychometrist or Reading Specialist this obviates the necessity for him to be sophisticated in the skills required to analyse reading behaviour in depth. Nevertheless, the teacher still has a responsibility for selecting material that will be within the pupil's instructional range. Therefore this research remained within the limits of the first purpose of the I.R.I. and that was to observe and quantitatively record the word recognition errors and comprehension results.

## JUSTIFICATION FOR THE STUDY

The underlying motivation for this study resulted from the fact that while a considerable amount of material has been written about the I.R.I. there is confusion about the construction and scoring. For example, some informal tests use a series of graded passages, oral and silent; others use oral only; still others are composed of graded word lists for placement in the oral passages and some are constructed from sentence samples. The confusion is just as prevalent when one compares the criteria for scoring the I.R.I. Some investigators include errors such as repetitions when calculating word recognition accuracy and others do not. Some investigators include all oral errors while some include only those errors that significantly alter the meaning of a sentence. In attempting to evaluate comprehension, Kender suggests that some authors feel that 90 percent understanding is required for the instructional level; others feel 75 percent is adequate and others maintain that only 60 percent is sufficient. (Kender, 1968).

Much of the confusion stems from research that has been conducted which has revealed some rather apparent weaknesses. These weaknesses will be discussed in chapter two.

The resultant confusion regarding I.R.I. usage presented justification for conducting a study that hopefully will lessen some of the many disagreements that have occurred heretofore. Such a study assumes some significance particularly when it addresses itself to the contentious issues involving the varying criteria used for determining the instructional level and whether the criterion applied to the primary grades should be different from that of the intermediate grades. With the exception of studies by Cooper (1952) and Powell (1968) and McCracken (1963) most authors have not extended their research to include grade one pupils. This lack of attention to the primary



grades provided an additional incentive to conduct a study that would not exclude them.

### THE HYPOTHESES

The hypotheses were as follows:

1. That a pupil's instructional level for primary and intermediate would differ and that all grades combined produce a standard lower than the traditional 95% and 75% criterion.
2. That there would be no significant relationship between word recognition accuracy, oral reading comprehension and silent reading comprehension for all grades combined.
3. That there would be no significant difference between oral reading comprehension and silent reading comprehension at all grade levels.

Presumably if one is not able to predict silent reading comprehension knowing oral word recognition and/or oral reading comprehension then one could assume that silent reading comprehension should be administered along with oral reading in order to determine a pupil's instructional level.

## CHAPTER II

## REVIEW OF THE LITERATURE

INTRODUCTIONThe Need for an I.R.I.

Betts (1954) emphasized that if a teacher is to truly individualize her instruction so that she does not find herself teaching the same thing to the bottom of the class as to the top, she will have to acquire techniques that adequately assess the pupils' instructional level. It is felt that the Informal Reading Inventory is a technique that provides the teacher with a basis for planning effective individual instruction. The intent of this chapter then is to express the merits and limitations as well as to present a complete description of the instrument.

The Definition of the I.R.I.

Killgallon (1942) describes the I.R.I. --

...as a test of reading performance in which the subject is required to read, silently and orally for definitely set-up purposes, selected passages from a graded series of readers. Inadequacies are noted on a rather detailed check-list during the performance and comprehension is checked afterward. The test enables an experienced examiner not only to diagnose reading difficulties but to determine the achievement level of the elementary pupil very accurately within limits of a single grade or reader level. (Killgallon, 1942).

The definition of the I.R.I. becomes somewhat more complete when Killgallon's definition is supplemented by William S. Gray's (1920) statement:

Informal tests, as the term is used in this discussion, relate to tests which are organized by the classroom teacher or supervisor for the purpose of securing accurate records concerning the accomplishments of pupils. They differ from standardized tests in that they are not so carefully organized, they have not been given to a large number of pupils under similar conditions and there are no standards which can be used as a basis for comparison. (Gray, 1920).

When one peruses such definitions it becomes clear there are certain deficiencies in the I.R.I.'s when compared with the more sophisticated standardized tests, but there are definite advantages to the I.R.I. as well.

Killgallon (1942) perhaps overstated his case when he submitted that the I.R.I. constituted the best single index to reading ability at the elementary school level. Donald D. Durrell (1940) in a more plausible way stated the advantages of informal inventories.

Informal tests based upon the reading materials used in the classroom and charts of faulty habits and difficulties observed when the child is reading provide the best basis for planning instruction. They indicate whether or not the assignments are suited to the child's reading maturity and whether instruction is being provided to overcome the specific confusions and faulty habits that arise in the child's daily reading...the proper use of the informal tests, supplemented by observation, will yield for the resourceful teacher information of a diagnostic character that is of practical usefulness in teaching to meet individual needs. (Durrell, 1940).

E.A. Betts has also presented cogent arguments for the usefulness of I.R.I.'s. For example, he has stated:

Probably one of the most direct and effective means of appraising reading levels and needs is the informal inventory. By using a graded series of reading material in a given area, the teacher or clinician may observe responses in a more nearly normal type of reading situation. In a well motivated situation, it is possible to estimate the independent and the instructional reading levels. In addition, specific needs may be evaluated in terms of related needs and background skills....An informal inventory has several merits. First, the teacher is given direct evidence on achievement and needs in terms of available instructional material. Second, the teacher is provided with a technique for detecting every-day needs in the classroom. Third, the child is 'sold' on his needs and how to improve his status. The procedure is sound, understandable and practical. (E.A. Betts, 1947, cited in Cooper, 1952).

The I.R.I. provides the teacher with an opportunity to gain diagnostic insights, from a simple indication of level to a more complex in depth diagnosis of reading behaviours. The latter in depth diagnosis provides very definite limitations. Kender (1968) feels that:

Anyone who is expected to administer an informal reading test must be thoroughly knowledgeable about the reading

process and thoroughly skilled in administering the instrument. The examiner must make his own judgments about what constitutes a sound reading performance on the part of any pupil. He must make decisions about a pupil's word analysis skills, his oral reading, his silent reading, his comprehension, and many other factors involved in the reading process. The usefulness, then, of an informal reading test is in direct proportion to the knowledge of the examiner who uses it; therefore, it is unlikely that just any classroom teacher can easily administer an informal reading test and judiciously interpret its results as is sometimes claimed. (Kender, 1968).

The teacher can still validly assess the pupil's instructional level for the purpose of selecting suitable materials and grouping without possessing the prerequisites preferred by Kender (see page 14). This is not meant to imply that teachers should not be encouraged to participate in in-service programs directed at improving their diagnostic skills through the use of I.R.I.'s. Indeed such programs assist the teacher in becoming more aware of the instructional reading levels. It has been found that:

Teachers who participated in a simulation type in-service program, were significantly more aware of the instructional reading levels of pupils in classrooms than those teachers who participated in the simulation-type in-service experience later in the school year after they had assigned pupils' basal readers. The study further found that teachers who participated in a simulation-type in-service program early in the school year before they had assigned pupils' basal readers were significantly more aware of the instructional reading levels of the pupils in the classroom than those teachers who did not participate in a simulation-type in-service experience. (Millsap, 1962).

Similarly, Ladd (1961) found that teachers given a thirty hour training course on I.R.I.'s improved their ability to identify oral reading errors, but still missed thirty-three to thirty-seven percent of the errors.

#### DEVELOPMENT OF THE I.R.I.

People such as W.S. Gray, (1920), E.A. Betts, (1936), and Arthur Gates, (1936) have pursued the techniques and potential values of the I.R.I. However, none explicitly mentioned the word recognition and comprehension criterion required for the three functional levels. It was not until 1942

that a student of Betts, P.A. Killgallon, first researched the criteria for identifying a pupil's functional level. Since that time key studies by Cooper, (1952), McCracken, (1963), and Powell, (1968) have attempted to empirically investigate the criteria.

Killgallon's doctoral dissertation, A Study of Relationships Among Certain Pupil Adjustments in Language Situations (1942), as mentioned earlier, was the first study to establish criteria for the instructional level. The main purpose of the study was "to study certain aspects of the general problem of individual differences in reading in connection with the reading ability with pupils at the fourth grade level." Killgallon (1942). The criteria for determining the functional reading levels seemed to emerge as a by-product of the study.

He had a sample of 211 fourth grade children of three central Pennsylvania communities. The communities were small industrial rural populations. All the children included in the study were native born and according to reports by the pupils their parents were also native born.

The subjects came mainly from average middle class homes. Professional, cultural and economically deprived or favoured groups were not sampled disproportionately.

In order to collect data for computing reading ages and reading grades for all the fourth grade children used in his study, he administered the Gates Reading Survey, Grades III to X. He checked the validity of the Gates data by administering an informal reading inventory to every fifth pupil (forty-one in total) on the ranked distribution of Gates Survey reading ages. As another sidelight of his study the validity check revealed that the Informal Inventory placed children an average 1.06 grades lower than the standardized test. He also found that the standardized test did not discriminate well among the lower extremes of the distribution. One child,

for example, scored 2.8 on the standardized test but was incapable of reading a pre-primer on the informal reading inventory.

Perhaps the most curious anomaly of the study involved the establishment of criteria for the functional reading levels. He determined prior to the testing of his subjects what the criteria would be. The criteria that he arbitrarily established for the lower limits at the instructional level were 50 percent for comprehension or better and a word recognition error of one error in every fourteen running words, (92.86 percent). Even though he defined the lower limits of word recognition as being 93 percent and comprehension as 50 percent he switched to a 95 and 75 percent criterion respectively in his conclusions.

The reason he switched from one criterion to the other is not clear.

On page nine of his dissertation he stated:

Criteria for defining the probable instruction level, the probable frustration level, and the probable reading capacity level were arbitrarily established by the investigator in connection with the Informal Reading Inventory (Killgallon, 1942).

However, later in the study on page 102 Killgallon states:

The subjectivity of the examiner's ratings, however, must be recognized as a major limitation in the use of the inventory. The extent of this limitation is reduced and the reliability of the instrument is increased in direct proportion to the degree to which results are interpreted according to valid and objective criteria. With this in mind, the criteria outlined below were established after preliminary trial of the Informal Reading Inventory and were observed in making the ratings in the present study (Killgallon, 1942).

Beldin (1969) felt there may have been some justification for Killgallon's original "arbitrarily established" criteria. He felt that Killgallon might have based the 50 percent comprehension from the comments of Bolenious (1919) who published a book called, Teacher's Manual of Silent and Oral Reading wherein he suggested that a child should grasp 50 percent of the ideas in a 400-word passage. However there seems to be no plausible

basis for his establishing a 92.86 percent word recognition error. Beldin suggests, which seems equally untenable that the word recognition criteria may have emanated from D. Durrell's (1940) book, Improvement of Basic Reading Abilities when he stated: "In the usual classroom practice it appears that children find difficulty in mastering material containing more than one difficult word in twenty running words." If Killgallon had used Durrell as a frame of reference, he should have used a word recognition criterion of 95 percent, but he did not--he initially used 92.86 percent.

On page 162 of Killgallon's study he justified his altered criterion for comprehension when he asserted: "The mean comprehension score at the instructional level was 71 percent." On page 165 he concluded that: "The mean percent of error was 5.1; the limits of the range, 1.2 and 6.6. In corresponding terms, pupils made approximately five word-perception errors in every hundred running words, or one in every twenty, on the average." By rounding off the above two figures he finally arrived at a word recognition error score of 95 percent and a comprehension of 75 percent.

In spite of the unorthodox manner in which this study was conducted, the results have been widely cited in the literature by Burrows (1954), Bortel (1969), Austin and Huebner (1962) and McCracken (1964). Killgallon was aware that his study had shortcomings, unfortunately many of his followers were not, which has led to the perpetuation of spurious criteria for over thirty years.

Cooper (1952) conducted a study on I.R.I. in which he had three objectives:

1. To determine the relationship between the ratio of word perception errors and gains in reading.
2. To investigate the possibility of using abnormal reading symptoms to determine what materials would be suitable for a pupil.

3. To determine a suitable criterion for the instructional level.

Cooper administered I.R.I.'s to approximately 1000 pupils in the Boston area in grades one to six. He classified them into five groups ranging from those who made the most word perception errors, to those who made the least. He then administered two standardized reading tests at the beginning and at the end of the year. He compared these results with the I.R.I.'s for each group and found that at the primary level the group making the greatest amount of progress in reading achievement was characterized by 0 - 1.99 word perception errors per 100 running words supported by a 70 percent comprehension score. At the intermediate level the 0 - 1.99 and 2 - 3.99 groups made the greatest gains supported by a 60 percent comprehension score. He then labelled these groups in the primary and intermediate grades as being placed in "suitable" instructional materials. He concluded from the above data that the criteria for placing a pupil in "suitable" instructional materials at the primary level should be 98 percent for word recognition accuracy and 70 percent for comprehension. At the intermediate level the criteria should be 96 percent for word recognition accuracy and 60 percent for comprehension. It should be recognized that Cooper (1952), Spache (1964) and Dunkeld (1970) suggested that 60 percent is the minimum criterion for the instructional level. However, Betts (1936), Beldin et. al. (1965), Johnson and Kress (1965), suggested the 60 percent oral reading comprehension approaches the frustration level.

While Cooper's study was one of the first scientific investigations of its kind, there were certain procedural weaknesses such as limited range of materials in some of the grades. For example on page 230 of his study he stated: "In some cases, only one book will be used in a room; in others several may be used. In any case, each child will be expected to read only from the immediate book that is being used for reading instruction." Since more



than one examiner administered the I.R.I.'s there is the possibility of variance in the results as interpreted by the different administrators. Also because of the geographic and socio-economic limitations the results of the study should be interpreted cautiously. In spite of the procedural difficulties displayed by Cooper's study it represented a useful piece of research in attempting to determine "suitable" instructional reading material.

