Purpose of the Study

The purpose of the present study was to design and test a diagnostic instrument to assess the reading performance of students for whom English is a second or foreign language in the context of a developmental reading program at an intensive English language institute.

The major objectives of the research were to investigate:

1. The components of an ESL developmental reading program.
2. The function of a reading inventory in providing students with reading materials at their appropriate level of instruction.
3. The utilization of the Inventory in a Reading Laboratory specifically designed to provide for the individualization of reading instruction.

4. The reliability and validity of the Inventory in measuring student reading performance.

Procedures

Two forms of the ESL Group Informal Reading Inventory were developed utilizing a computerized readability program that provided data on the readability levels of the reading passages. For each form, twelve reading selections were arranged according to their reading grade levels beginning with reading grade level one and extending through reading grade level twelve. Comprehension questions followed each reading selection. The two forms of the Inventory were administered to 121 students enrolled at either the English Language Institute at Oregon State University or at the American English Institute at the University of Oregon. Reliability of the instrument was determined by administering equivalent forms of the instrument to the students and then calculating the Pearson Producted Moment Correlation Coefficient and the standard error of measurement. Validity was determined by correlating student test scores on the Inventory with student scores on the TOEFL Reading Comprehension and Vocabulary section. Regression analysis was employed to facilitate the prediction of TOEFL scores from scores on the Inventory.
Findings of the Study

The reliability coefficient for those sections of the Inventory tested was .87. The estimated reliability of the entire Inventory was calculated to be .93. The standard error of measurement was calculated to be 2.72. A coefficient of .62 was obtained when Inventory scores were correlated with TOEFL Reading Comprehension and Vocabulary section scores. The Inventory was found to be a good predictor of TOEFL Reading Comprehension and Vocabulary section scores when the two instruments are administered concurrently.
A Group Informal Reading Inventory:  
An Instrument for the Assessment of ESL Students'  
Reading Performance

by

Meritt William Stark Jr.

A THESIS

submitted to

Oregon State University

in partial fulfillment of
the requirements for the
degree of

Doctor of Philosophy

Commencement June 1982
APPROVED: Redacted for privacy

Associate Professor of Modern Languages and Literature in Charge of Major Redacted for privacy

Dean, School of Education Redacted for privacy

Dean of the Graduate School

Date thesis is presented September 15, 1981

Typed by Julie Temple for Meritt Stark, Jr.
ACKNOWLEDGEMENT

I would like to thank the members of my committee for their advice and encouragement. Dr. Gywneth Britton provided the inspiration for me to set up the individualized reading program at the Oregon State University English Language Institute. Dr. Robert Kiekel guided me in the preparation of the dissertation. Dr. John Van de Water made it possible for me to integrate my study with my work as an instructor of English as a Second Language. Dr. Dorice Tentchoff provided valuable commentary on relating my course work to important international issues in education. Dr. Arnold Flath offered valuable input regarding the procedures followed in completing the study.

Special thanks are given to Ms. Julie Temple, ELI Secretary, for her patience and cooperation in typing the dissertation. Finally, I would like to thank my wife, Kathleen, for her active involvement in the preparation of the study.
TABLE OF CONTENTS

I. Introduction .......................................................... 1
   Definition of Terms ................................................. 4
   Purpose of the Study .............................................. 5
   Significance of the Study ........................................ 6

II. An ESL Developmental Reading Program ....................... 27
   The Cloze Procedure .............................................. 33
   Readability Formulas ............................................. 43

III. ESL Developmental Reading Inventory ......................... 54
   Using the ESL Group IRI for Student Placement .............. 57
   Reading Resources ............................................... 60
   Responsibilities of the Reading Specialist .................. 66
   Advantages of Individualized Reading ......................... 67

IV. Inventory Reliability and Validity ............................ 69
   Instrument Reliability ........................................... 70
   Instrument Validity ............................................... 77
   Content ........................................................... 78
   Empirical .......................................................... 83
   Conclusion and Future Research ................................. 93

V. Bibliography ........................................................ 95

VI. Appendix I. Readability Formula Worksheets ............... 103
   Appendix II. ESL Group Informal Reading Inventory ........ 106
      Introduction ..................................................... 107
      Definition ....................................................... 108
      Administration .................................................. 110
      Student Edition IRI I ......................................... 111
      Student Edition IRI II ........................................ 137
      Teacher's Edition IRI I ...................................... 162
      Teacher's Edition IRI II ...................................... 203
   Appendix III. Sample Reading Laboratory Catalogue .......... 245
   Appendix IV. Statistical Data on Reliability of IRI ....... 258
   Appendix V. Statistical Data on Validity of IRI ............ 262
A GROUP INFORMAL READING INVENTORY:
AN INSTRUMENT FOR THE ASSESSMENT OF ESL STUDENTS' READING PERFORMANCE

INTRODUCTION

The English Language Institute (ELI) at Oregon State University offers an intensive English as a Second Language (ESL) program for foreign high school and college graduates intent on pursuing their education at an American university or community college. Students in the program need to improve their English language proficiency before they can begin a formal program of academic studies at a university or community college. Admission to Oregon State University is determined on the basis of students' high school academic records and their score on the Test of English as a Foreign Language (TOEFL). Foreign students enrolled full-time at the ELI are given a battery of placement tests to determine their level of English language proficiency and to place them in classes at one of the Institute's six levels. Each student is placed in a level with five core courses: English Structure and Writing, Vocabulary and Reading, Aural Comprehension, Speech, and Reading Laboratory. There is a variety of additional elective course offerings which supplement the core program: Typing, Study Skills, Handwriting, English for Science and Technology, English for Business and Economics, Pronunciation, Spelling, and Survival English.

In May, 1977, the ELI faculty voted to establish a Reading Committee to review the curriculum of the Institute's Vocabulary and Reading classes and to plan and organize a developmental reading
program. The program would provide for the systematic, sequential development of students' reading skills at all instructional levels of the ELI. A committee consensus developed that while foreign students attending the ELI were receiving quality instruction in their regular Vocabulary and Reading classes, their progress in reading was slowed by several factors. Some students could not organize their daily activities to ensure that they had sufficient time to read independently. Others had not learned the prerequisite study skills essential in providing them with the confidence and enthusiasm necessary to begin reading by themselves.

The Committee concluded that the needs of the students could be met by adding a Reading Laboratory to the ELI's curriculum. The primary goals of the Laboratory are to:

- Provide an additional period of two hours per week for all students to read in a quiet, comfortable atmosphere.

- Provide the students with an opportunity to practice the reading skills they had learned in their regular vocabulary and reading classes using materials specifically written for individual use.

- Make available the assistance of a reading specialist to guide the students in selecting materials of interest and of an appropriate level of difficulty.

- Help students determine and chart their own progress with regard to reading rate and comprehension.

- Provide individual assistance to help each student with specific study and reading skills.

The creation of a Reading Laboratory was felt to be an important step in planning and implementing a developmental reading
program. It was envisioned that the developmental reading program would follow nine objectives based on student needs:1

1. Provide adequate reading instruction for each student at his/her own instructional level of reading.

2. Include an adequate supply of interesting subject materials at various levels of difficulty.

3. Utilize the services of at least one thoroughly prepared specialist in reading.


5. Consider reading as an integral part of the total language learning process.

6. Recognize that reading must be taught at all levels of instruction of the ELI.

7. Provide students with numerous opportunities for wide and varied reading experiences.

8. Arrange for the continuous evaluation of students.

9. Have a permanent committee of interested persons with authority to study and recommend changes necessary for improving the program.

To attain the preceding objectives, the Reading Committee recognized that it would be necessary to develop diagnostic tools to evaluate student interests and reading ability. The diagnostic tools could be used by the reading instructors to provide for the individual needs of students by facilitating the assessment of student abilities.

1Adapted from a list of principles that should be used for guiding the planning and operation of a developmental reading program by: Ned D. Marksheffel, Better Reading in the Secondary School (New York: Ronald Press, 1966), p. 114.
and the assignment of appropriate reading materials. Selecting an ESL textbook or reader is difficult. This difficulty exists because of the subjective nature of the process. Instructors have traditionally utilized alone or in combination a host of personal, content, or student variables. New and more objective measures have been devised that greatly enhance the adoption process.

The attention of the Committee focused on the use of informal reading inventories (IRIs), the cloze procedure, and readability formulas that might help resolve many of the problems frequently encountered by teachers in selecting appropriate reading texts and materials for their ESL classes.

**Definition of Terms**

**READABILITY**

"The quality of a piece of reading matter that makes it interesting and understandable to those for whom it is written at whatever level of educational experience."

**READABILITY FORMULA**

"A technique for determining the difficulty of reading materials, generally taking into account vocabulary and sentence length, all additional aspects are included in different formulas."

**CLOZE PROCEDURE**

A procedure for measuring communication where the nth word (where n is between 5 and 10) is

---


3 Ibid., 471.

INFORMAL
READING
INVENTORY

A diagnostic measuring instrument designed to help a teacher determine student reading levels and to select reading materials at the learner's instructional level.

Purpose of the Study

The need for abbreviated and practical devices, techniques and procedures for appraising reading performance was judged to be fundamental to the creation of an ELI developmental reading program by the Committee. Two assumptions underlie this recognition. First, reading is basic to virtually all learning in school, especially to all higher levels of learning. Second, readiness for reading is related to foreign students' understanding of English structure and manifested in their proficiency in speaking, listening comprehension, and writing. Fruitful instruction is based on an understanding of learners' achievement and needs. The reading specialist in the Reading Laboratory needs to know the highest reading level at which students can read with full understanding and freedom from mechanical difficulties, if s/he is to provide them with material they can read independently. The Vocabulary and Reading class instructors need to know the highest reading level at which systematic instruction can be initiated for each student.

---

if they are to provide instruction in the basic reading skills. The purpose of the study is to construct a valid and reliable IRI specifically designed to assess the reading ability of foreign students in an intensive ESL program. In addition, the use of the IRI as a placement tool used in the ELI Reading Laboratory will be explained. Finally, the utilization of the IRI in conjunction with the cloze procedure and readability formulas will be detailed in terms of its importance to the organization of a developmental reading program.

Significance of the Study

The significance of the study becomes apparent when one considers the responsibilities of ESL instructors, trained in Applied Linguistics with its emphasis on the audio-lingual method of language instruction, to prepare foreign students from many different countries to pass standardized ESL proficiency tests and to read college texts and scholarly journals. The task of providing effective instruction in reading, selecting appropriate textbooks and readers, and developing a carefully designed curriculum that meets the individual needs of their students is a responsibility that has left many in the field of ESL convinced that the issues regarding the role of reading instruction in intensive ESL programs need to be re-examined in light of advances made by reading specialists.
David Eskey has focused on one fundamental issue when he pointed out: "Considering the objectives of many of our best students, we may think it strange indeed that specialists in teaching of English as a second language have had so little to say about the teaching of reading." 6

A re-examination of the issues might well begin with an attempt to understand why this is so. The relationship between reading and the audio-lingual method of language instruction based on Behaviorism and Structuralism might serve as a reference point from which to consider such questions as: What are the most important differences between learning to read English as a second language and learning to read English as a first language? How do we define the concept of language interference as it applies to reading? and finally, How can ESL instructors utilize such tools as IRIs, the Cloze procedure, and readability formulas to provide individualized diagnostic instruction in reading?

Muriel Saville-Troike has suggested that the neglect of reading in the field of ESL can be understood when the history of English language teaching in the United States is reviewed. "The primary reason for neglect of this area seems to be a historical one. Older teaching methods emphasized the written forms of language, largely ignoring speech, and the audio-lingual approach was a

reaction to this book-centered orientation. In addition the schools of behaviorist psychology and structuralist linguistics were in vogue at the time, and their respective views of language learning as a process of habit formation and of language itself as speech, providing a rationale for the new methodology." The audio-lingual principles which have influenced ESL theory and practice gave little attention to the so called high level skills of reading and writing which were regarded as but secondary manifestations of language.

The advent of the Second World War greatly increased the demand for Americans who could speak foreign languages. Linguists such as Leonard Bloomfield, Charles Fries, Eugene Nida and Edwin Cornelius provided a theoretical and practical linguistic framework that firmly established the audio-lingual method as the dominant English language teaching methodology in the United States. At the Defense Language Institute (DLI) and at most university ESL programs throughout the United States, proponents of the audio-lingual method believed that the notions of patterns in language, of habit formation, and of interferences resulting from dissimilar patterns were basic to the learning of a second language. Once the instructor had determined the English structures to be taught in a lesson, s/he would utilize intensive individual and group drills to establish the

---

new patterns as habit. The drills would encompass transformations, expansions, combinations, and substitutions. It is pattern practice that plays the key role, and it is this technique that the teacher primarily relies on to establish automatic habits powerful enough to overcome interference from the student's native language. The maxim of the DLI summarizes the focus of the audio-lingual method and its relation to reading: "Hearing before speaking, speaking before reading, and reading before writing." 8

The audio-lingual approach was clearly a strategy resulting from an awareness that the empirically based learning theories of the behaviorist school of contemporary learning theory had much to offer the science of structural linguistics. Early proponents of the audio-lingual method were convinced that:

"Anyone can learn anything of which he is capable if he will allow himself to be put through the pattern of activity necessary for conditioning to take place. Thus a behaviorist does not talk about such things as psychological involvement or helping students see the points of learning. Instead he engages students in behavior and assumes that behavior with appropriate conditioning automatically produces learning." 9

Language was thought of as a sophisticated stimulus-response system learned much like any other habit system through the building up of associations and through the success of schedules.

---

of reinforcement.

It is possible to justify an emphasis on the audio-lingual method in classes where the students are beginning to learn English as a second language. As Eskey points out:

"At the primary level this approach is not only sensible, it is a welcome relief from the older grammar - translation approach in which beginners were often saddled with the frustrating task of trying to read works intended for native speakers." 10

Another reason for stressing the development of oral - aural skills in beginning language instruction is based on a consideration of interference from the first language. Nancy Modiano suggests that the use of a foreign language interferes with the acquisition of ESL reading skills in every way. First of all, the learner can understand only the most rudimentary type of instruction when his/her teacher speaks in an unfamiliar language.

"His acquisition of the decoding skills is greatly hampered because he cannot hear many of the sounds and words of the foreign language; he cannot perceive the letters and visual configurations by which the words are represented; and he seldom can link the sounds and the symbols meaningfully. What he learns he learns by rote. The lack of vocabulary and nonmastery of grammatical structures greatly impede his comprehension of what he does read." 11

Oral-aural communication should receive priority at the beginning levels of English instruction. But as this competence

10 Eskey, op. cit., P. 15.
developed new priorities must be established with regard to reading. While reading may still be utilized to reinforce a student's oral-aural competence, it must be made clear that reading is a communication system that involves its own set of skills.

The linguists Leonard Bloomfield and Charles Fries consider the primary reading skill to be the ability to decode printed symbols into sounds and to extract meaning from sound. They attempt to apply the knowledge they acquired about the development and characteristics of spoken English to the problems of reading. Bloomfield and Fries define reading as the act of turning the stimulus of graphic shape on a surface back into speech. Bloomfield differentiates between the act of reading (recognition of grapheme-phoneme correspondences) and the goal of reading (comprehension).

In order to read alphabetic writing one must have an ingrained habit of producing the phonemes of one's language when one sees the written marks which conventionally represent the phonemes. A well-trained reader, of course, for the most part reads silently, but we shall do better for the present to ignore this fact, as we know that the child learns to read aloud.

The accomplished reader of English, then, has an overpracticed and ingrained habit of uttering one phoneme of the English language when he sees the letter p, another phoneme when he sees the letter m, still another when he sees the letter d, and so on. In this way, he utters the conventionally accepted word when he sees a combination of letters like pin, nip, tip, tin, nit, dip, din, dim, mid.12

---

Fries, defining reading states that:

"The process of learning to read in one's native language is the process of transfer from the auditory signs for language signals, which the child has already learned, to the new visual signs for the same signals." 13

While both Bloomfield and Fries emphasize the code-breaking aspect of reading, Fries sees the need for a meaning response from the very beginning while Bloomfield views meaning as an automatic step which comes after the code is broken. "Fries unlike Bloomfield has a concept of reading that leads to the development of the mature reader far beyond the code breaking stage." 14

The ideas of both men are compatible with the views of the proponents of the audio-lingual method of language instruction for whom the notion of habit formation as the result of pattern practice is central to the teaching of speech and of reading. Conditioning to produce an automatic response is achieved by using carefully structured drills. In the Bloomfield-Barnhart book, Let's Read, the first 36 lessons present the five short sounds of the vowels using two and three letter words in lists to be used for drill sessions. The words are then used in sentences such as "Nat at bat" and "Nan had a pan". 15


The materials have little or no content at this stage.

While Bloomfield and Fries consider reading as a behavior in which readers engage, reading specialists prefer to view reading as active information processing. Kenneth Goodman has described reading as a psycholinguistic process by which the reader, a language user, reconstructs as best he can a message which has been encoded by a writer as a graphic display. Goodman describes reading as a "psycholinguistic guessing game." A good reader takes advantage of the redundancy inherent in language to sample, predict, test, and confirm his hypotheses about the meaning the author is trying to convey. The good reader does not process each and every letter. As Goodman states:

"The common misconception is that graphic input is precisely and sequentially recoded as phonological input and then decoded bit by bit. Meaning is cumulative, built up a piece at a time in this view."

The good reader attempts to reconstruct the whole of the writer's message although he extracts only part of the graphic material. The reader must try out his knowledge of sound-symbol relationships, grammatical patterns, semantic groupings, and the real world in his attempt to impose some kind of meaning on the texts. Comprehension results from the interaction between


background knowledge, conceptual abilities and process strategies.