Another interesting I.R.I. study was conducted by R.A. McCracken (1963). The purpose of this study was "...to develop a valid and reliable individual reading test for measuring the reading achievement of elementary school children." McCracken's "Standard Reading Inventory" purports to measure a pupil's independent, instructional and frustrational reading levels. He based his validity on the vocabulary of three basal readers and tested the validity of his passages by using the Spache Readability Formula for the primary grades and the Dale-Chall formula for the intermediate grades. He further supported his results by administering his test to 664 pupils in grades one through six and by using the subjective ratings of twenty-five nationally known reading authorities. Reliability was demonstrated by having two other examiners administer alternate forms of the Standard Reading Inventory to 60 children, 30 boys and 30 girls. The data from this testing was used to compute twelve Pearson product moment correlations; these correlations ranged from 0.99 to 0.68 with a median of 0.91. The main shortcoming of McCracken's inventory is that the standards used in his test were based on Killgallon's criteria. In view of the comments made earlier on the derivation of the Killgallon criteria, findings of the McCracken study should be regarded as somewhat tenuous.

A unique approach in attempting to establish an instructional criteria was presented in a study by William Powell (1968). He hypothesized that a pupil should be able to make more than 5 percent error in word recognition

and still be reading at his instructional level and therefore the 95 percent word recognition standard should be lowered. In order to test his hypothesis he examined the I.R.I. profiles of 178 protocols selected from average ability, average achieving middle class children in grades one through six. He had three examiners collecting the data which like Cooper's study would involve examiner variance.

The method he used for examining each of the protocols was to hold comprehension constant at 70 percent or higher. The 70 percent or higher criterion was the lowest acceptable score for classification at the instructional level. Each protocol was first examined to determine the highest grade level basal reader which the pupil could read with comprehension closest to the 70 percent criteria, but still higher than this arbitrarily determined cut-off. It is this level that determined the entry into the word recognition column. The word recognition scores were perused up to and at that level to determine the lowest percentage of word recognition accuracy. This lowest percentage figure is the number that was used for computing the mean for all grade levels. Powell justified his procedure by stating: "If the youngsters' comprehension percent remained continuously at an acceptable level, then the fluctuation in word pronunciation was tolerable to the reader." The critical issue in his statement is what does he mean by tolerate: Powell did not explicitly define the word. However, one can presume that he meant that as long as a child can maintain acceptable comprehension (70 percent), any variation in word recognition error would not be frustrating to him by displaying undue reading difficulties or tensions. Such frustration would be apparent as Killgallon suggested, by the presence of two or more signs of difficulty--excessive lateral head movement, finger pointing, various forms of atypical vocalization.

Powell concluded that the 95 percent model presented by Killgallon and

Betts is too high. Powell explained that the reason he used the 70 percent comprehension level rather than the 75 percent "was to mitigate the effects of the comprehension score which could have been influenced by the number of questions asked of the subject. Observation revealed that this precaution was not truly necessary, as only a very small number of the cases would have been so affected." The perplexing thing about his comprehension criteria is why he would have considered a 75 percent criterion in the first place. There is no clear explanation for the choice but one suspects it might have been based on the spurious Killgallon criteria. This latter point represents a substantial weakness of an otherwise noteworthy research study.

#### Reliability and Validity of the I.R.I.

Those who are aware of the construction of I.R.I.'s may find the terms reliability and validity unfamiliar concepts and perhaps unnecessary. In using these instruments there is generally little attempt to adhere to rigorous administrative procedure. McGinnis (1970) feels that the way a child reacts and what he has to say about his performance are more important issues than testing procedures. McGinnis' statement has merit with respect to informal assessment as such, but it seems clear that if one adopts such an attitude one must also be prepared to accept results that are substantially less than valid or reliable. Such an attitude further supports the notion that I.R.I.'s should not be used independently, but should be complemented with standardized testing. On the other hand, Botel (1969) assures that the I.R.I. has high reliability by the fact that the teacher can provide many on-the-spot appraisals. He suggested that the instrument can have a high face validity in that it is based directly upon materials the pupil is using in the classroom. Roger Farr (1969) concurred with Botel when he maintained that the reliability of the I.R.I. will be high because the reader's performance is assessed over a number of different occasions. One

should bear in mind with reference to Botel and Farr's comments on reliability that while the I.R.I. has the potential for assessing reliability one should not conclude that it necessarily will be high simply because the opportunity exists for measuring it.

A major limitation of the I.R.I. is that often the results of an I.R.I. are contingent upon teacher bias. Many teachers evaluate a protocol on the basis of a predetermined bias as to what they consider the reading process to be (Emans, 1965, cited in Powell 1969). To reduce the effects of predetermined biases and to increase reliability and validity, McGinnes (1970) stated that the examiner should: "Adhere to the facts and should restrict his inferences to the simplest interpretation."

McCracken and Mullen (1969) conducted a validity study to determine if the data from two informal reading inventories as well as one standardized reading achievement test would be valid indicators of the independent, instructional, and frustrational levels of reading. The tests were administered to 147 boys and girls in grades one through six at the Western Washington State Campus School and a combined second and third grade class consisting of 24 children from an off-campus public school. The tests used in the study were the Standard Reading Inventory Form A, the Stanford Achievement Tests, the California Tests of Mental Maturity and the Botel Reading Inventory. The results in part suggested that the Botel Inventory and the Standard Reading Inventory both offer evidence of validity which is reported in their manuals. A later study by Botel, Bradley and Kashuba (1970) substantiated this claim wherein concurrent validity coefficients for the Standard Reading Inventory ranged from .80 to .88. Since both purported to measure the basal book levels at which a child should be instructed, they should yield similar results, particularly if they use the same standards for determining instructional level. A correlation was determined between the midpoints of the

instructional range of the S.R.I. and the Botel Inventory. The correlations are presented in Table 1 and are all significant at the .01 level of significance.

TABLE 1  
CORRELATION BETWEEN THE MID-POINTS OF THE  
INSTRUCTIONAL RANGE OF THE STANDARD READING  
INVENTORY AND THE BOTEL READING INVENTORY  
FOR 140 CHILDREN IN GRADES ONE THROUGH SIX

Grade	N	r	Significance of Correlation
1	23	.79	0.01
2	23	.88	0.01
3	22	.85	0.01
4	25	.95	0.01
5	23	.90	0.01
6	24	.95	0.01
Total	140	.95	0.01

### Oral and Silent Reading

The literature does not present a unified approach on the method of presentation of oral and silent reading passages in I.R.I.'s. Some examiners base their test results on oral sight reading alone; others administer both oral and silent. For example, Spache (1952) used oral reading for determining the independent level and silent reading for the instructional level. Cooper (1952) used silent reading after oral reading. Killgallon (1942) administered silent reading prior to reading the same material orally. Powell (1968) did not use silent reading at all. Whether Powell's procedure

is tenable is one of the major concerns of this thesis and will be discussed in Chapter V.

### Reading Rate

Cooper (1952) examined both silent and oral reading rates in his dissertation on I.R.I.'s. He found that as material increased in difficulty the rate of oral and silent reading decreased. He also observed that rate of silent reading was greater than oral reading.

McCracken (1963) noted that some children can meet the instructional level criteria for word recognition and comprehension but at a reduced reading rate. To offset this he added a time criterion to his inventory.

Beldin (1969) mentioned that experienced teachers and examiners know that some children, realizing the evaluation time is relatively short, will not show some of the symptoms of tension during testing that they will exhibit over a longer term. The antithesis to Beldin's unusual statement is a case presented by Preston (1954) which one could argue would probably be more typical:

Another case comes to mind of a junior high school boy, who, on the basis of a diagnostic examination was judged to be a word-attack case. Yet during the instruction in the Clinic it was discovered he really had no word-attack difficulty at all when allowed sufficient time and when free of tension (Preston, 1954).

To impose time limits on informal reading passages is to ignore one of the major assets of the informal inventory and that is it provides the opportunity to observe the child in a non-threatening atmosphere which is free from tension-producing time restrictions.

### Alternatives to the Informal Inventory

The I.R.I. has many advantages over other diagnostic instruments. For example, it can be constructed from materials in a particular subject matter field and can yield immediate practical results for the teacher. Further,

the main purpose of the I.R.I. is not to identify in a comparative way the poor readers but rather to identify the level and type of material that the pupil can manage with adequate understanding. One should not conclude that the I.R.I. is a complete inventory for determining reading levels. On the contrary, other alternatives such as standardized reading tests are required. However, standardized tests tend to yield higher scores than I.R.I.'s by as much as three grades.

E.A. Sipay (1964) administered three standardized achievement tests and I.R.I.'s to 202 subjects from eight fourth grade classes. The results are as follows:

1. When Cooper's criteria of 60 percent comprehension and 96 percent word recognition accuracy were used to estimate the instructional level, all three standardized tests tended to overestimate the instructional level by approximately one or more grade levels.

2. When a less stringent criteria of 60 percent comprehension and 90 percent word recognition accuracy were used, the mean score on the Metropolitan test was 0.11 grade levels higher while the Gates Survey overestimated the more liberal criteria instructional level by 0.29 of a grade level and the mean of the California test was 1.02 higher than that of the lowered criteria level (Sipay, (1964).

It appears that the higher scores on the standardized tests implicitly suggest that if a child was instructed in materials as indicated by the standardized tests he would be reading materials at a frustrational level. Such an assumption is purely speculation. While Sipay's study suggests standardized tests do yield higher scores than the instructional level indicated by the I.R.I., it does not necessarily validate the I.R.I.

McCracken (1962) however, in a comparison of the I.R.I. with standardized test scores did validate the assumption that using standardized test scores would overestimate the pupils' instructional level. This study was conducted only on the Iowa Every-Pupil Tests of Basic Skills and the results certainly cannot be generalized to all standardized tests. Nevertheless,

McCracken's study compared the performance of 56 sixth-grade pupils on the Iowa Tests of Basic Skills, Test A: Silent Reading Comprehension to the reading comprehension and vocabulary scores on an informal reading inventory which included both oral and silent reading. The three levels of performance on the informal reading inventory were the immediate instructional level, the maximum instructional level, and the word recognition level. In his study he concluded that:

...the use of standardized test scores to determine level of instruction would place 63 percent of the students at a frustration reading level and suggested that the standardized test scores be lowered by two grades. He urged that this score be used to determine instructional level. (McCracken, cited in Farr, 1969).

Roger Farr stated:

If McCracken's recommendations were followed through with the students in his study, only four percent would have been reading books which would be too difficult and seven percent would have been reading books which would be too easy (Farr, 1969).

The I.R.I. too, has its critics. Della-Piana, Jensen, and Murdock (1970) advocated that the I.R.I. is too time consuming for the average classroom teacher and that the inventory will be dropped in favour of more relevant activities related to improving pupil reading.

In spite of the weaknesses of standardized tests and I.R.I.'s, one should not discount their value, but rather consider the notion that the purposes for which they were both designed differ. Standardized tests are essentially normatively designed to compare pupils to each other in terms of their reading skills, whereas I.R.I.'s tend to be more concerned with establishing a functional reading level on an individual basis.

Perhaps the least desirable alternative to the I.R.I. comes from teacher estimates. A study conducted by Littrell (1968) correlated scores on the Diagnostic Reading Survey and teacher's estimates of pupil reading ability based on subjective judgment. He found that eleventh grade pupil's English,



Science and Social Studies vocabulary ratings correlated moderately with the pupil's measured abilities. On the basis of subjective observation the teachers were not able to accurately judge the vocabulary levels of their pupils. He concluded that one should determine whether a teacher's evaluation of a pupil's reading ability was based on either measured, objective data or whether it was subjectively derived, since the latter does not correlate well with measured reading abilities.

Wanderlich and Bradtmeuller (1971) conducted a study to determine whether a teacher's estimate of a pupil's reading ability would be more accurate than an informal inventory which the authors developed and named the Individual Reading Placement Inventory (I.R.P.I.). A concurrent validity study was made comparing the I.R.P.I. scores with the Rasnof-Neff, Stanford Reading Achievement Test, and the California Reading Achievement Test. This produced correlation coefficients of .89, .78, and .87 respectively. The reliability of the two forms of the I.R.P.I. was established by administering Forms A and B to 410 students divided into seven groups. The groups, including junior high and senior high school students and adults, were administered at different times and in different places by different administrators. The correlation coefficients between the two forms for the seven groups ranged from .91 to .98. Although the authors feel their sample of teachers (30) was too small to make any firm conclusions, they did suggest that middle grade school teachers could not accurately make subjective judgments about the reading levels of their classes. The teachers tended to overrate the poor readers and underrate the better ones.

It has not been the intention of this section to extol the virtues of the I.R.I. and give token gesture to the alternatives: Quite the contrary, it would be a naive procedure that would employ any one instrument or technique in favour of another. A full diagnostic program that provides an

ongoing assessment must surely include the I.R.I. along with standardized testing as well as the alternatives outlined, at least until some more valid, all-encompassing instrument is designed.

## CHAPTER III

## METHOD

SELECTION OF SUBJECTS

In the present study 120 children were selected from grades one through six (20 from each grade). The elementary school is located in the Lower Fraser Valley composed of pupils from middle class socio-economic background. Unlike Powell (1968) who selected only average achieving students, this study was more in accord with Botel et al. (1970) who randomly sampled to insure average, below and above average readers would be represented. Randomness was assured by assigning each pupil in each class a number, the children were then selected on the basis of their assigned number being generated from a table of random numbers.

MATERIALS

McCracken (1966) in developing his Standard Reading Inventory constructed his own passages for presentation to the pupils. Such a procedure ignores the biggest contribution the I.R.I. has to make and that is by using classroom materials as they have considerably more face validity than published inventories. With this in mind the reading material was taken from readers that were used as supplementary readers for classroom instruction. Some advocates of the I.R.I. like Betts (1954) suggested that a fairly satisfactory inventory can be developed from material which the child has already been exposed to. He justified this by arguing that: "Since comprehension is carefully checked by both factual and inferential questions in both a silent and an oral reading situation, memorization is quickly detected and this reading 'crutch' is removed." He conceded however that a student who has had a failing experience with a particular text may be unduly affected if the same material is presented for assessment. Botel et al. (1970) on the other hand

eliminated exercises from their study if they felt the pupil's performance indicated that he had previous knowledge of story content. In order to reduce the possibility of getting spurious results from the pupils having already been exposed to the materials, this present study selected the passages from supplementary classroom texts. To insure proper stratification of selections, each intermediate text was divided into four equal sections. Selections were not chosen from the first part of the books since the first several selections in any basal reader are not generally representative of that reader level but instead serve as a review of the previous level. Two selections were made from each of the remaining three sections--one for oral sight reading and one for silent reading. Each selection taken from the reader contains approximately 100 words, although there are more for the intermediate grades and somewhat less for the primary grades. For grade one there were three texts (pre-primer, primer, level one). One passage for oral and one for silent reading were selected from the middle of the text. In grades two and three there were two levels of texts provided for each grade. Because of the repetitive nature of the materials only one passage for oral and one passage for silent were selected midway through each text. While this procedure gave an adequate graded sampling for grades two and three, it also produced only 10 questions for each of grades two and three rather than 15 for each of the intermediate grades.