Conceptual abilities  arrow< arrow Background knowledge
arrow< Process strategies

Figure 1.1. The interaction of three factors that affect comprehension. 18

Knowledge of the relevant language is part of information that is essential for reading, but it is not information that the foreign student can expect to find on the printed page. Rather it is information that he must have already, behind the eyeballs. It can be distinguished from the visual information that comes through the eyes by being called nonvisual information. Frank Smith has diagramed the relationship between visual and nonvisual information. 19

![Diagram](attachment:image.png)

Figure 1.2. Two sources of information in reading.

Smith recognizes a reciprocal relationship between the top sources of information in reading. "The more nonvisual

---


information a reader has, the less visual information the reader needs. The less nonvisual information that is available from behind the eyes, the more visual information is required." 20

The reader utilizes nonvisual and visual information in a process of giving the significance intended by the writer to the graphic symbols by relating them to his own fund of experiences. The more efficient reader selects the minimum number of graphic cues necessary to predict the writer's intended meaning accurately.

The fund of experiences which a foreign student brings to the printed page is frequently inadequate in terms of cultural relevance. He is unable to react to what he reads because he cannot associate the meaning with his own culturally different past experiences and is unable to form tentative judgements or interpretations. In instances where the language is near to being on a 'one word stands for one idea' level, as in technical vocabularies, the reconstructing process is relatively clear-cut. Here the reference can be formed simply and directly by one grouping of experience. But when the reference is the result of varied groupings of experiences, reconstruction occurs only through the complex process of selection and elimination. 21

20 Ibid., p. 5.

Research conducted by Kenneth Goodman and Carolyn Burke offers support for the psycholinguistic model of the reading process described by Goodman and Smith. Goodman and Burke observed children reading orally. They noticed that when the children made errors in reading, the errors (or miscues as they prefer to call them) were largely grammatical substitutions based on the syntactic and semantic information from the context, as well as the redundancy of the language. Goodman believes on the basis of his research that all readers produce the unexpected responses which he calls miscues. "These miscues occur because the reader is not simply responding to print with accurate word identification. He is processing information in order to reconstruct the message the writer has sought to convey."

Goodman has illustrated the essential tasks the reader faces as he moves from a graphic display to meaning. (Figure 1.3) Goodman admits that his diagram employs the transformational-generative view of language originally formulated by Noam Chomsky. 24


Writing and speech are surface representations of language. The author, like the speaker, first starts with meaning. S/he then assigns a deep underlying grammatical structure. Using the transformational rules, s/he then generates a written surface structure. Finally s/he utilizes the rules of English orthography (spelling, punctuation) to produce the graphic display. "The reader must infer from the graphic display the rules that have produced it and its underlying deep structure. Only then can he reconstruct the writer's message, that is, comprehend the meaning."

Oral reading is not necessary for comprehension. The reader must encode the message as oral output producing an oral surface structure using the rules of phonology and syntax.
The Transformational-generative view of reading reaffirms the importance of meaning. The task of the beginning reader is to construct a set of rules that will enable her/him to translate the surface structure of written language — the graphic symbols on the page — into meaning. Transformational rules operate on basic underlying structures (simple, active, and declarative) to add, delete, or rearrange various elements in them to produce corresponding surface forms.

The simple, active declarative form (The girl bought the dress.) can be transformed to a more complicated sentence — such as, one asking a question, giving a command, or containing one or more included clauses. For example, "Who bought the dress with the white collar?" As Chomsky has pointed out, native speakers can form and understand an infinite number of sentences because they understand the basic, underlying system of the language. They know for instance, that underlying the second sentence in the paragraph above are much simpler sentences as "The girl bought the dress."; "The dress had a white collar."; and the question-transformation "Who bought the dress?"

A foreign student who has not acquired an understanding of the underlying system of syntactic rules specific to English will not be able to reconstruct a writer's message. Furthermore, her/his comprehension will suffer from interference from those structures in her/his native language that contrast with those in
English. The foreign student's native-language habits will tempt her/him to follow the pattern of her/his own language as s/he attempts to reconstruct the message. Robert Lado has pointed out that the foreign student tends to transfer the sentence forms, modification devices, the number, gender and case patterns of her/his native language.

Those structures that are similar will be easy to learn because they will be transferred and may function satisfactorily in the foreign language. Those structures that are different will be difficult because when transferred they will not function satisfactorily in the foreign language and will therefore have to be changed. 25

For example, English adjectives normally occur before the noun they modify; in fact, it is this order which signals their modifying function in most instances. Spanish adjectives normally follow the noun they modify. This contrast in structure will interfere with the ability of a Spanish speaking reader to make hypothesis about the material s/he is reading. The "guessing" game process of reading that Goodman outlines is language specific.

The rate at which the foreign student reads English will depend in part on the degree of interference from the student's first language. Students from South America have the advantage of familiarity with the Latin alphabet. Learning to read English necessitates a change in motor skills for Chinese and Persians. Farsi

(Persian) is read from right to left. Chinese is read from top to bottom, right to left. Fewer rhetorical devices and symbols are employed in Farsi. Paragraph indentation, the period, the comma, the explanation point and question marks are lacking. Twenty-two of the Persian alphabetic letters are distinguished from one another by only the presence or absense of a dot or stroke. Cowan and Sarmad cited a study which:

...has demonstrated experimentally that the characteristics of Persian writing can create ambiguities in perfectly normal sentences, and that these will interrupt the reading process for brief periods. It is conceivable that these properties of the orthography might induce the reader to give greater attention to word-by-word processing instead of sampling from larger stretches of prose. 26

A similar hypothesis might be stated for Chinese. Although in more recent times punctuation has begun to be introduced especially in newspapers and school books, it is still regarded by many as a bolstering of ignorance, and in editions of the most important Chinese books, words, clauses and sentences follow each other in an interminable flow without being separated in any way whatever. 27

The lack of punctuation, the excessive latitude of meaning of the majority of Chinese words (Chinese does not use inflectional


or derivational affixes and employs words without modification in the most diverse functions and connections), and the lack of formal marks of the relations of the words within the sentence, are serious obstacles to be overcome in rapid processing of Chinese ideographic script. Bernhard Karlgren suggests that:

This 'sketchy' nature of Chinese, its want of clear and adequate guiding details, its apparently formless sentence structure, put serious difficulties in the way of learning it. There is nothing for it but to translate word for word—in case of ambiguous words, trying one sense after the other—and thus endeavour to draw conclusions from the context as to the purport of the sentence.28

In addition to learning that the words and word groups of one language do not fit together the same way as the word of another language, the foreign student must realize that ideas don't fit together in the same way. As Robert Bander explains:

The written arrangement of a thought pattern in an English paragraph normally follows a straight line of development. It is very different, for instance, from an oriental paragraph, which tends to follow a circular line of development. A paragraph in Spanish, or in some other Romance language, differs in still another way: its line of thought is sometimes interrupted by rather complex digressions. Similarly, a paragraph in Russian often contains digressions.29

28 Ibid., p. 75.
Robert Kaplan has diagramed the cultural thought patterns that are reflected in the written statements of various cultures.  

![Diagram showing cultural thought patterns]

**Figure 1.4. Cultural thought patterns reflected in writing.**

How a person thinks largely determines how he writes. For a foreign student to be able to reconstruct the written message of a writer he must understand how English speakers usually arrange their ideas. Foreign students are often not familiar with the concept of an English paragraph. When they read they do not look for the unity that characterizes the paragraph. An awareness that a paragraph frequently begins with a topic sentence followed by a series of subdivisions of the central idea, can help them process the information as the writer intended. Just as the student must understand the underlying structure of grammatical rules to comprehend the meaning of sentences, s/he must understand the rhetorical devices and transitional signals used by a writer to make paragraphs coherent. A student's comprehension will be enhanced if as s/he reads s/he expects the writer to develop a paragraph along chronological or spatial lines employing such transition signals as time expressions in mentioning events in the order they occur,

---

or connectives in discussing details according to their location and their relationship to each other. In addition to understanding the techniques used by a writer in achieving paragraph coherence and unity, the student needs to understand how the writer ties paragraphs together sequentially by including a thesis statement and transitions that serve as a bridge between paragraphs.

The acquisition of process strategies in reading will be facilitated by providing materials for meeting individual differences. Whether the student is just beginning to learn the more concrete process strategies such as phoneme-grapheme correspondences and word meaning or at a more advanced stage where s/he can use more abstract process strategies such as context and syntax, s/he will need material that will sufficiently challenge her/him to continue to improve her/his reading skills, but that is not so difficult that it frustrates and defeats her/him. Charles T. Scott has found two faults with the presently utilized materials in ESL programs that make them less than ideal. The first is that there is generally no tabulation of syntactic structures in terms of their frequency of occurrence, as there is for vocabulary items. The second fault is that for the most part these materials exist in isolation - isolation, that is, from a unified and coherent series of test material for a specific program in English as a

second language. Some compensation for this is frequently attempted by subtitling these readers with comforting, but imprecise labels such as "for high intermediate level," or "for advanced learners of English." Scott believes that ESL instructors have a right to know what these labels really mean in terms of structural patterns and vocabulary which the editor assumes to be familiar to students who will use the text. The need for well-planned, structurally-graded reading materials in ESL was recognized by Longmans Publishing Company. In 1973 it published a series for adults and teenagers. Material in each book was selected according to a pre-established structure table and a 2,000 word list. (The word list was composed by Michael West.)