The texts were compared against two reading formulae to insure that the selections represented reading levels that the publishers purported them to represent. The Spache Readability Formula (1953) was used to estimate the material below the fourth reading level and the Dale-Chall formula (1948) was used to estimate material including and above the fourth reader level. Research (Botel et al. 1970) has indicated that these formulas give fairly accurate indications of levels of reading difficulty.

The number of questions finally selected for each passage were five for

both primary and intermediate grades. This number was used namely for simplicity of computation. Also it was difficult to generate more than five questions from the short passages selected, particularly for the primary grades.

As mentioned earlier the questions were composed of inferential and literal comprehension questions. The literal comprehension questions required the pupil to recall from the selection, details, main ideas, sequences, comparisons, cause and effect relationships and character traits. The inferential questions required the pupil to infer main ideas, comparisons, and character traits. Table 2 outlines the number of each type of question included. Table 3 summarizes these findings. Upon examination of Table 3, it can be seen that in the primary grades there were almost as many literal comprehension questions in the oral comprehension items as in the silent comprehension items. Also, in the primary grades there were almost as many inferential comprehension questions in the oral comprehension items as in the silent comprehension items. A similar pattern emerged from the intermediate grades wherein there were almost as many literal comprehension questions in the oral comprehension items as in the silent comprehension items. Similarly, there were almost as many inferential comprehension questions in the oral comprehension items as in the silent comprehension items. One will note the larger number of questions for the intermediate grades than for the primary--this discrepancy was explained on page 28.

Table 4 represents an item analysis for all the comprehension questions. For clarification it should be mentioned that in Table 2 there were no inferential items for the grade 3 book level; however, in Table 4 it can be seen that there were seven responses to inferential items by pupils in grade three. This apparent anomaly is due to the fact that pupils in grade three answered inferential items that were either above or below the grade three placement in which there were inferential questions.

TABLE 2

## COMPOSITION OF ORAL AND SILENT COMPREHENSION QUESTIONS BY TYPE AND GRADE

Type of Question	Oral Comprehension Grade of Question							Silent Comprehension Grade of Question						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
<b>Literal Comprehension</b>														
Detail	9	3	4	6	7	9	10	11	6	5	9	13	7	9
Main Ideas	2	6	6	6	6	4	1	2	4	4	3	1	6	2
Sequence	2													
Comparisons				1										1
Cause & Effect						1	1			1	2			
Character Traits				1		1	1						2	1
TOTAL	13	9	10	14	13	15	13	13	10	10	14	14	15	13
<b>Inferential Comprehension</b>														
Main Ideas	1	1			2		1	2						2
Comparisons												1		
Character Traits	1			1			1				1			
TOTAL	2	1	0	1	2	0	2	2	0	0	1	1	0	2

TABLE 3

SUMMARY TABLE OF COMPOSITION OF ORAL AND SILENT  
COMPREHENSION QUESTIONS BY TYPE AND GRADE

Type of Question	Oral Comprehension Grade		Silent Comprehension Grade	
	Primary	Intermediate	Primary	Intermediate
Literal Comprehension	32	55	33	56
Inferential Comprehension	3	5	2	4

TABLE 4

## ANALYSIS OF RESPONSES\* OF PUPILS IN GRADES ONE THROUGH SIX

## TO ORAL AND SILENT COMPREHENSION QUESTIONS

Type of Question	Oral Comprehension Grade of Pupil						Silent Comprehension Grade of Pupil					
	1	2	3	4	5	6	1	2	3	4	5	6
Literal Comprehension												
Details	60/15	38/9	66/16	58/12	90/24	58/23	63/32	44/33	72/40	55/26	77/38	38/37
Main Ideas	65/15	62/22	58/20	35/13	29/3	8/2	34/30	30/29	24/20	11/9	26/10	11/17
Sequence	1/1											
Comparisons	1/0	1/0	8/1	1/0							1/1	7/4
Cause & Effect		1/0		1/0	4/0	8/2	2/0	4/3	11/12	7/18	0/2	
Character Traits	1/0	1/0	9/0	1/1	4/2	16/2				1/2	8/2	7/3
TOTAL	135/34	103/31	141/37	96/26	127/29	90/32	99/62	78/65	107/72	74/54	112/53	63/61
Inferential Comprehension												
Main Ideas	6/2	9/1	0/1	5/1	13/0	13/0	1/3				2/0	9/7
Comparisons										0/1	1/1	
Character Traits		0/1	2/4	8/4	1/0	4/1		1/1	1/5	2/9	1/0	
TOTAL	6/2	9/2	2/5	13/5	14/0	17/1	1/3	1/1	1/5	2/10	4/1	9/7

\* Upper figure = number of correct responses  
 Lower figure = number of incorrect responses



An examination of Table 4 revealed that generally the inferential comprehension questions were observationally no more difficult than the literal comprehension questions. The exception to this observation was with inferential comprehension questions presented in silent comprehension for grades one through four where it appeared they may be more difficult than the literal comprehension items. However, one will note that the total number of items in this category was only three out of a total of ninety-two and represented only twenty-four responses out of a total of nine hundred and forty-five. This small representation of items would not lead one to suspect that the sixty percent comprehension criteria is spuriously low due to more difficult inferential items.

The questions were carefully constructed as Austin and Huebner (1962) suggested, so that exact wording of the material would not be necessary. Unaided recall type questions were used, based upon reading material rather than experiences the child may have had. Following Bett's (1954) recommendation the questions avoided catch questions, and the combined use of interrogative or imperative type questions. Additionally, questions that could be answered yes or no were avoided. The scoring of the correctness of response did occasionally require a certain amount of subjectiveness on the part of the examiner; however, no part credit was given. The response was scored either right or wrong. All the questions were administered orally immediately after the pupil read the selection.

The reliability coefficients for the comprehension questions on each of the graded book levels is outlined in Table V. Where there were less than ten pupils responding to any one book level the reliability was not computed which accounts for no reliability reported in the grade one book levels. A two way analysis of variance was conducted post facto on the comprehension items by the U.B.C. 360 computer program BMD:08V. From this analysis Kerlinger's (1964) formula was applied to compute the reliability coefficients. The coefficients ranged from .958 to .998.

TABLE 5

## RELIABILITY COEFFICIENTS FOR GRADED BOOK LEVELS GRADES 2 - 7

Grade	Level of Book Within Grade	Oral Comprehension Reliability	Silent Comprehension Reliability
2	1	.998	.997
2	2	.985	.975
3	1	.973	.989
3	2	.961	.994
4	1	.993	.986
4	2	.976	.981
4	3	.998	.958
5	3	.991	.988
6	1	.995	.992
7	1	.998	.985

## TESTING PROCEDURES

Since the pupils were unfamiliar with the examiner, he took as much time as was necessary to establish effective rapport. The administration of the inventory itself deviated somewhat from standardized testing procedures in that the length of time a pupil took to complete a reading passage was not uniform. After the pupil had completed reading the selection either orally or silently, the selection was taken from him and he was not allowed to look at it again.

The selection that each child read was mimeographed and the questions were written below. The child read from the textbook while the examiner made the necessary recordings on the mimeographed sheet. Each mimeographed sheet had a space for the pupil's name and grade, word recognition errors and comprehension scores. In addition the following information was on the test sheet:

- (1) Name of Book, grade level--as calculated by the examiner,
- (2) whether the selection was for oral or silent reading and the page number on which the selection may be found, and
- (3) the number of words in the selection.

One will note that this format for the reading selections was a modification of the one used by Cooper in his dissertation.

The oral reading selection was presented to the pupil first. In regular classroom routine the practice of preceding silent reading with oral is perhaps not too prudent; however, for the purpose of this study it was necessary to first establish a valid instructional level which could not have been done if silent reading had been presented first.

Before testing began a few preliminary remarks were made. The examiner indicated to the pupil the selection to be read and whether he should read the selection orally or silently. He was also advised that while he was not

being timed, he should read the selection as quickly and accurately as he could. He was also instructed that he would be asked questions about what he had read when he was finished.

The pupils were given a passage that was equal in difficulty to their present grade placement. For example, pupils in grade one were given a selection from the last section of book one. After the selection was read, questions were asked. If the pupil's comprehension was at least 60 percent, then a more difficult selection was given. A ceiling was reached once the pupil dropped below 60 percent comprehension. At this point reading was stopped.

The traditional Killgallon 75 percent comprehension was not used for previously stated reasons. Spache's (1963) 60 percent criterion which evolved from his Diagnostic Reading Scales was used because his norms for oral reading errors were developed and standardized separately for each reading selection by widespread pupil testing and comparison with other individual and group reading tests. A comprehension norm of 60 percent represents the actual minimum comprehension found in this standardization. The validity of the Diagnostic Reading Scales was established through careful test construction and numerous studies conducted during eight years of development and research. Studies by Cooper (1952), and Dunkeld (1970) also established oral reading comprehension at 60 percent. Since these notable studies were based on empirical evidence rather than conjecture, the 60 percent criterion was finally selected for this study as well.

While the child was reading orally from the text, the examiner recorded the word recognition errors on the mimeographed sheet. To enhance the accuracy of recording a notation system was adopted as suggested by Spache (1964).

After the instructional level was determined through oral sight reading, the pupil was asked to read a selection silently. The silent reading passage is equal in reading difficulty to the oral instructional level which is the

highest grade level at which he could understand at least 60 percent of the material. After he had finished reading silently he was asked questions and his comprehension was recorded.

Proper nouns incorrectly pronounced were not recorded as errors. Also if a pupil corrected himself on any type of error it was not recorded unless a repetition was involved. For the example the pupil may read "a big black dog" for "a black dog". If he vocalized an error and repeated it correctly, an insertion error was not counted, but a repetition error was.

In recording errors no attempt was made to record hesitations, phrasing, word stress, or punctuation errors because a study by Ladd, (1963) cited in Spache, (1964) suggested that the above-mentioned errors could not be accurately recorded by teachers even after thirty hours of training.

After the pupil had finished both the oral and silent reading and had left the room, the number of word recognition errors were calculated. The recognition errors were divided by the total number of words in the selection and multiplied by 100 to arrive at a percentage of word recognition errors. This percentage was subtracted from 100 to get a percentage in terms of word recognition accuracy.

## CHAPTER IV

## RESULTS

DETERMINATION OF WORD RECOGNITION ACCURACY (W.R.A.) AND ORAL COMPREHENSION (O.C.) FOR THE INSTRUCTIONAL LEVEL

For Each Grade (1 - 6)

When a ceiling of sixty percent for comprehension was reached and the pupil had left the examination room, each protocol was scored for word recognition errors. The errors recorded were: Words aided, Omissions, Substitutions, Insertions, Repetitions, Initial Consonant Errors, Letter reversals, Partial reversals, and Complete reversals. The percent of errors for the entire passage were recorded; however, one should note that it was the percent of word recognition accuracy that was used for further computations. Word recognition accuracy and oral reading comprehension and silent comprehension will be referred to as W.R.A., O.C., and S.C. respectively.

In establishing criteria for W.R.A. and O.C., each of the twenty protocols for the six grades was examined (N = 120) to determine the highest grade level which indicated a comprehension score of at least sixty percent. The word recognition scores up to and including that point were perused and the reading selection that had the lowest percent of word recognition accuracy was recorded for each pupil so long as it was within the limits of the comprehension score. The lowest word recognition score for each of the twenty pupils was averaged which yielded the minimum limits of the instructional level for each grade. This procedure was the same one that Powell (1968) adopted in his study. Scores beyond the ceiling of sixty percent were not considered for further computation. However, the scores beyond the 60 percent ceiling were considered, as summarized in Table VI and illustrated by the plots in Figures 1 and 2, to determine whether they gradually increase or decrease on either

side of 60 percent. The data indicate that there was no change of direction on either side of the criterion of 60 percent.

TABLE 6  
PERCENT OF WORD RECOGNITION ACCURACY SCORES ABOVE  
AND BELOW 60 PERCENT COMPREHENSION FOR  
GRADES ONE THROUGH SIX

Comprehension Percentage	Grade Percentages					
	1	2	3	4	5	6
20	73.78	91.70	92.70	96.10	95.80	95.90
40	84.25	93.80	95.30	94.81	97.40	95.60
60	83.71	91.70	92.60	95.92	96.50	97.60
80	89.97	95.64	96.27	97.88	98.10	98.80
100	89.40	94.95	95.00	94.83	97.36	97.90

The word recognition scores within the constant 60 percent oral comprehension criteria are summarized in Table 7 and plotted in Figure 3.

TABLE 7  
 LOWEST WORD RECOGNITION ACCURACY PERCENTAGE  
 MEANS AND VARIANCES FOR EACH GRADE  
 ONE THROUGH SIX

Grade	Percent of Word Recognition Accuracy	Standard Deviation	Oral Comprehension Percentage
1	84.65	8.50	60
2	92.85	5.64	60
3	92.29	6.52	60
4	95.86	5.18	60
5	97.62	1.63	60
6	97.60	2.52	60

The above data is graphically presented in Figure 3 wherein the upward trend of the older pupils committing fewer word recognition errors is similar to Powell's (1968) study.