An additional problem facing the ESL instructor in selecting materials that meet the needs of each student becomes apparent when one understands how foreign students in ESL programs are usually placed in vocabulary and reading classes. Most intensive university ESL programs use a standardized ESL proficiency test to place students in beginning, intermediate or advanced level classes. At the Oregon State University English Language Institute new students are placed into one of six levels with core classes in English Structure and Writing, Vocabulary and Reading,

---

Speech and Aural Comprehension on the basis of their scores on a
battery of placement tests\textsuperscript{34} given when the students enroll. As
a result, a student whose reading ability might be either sub-
stantially better or worse than his ability in speaking, listening
or writing might be assigned to one level. Scheduling difficulties
usually limit the option of assigning a student to classes at
different levels. Because there is no direct relationship between
the placement test battery and the instructors' selection of texts
(no comprehensive and graduated reading series is used) a correspon-
dence between a student's reading ability and the difficulty of the
materials is not always achieved. Consequently, some students are
overwhelmed by a feeling that there is too much new vocabulary.
Their comprehension suffers as a result of their snail's pace progres-
sion through the reading lesson and they fail to acquire reading
skills. Other students complain that their texts and readers do
not sufficiently challenge them. These students may fail to
appear motivated or interested in class activities. Instructors
only increase the problem by demanding more diligence in using the
dictionary. They should look to the benefits that can accrue
to their students when instructors participate in the planning and
organization of a development reading program that offers techniques
to assess each student's reading strengths and weaknesses and to

\textsuperscript{34} The test battery includes: The Michigan Test of Aural
Comprehension, The John Speaking Test, The Basilisk Structure
Test, A Cloze Test, and a Written Composition.
select appropriate instructional materials to enhance reading skills.

The following chapters focus on two techniques for the assessment of students' reading ability within the framework of an ESL developmental reading program. Chapter two examines how the cloze procedure and readability formulas can be used by instructors in Vocabulary and Reading classes. Chapter three describes how an ESL group informal reading inventory is used in the operation of the ELI Reading Laboratory. The final chapter provides statistical support on the validity and reliability of the inventory.
CHAPTER TWO

An ESL Developmental Reading Program

The design of an ESL developmental reading program for foreign students enrolled in an intensive English language institute should proceed from an understanding of what the student ought to know in order to be considered proficient in reading. The National Association for Foreign Student Affairs (NAFSA) has offered the following guidelines on the level of proficiency recommended for foreign students seeking admission to a degree program at an American university.

The student should be able to read college-level text materials without constant reference to a dictionary and with sufficient speed and comprehension to allow him to complete the typical amounts of reading required in any college level course. It is assumed that the student has some comprehension of lexical items, of the grammatical classes, and of the permissible sequences of acceptable syntax.

It is also assumed that the student must learn the permissible sequence of various rhetorical forms...35

The preceding guidelines serve as a point of departure for the formulation of objectives for the ESL developmental reading program. The development of specific objectives provide direction in learning, aids in discriminating between relevant and irrelevant information and provides a plan of organization for the subject

The formulation of objectives also facilitates students' integration of diverse units of information by providing a general structure to content. In an ESL developmental reading program the specification of objectives is useful in two additional ways. First, it makes possible the correct sequencing of learning tasks and activities for reading skill development. Second, it facilitates an intensive analysis of written passages in vocabulary and reading class and extensive synthesis of materials in quantity at home or in the reading laboratory.

The sequencing of learning tasks and activities for reading skill development should mirror the relative change in the use of process strategies as the reader becomes more proficient. Roger Shuy has diagrammed the change in the use of process strategies from beginning to advanced reading (left to right).

Grapheme - Phoneme
Grapheme- Morphophoneme
Syllable - Morpheme
Syntax
Lexical meaning
Contextual meaning

Figure: 2.1 The relative change in the use of reading process strategies.

---

For the foreign student to achieve advanced ability in reading English as a second language, s/he must rely increasingly on more abstract process strategies to improve her/his reading speed and vocabulary recognition. Comprehension of sentences, paragraphs and complete reading selections will hinge upon her/his ability to process information by relying less on graphic cues and more on better sampling techniques, increased conceptual development and greater control of language structure. The student who cannot read at a rapid rate will be limited in both the volume of reading s/he can do and her/his overall comprehension. It should soon become obvious to the reader that word-by-word processing limits rather than enhances comprehension.

William Norris believes that the objectives of advanced ESL reading courses is "to teach the student (who already has at least an 'intermediate' mastery of spoken English) to get information from the printed page efficiently, rapidly and with full understanding." 37 He has delineated the specific reading skills students must develop in order to achieve this goal.

1. Speed of recognition and comprehension
   a) Word-recognition speed: improving eye movement, visual discrimination
   b) Word-comprehension speed: symbol-sound-meaning association
   c) Sentence-structure recognition: eye sweep, reading by structures

2. Vocabulary recognition and comprehension
   a) Word formation: derivation and compounding
   b) Lexical range: choices and restrictions
   c) Vocabulary in context: using context clues to meaning

3. Sentence structure and sentence comprehension
   a) Sentence structures: understanding advanced-level conjunction, nominalization, embedding, etc., and grasping the "main idea"
   b) Sentence comprehension: understanding the full meaning

4. Paragraph structure and paragraph comprehension
   a) Paragraph organization: the "central idea," paragraph development
   b) Scanning for specific information
   c) Full understanding: paragraph analysis

5. Comprehension of the complete selection
   a) Surveying for the main ideas
   b) Scanning for specific information
   c) Reading for full understanding

The acquisition of these skills occurs when students have opportunities to read both extensively and intensively. One objective of extensive reading is to encourage students to develop the habit of reading quickly. To do so, the materials should be of high interest so that reading is a pleasurable experience. To achieve fluent mastery of the mechanics of reading and to extend their word knowledge and become familiar with common idioms, they must have reading materials that do not frustrate them while reading for meaning. Sarah Arnold emphasizes the importance of extensive reading.

38 Ibid.
Now the cultivation of the reading habit and
the love of books is an immediate aim, and the book
ceases to be a test merely. It is a means to an
end, an instrument by whose use new knowledge
can be gained or the pleasure of life enhanced.39

By providing opportunities and materials for extensive
reading, the instructor is taking a step towards meeting the
individual needs of each student. Even those foreign students
who attain similar scores on standardized English language
proficiency tests will read at different rates, since no two
students at the same level will have identical aptitudes
and learning rates. Furthermore, their reading rates will
be influenced by their motivation. The use of a single-copy text-
book series tends to restrict the learning opportunities of students.
If the instructor suggests to her/his students that they be respon-
sible for improving their reading ability, students should be
provided materials which enable them to achieve this goal. If the
instructor believes that students should be given an opportunity
to set up and attain their own reading objectives at their own rate
and in accordance with their own plan, the instructor ought to
develop a catalogue of materials which enables students to evaluate
for themselves their ability to read and understand passages of
graded difficulty and to answer comprehension questions.

39 Sarah Arnold, Reading: How to Teach It, (New York: Silver,
Burdett and Company, 1899,) p. 205.
The need for a wide variety of reading materials appropriate for foreign students was recognized by David Eskey.  

The following model of an intensive ELI Developmental Reading program incorporates aspects of Eskey's model ESL reading program.

![Diagram of Intensive ESL Developmental Reading Program]

INTENSIVE ESL DEVELOPMENTAL READING PROGRAM

INTENSIVE READING
(In Vocabulary and Reading Class)

Language | Culture
Syntax | Vocabulary | Concepts | Rhetoric

and
(meaning)

(Form)

EXTENSIVE
(In ELI Reading Laboratory and at Home)

Level: adjusted to the student's competence
Content: Tailored to the particular students' or, ideally, student's needs
Volume: as great as possible

FIGURE: 2.2 A Model Intensive ESL Developmental Reading Program

Both the reading specialist in the Reading Laboratory and the instructor in the Vocabulary and Reading class will need diagnostic tools enabling them to select materials appropriate for the students. Just as the reading specialist seeks not to frustrate the reader by giving her/him materials that are too difficult for him to understand, the Vocabulary and Reading instructor knows that the


41 Ibid.
acquisition of specific reading skills and of vocabulary will be facilitated by using materials at the instructional level of each student.

The Cloze Procedure

The cloze procedure, developed by Wilson Taylor in 1973, allows the instructor of Vocabulary and Reading classes to determine the appropriateness of materials selected for instruction. The standard method of using the cloze procedure is for the instructor to select a 250 - 300 word passage from a reading selection in the textbook. The first sentence of the passage is left intact without deletions. Starting with the second sentence every fifth word is deleted until fifty words have been omitted. The sentence after the fifty deleted words is left intact. The student is asked to use grammatical and contextual clues to fill in the blanks with the missing words. The cloze test is corrected in accepting only the exact word that was deleted. Spelling errors are not counted as incorrect. The right number of responses is multiplied by two to obtain a percentage score.