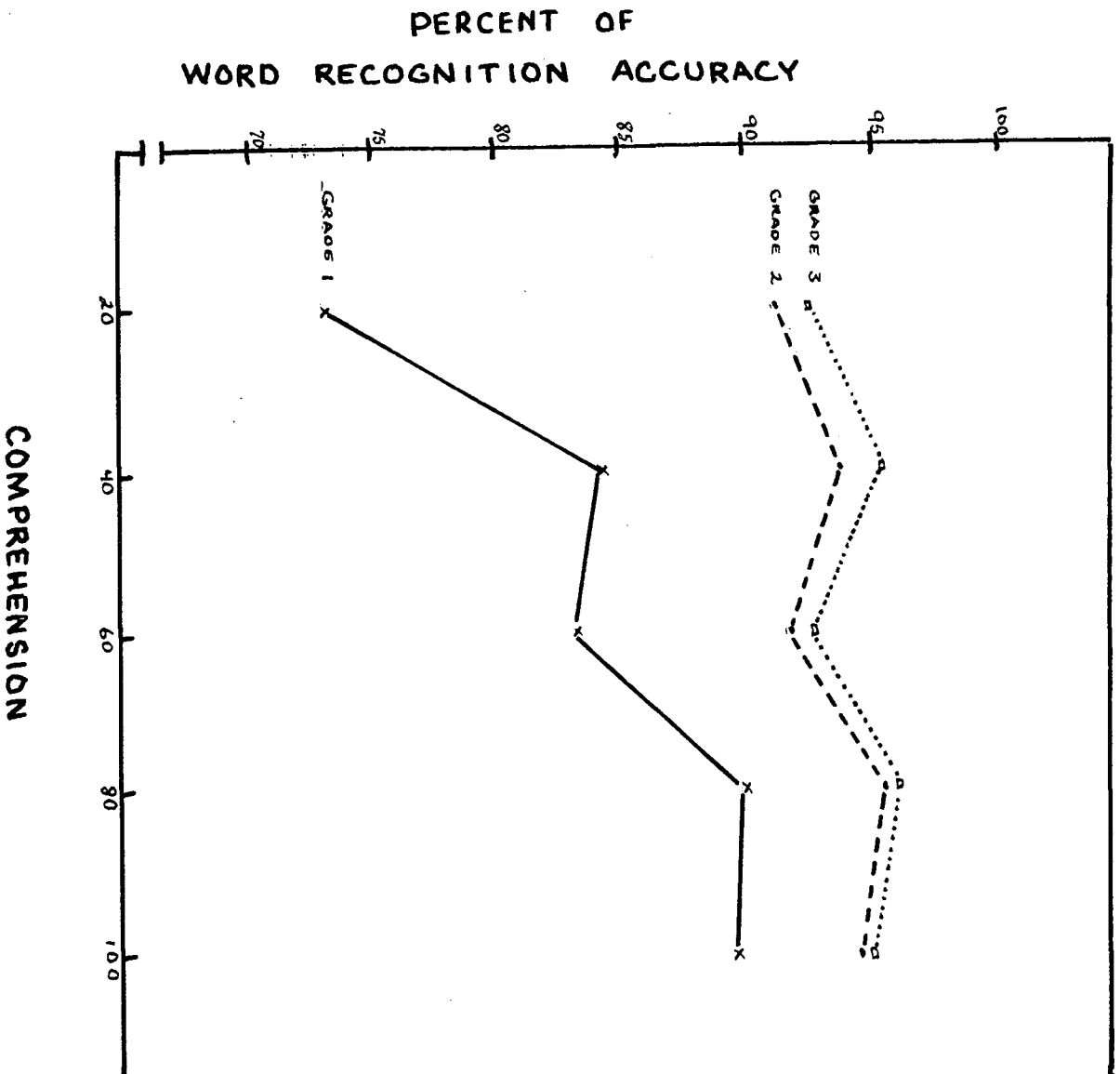


FIGURE 1 WORD RECOGNITION ACCURACY  
ABOVE AND BELOW 60 PERCENT  
COMPREHENSION CRITERION FOR  
GRADES ONE TO THREE

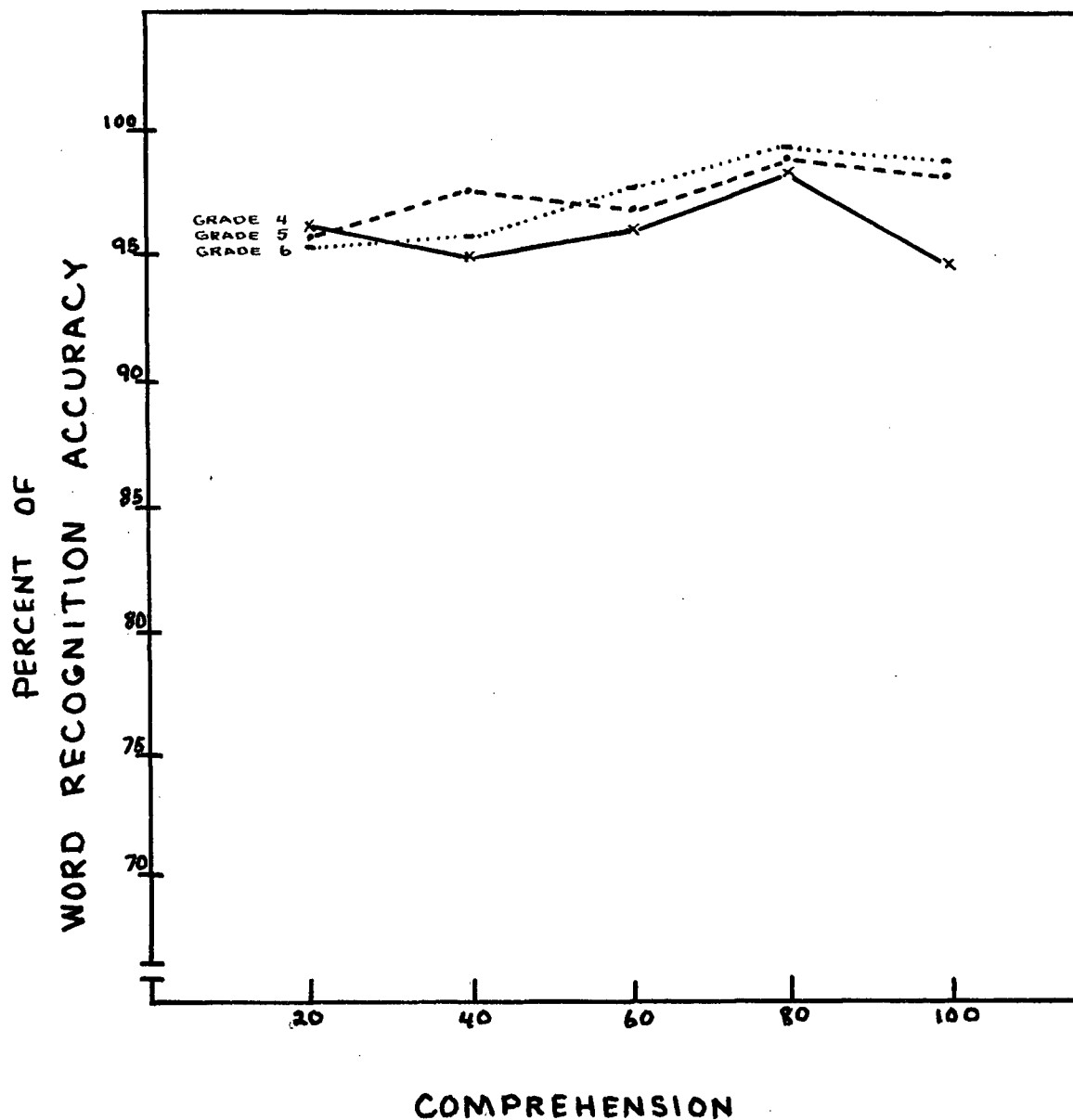


FIGURE 2 WORD RECOGNITION ACCURACY  
ABOVE AND BELOW 60 PERCENT  
COMPREHENSION CRITERION FOR  
GRADES FOUR TO SIX

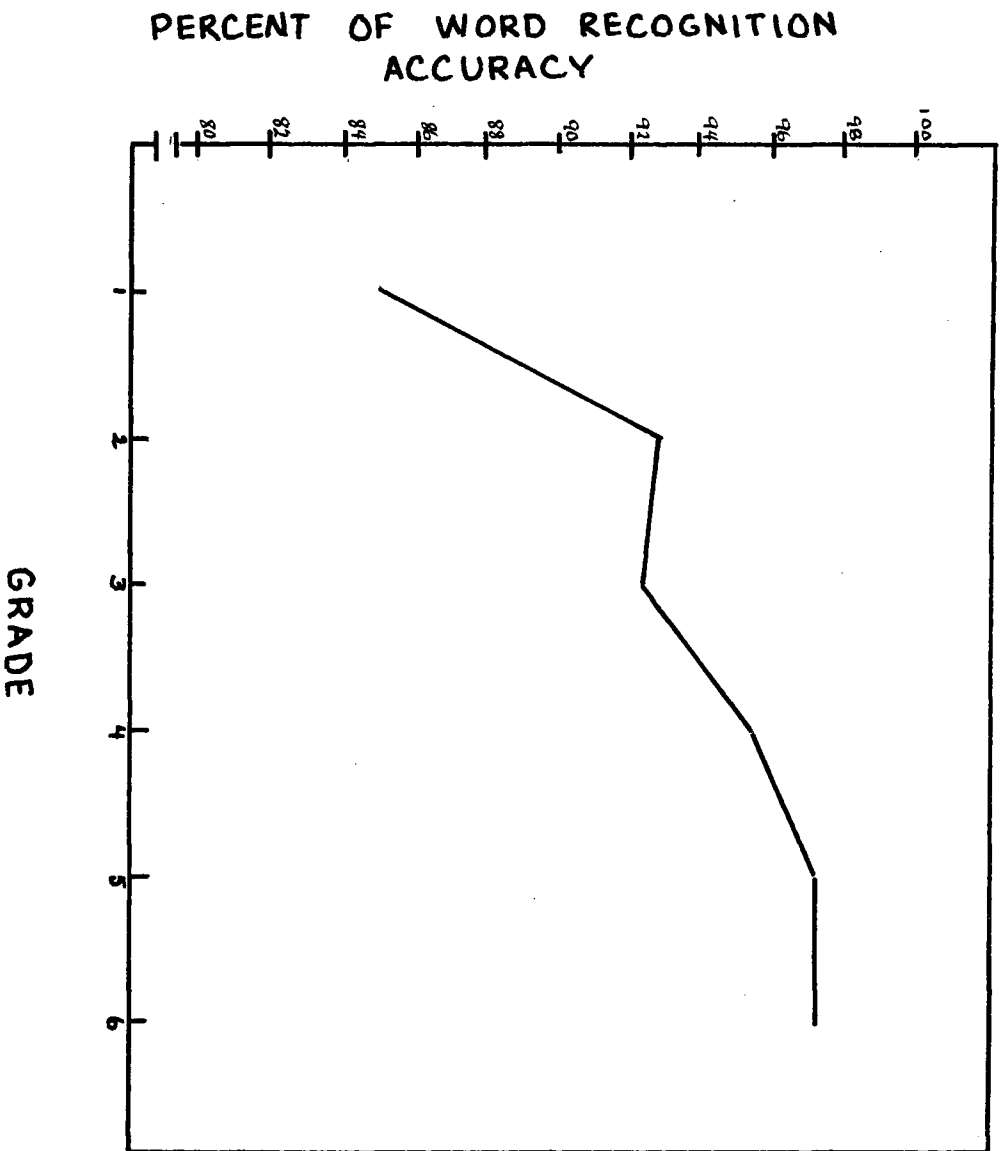


FIGURE 3 LOWEST WORD RECOGNITION  
ACCURACY SCORE MEANS FOR  
GRADES ONE THROUGH SIX  
FOR 60 PERCENT ORAL  
READING COMPREHENSION

Table 8 presents the data in grade groupings of Primary (1-3), Intermediate (4-6) and a combined (1-6) grouping. Here, grades one, two and three were averaged; four, five and six were averaged; and all grades were averaged so that a differential criteria for primary and intermediate grades could be established. The data in Table 8 supports the first hypothesis of this thesis, that a pupil's instructional level for primary and intermediate grades will differ and that all grades combined will produce a standard lower than the traditional 95% and 75% criterion.

TABLE 8  
LOWEST WORD RECOGNITION ACCURACY PERCENTAGE MEANS  
AND VARIANCES FOR PRIMARY, INTERMEDIATE,  
AND COMBINED GRADES

Grades	Percent of Word Recognition Accuracy	Standard Deviation	Oral Comprehension Percentage
Primary (1 - 3)	89.93	6.89	60
Intermediate (4 - 6)	97.03	3.11	60
Combined (1 - 6)	93.48	4.99	60

Again, as illustrated in Figure 4, the relative position of the grade groupings support Powell's (1968) data. The one exception is that the intermediate grouping produced an average higher by 2.03 percent than the original Killgallon (1942) standard of 95 percent. The findings of this present study are more consistent with Cooper's (1952) study where he determined the intermediate word recognition average to be 96 percent.

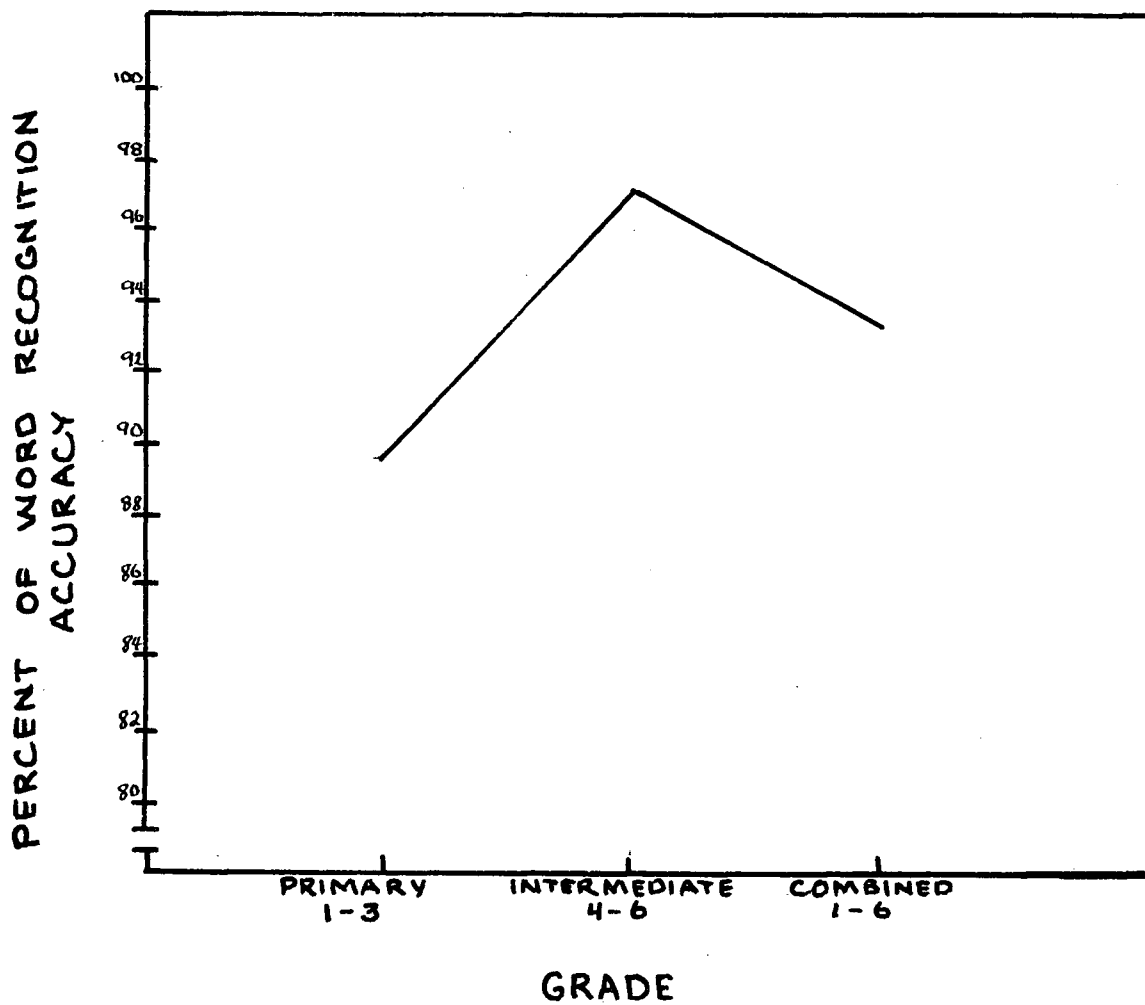


FIGURE 4 LOWEST WORD RECOGNITION  
ACCURACY SCORE MEANS FOR  
PRIMARY, INTERMEDIATE, AND  
ALL GRADES COMBINED FOR  
60 PERCENT ORAL READING  
COMPREHENSION

One of the hypotheses of this thesis is that a differential Word Recognition Accuracy criteria should be applied to primary and intermediate grades. To determine statistically the significance of the upward trend of Word Recognition Accuracy as a function of grade, a linear and quadratic trend analysis was computed by means of the U.B.C. \*TRIP program using INMSDC and STREG sub-routines.

The input data for this program was calculated recording the number of pupils that responded to each graded book level selections. The associated Word Recognition Accuracy Scores for each of these pupils was calculated and averaged for each grade level. The W.R.A. percentage means for all reading selections represented by reading materials, grades one through seven, are presented in Table 9.

TABLE 9  
WORD RECOGNITION ACCURACY PERCENTAGE MEANS  
FOR READING MATERIALS GRADED  
ONE THROUGH SEVEN

Item	Grade Level of Reading Selection						
	1	2	3	4	5	6	7
Mean Percentages	85.30	89.43	93.41	95.46	92.31	98.10	98.30

The total Word Recognition Accuracy mean for the grades one through seven outlined in Table 9 is 93.19 with a standard deviation of 4.70.

The correlation between grade and word recognition accuracy was found to be .91. This correlation yielded a significant linear relationship at the .02 level of significance and a quadratic relationship at the .02 level

of significance which can be seen in Table 10. These results suggest that an increase in word recognition accuracy is a function of grade level.

TABLE 10  
LINEAR AND QUADRATIC RELATIONSHIP BETWEEN  
WORD RECOGNITION ACCURACY AND GRADE LEVEL

Item	Linear	Quadratic
RSQ	0.82220	0.8616
F. Probability	0.0055	0.0211

THE RELATIONSHIP BETWEEN WORD RECOGNITION ACCURACY,  
ORAL COMPREHENSION AND SILENT COMPREHENSION

The instructional level criteria established in this thesis have been based on the lowest percentage figure of word recognition accuracy for each pupil within the sixty percent limits set for oral comprehension. It was this lowest percentage figure that was used for computing the means for all grades. While there was justification for this procedure in developing the criteria (see page 48); to use the lowest percentage figure for comparing the relationship between Word Recognition Accuracy, Oral and Silent Comprehension would have been misleading. Therefore, all W.R.A. and O.C. percentages up to the 60 percent oral comprehension limit were considered and an average was calculated for each pupil and subsequently for each grade. The corresponding silent comprehension percentages were calculated in the same way. This measure of central tendency will present a sounder statistical basis for determining relationships between W.R.A., O.C. and S.C. and for comparisons across grades. The mean percentages for all the W.R.A., O.C. and S.C. scores for each of grades one through six are listed in Table 11 and presented graphically in Figure 5.

TABLE 11  
MEAN PERCENTAGES FOR ALL WORD RECOGNITION  
ORAL AND SILENT COMPREHENSION SCORES FOR  
GRADES ONE THROUGH SIX

Grade	Percent of W.R.A.	Standard Deviation	O.C. Percentage	Standard Deviation	S.C. Percentage	Standard Deviation
1	85.03	8.37	77.95	14.53	46.53	23.72
2	93.35	5.65	77.41	16.23	50.73	28.77
3	93.21	6.66	74.07	13.49	61.58	20.38
4	95.97	5.25	76.79	15.36	43.05	26.49
5	97.89	1.61	81.92	8.36	62.17	28.52
6	97.68	2.29	76.0	17.22	49.0	29.68

CORRELATIONS AND MULTIPLE REGRESSION ANALYSIS ( $R^2$ ) BETWEEN W.R.A.,  
O.C., AND S.C.

The mean percentages for W.R.A., O.C. and S.C., summarized in Table 11, were the input data used to compute correlations and multiple regressions. The results of this data led to acceptance of the second hypothesis and that is that there will be no significant relationship between word recognition accuracy, oral reading and silent reading when all grades were combined.

W.R.A. and O.C. were designated as the two predictor variables  $X_1$  and  $X_2$ , and silent comprehension was designated as the predicted variable  $Y$ . The basic data in Tables 13 through to 16 was generated by the U.B.C. 360 computer program \*TRIP employing INMSDC and STREG sub-routines. The first observation came from Table 13 where one can notice the relatively larger negative correlation between W.R.A. and O.C. for grade four. This correlation can be seen to approach zero when combined with all grades which is presented in Table 15.



To determine whether W.R.A. (  $X_1$  ) and O.C. (  $X_2$  ) were significant predictors of silent comprehension, (  $Y$  ), a multiple regression analysis was computed. The results of this analysis are summarized in Tables 14 and 15. It can be seen that when grade level was included in one equation with W.R.A. and O.C., that grade four  $X_1$  and  $X_2$  are significant predictors of  $Y$ . In Table 15,  $X_1$  and  $X_2$  are significant predictors for  $Y$  in the intermediate grades. However, when one considers combined grades (1 - 6), the variables  $X_1$ ,  $X_2$  and  $Y$  are not significantly related in a linear way (Glass and Stanley, 1970). Since in combined grades one through six word recognition accuracy and oral comprehension are not significant predictors of silent comprehension, one could generally conclude that silent reading is an independent function. If the non significant relationship demonstrated above does not allow one to predict silent reading comprehension knowing word recognition and oral comprehension then one can assume that silent reading comprehension should be administered along with oral reading in order to determine a pupil's instructional level by means of an informal reading inventory.

#### ORAL READING COMPREHENSION AND SILENT READING COMPREHENSION

From the results in Table 12 one can reject the third hypothesis of this thesis that there will be no significant difference between oral reading comprehension and silent reading comprehension at all grade levels.

The results of the differences between the means for oral reading comprehension and silent reading comprehension were subjected to a 't' test analysis to determine their statistical significance. Since absolute magnitude of the differences was considered a two tailed test revealed a significant difference between oral and silent comprehension for each grade. The results of this analysis are indicated in Table 12.

TABLE 12  
RESULTS OF t TESTS BETWEEN ORAL AND SILENT  
COMPREHENSION FOR GRADES ONE THROUGH SIX

Test	Grades					
	1	2	3	4	5	6
t	**5.05	**3.63	*2.29	**4.93	**2.97	**3.52

\* .05 level of significance

\*\* .01 level of significance

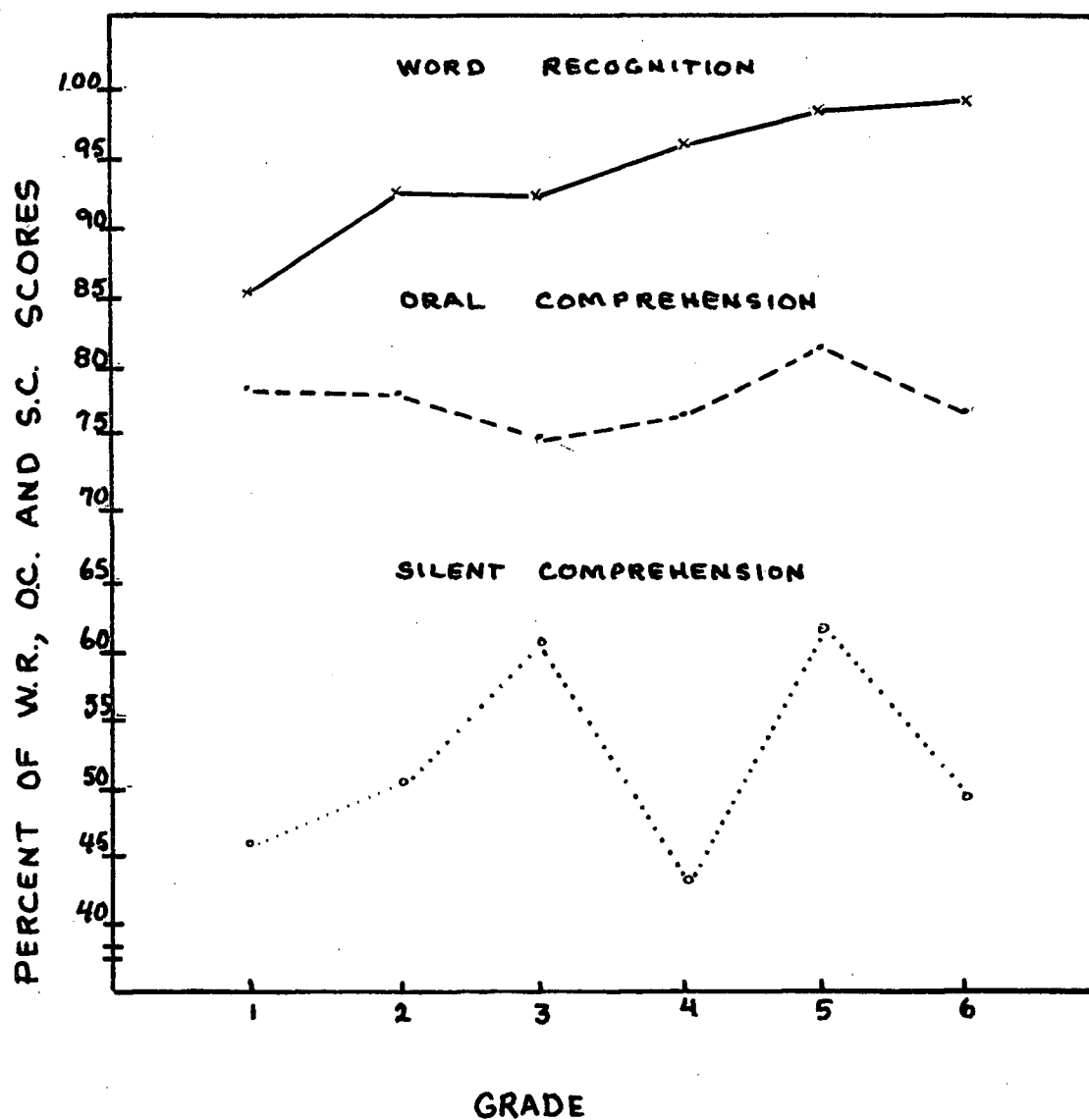


FIGURE 5 MEAN PERCENTAGES FOR ALL WORD RECOGNITION, ORAL AND SILENT COMPREHENSION SCORES FOR GRADES ONE THROUGH SIX

TABLE 13  
CORRELATION MATRIX BETWEEN WORD RECOGNITION  
ACCURACY, ORAL AND SILENT COMPREHENSION FOR  
GRADES ONE THROUGH SIX

Grade	Variable	W.R.A.	O.C.	S.C.
1	W.R.A.	1.0000		
	O.C.	0.1025	1.0000	
	S.C.	0.2229	0.2190	1.0000
2	W.R.A.	1.0000		
	O.C.	0.3062	1.0000	
	S.C.	-0.0493	0.1863	1.0000
3	W.R.A.	1.0000		
	O.C.	0.3170	1.0000	
	S.C.	-0.4954	-0.1130	1.0000
4	W.R.A.	1.0000		
	O.C.	-0.2405	1.0000	
	S.C.	-0.5497	0.2907	1.0000
5	W.R.A.	1.0000		
	O.C.	-0.0659	1.0000	
	S.C.	0.0402	0.2725	1.0000
6	W.R.A.	1.0000		
	O.C.	-0.0758	1.0000	
	S.C.	0.1357	0.3669	1.0000