The raw scores (or percentage scores) are difficult to interpret except in relation to other raw cloze scores (or percentage scores). As Earl Rankin and Joseph Culhane point out:

A more difficult article will yield a lower mean cloze score than an easier article, but no information is gained from these mean scores. A higher cloze

---

score for one reader will indicate that this person is a better reader than one with a lower cloze score. But the cloze scores do not tell us how well both readers comprehend the material. What is lacking is a frame of reference with which to interpret an acceptable level of performance on cloze tests. 43

Researchers have sought to provide this frame of reference by administering cloze tests and multiple-choice comprehension tests to the same readers. The reading passages used in the construction of both tests are identical. The two sets of scores are then correlated. A regression equation is used to calculate the cloze percentage scores which predict specified multiple-choice percentage scores. Conventional standards of 75 percent comprehension (i.e. instructional level) or 90 percent comprehension (i.e. independent level) have been used as criteria of acceptable performance on multiple-choice comprehension tests. 44 There have been various sets of criteria proposed by researchers for determining the equivalent independent, instructional, and frustration levels using the cloze measures. Figure 2.3 compares the results of cloze tests with the 75% and 90% reference points.


44 Ibid., p. 192.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>75%</td>
<td>38</td>
<td>44</td>
<td>47</td>
<td>41</td>
</tr>
<tr>
<td>90%</td>
<td>50</td>
<td>57</td>
<td>62</td>
<td>61</td>
</tr>
</tbody>
</table>

**Figure 2.3** Cloze Test Percentage Scores Comparable to 75% and 90% Criterion Multiple-Choice Scores

Figure 2.4 was compiled from the preceding data to suggest an interpretation of cloze test scores for Vocabulary and Reading class instructors.


Above 60% - Independent
50% - 60% - Probably Independent
40% - 50% - Instructional
30% - 40% - Probably Instructional
Below 30% - Frustration

Figure 2.4 An Interpretation of Cloze Test Scores.

It is possible for an instructor to evaluate the readability of the reading selections in a text using a cloze test that is simple to construct and administer. S/He will then have data which facilitate decisions on how best to sequence the material so that there is a gradual increase in the difficulty of the selections. Furthermore, by administering four or five cloze tests constructed from the easier reading selections in the text, the instructor can determine whether the beginning reading material is appropriate for a majority of the students in the class. If a majority of the students obtain scores below 30%, the instructor might consider substituting a text with less difficult reading selections. Likewise, if a majority of the students supply more than 50% of the words in the passages, the instructor might substitute a text that is more challenging.

The use of the cloze procedure for matching students with appropriate materials is less reliable if the students are unfamiliar with the suggested manner of response. Cloze work can cause consternation among foreign students accustomed to answering multiple-choice type questions. It is therefore vital for the instructor to use at
least one of the many modifications of the cloze procedure as a
teaching technique prior to using the cloze test as a means of
assessing students' reading ability. The instructor should consider
exactly what is taking place when a student responds to the items
of a cloze test or exercise.

The term "cloze" is derived from the notion of closure in
Gestalt psychology. "According to this theory, learning follows a
sequential pattern through which one understands the whole - that is,
the broader issues - before grasping details." For example, one
might perceive a not-quite-complete-circle as a whole circle and then
notice the gap in the circumference. An incomplete figure sets up
in an individual tensions to complete it in the simplest and easiest
way possible. The cloze test capitalizes on this tendency to close
gaps or fill in blanks by requiring students to supply missing words.
The reader can utilize the natural redundancy of language to predict
what word should occur in a given context. John Oller believes that:

The information provided in the cloze test
allows the student by analysis to synthesize
a greater whole. At the same time, the synthesis
or projection may become part of the next analysis
required to produce a subsequent synthesis.  

---


To project a word in a blank and thereby complete a sequence, the reader must make hypotheses or expectations about the information that is to follow. Oller further states that:

"By sampling subsequent sequences, he either confirms or disconfirms these expectations. If the expectations are disconfirmed, they must be revised and new hypotheses must be formed." 54

The cloze procedure can be utilized to stimulate the reader to anticipate that which has not been seen. In this way it can be used to teach the reader to play what Kenneth Goodman called the "psycho-linguistic guessing game."

English has two characteristics that permit the prediction of what follows in written discourse.

"In the terminology of information theory written English is said to be a 'stochastic' process because it consists of a finite set of symbols whose probabilities of occurrence are not equal (a is more probable than z) and a 'Markoff' process, because the probability of occurrence of a symbol is affected by the actual occurrence of symbols preceding it." 55

In the letter combination t-h-r-, the probability that an 'e' will follow is much greater than the frequency of 'e' in the language in general. The same 'stochastic' and 'Markoff' characteristics appear to exist when one considers words in discourse. At certain points in continuous discourse, the fluent reader of English is quite certain of what the next word will be before he actually sees it.

54 Ibid., p. 114.
Uriel Weinrich has shown that the inclusion of a particular word in a discourse can dictate some lexical features for other words. For example, in the incomplete sentence: "___ woman drove from Boston in ___ car," the words 'woman' and 'car' have the grammatical features +Noun, +Common and +Singular. These features dictate that somewhere before the nouns there must appear a word with the features +Determiner and +Singular. The word 'drove' has certain transfer features regarding the kinds of nouns that relate to it. The subject will most probably be +Agentive and must be +Animate and probably will be +Human and +Adult. Knowledge of grammatical and semantic features of certain words in a sentence enables the reader to project a limited number of words that fit into the deleted space in a cloze sentence. Such knowledge also facilitates the ability to anticipate what follows in discourse. Samuel Fillenbaum found that when native speakers were asked to fill in fifth word deletions in a transcript of spoken English, words of the same form class (noun, verb, pronoun) were supplied 78 percent of the time for the deleted words. He also found that subjects supplied verbatim function words correctly 65 percent of the time, while content words were supplied only 32 percent of the time. The choice of function words is much more circumscribed by the grammatical structure of the sentence, than is the choice of content words. The cloze procedure can be

57 Finn, op. cit., p. 518.

utilized to enable the student to learn to use lexical features and redundancy to make predictions about what s/he reads.

Richard Bloomer has suggested several ways to use a modified cloze procedure in the ESL classroom to teach grammar and composition and to improve reading comprehension.\(^5^9\) From his research Bloomer has shown that the cloze procedure can be used to increase a student's ability to use correctly words in certain grammatical categories (prepositions, conjunctions and noun determiners).\(^6^0\) Exercises are prepared by deleting every preposition, conjunction or noun determiner from a passage rather than every fifth word. The student is then asked to use the context and her/his knowledge of grammatical rules to supply the missing word.

In using the cloze to teach composition, the instructor is not interested in having the student supply the exact words that were deleted, but rather the cloze procedure is modified to enable each student to draw from her/his own stock of words and her/his own language patterns to fill in the blanks which are left in the materials. The result of this activity is that each student has transformed the passage distinctively.

Keith Thomas has described strategies for using cloze type activities to help develop student competencies in (1) using context

---


clues, (2) determining the relationship of pronouns and pronoun referents, (3) understanding cause and effect, (4) comparing and contrasting, and (5) perceiving time relationships. In addition to presenting passages with words deleted, Thomas has shown that it is also appropriate to delete selected consonants, consonant clusters, consonant digraphs or suffixes. These types of exercises are designed for functional application of phonic and structural clues utilized in combination with semantic and syntactic information.

Both Richard Bloomer and Mildred Friedman have conducted research on using the cloze as an instructional tool to improve students' reading comprehension. Bloomer reported significant gains in comprehension skills of a groups of American college students. Using foreign students as subjects, Friedman found the cloze procedure to be an effective method to improve reading comprehension and vocabulary-in-context. Of particular interest were the foreign students' reactions to the cloze procedure. Self-report comments indicated that the cloze procedure required them to "think in English." Carr Cranney has observed that "this shift from a word-by-word translation approach to 'thinking in English' seems to be an important perceived step in the acquisition of a second language."

---

that the cloze measures familiarity with the subject as well as the
difficulty of the article. 65 This insight has been verified by
Eugene Jongsma. From his research, Jongsma concluded that if a
student is familiar with the text of a cloze passage, s/he will
perform significantly better in proportion to his familiarity with
the passage. These observations are important when one intends
to use the cloze as a measure of readability. 66

The cloze procedure is one way to tell whether a piece of
writing is likely to be readable to a foreign student. Because
it is relatively simple to design and administer a conventional
cloze test where every fifth word is deleted, the cloze is a useful
method for measuring the readability of certain textbook reading
selections. Once several cloze tests have been administered and
selections that are at the student's instructional level have been
found, the instructor can use readability formulas to obtain addi-
tional reading selections that are at the same reading level.
Readability formulas enable the instructor to use counts of language
elements in a piece of writing to predict its readability. "They
are a predictive device in the sense that no actual participation by
readers is needed." 67

65 Friedman, op. cit.,

66 Eugene Jongsma, "The Cloze Procedure: A Survey of the
Research," Occasional Papers in Reading, (Bloomingdale, Ind.:
Indiana University, 1971).

67 George Klare, "Assessing Readability," Reading Research
Readability Formulas

Since the formulation of the first readability formula by Bertha Lively and Sidney Pressey in 1923, many educators have attempted to determine those variables that make certain reading selections more difficult to comprehend than others. In addition to examining the variable of word difficulty, researchers have investigated a variety of other factors which they thought might be related to readability - such as the number of polysyllabic words or number of syllables in a passage, number of phrases of varying types, number of personal references in a passage and syntactic complexity.

Lively and Pressey utilized the word list constructed by Edward Thorndike in designing their readability formula. Thorndike sought to identify the 10,000 most common words of the English language. He gave a measure of the relative frequency of appearance of 10,000 words in a wide variety of materials such as children's literature, English classics, reference and technical books, newspapers, and correspondence. In Thorndike's word book, each word is followed by an index number indicative of its commonness. Thus such a common word as "and" has an index number of 210; a relatively


uncommon word like "atom" has an index of 4. Words with numbers of 49 or over occur in the first 1,000 words of the frequency list.\(^70\)

Since the publication of Thorndike's word list, other word lists have appeared. It has long been recognized that the frequency of vocabulary changes over time. The index for the word "atom" has risen considerably since 1921. Consequently, word lists have been revised and updated. This has necessitated revision of readability formulas which use word lists.

The early readability formulas by Lively and Pressey, Edward Dolch\(^71\) and F.D. Keboch\(^72\) were used to arrange different books in relation to one another in terms of one kind of measurement: vocabulary difficulty. The formulas did not indicate whether these books could be read by students in a particular grade level. It was not until 1928 that Mabel Vogel and Carleton Washburne\(^73\) began to develop a formula to predict the reading level at which certain books could be read and understood by children in the elementary grades. In the formula they produced in 1928, they included the variable of


vocabulary difficulty, sentence length and number of different words. In addition they sought to find some objective measure whereby teachers and supervisors could select appropriate materials that could be understood by children in different grades. "A difficulty score was assigned to each of 150 books on the basis of the average reading-grade score on the Stanford Achievement Test of those children who had read and liked each book."\(^{74}\) For the first time, researchers had shown that it was possible to correlate elements of difficulty in the text with the criterion of difficulty based on reading ability.

Since 1938 a wide variety of readability formulas has been produced. George Klare has found that most readability formulas depend on word frequency counts and measures of sentence length.\(^{75}\) He also found that many formulas use the McCall-Crabbs Standard Test Lessons in Reading as a criterion.\(^{76}\) These lessons are a series of 376 passages of reading already graded in difficulty on the basis of comprehensibility of questions at the end of each passage. These lessons have been convenient statistically because there are a large number of reading passages covering a wide range of difficulty, resting upon extensive testing, and providing grade scores.

\(^{74}\) Chall, op. cit., p. 4.

\(^{75}\) Klare, op. cit., p. 97.

Researchers have sought to design readability formulas for particular purposes. For example, George Spache specifically developed a formula to assess the readability of materials at the preprimer to third grade level. Rudolf Flesch published a formula in 1943 for general adult reading materials. The Flesch formula is useful in determining a readability level for materials between grade level 5 and 17.

Some formulas are highly complex and require an hour or more to compute the readability of a single 100 word passage. Others are quite simple and may be computed in a matter of minutes. The readability formula presented by Edgar Dale and Jeanne Chall in 1948 included a 3,000 word list. In addition to determining a factor of average sentence length, those who use the Dale-Chall must determine those words that are not on the 3,000 word list. In 1965 Edward Fry proposed a readability graph for predicting readability. The user simply enters the counts of syllables per 100 words and the


number of words per sentence in a graph and then reads the readability grade score directly from it. According to Klare, "Fry's graph has been validated on both primary and secondary materials, and the scores derived from it correlate highly with those from several well-known formulas." 81

Klare believes that it is unnecessary to consider more than two variables in order to predict readability. "A simple 2-variable formula should be sufficient, especially if one of the variables is a word or semantic variable and the other is a sentence or syntactic variable." 82 Researchers have found that word recognition is related to word frequency. One method of determining this is to use a mechanical device called a tachistoscope to measure how long it takes an individual to say or signal a word upon seeing it flashed on a screen. Initially, very brief exposures of the word are flashed by a tachistoscope. Exposures are then increased in some systematic way until the subject is able to say the word correctly. 83 Studies have consistently reported that higher frequency words are recognized faster than lower frequency words. High frequency words tend to be function words that have few semantic features and are easy to process.

81 Klare, op. cit., p. 77.
82 Klare, op. cit., p. 96.
Klare found that 18 of 31 readability formulas he reviewed included some measure of word frequency. These eighteen readability formulas are based on the assumption that comprehension is facilitated by the use of high frequency words which can be processed more rapidly than low frequency words.

This assumption has been shown to be valid particularly when low frequency words which are not familiar to the reader are replaced by familiar words. Carolyn Marks, Marleen Doctorow and M.C. Wittrock conducted a study with two groups of sixth graders that appears to validate the preceding assumption.

Five stories ranging in length from 400 to 1800 words and ranging in difficulty from a grade level of 2.5 to 9.0 were used. The materials were altered to create two sets that differed only in the frequency value of 15% of the words used. The criterion for high frequency was occurrence 50 or more times per 50,000 words. The criterion for low frequency was occurrence less than 50 times but more than one. Frequency ratings were from The American Heritage Word Frequency Book.

The investigators found that the group of students that read the "more meaningful" (high frequency material) material averaged 25% higher on the comprehension measure than the group that received "less meaningful" (low frequency) material.


Research has not yet shown that the replacement of low frequency familiar words with high frequency familiar words aids comprehension. It has shown that comprehension is improved if the reader is able to process a message more rapidly because s/he recognizes the words employed. Failure to recognize high information words will limit comprehension.

In addition to word frequency, most readability formulas consider the variable of syntactic complexity as measured by sentence length. Emmett Betts reviewed twelve readability formulas. She found them based on the following assumption: "long sentences contribute to the difficulty of reading materials," and "simple sentences are easier to understand than complex sentences."86 Shirley Braun elaborates on this idea when she states:

The level of difficulty of reading material for a learner of ESL, is not primarily a function of simpler sentence structure, and wider spacing of new words. More important is the extent of embedding structure of modification and prediction— in other words, the extent to which full clauses have been reduced to verb phrases which consist of timeless gerunds, participles and infinitives, alone or with their own object and complement.86

She bases her observation on the transformational—generative model that suggests that additional transformations are required to combine


two ideas. For example, the following sentence is composed of two kernel structures.

I saw the man who wrote the poem.
I saw the man.
The man wrote the poem.

In combining the two sentences, the second sentence is embedded in the first. For this to happen the noun phrase "the man" must be replaced by the relative pronoun "who". The result of the transformation has a different surface structure.

The issue of sentence length and level of difficulty is not as clear-cut as it first appears. William Smith suggests as a result of his research that "too many choppy" sentences can actually hinder rather than aid readability. Writers that present their ideas in such a way that the reader can comprehend and retain the information efficiently and smoothly use a judicious blend of short and long sentences depending on their estimation of their audience's reading skills. Although highly embedded (longer sentences) are less easily retained and/or comprehended, John Bransford and Jeffrey Franks have shown that native speakers often treat related information presented to them in single declarative sentences as one long complete sentence.

---


Foreign students who do not know how English function words are used to introduce clauses will find longer sentences that employ them difficult to comprehend and retain. The two following sentences illustrate the point that sentence length is not always as important to comprehension as the way in which ideas are connected within a sentence. A foreign student beginning the study of English might not find it very difficult to process the first sentence.

1. The boy is big, and the boy is good, and the boy has a dog.

2. The big, fat boy, who is very good, has a marvelous small brown sheep dog. 90

Even though the second sentence has the same number of words as the first, it will be more difficult for the foreign student to process. The first sentence contains three simple kernel sentences all connected with the coordinate 'and'. The second sentence contains a dependent clause, (who is very good) and an intensifier (very), as well as the kernel (the boy has a dog). The sentence also has six noun modifiers. 91

While recognizing that sentence length does not always equate with structural complexity, it can still be considered a good indication of difficulty. On the basis of her research, Susan Glazer believes that sentence length shows a high correlation with complexity counts. 92

90 Susan Glazer, "Is Sentence Length a Valid Measure of Difficulty in Readability Formulas?" The Reading Teacher, Vol XXVII, No. 5 (February, 1974), p. 466.