TABLE 14

MULTIPLE REGRESSION ANALYSIS BETWEEN WORD RECOGNITION

ACCURACY (  $X_1$  ) ORAL COMPREHENSION (  $X_2$  ) ANDSILENT COMPREHENSION (  $Y$  ) FOR

GRADES ONE THROUGH SIX

Grade	RSQ	F. Probability	S.E.(Y)
1	.0885	.4798	24.0183
2	.0472	.6677	29.6865
3	.2475	.0878	18.6920
4	.3288	.0405	23.0152
5	.0776	.5071	28.9672
6	.1615	.2227	28.7320

TABLE 15

CORRELATION MATRIX BETWEEN WORD RECOGNITION ACCURACY,

ORAL AND SILENT COMPREHENSION FOR PRIMARY AND

INTERMEDIATE AND COMBINED GRADES

Grade	Variable	W.R.A.	O.C.	S.C.
Primary (1 - 3)	W.R.A.	1.00		
	O.C.	.16	1.00	
	S.C.	.03	.08	1.00
Intermediate (4 - 6)	W.R.A.	1.00		
	O.C.	- .13	1.00	
	S.C.	- .15	.34	1.00
Combined (1 - 6)	W.R.A.	1.00		
	O.C.	.09	1.00	
	S.C.	- .04	.22	1.00

TABLE 16

MULTIPLE REGRESSION ANALYSIS BETWEEN WORD RECOGNITION  
 ACCURACY (  $X_1$  ) ORAL COMPREHENSION (  $X_2$  ) AND SILENT  
 COMPREHENSION (  $Y$  ) FOR PRIMARY AND INTERMEDIATE  
 AND COMBINED GRADES (1 - 6)

Grade	RSQ	F Probability	S.E.(Y)
Primary (1 - 3)	.0075	.8105	25.991
Intermediate (4 - 6)	.1258	.0228	27.5405
Combined (1 - 6)	.0496	.0524	26.4680

## CHAPTER V

## DISCUSSION AND CONCLUSIONS

The findings of this study indicate that a pupil's instructional level for primary and intermediate grades will differ (89% word recognition accuracy and 60% oral reading comprehension for the primary grades; 97% word recognition accuracy and 60% oral reading comprehension for the intermediate grades). The overall criterion of 93% for word recognition for combined grades one through six found in this thesis is less than most authors have presented. One, however, should be doubly cautious in interpreting the 60% oral reading comprehension used in this thesis since only a few authors would agree to its validity. The criteria advanced by Betts-Killgallon (1942) and Johnson Kress, (1965) of 95% word recognition accuracy and 75% oral reading comprehension seems to be representative of most authors. The general trend of word recognition accuracy being higher for intermediate grades than for primary grades supported Powell's study. In Powell's research (1968) he found that the primary pupils experienced more word recognition errors than the intermediate pupils while maintaining acceptable comprehension. Cooper's study (1952) showed an opposite trend to this thesis. He found 98% word recognition accuracy and 70% oral reading comprehension for primary and 96% word recognition accuracy and 60% oral reading comprehension for intermediate.

The new criterion (see Table 8) developed in this thesis would provide additional evidence for Dunkeld's (1970) criticism of the traditional criterion. In his study he stated:

Furthermore, the findings of this study suggest that the instructional level criteria most widely encountered in professional literature, when applied to children's oral reading at sight, underestimate children's abilities, and fail to recognise the stages of development.  
(Dunkeld, 1970).

Generally one could conclude that in assessing a pupil's instructional level in the primary grades, the pupil will experience more word recognition

error than traditional criteria would allow and not experience significant loss of comprehension. As he matures he may in fact make fewer errors, but one should not necessarily expect an increase in comprehension.

The second hypothesis of this thesis stated that there would be no significant relationship between word recognition accuracy, oral reading comprehension and silent reading comprehension for all grades combined. Figure 5 shows the gradual upward trend of word recognition accuracy. An interesting observation here is that the oral reading comprehension associated with the word recognition accuracy did not show a corresponding upward trend, but rather stayed essentially the same across all grades. In fact, oral comprehension took a corresponding drop in grades 4, 5, and 6 which resulted in a negative correlation for these grades. It is difficult to explain why there is such a large negative correlation particularly for the grade four level. The reading passage selected for this grade level was graded for level of difficulty and was within the grade four level. In addition, the reliability for oral comprehension for this grade was .985. One can only conjecture that by the time a pupil has reached grade four he has developed good word recognition skills and has become sophisticated at word calling. The word calling, however, may interfere with the flow of ideas contained in the reading selection thereby affecting comprehension. A recent study by Becker (cited in Pennock, 1973) with fourth grade pupils tends to support the above speculative statement. Becker found that those students with the lowest comprehension scores made the fewest oral reading errors, while the best comprehenders made the most errors in word calling.

The finding of a significant difference at all grade levels between oral reading comprehension and silent reading comprehension led to a rejection of the third hypothesis. While such a finding is not in agreement with Betts' (1942) criterion, it does conform to Cooper's (1952) data. Like Cooper, one



could argue that this finding does not necessarily refute Betts' data but rather could be a reflection of the over emphasis placed on oral reading in this school. Just as significant is the notion that as a pupil progresses through the primary grades to the intermediate grades one would expect a decreasing emphasis on oral reading comprehension with a subsequent gradual increase in silent comprehension. This was not found (see Figure 5). The first three grades assume the expected inclination, thereafter the data reflects the possibility of insufficient concentration on silent reading. This possibility becomes more plausible in view of Spache's statement:

None of the aims of oral reading function in silent reading. In fact, if we try to have some of them transfer, such as the need for careful reading of each word, we would block silent reading development.... Perhaps each type of training has its place in the total reading program, but it is obvious that oral reading, if justified in the early stages, must be greatly de-emphasized at later levels if eventual development of silent abilities is to be promoted. (Spache, 1969).

The data provided in this study as well as Spache's argument provides a reasonable basis for introducing such a program as U.S.S.R. (Uninterrupted Sustained, Silent Reading) into the elementary reading program as outlined by Hunt (1969).

Since the variance of the level of difficulty of the comprehension questions was tested and the reliabilities found to be high the overall low comprehension inclines one to accept the idea that there probably is a lack of emphasis on silent reading.

A study by Gilmore, (cited by Spache, 1954) found that correlations between oral reading errors and silent reading comprehension drops from (0.918) in the second grade to only moderate levels (0.631 to 0.693) in the third to sixth grades and still lower levels (0.572 and 0.561) in the seventh and eighth grades. Fields, (cited in Spache, 1954) found a high negative relationship between oral and silent comprehension. Reference to page 52 will show

that neither of these findings were substantiated and that in fact the correlations indicate that oral and silent reading for both primary and intermediate grades are independent processes. From this data one could maintain a similar position as Spache when he asserted:

...in their attempts to judge probable silent reading ability from oral informal or formal tests, teachers and even some reading clinicians demonstrate their confusion over the two processes. When oral reading is accompanied by many errors or weak comprehension, it is assumed that the silent reading of the pupil is similarly poor. Its many reading clinic personnel can testify, a large number of pupils are referred to reading centers because of this assumption of parallelism between the two reading behaviours. However, as we have tried to point out, oral and silent reading are not very similar performances in rate, comprehension, use of word attack or word recognition techniques, or thinking processes. (Spache, 1969).

It is evident then that silent reading comprehension should be measured in an informal reading inventory assessment.

#### IMPLICATIONS FOR FURTHER RESEARCH

It was not the original intent of this study to focus on silent reading, but since it was concluded that it should be included in the assessment of a pupil's probable instructional level, it would seem most worthwhile for further research to consider developing criteria for this process. Additionally, future studies might initiate research that would include the revised instructional level criteria for oral word recognition and comprehension in the instructional program and evaluate the achievement made by these pupils against the gains made by pupils instructed in either easier or harder materials. Such studies might provide some additional clarification as to whether the 60% oral reading comprehension is a frustrational criteria as suggested by Betts (1936) or an instructional criteria suggested by Cooper (1952), Spache (1963), and Dunkeld (1970) and used in the present study.

An important goal of the reading teacher and diagnostician is to provide

high interest reading material for the child that is neither so difficult that it frustrates nor so easy that it bores; therefore, future research as outlined seems justified.

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## APPENDIX A

## Informal Reading Inventory Graded Passages

One through Six.

The mimeographed reading selections included in this appendix were for the use of the examiner. The subjects read the passages from the textbook while the examiner recorded word recognition errors on the protocols. In addition, they were used for asking the subjects oral and silent comprehension questions and recording their responses.



Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of book "Here and Near" Grade Level Pre Primer; \*(1,4)

Oral Reading: "Daddy is Here" pages 31 - 34

Number of Words in selection - 52

Daddy is Here

Linda! Ricky!	Look mother, look.
Come fast.	See the boat for Linda.
Daddy is here.	See the boat for Bill.
Daddy is here with something.	Look at the boat for me.
Come and see.	

Here is something for you Linda.  
 Here is something for you Bill.  
 Ricky, here is something for you.

Questions: 1. Who brought home the presents?  
 2. How many children were there in the story?  
 3. What were the childrens' names?  
 4. What kind of presents did each child receive?  
 5. Who showed his present to mother?

Silent Reading: "My Boat" pages 35 - 38

Number of Words in selection - 50

My Boat

Look at my yellow boat	Look at Midnight.
See the yellow boat go.	Look at my red boat.
The yellow boat can go fast.	Help Midnight.
	Help my red boat!

Look at my blue boat.  
 See my blue boat go.  
 Go, blue boat, go.  
 My blue boat can go fast.

Questions: 1. How many boats were in the story?  
 2. What colours are the boats?  
 3. What speed did the boats go?  
 4. Who needed help?  
 5. What needed help?

Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "Our school" Grade level: Primer: \*(1.5)

Oral Reading: "Mr. Big" pages 50 - 52

Number of Words in selection - 104

### Mr. Big

"This is Mr. Big,"  
Said Mr. Little.  
"He is my pet."  
He wants to be in the pet show."  
"Mr. Big! said the children."  
"This is funny!"  
Mr. Big and Mr. Little!"  
"Big! Little! Big! Little!"  
Here I am! Here I am!"  
Said Mr. Big.  
"Where is the show?"  
Where is the show?  
Where is the show?"

- Questions:
1. Who was Mr. Little?
  2. Who was Mr. Big?
  3. What did the children think of Mr. Big?
  4. What did Mr. Big want to do?
  5. What did Mr. Big want to know?

Silent Reading: "The Box Train" pages 63 - 64

Number of Words in selection - 71

### The Box Train

Will said, "Look there, Bill.  
Do you see what I see?"  
"Yes I do!" said Bill.  
"I see a little box."  
I see a big box.  
I see a big, big box, too.  
Now we can make something!"  
"What can we make?" said Will.  
"A train!" said Bill.  
"We can make a box train  
And all the children can ride in it."

- Questions:
1. Who were the boys in this story?
  2. What did the boys see?
  3. What did the boys make?
  4. Which boy wanted to make the train?
  5. Why did they want to make the train?

Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of book "Our Town" Grade Level: One \*(1.9)

Oral Reading: "Mr. Dolittle's Bees" pages 88 - 89

Number of Words in selection - 85

Mr. Dolittle's Bees

"Hello, Mr. Dolittle," said Bill and Will.	They saw bees and flowers
"What a funny hat you have on!"	everywhere they looked.
"This is my bee hat,"	Soon they saw a big white box
Said Mr. Dolittle.	Bees were going in and out
"Come into the yard, boys.	of the white box.
I will show you my bees	"The white box is a bee house,
and tell you about them."	said Mr. Dolittle.
The boys went into the yard.	"That is where my bees live,"

- Questions:
1. What kind of a hat did Mr. Dolittle have on?
  2. What did Will and Bill think about the hat?
  3. Where did Mr. Dolittle take the boys?
  4. What did the boys first see in the yard?
  5. Why did Mr. Dolittle take the boys into the yard?

Silent Reading: "A Day at Home" pages 94 - 95

Number of Words in selection - 82

A Day at Home

One day Will could not go to school	Then Will began to think.
He had a cold.	He thought and he thought.
So he had to stay at home	But he could not think of a
in the trailer	story.
"I know what I will do to-day,"	"Look out of the window,"
he said.	said his mother.
"I will make up a story to read to	"Maybe you will see something
my friends at school."	to tell about in a story."

- Questions:
1. Why did Will stay home from school?
  2. What kind of house did Will live in?
  3. What did Will do when he was at home?
  4. Why did he want to make up a story?
  5. Do you think the story was easy for Will to make up?

Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "Fields and Fences" Grade Level: Two \*(2.2) Book 1

Oral Reading: "More Winter Fun" page 122

Number of Words in Selection No. 1 - 67

More Winter Fun

<p>Bill and Jack were going down the big slide on their sleds. Bill stopped his sled so fast he fell off. He heard the clang, clang, clang of the fire truck. "Look Jack! There must be a fire," Bill called.</p>	<p>"There goes the fire truck up the street," said Jack. The big red truck went up the street. "Clang! Clang! Clang!" "Let's go see the fire," said Bill.</p>
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- Questions:
1. Who were the boys in the story?
  2. What were the boys doing?
  3. What did Bill do when he slid down the hill?
  4. What did Bill see?
  5. What did Bill want to do after he saw the fire truck?

Silent Reading: "The Blue Doll and the Toy Soldier" page 161

Number of Words in the selection - 72

<p>A blue doll sat in one corner of an old toy store window. In another corner was a toy soldier covered with spider webs. The paint was coming off his coat and his hat was broken.</p>	<p>No one ever wanted to buy the doll with the blue dress. Who would think of buying a soldier with a broken hat! So the doll and the soldier stayed in the window day after day.</p>
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- Questions:
1. Who was this story about?
  2. Where were the dolls?
  3. What colour was the doll's dress?
  4. Why wouldn't someone want to buy the toy soldier?
  5. What did the soldier and the doll do day after day?

Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "Town and Country" Grade Level: Two \*(2.5) Book 2

Oral Reading: "Going Places" page 128

Number of words in selection No. 2 - 68

### Going Places

On Saturday Jack went over on his skates to see Bob and Bill.

"I came to say good-by, he said.

"Nancy and I are going alone to our uncle's ranch today.

Mother and Father will stay at home

to take care of the farm."

"How long will you be gone?"

Bill asked.