91 Ibid., p. 464.

92 Ibid., p. 467.
Klare states: "sentence complexity is probably the real causal factor in difficulty, but length correlates very highly with complexity and is much easier to count."\textsuperscript{93}

The instructor who can assess reading material using one or more readability formulas that include the variables of vocabulary load and sentence length will be taking one step towards selecting appropriate material for her/his students. A consideration of the readability level of materials provided to the student in the various levels of an intensive English language institute will enable each instructor to provide materials that are at the students' instructional level. By using cloze tests and one or more readability formulas, the instructor can accurately assess students' reading ability and can assign reading selections and exercises that foster the acquisition of desirable reading skills.

Vocabulary and Reading instructors can share the information they acquire on each student with the reading specialist in the reading laboratory. Communication between instructors and the reading specialist is essential in a developmental reading program. The reading specialist can utilize information gathered by Vocabulary and Reading instructors on each student's reading strengths and weaknesses when h/she conducts individual conferences with the students.

\textsuperscript{93} Klare, "Assessing Readability", p. 97.
Like the Vocabulary and Reading instructors, the reading specialist can use readability formulas to catalogue the materials in the laboratory. By administering a group informal reading inventory to all new students entering the institute, the reading specialist can assess each student's frustration, instructional and independent reading levels. Having determined students' reading levels, and having determined the readability of the materials in the laboratory, the reading specialist can have students begin reading selections or books that interest them from a catalogue of materials at this reading level. Chapter three details the design of an ESL group Informal Reading Inventory, its use in the administration of the reading laboratory, the procurement of reading materials, the responsibilities of the reading specialist, and the advantages of individualized reading.
CHAPTER THREE

ESL Group Informal Reading Inventory

The design of the ESL Group Informal Reading Inventory is based on a consideration of the most feasible way to assess the reading ability of new students who enter the Oregon State University English Language Institute each term. Between forty and seventy new students enroll each term in the ELI's six levels. They attend the Reading Laboratory for a minimum of two hours each week for ten weeks as part of the two-hundred hours of English language instruction they receive in a term. The Inventory is administered to all new students in small groups on the first day they attend the Reading Laboratory in order to determine their independent reading level. Once this has taken place, they are given a catalogue of materials to read independently.

The Inventory was constructed from materials used to teach reading to students of English as a second language. Selections of 100-200 words were chosen from ESL readers and textbooks being used in the Institute. In accordance with the guidelines presented by Ned Marksheffel for the construction of group informal reading inventories for secondary and college students, ten questions follow each reading selection. Three different kinds of questions are used. Four of

the ten test knowledge of the facts found in the reading. Three check on vocabulary understanding, and three are based upon generalization or inferences that can be deduced by making use of factual knowledge contained in the selection. The various types of questions are dispersed throughout the selection.

In order to facilitate the administration and correction of the inventory, eight of the ten questions are multiple-choice. Students are required to write answers to two of the four factual questions. The inclusion of short written answers provides a check to guessing. In addition it supplies the reading specialist with data on the foreign students' ability to answer a question with a complete written statement.

The reading selections are arranged in sequence according to their readability as measured by a readability formula. Each selection is labeled by reading grade level from one to twelve. The Spache formula is used to order the first three reading selections. Developed by George Spache in 1953 and revised in 1974, it is based on a list of words which occur most frequently in children's tests and on sentence length. The Harris-Jacobson formula was used in selecting a passage at the fourth grade reading level. It was published by Harris in 1975 for materials from pre-primer to grade eight and is based on a percentage of unique or unfamiliar words and average sentence length.

95 George Spache, op. cit.

Selections five through twelve were ordered using the Dale-Chall formula. It was designed for middle school through adult materials and is based on a word list and a factor of average sentence length. These formulas were selected because they are based on extensive research, they are objective and they have been computerized. (See Appendix I for readability formula worksheets.)

The readability of the selections used in the inventory was determined by a computerized analysis made possible by the computerized readability program of Gwyneth Britton and Margaret Lumpkin. The computer program completes the calculations in a few minutes and summarizes, averages, ranks, and displays the data in a meaningful cogent form. The use of the computerized program eliminates the laborious time consuming hand calculations and concomitant inaccuracies.

In preparing 100-200 word selections for computer analysis, the total number of words in the first sample was calculated by counting the number of words from the beginning of the passage and ending the count with the last word in the sentence containing the

---

97 Edgar Dale and Jeanne Chall, op. cit.
100th word. To avoid having selections with two different readability levels a second sample was taken from selections containing more than fifty additional words. This procedure insured that the readability level was consistent throughout the longer selections included in the inventory.

Two forms of the inventory were made to determine the reliability of the instrument and to conduct pre and post assessment of individual students at the beginning and end of each term. (Appendix II) In addition to the readings and questions provided for the student, the inventory provides answer sheets in which each question is labeled as to whether it is a fact (F), vocabulary (V), or inference (I) question. Also included in the inventory are acceptable answers for those questions the student must answer in writing. Information is provided on (1) the readability formula used to assess each reading selection, (2) the readability factors included as variables in the computer program and (3) bibliographic information.

**Using the ESL Group IRI for Student Placement**

The inventory is administered by having the reading specialist in the laboratory read a statement that explains why the students are being requested to read the selections and answer the questions. Students are told that once they begin answering the comprehension questions, they are not permitted to look back at the selection.

The inventory is divided into four sections. Section one includes
reading selections from reading grade level one through three; section two, four through six; section three, seven through nine; section four, ten through twelve. All new students are administered section one. They are given thirty minutes to complete section one. After section one is completed, the reading specialist equates the percentage of correct responses with one of three categories; 90%-100% equates with independent. 70%-89% equates with instructional, less than 69% equates with frustration. If the student obtains scores of 69% or less on two out of the three selections in section one there is no need to administer additional more difficult selections. This student has reached her/his frustration level. If a student has obtained scores of 70% or better on at least two of three selections, s/he is given section two of the inventory to complete within thirty minutes. When the student obtains 69% or less on any two consecutive selections, it should be assumed that s/he has reached her/his frustration level and no additional sections are administered. S/he should be given a catalogue of materials one level below that on which s/he first scored 69% or less to begin reading in the laboratory.

The catalogue of materials given to students requires them to read approximately fifteen stories or articles at a particular level. The catalogues contain: (1) requirements stipulating the number of articles or stories that must be read from each of the reading series, (2) a list of all stories and articles from each series at the same reading level as determined by the 1968 Fry Readability Scale, and

Edward Fry, op. cit.
(3) a summary of each story or article. (See Appendix III for a sample catalogue.) Some of the readings do not have questions that follow them; others do. For students to successfully master the requirements at a particular level, they must read four or five stories or articles and answer the comprehension questions that follow with at least 80% accuracy. If they fail to respond with at least 80% accuracy on any particular reading, they must read an additional story or article from the same series. Students check their own work and establish and record their scores. When they have successfully completed the requirements for a particular level, they are given a new catalogue of reading materials and a new set of requirements for the next higher reading level.

Seven criteria were established for selecting the materials to be included in the catalogue.

1) High interest for young adults studying ESL.
2) Tailored for individual self-instruction.
3) Wide range of topics in various subject areas.
4) Established readability levels.
5) Graded levels of difficulty (1-12)
6) Cost
7) Inclusion of comprehension questions.

The following is a brief description of the series and kits acquired and being used in the Reading Laboratory.
Reading Resources

I. Timed Readings, Jamestown Publishers

This series consists of eight graded books, each containing fifty 400-word selections followed by questions. The books are designed to increase student speed in reading factual material without neglecting comprehension.

The fifty reading selections in each book are all 400 words long and deal with factual information on a variety of subjects. The identical word length facilitates timing by either student or teacher.

The reading selections are graded. Starting at grade six, each book advances one grade level, ending at college level. Readability of the selections was assessed by applying the 1968 Fry Readability Scale using two examples within each selection. The questions accompanying the selection were constructed only to demonstrate that students have read the passage and that they have achieved sufficient comprehension for their reading rate to be valid. In this regard the questions may be considered comprehension checks rather than comprehension tests. A mix of question types is used—five fact recall and five inference questions. An introduction, instructions on faster and better reading, answer key and progress graph are also included in each book.

---

II. Science Readers, Reader's Digest Services, Inc. 102

The Reader's Digest Science Readers is a series of seven books, which presents scientific information in a popular - yet completely thorough and accurate - style to foster immediate interest. The seven books range in reading levels between grades 3 - 6. Virtually all selections, inherently interesting, are supported by a variety of easy, yet stimulating activities. These include simple science experiments, weather forecasting, observations, etc. In addition, many articles are followed by suggestions for further readings. Finally, 16 pages of duplicating masters have been provided for each book, which emphasize the reading skills needed for science, as well as other subjects. The duplicating masters focus on the critical and practical skills needed by the student for the assimilation of information and the application of ideas. All major stories and articles are covered on the dittos. The exercises include comprehension tests, writing assignments, experiments and puzzles.