"We'll be gone three weeks,"

said Jack. "We'll get back

here just in time for school."

- Questions:
1. Who did Jack visit on his skates?
  2. Why did he go to visit his friends?
  3. Where did Jack say he and Nancy were going?
  4. How long will Nancy and Jack be away?
  5. Where do Nancy and Jack live?

Silent Reading: "Ranch Life" page 160

Number of words in selection - 97

### Ranch Life

Jack and Nancy were up early for their birthday the next morning.

They ate breakfast with Uncle Jim and Aunt Sue. Then they were ready for their first day on the ranch.

Uncle Jim took them out to the corral. Jack and Nancy sat on the fence and watched the cowboys catch

their horses. Uncle Jim caught a black horse for Jack.

"Here is your cowpony, Jack," he said. "His name is Blackie."

Uncle Jim caught a gray horse for Nancy. He brought the gray horse around the corral to her.

- Questions:
1. Why did Jack and Nancy get up early in the morning?
  2. What were the names of their Aunt and Uncle?
  3. Where did Jack and Nancy's uncle take them?
  4. What colour horse did Uncle Jim bring for Jack?
  5. What colour horse did Uncle Jim bring for Nancy?

Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "Magic Windows" Grade Level Three (3.1) Book 1

Oral Reading: "The Strongest Indian Brave" pages 157 - 158

Number of words in selection No. 1 - 100

### The Kicking Game

Brown Bear liked to play with the other Indian boys. Sometimes the boys went swimming or fishing together. Sometimes they ran races or played games.

The game Brown Bear liked best was a kicking game. The game was played by two teams which took turns kicking a stick. The team which kicked the

stick past the oak tree first won the game.

Little Deer also liked this game because he could kick well. He tried hard to help his team win. Brown Bear could not kick well, but he had fun trying to kick the stick past the oak tree.

- Questions:
1. What kind of games did the Indian boys like to play?
  2. What game did Brown Bear like to play best?
  3. How could a team win the game?
  4. Why did Little Deer like the game?
  5. Why did Brown Bear like the game?

Silent Reading: "Little Crow" page 167

Number of words in the selection - 100

### The Noisy Little Indian Boy

Little Crow was an Indian boy who lived long, long ago. He lived in a tepee near a great forest. He was called Little Crow because he was always so noisy. Some people thought he should have been named Big Flock of Crows because he sounded just like a large flock of noisy crows.

Little Crow was always running and shouting. He was always jumping and hopping too. He liked to run after the big boys who were learning to use their bows and arrows. He liked to shout to the hunters who were going out to find food, too.

- Questions:
1. What was the name of the little boy in this story?
  2. Where did the little Indian boy live?
  3. Why did people call him Little Crow?
  4. Why did some people think he should have been named Big Flock of Crows?
  5. What were the big boys in the story learning to do?

Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "Story Window" Grade Level: Three \*(3.5) Book 2

Oral Reading: "Miss Crumpet's Great Day" pages 124 - 125

Number of words in selection No. 2 - 114

### Miss Crumpet Meets a Stranger

The people of London were getting ready to crown their new King. Preparations for the great day had gone on for several weeks. Streets were gaily decorated with coloured streamers. And in the middle of the preparations stood the tiny candy shop of Miss Crumpet.

Miss Crumpet was a lively little lady, plump, quite short, and always friendly and cheerful.

As the Great Day came nearer, Miss Crumpet seemed to lose some of her usual cheerfulness. At first she had watched the preparations in the city square with happiness. As the days passed, she noticed that London grew more and more crowded.

She suddenly realized that she would not be very happy among the large crowds.

- Questions:
1. What were the people of London getting ready for?
  2. What were the streets decorated with?
  3. What was the lady's name in the story?
  4. What kind of a store did she own?
  5. Why was Miss Crumpet not very happy in this story?

Silent Reading: "Eddie and Gardenia" pages 192 - 193

Number of words in selection - 116

### Gardenia Trouble

Eddie Wilson had a pet goat named Gardenia. Gardenia was only happy when she was eating something or had climbed up on top of something. The happier Gardenia was, the unhappier Eddie's father and mother were.

One Monday afternoon Gardenia got out of her fenced yard climbed on top

of Mr. Wilson's new car. This would not have been so bad, but Gardenia began to eat the cloth top of the car.

When Mr. Wilson came home from his office, there was Gardenia chewing a mouthful of car. Her face was turned up to the sky, and her eyes were closed in enjoyment. At her feet there was a big hole in the canvas top.

- Questions:
1. What kind of pet did Eddie own?
  2. What was the pet's name?
  3. What was Eddie's pet eating?
  4. Whose car was Eddie's pet chewing?
  5. Why do you think Gardenia was happy in this story?

Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "Believe and Make Believe" Grade Level Four \*(4.9)

Oral Reading: "Horace, the Happy Ghost" page 75

Number of words in selection - 142 Selection No. 1

### Horace, the Happy Ghost

Horace was a happy ghost. He lived with his father and mother in a big old house with lots of creaking stairs and windows. It was just right for ghosts.

Of course, people lived there too--a whole family of people--but the ghosts and people got along very well together. The ghosts didn't mind the noise the people made during the day, and the people didn't mind the noise the ghosts made at night.

There was only one trouble.

Horace!

Horace was a well-behaved little ghost in some ways. He had carefully learned his vanishing lessons. One moment he was there and the next--he wasn't. Sometimes he vanished for his family's visitors at after-midnight tea. They all said they had never seen finer vanishing. Besides, he could creak doors and shake windows as a big ghost.

- Questions:
1. Do you think Horace liked being a ghost?
  2. Tell me what Horace's house was like.
  3. Who else lived in the house besides ghosts?
  4. How did the people and the ghosts feel about each other?
  5. What things could Horace do that were as good as big ghosts?

Silent Reading: "Daniel Boone Leads the Way" page 129

Number of words in selection - 130

### Collecting the Salt

A dozen men walked quickly along a forest trail. They were bound for the salt springs near the mountains. Each man led a pack horse. These men were all hunters and woodsmen, but they had never been in this country before. They didn't like to go there now, but they had to have salt. Their farm animals were suffering from the lack of it. New settlers had been bringing salt, but that was about gone now.

At the head of the long line walked one of the best guides in Pennsylvania--young Daniel Boone. He was tall and slender for his fifteen years. But he was strong and he could stand hardships as well as these older men. He was used to hardships. He had hunted alone for two years.

- Questions:
1. Where were the men in the story going?
  2. Why were they going for salt?
  3. What was the name of the guide in the story?
  4. How old was Daniel Boone?
  5. How long had Daniel Boone been hunting?



Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "Believe and Make Believe" Grade Level Four \*(4.9)

Oral Reading: "The Story of the First Bow and Arrow" page 180

Number of words in selection No. 2 - 111

### Chicka's Invention

The spear shot into the air. Chicka let out a yell. "It works! It works!"

Chicka, the cave boy, had made the first bow and arrow.

The first thing he wanted to do was tell everyone about it. But he remembered that someone had called him, A - boy - who - talks - like - a - man. They would laugh at him. He thought for a moment. There was always his grandfather. What would Ol say?

He set the bow and arrow down in some bushes and raced back to the cave. Teesa and Mea were there.

"Where is Ol?" Chicka panted.

Teesa looked wonderingly at her grandson. "He is on guard near the ladder."

- Questions:
1. What was the name of the boy in this story?
  2. What did he make?
  3. Why didn't he tell everyone about his invention?
  4. Who did he decide to show it to?
  5. Where was Chicka's grandfather?

Silent Reading: "Riding the Pony Express" page 189

Number of words in selection - 142

### Sally's Discovery

Sally Mason was baking cookies. Her brother, Randy, would like something warm and good when he rode in late in the afternoon to change horses. It would be his last lap before he turned the mail over to the next Pony Express rider at Placerville.

Randy would stop only long enough to put the saddle and its heavy bags of mail on a fresh horse. Then he would be off again. Mrs. Mason always had a cup of hot coffee and cake or cookies to take along. But Sally's mother was away with a sick neighbor, and Sally was trying to take her place.

Sally pulled the pan of cookies out of the oven just as a shadow appeared in the doorway. It was the Indian woman, Old Suzy, who was as wide as she was high. She was carrying a basket.

- Questions:
1. What was Sally baking?
  2. Who was she baking for?
  3. Why was Sally baking the cookies instead of her mother?
  4. What kind of work did Sally's brother do?
  5. Who came to the door to see Sally?

Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "Believe and Make Believe" Grade Level Four \*(4.9)

Oral Reading: "The Story of William Tell" page 255

Number of words in selection No. 3 - 147

### The Story of William Tell

Many years ago, Switzerland was ruled by a cruel man named Gessler. His wickedness and pride made him hated and feared throughout the land.

One day, Gessler had his hat placed on top of a pole. He gave orders that everyone who passed the pole should bow down. The people were afraid of Gessler, so most of them obeyed. But there was one man, a brave and good man named William Tell, who would not obey the wicked Gessler. He walked past Gessler's hat and laughed when Gessler's soldiers ordered him to bow down.

When Gessler heard what William Tell had done, he was very angry. He ordered his soldiers to bring Tell before him.

- Questions:
1. In what country did this story take place?
  2. Who was this country ruled by?
  3. What did Gessler order everyone in his country to do?
  4. Why was Gessler angry at William Tell?
  5. What kind of a man do you think William Tell was?

Silent Reading: "Quiet Boy" page 260

Number of words in selection - 157

### The Fight

Quiet Boy leaned against the sunny side of the Navajo Trading Post in northwestern New Mexico. The November wind roughened his straight black hair and reached through his blue shirt.

Once more he searched the long flat road for his father's green covered wagon. Already it had been a half-hour since the bus from the boarding school had left him. But waiting for his family on Friday afternoons was not new to Quiet Boy, and he was not impatient.

He knew there was much work to be done on a farm when sheep were many and winter was near. Sometimes he asked if he, as the oldest son, should not stay at home; if it should not be one of his younger sisters who should go to school. But always Rapid Runner and Happy Weaver, his parents, said that he, as the oldest, should learn the white ways well and quickly; so he might teach them all.

- Questions:
1. Where did this story take place?
  2. What time of year was it in the story?
  3. Why did Quiet Boy think it should be one of his younger sisters who should go to school?
  4. What kind of boy do you think Quiet Boy was?
  5. Why did Quiet Boy's parents decide he was the one who should go to school?

Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "Finding the Way" Grade Level Five, \*(5.4)

Oral Reading: John Henry and His Hammer" page 98

Number of words in selection No. 1 - 137

### Men Wanted

Men wanted! Men wanted for work on the railroad tunnel! Men wanted for work on the Big Bend Tunnel! The Big Bend Tunnel! The Big Bend Tunnel!

The words flashed through the camp, and John Henry heard the words.

Twice the pay! Ten times the work! A thousand times the danger!

Ten thousand men heard the words, and they came from all parts of the country--all parts of the world.

Ten thousand men pushed through the dark and sunless forest where few men had been before, through swamps where dangers were many, across roaring mountain streams. Up rough, high cliffs; around giant boulders and over mountains--they climbed where strong men could pass and mules could follow, but where trains could not go until the will and the strength of men had made the road bed smooth.

- Questions:
1. Why were men wanted for work?
  2. How many men came to work on the Big Bend Tunnel?
  3. Who do you think this story is about?
  4. What was it like when the men were working?
  5. When will the trains be able to go through the country?

Silent Reading: "Wild Honey" page 161

Number of words in selection - 119

### Wild Honey

Dan Morgan and his little Indian friend, Ramapo, had tracked a brown bear deep into the forest. Both the boys and the bear were hunting for wild honey. Suddenly, the boys came upon the bear who had just found the bee tree.

The big bear was standing on its hind legs and clutching the tree. It stretched its head up and sniffed.

Slowly and silently, Ramapo moved back toward a clump of bushes. Slowly and silently, Dan followed--though his knees were shaky.

The big brown bear moved around the tree.

Buzz, buzz! Grrr! The bear snapped at the bees flying around its head. Grrr! It dropped its big forepaws to the ground and circled around the tree again.

- Questions:
1. What was the name of Dan Morgan's Indian friend?
  2. What were both the boys and the bear looking for?
  3. What was the big bear doing when the boys came upon him?
  4. How did the boys feel when they saw the bear?
  5. Where did the boys hide?

Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "Finding the Way" Grade Level Five \*(5.4)

Oral Reading: Buffalo Stampede - page 189

Number of words in Selection No. 2 - 142

### Buffalo Stampede

As the wagon train followed the rough, dry trail across the prairies the travelers saw large areas of dry earth with bare spots of salt. Short, dry grass grew in small clumps around dry creek beds. The men called these spots in the wasteland, buffalo licks. Trader Jim explained that great herds of buffaloes came to these water holes, for here they could find the salt and the water which they needed.

The travelers welcomed the sight of the plentiful supply of buffalo chips that were scattered about the holes. Keeping the campfires going had become a big problem, as trees for fuel were becoming scarcer and scarcer. Stories of buffalo hunts and buffalo stampedes were told around the campfires at night. Dan and other young boys kept their rifles ready, each hoping to be the first to kill a buffalo.

- Questions:
1. What kind of land was the wagon travelling across?
  2. What were the buffalo licks?
  3. Why did the travelers use buffalo chips to keep their fires going?
  4. What kind of stories were told around the campfire?

Silent Reading: "Cattle Drive" page 195

Number of words in selection - 100

### The Silent Plain

Tom lay watching the stars in the blue sky. It had been a long hard day. This was his first day on the trail with the other men. It was their job to drive the cattle north from Texas. Tom's big brother, Jess, thought he was too young to be a useful cowhand, but Tom would prove he could handle a man-sized job. He thought of his father who believed in him and wanted him to learn the cattle business. Now, excited but weary, Tom lay watching the Big Dipper in the night sky, and suddenly he was asleep.

- Questions:
1. Where were the men driving the cattle?
  2. How many days had they been on the trail?
  3. What was Tom's brother's name?
  4. Was he older or younger than Tom?
  5. What was Tom watching before he went to sleep?

Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "Finding the Way" Grade Level Five (5.4)

Oral Reading: "How the Foxes Became Red" page 268

Number of words in Selection No. 3 - 166

### How the Foxes Became Red

In the olden days the foxes were all white. Their beautiful coats were just the colour of the snow in the wintertime, and they could slip about over the frozen country without any of the other animals being able to see them. Sometimes they would catch the big Arctic hares but they were especially fond of mice.

Usually the little mice lived beneath the snow and rarely came out into the winter cold. They ate the nice grass seeds and stayed safe and warm beneath the cold, white snow, just as did the Eskimo boys and girls in their igloos. But when the snow melted off and the summertime came, the little mice did have to come out on top of the ground to gather more grass seeds and mouse food for their next winter's supply. It was then that they were afraid of the foxes, and usually they stayed close to their burrows so they could dive into them just the minute a fox appeared.

- Questions:
1. What colour were the foxes' coats in the olden days?
  2. What did the foxes enjoy eating most of all?
  3. Where did the mice live?
  4. Do you think the mice were cold in the snow?
  5. What were the mice afraid of when they came out in the summertime?

Silent Reading: "The Salmon Run" page 274

Number of words in selection - 140

### Salmon Sighted

It was a drizzly gray spring day, and most of the Indian fishermen of the northern Pacific coast were staying at home in their villages. But two boys who wanted some fresh cod for dinner had paddled offshore in a canoe to fish. The waves tossed their small dugout about. It was too rough for fishing in the open bay; so the boys turned toward an inlet near the mouth of a mountain stream.

Although it was mid-morning, the towering tree-covered mountains along the shore made the inlet quite dark. The boys cast their bone fishhooks into the water, and, to their surprise and delight, one of them pulled in a fine salmon instead of a cod. The tide was low, and peering overboard, the young fishermen discovered more silvery fish heading toward the mouth of the stream.

- Questions:
1. What kind of day was it in the story?
  2. What kind of fish did the boys start out to catch?
  3. Where did the boys paddle their canoe to catch the fish?
  4. What kind of fish were the silvery fish?
  5. What kind of fishhook did the boys use?

Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "Arrivals and Departures" Grade Level Six (6.8)

Oral Reading "The Green Hat" page 89

Number of words in Selection No. 1 - 173

The Green Hat

A thin crust on the snow glistened in the sun. Len adjusted his sunglasses carefully to protect his eyes from the glare. He felt very sure he was going to win the Serpent Run race again this year. Of course, the other fellows were good skiers, but none could match him except perhaps Red Skinner, his best friend. And although Len felt Red would give him a good race, Len had no doubt that he could beat him.

Each winter, as soon as there was enough snow for skiing, Mr. Harley took his boys out to the Serpent Run slope. The boy who won the race down the steep run received the Green Hat, "Robin Hood's hat," the symbol of the patrol. He would feel very proud of the honor of wearing the hat for a day, and of leading the patrol on its cross-country hike. He was the one who would read the signs in the snow--the rabbit tracks, the prints of a wild cat, the tracks of a frightened field mouse.

- Questions:
1. What was the name of the race Ken hoped he would win?
  2. Who did Ken think could beat him?
  3. What did the winner of the race receive?
  4. What did the winner of the race get to do?
  5. What was the duty of the patrol leader?

Silent Reading: "The Treasure Map" page 95

Number of words in selection - 132

The Treasure Map

The young Hendersons--Lester, Jodie, and Ellen--sat in a row on the warm grass and stared at the tall fence between them and their neighbors.

It was a spite fence which had been put up many years ago to shut out Grandfather Henderson and his family, including these three young visitors from the North.

Close to the fence was a small white house, built as a tool house. Grannie Henderson had presented it to them to use as their special clubhouse during their stay at Riveredge Plantation.

"I wish it wasn't so near that mean old fence," Jodie said. "I think feuds with your neighbors are horrible! What was it all about, anyhow?"

Les grinned, "Grannie said it had something to do with a boundary line. They haven't spoken for years."

- Questions:
1. What were the young children staring at?
  2. Why was the fence built?
  3. What time of year do you think it was?
  4. What did Granny Henderson give the children to play with?
  5. What was the feud with the neighbours all about?

Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "Arrivals and Departures" Grade Level Six \*(6.8)

Oral Reading: "When the Mississippi Was Wild" page 171

Number of words in Selection No. 2 - 146

When the Mississippi Was Wild

The Mississippi was a wild river, once. And the wildest thing on the whole river was Old Al. Old Al was the chief alligator. He lived in the river, and he made storms by thrashing the water with his tail.

When Old Al thrashed his tail, the waves splashed high, and the wind blew, and there were storms from the Gulf of Mexico clean up to Pig's Eye, Minnesota.

The only man who wasn't afraid of Old Al's storms was Mike Fink. Mike Fink was a river man, and he lived on a raft. In those days a riverman had to fight wildcats, bears, and Indians. Mike Fink was the champion fighter of the whole Mississippi River. He lived on his raft right through the worst of Old Al's storms, although no one else could go out on the river when Old Al thrashed his tail around.

- Questions:
1. What kind of a river was the Mississippi?
  2. What was the wildest thing on the whole river?
  3. What would happen when Old Al thrashed his tail?
  4. Who was Mike Fink?
  5. Where did Mike Fink live?

Silent Reading: "The Queen and The Pauper" page 187

Number of words in the selection - 119

The Queen and The Pauper

When I was a boy in the Dutch village of Vaals, I knew a poor old man who had the queer name of Ikben Rex. The name didn't fit him at all, because "ik ben" in Dutch means "I am," and "Rex" stands for "king."

Ikben Rex didn't look at all like a king. He was short and very shy. He was bald, and had lost most of his teeth. His pale blue eyes were close together and watery; his nose had a wart on it, and his ears stuck out like small cups fastened to his head by their handles. His arms were too long and his legs were too short. He looked like a scarecrow in winter.

- Questions:
1. In what country did this story take place?
  2. What was the name of the man in this story?
  3. What did his name mean?
  4. Was Ikben Rex rich like a king?
  5. What did he look like?

Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "Arrivals and Departures" Grade Level Six \*(6.8)

Oral Reading: "The Flight of Icarus" page 294

Number of words in Selection No. 3 - 139

### The Flight of Icarus

Once long ago in Greece there lived a famous craftsman named Daedalus. While Daedalus was visiting on the island of Crete, King Minos, the ruler of the island, became angry with him, and he ordered him shut up in a high tower that faced the lonely sea. In time, with the help of his young son, Icarus, Daedalus managed to escape from the tower, only to find himself a prisoner on the island. Several times he tried to hide on the vessels sailing from Crete, but King Minos kept strict watch over them and no ships were allowed to sail without being carefully searched.

Daedalus was a clever man and was not discouraged by his failures. "Minos may control the land and sea," he said, "but he does not control the air. I will try that way."

- Questions:
1. Where did this story take place?
  2. What happened to Daedalus when he was visiting Crete?
  3. After Daedalus escaped from the tower why could he not leave the island?
  4. What kind of man do you think King Minos was?
  5. How did Daedalus decide to escape from the island?

Silent Reading: "Jane and the Big House" page 301

Number of words in selection - 130

Jane Addams was born about a hundred years ago, in 1860, in a town near Chicago. While she was still a baby, her mother died, and she was brought up mainly by her father and her eldest sister, Mary.

Jennie (as everybody called her then) was rather sickly as a child, but she was determined as a little person and never let her frailty spoil her fun. She joined her playmates in their favorite games--playing house in the huge empty bins of her father's flour mill, or pretending to be knights killing dragons on the fields near town. Jennie liked playing by herself too--perhaps kicking a stone on her way to school, and keeping after it wherever it went. Also she liked reading books, especially her father's. Every time she finished one, he took her on his knee and they talked about the book.

- Questions:
1. How long ago was Jane Addams born?
  2. Why was Jane brought up by her father and her sister?
  3. What kind of girl was Jane when she was growing up?
  4. What kind of games did she like to play?
  5. When Jennie finished a book, what would her father do?



Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "High Trails" Grade level Seven

Oral Reading: "Free and Easy" - page 65

Number of words in Selection No. 1 - 169

### Free and Easy

Stella O'Dare was walking along the dunes toward the beach one spring morning in the year of 1707. She was barefoot, her shoes tied together and dangling over one shoulder. The sun glistened on her glossy black locks and began to add to the freckles on her small, uptilted nose.

Stella, deep in thought, stared down at her toes as they dug into the sand. Just a short time ago her father had died leaving her with a debt of 30 pounds. Saddened though she was, Stella had taken up her father's work almost immediately. She had learned enough from her father to run his looms. She knew she could earn a good living, but it seemed impossible that she could ever save enough money to repay their debt. Her father had been a master weaver, yet he had been unable to earn extra money. How could she, a fourteen year old girl, ever hope to do better?

- Questions:
1. Describe Stella as she was walking down the beach.
  2. What do you think Stella was thinking about as she walked down the beach?
  3. What sort of work did her father do?
  4. What time of year did this story take place?
  5. What sort of work did Stella take up after her father died?

Silent Reading: "Black as Night"

Number of words in selection - 159

### Black as Night

By the time they finished breakfast the radio was reciting the news. None of them listened as they carried their dishes back to the galley, but when the announcer said, "And now we turn to the news of local interest. Runaway children seem to be heading the list this morning," Ben stopped in mid-stride, then slowly put his plate down and went back into the cabin. Penny and Nick followed him slowly, and all three of them stood motionless in front of the radio's speaker.

"Mr. Peter Lanford," the announcer went on, "has requested that all fishermen, yachtsmen, and people along the Atlantic coast keep a lookout for a thirty foot white sloop-rigged yacht named Hard A. Lee. The boat is being piloted by Mr. Lanford's fifteen year old nephew, Benjamin E. Sturges who Mr. Lanford reports, has apparently run away. With young Sturges are the boy's sister, Penny, and brother Nick, aged twelve and nine years.

- Questions:
1. Who were the three children in this story?
  2. Why do you think they were on the boat?
  3. What was the name of the boat?
  4. Who was it that wanted to find the three children?
  5. Who was the oldest of the group?

Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "High Trails" Grade Level Seven

Oral Reading: "Crooked Arm" page 178

Number of words in Selection No. 2 - 168

### Crooked Arm

When Bill Wingate made his first appearance at Riverdale High School, he was sixteen years old and six feet three in his shoepacks. He came rattling down the mountain in an unbelievable ancient flivver, parked it with its nose to a tree, and ambled up the steps. His great red wrists hung far out of his coat sleeves. His neatly patched trousers missed his ankles by inches, and he wore an odd-looking little felt hat perched on his mop of sandy hair. But the most noticeable thing about him was his grin. It was so wide and friendly that even his grotesque length and outlandish costume were forgotten by the crowd of students who stood staring as he approached.

"Hi, folks," he nodded to them and went in.

Ten minutes later in the principal's office, he registered as a sophomore. He had come to Riverdale High because, as he expressed it, he had "got all the education they could give" in the frame schoolhouse up on Hog Back.

- Questions:
1. Tell me what Bill Wingate looked like.
  2. What kind of a car did he drive?
  3. Where was Bill from?
  4. Why did he decide to come to Riverdale High?
  5. What kind of a person do you think he was?

Silent Reading: "The Butcher"

Number of words in selection - 122

### The Butcher

The story begins on July 31st. At eight o'clock that morning Dave and Jim were still in bed at High Camp. They were not asleep, for sleep is next to impossible at 21,000 feet where the air is very thin. The day was gray; the temperature was 10 degrees above zero. In their stupor there seemed little reason to get out of the sleeping bags, the only warm spots in the whole camp.

The rest of the party, all suffering with a virus-cold infection, were camped at Col Camp about three thousand feet below. It was ten o'clock in the morning before those in Col Camp, using their binoculars, spotted Dave and Jim as they left their tent for the assault.

- Questions:
1. Who were the main people in this story?
  2. When did the story take place?
  3. Why were Dave and Jim unable to sleep at night?
  4. What was the name of their camp?
  5. Why were Dave and Jim the only ones who went on the assault?

Name \_\_\_\_\_ Grade \_\_\_\_\_

Name of Book "High Trails" Grade Level Seven

Oral Reading: "Madame Curie Discovers Radium" page 326

Number of words in Selection No. 3 - 155

### Madame Curie Discovers Radium

Today radioactivity is an everyday word. The harnessing of atomic power has forced it upon everyone. In the 1890's, radioactivity, the ability of certain substances to give off energy in the form of rays, was understood vaguely and only by scientists. It had been detected in uranium ores, but the cause of radioactivity was unknown.

At the invitation of the French scientist Henri Becquerel, Pierre and Marie Curie set about to investigate uranium ores to see if they could learn more about radioactivity. One ore, called pitchblende, was particularly interesting, for it was four times as radioactive as the amount of uranium in it indicated it should be. The Curies concluded that there must be some strongly radioactive substance other than uranium in this unusual ore. The pair set to work and in 1898 announced the discovery of not one, but two new radioactive substances. They called these new metals polonium and radium.

- Questions:
1. In what substance had radioactivity originally been detected?
  2. Describe what you think radioactivity is.
  3. What was the ore that had four times the amount of radioactivity that the uranium revealed it should be?
  4. Who discovered the new metals mentioned in this story?
  5. What were these metals called?

Silent Reading: "The She Wolf" page 315

Number of words in selection - 153

### The She Wolf

A dark spruce forest frowned on either side of the frozen waterway. The trees had been stripped by a recent wind of their white covering of frost, and they seemed to lean toward each other, black and ominous in the fading light. A vast silence reigned over the land.

The stillness of the land was broken by a string of wolf-like dogs toiling down the frozen waterway. Their bristly fur was covered with frost. Their breath froze in the air as it left their mouths. Behind them they dragged a stout sled made of birch bark. The sled was without runners and its front end turned up like a scroll. On the sled, securely lashed, was a long, narrow, oblong box. There were other things on the sled--blankets, an axe, and a coffee pot and frying pan; but prominent, occupying most of the space, was the long and narrow oblong box.

- Questions:
1. What kind of land was described in the story?
  2. What broke the quietness.?
  3. Describe the dogs that were pulling the sled.
  4. What was the most prominent thing on the sled?
  5. What was the sled made of?