III. Social Science Readers, Reader's Digest Services, Inc. 103

This series is designed to reinforce reading skills while encouraging students to become interested in their social and


natural environment. The seven books are arranged from level to level in a "strand" or theme approach - with the selections organized under the heading of "Family", "Community", "Nation", and "World". In addition to these strands, each book concentrates on a specific subject area:

- Book 3 United States Urban Life
- Book 4 United States and Europe
- Book 5 United States History
- Book 6 United States and Canada
- Book 7 United States and South and Central America
- Book 8 United States Modern History
- Book 9 The Non-Western World

The range of genre within a book is wide - stories, poems, plays, factual articles, letters, games and even recipes. A number of well-known authors are represented - Langston Hughes, Annette Wynne, Woody Guthrie, John Steinbeck, Lois Lenski, to name a few.

The series contains visual aids and each book has a set of duplicating masters.

IV. Reader's Digest Leaflets, Reader's Digest Services, Inc. 104

The leaflets are designed to give information on worthwhile and interesting topics for adults and secondary school students who have difficulty reading English at secondary and adult readability levels. The leaflets contain sixty articles from the 1969, 1970 and 1971 issues of Reader's Digest, rewritten at lower reading levels. Readability levels range from 4th through 9th
grade as determined through the use of the Dale-Chall and Fry formulas. At least 90 percent of the words in each article are on the Thorndike-Lorge list of the 1,000 most frequently used words. The following chart indicates the number of articles at each level:

<table>
<thead>
<tr>
<th>Reading Level</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Articles</td>
<td>10</td>
<td>10</td>
<td>15</td>
<td>15</td>
<td>7</td>
<td>3</td>
</tr>
</tbody>
</table>

There are six articles in each of the following ten categories: Community Action; Consumers; Earth, Sea, Sky, Space; Education and School; Families; Government; Health; Interesting People; Safety; and Society.

V. Reader's Digest Readings, Reader's Digest Services, Inc.

The series contains six books. Each book includes stories originally printed in Reader's Digest. The basic vocabulary for the books is the 2,000-word list by Thorndike-Lorge. The reading selections cover a wide variety of subjects to capture the interest of both young people and adults: adventure, episodes in history, science and inventions, travel, personal achievement and human interest. The exercises at the end of each reading selection not only test the student's comprehension of the story but also aid in the learning of new words and idioms. Students


106 Thorndike, op. cit.
can check their own work by referring to the Answer Keys in the back of the books.

VI. SRA Multi-Read A, Science Research Associates Limited.

This multilevel reading kit was designed for adult learners who have a minimum of one year of English. It emphasizes functional reading skills such as the reading of documents, forms, and magazines. Each reading selection is followed by multiple choice questions, plus questions on vocabulary. Multi-Read A enables learners to begin at their own levels of proficiency and to move ahead as fast as their learning capacity permits. The kit is a set of highly individualized, self-operating, self evaluating learning materials. Two placement tests, called Starting Level Guides help to determine at what point each individual learner can start to use the kit.

VII. SRA Multi-Read 2, Science Research Associates Limited.

Designed for all students grade 3 and above learning English as a second language, the kit offers a personalized systematic approach to studying English as a second language. The kit contains stories on color coded cards. Also included on the cards are exercises that concentrate on trouble spots of the English


language. The "Learn From Your Mistakes" section helps students note and correct their reading mistakes.

VIII. SRA Reading for Understanding 2, 3, Science Research Associates Limited. 109

The Reading for Understanding program consists of practice materials arranged for a completely individualized program of instruction. Kit 2 is intended for use with students with an average reading level of above 7.0. Each of the kits contains three hundred lesson cards arranged in one hundred levels of comprehension difficulty with three lesson cards at each level. The procedures that students are to follow throughout the program are outlined for them in the Student Record Book. The entire program can be largely student-operated. The students correct their own work, record the results of their practice reading, and plot their own progress on the charts provided. The paragraphs in Reading for Understanding cover a wide range of subject areas, including education, politics, history, science, business, sports, agriculture and current events. There are placement tests to help determine at what point each individual learner can start using the kits.

IX. Miscellaneous Materials

The reading specialist in the ELI Reading Laboratory has established a small library of books acquired at local book sales. These books are checked out to the students for their reading pleasure at home. In addition the reading lab is equipped with a wide variety of popular magazines, dictionaries, newspapers and an encyclopedia. News For You, a high interest - low vocabulary newspaper for people with a low literacy level by Lauback Literacy International, is a particularly popular and useful publication, available in the Reading Laboratory.

The acquisition of an adequate supply of reading materials has been one of the responsibilities of the English Language Institute's Reading Committee.

Responsibilities of the Reading Specialist

Another responsibility has been to delineate the responsibilities of the reading specialist selected to administer the laboratory. The most important duties of the reading specialist were determined to be:

1. Maintain an individualized, self-paced reading program
   A. Help students maintain reading records
   B. Give individual help with word recognition and meaning
   C. Give, score and record results of Group Informal Reading Inventory
   D. Direct prescriptive reading where necessary

2. Maintain adequate Inventory security

---

110 News For You, (Syracuse, New York: Lauback Literacy Int., New Readers Press.)
3. Perform readability tests on all new materials using 1968 Fry Readability Scale
4. Update all catalogues to include new material
5. Keep student level catalogues current
6. Provide each student with a current level catalogue
7. Encourage outside reading for enjoyment
8. Maintain proper records on library materials
9. Keep Reading and Vocabulary instructors informed of student attendance
10. Maintain laboratory in a manner that encourages reading enjoyment
11. Hold individual student conferences to teach whatever skills are currently needed for word analysis, comprehension, effective study, etc.

The Advantages of Individualized Reading

An important aspect of an ESL developmental reading program is the goal of maximizing the amount of reading each student does. For some foreign students, the problem is not only to read English but to develop a reading habit for the first time in their lives.

The availability of the Reading Laboratory makes it possible to capitalize on each student's interests and unique background of experience. The students can develop their reading skills when reading articles in the subject area that interests them. They can progress at their own rate. This eliminates the waste of time that occurs when the most able learners are required to move as slowly as others in the group. Likewise, slow learners will not develop a poor self image

because they trail their classmates in responding to the instructor's questions. Student time is not wasted doing workbook exercises over materials that do not challenge the student. Nor is it wasted while the student has to sit and listen while another student struggles with oral reading the same selection. The reading specialist's main function is to get the students moving in the right direction and provide timely and appropriate feedback.

The individualization of reading instruction in the Reading Laboratory cannot occur unless the reading specialist has information needed to match learners with the materials and skill instruction they are ready to handle at a given time. Chapter four details (1) the procedures used to determine the validity and reliability of an ESL Group Informal Reading Inventory in serving this function, and (2) suggests further research to ascertain the effectiveness of individualized reading instruction in an ESL developmental reading program.
CHAPTER FOUR

Inventory Reliability and Validity

It is important to establish the reliability and validity of the ESL Group Informal Reading Inventory (IRI) if it is to be used as an instrument to assess students' reading ability and as a placement tool in the Reading Laboratory. To do this, two questions must be considered: (1) How well does the Inventory measure? and (2) What precisely does the Inventory measure? A determination of the Inventory's reliability is relevant to an examination of its validity simply because an instrument cannot measure anything well unless it measures consistently.

To have confidence in the Inventory as a measuring instrument, the reading specialist needs to be assured, for example, that approximately the same results would be obtained if two parallel forms of the Inventory were given to the same group of students. In addition, the reading specialist needs to know if the same results would be obtained if two or more competent scorers scored the Inventory independently.

Unreliability or inconsistency in a measuring instrument such as the ESL Group IRI stems from two sources. The first relates to the physical and psychological state of the individual students being evaluated. The second concerns the Inventory itself. Such variable factors as conditions of testing, time limits, and directions can be fairly closely controlled if clear procedures for the administration of the Inventory are provided. Conditions of the individual such as fatigue, motivation, illness and similar temporary factors are much
harder to control.

The principal factors in the Inventory itself which may affect the reliability of the instrument are the quality of the individual questions and the length of the Inventory. Ambiguous questions will generally lower reliability. The avoidance of ambiguity in Inventory questions would contribute materially to the attainment of a high degree of reliability.

To avoid the inclusion of ambiguous questions in the ESL Group IRI, the instrument was pilot tested using two classes of students in the Oregon State University School of Education. Twenty-five undergraduate students in the course Methods in Reading and twenty-three graduate students in the course College and Adult Reading were given two forms of the Inventory to complete under closely supervised conditions. Each form of the Inventory consisted of twelve selections from reading grade level one to twelve as measured by using the Spache (selections 1-3), Harris-Jacobson (selections 4), and Dale-Chall (selections 5-12) readability formulas. Selections from forms A and B were paired so that the students completed two selections at the first readability level before proceeding to the next two passages at a higher readability level. Students in the undergraduate class were given two and a half hours to complete the Inventory during the second week of classes, spring term 1981. The students were encouraged to circle any questions in the Inventory they believed to be ambiguous. Student responses were solicited to revise and improve the directions and administration of the Inventory. The Inventory was corrected and a
list of student errors compiled. Any questions missed by more than 20% of the students were reviewed. Ambiguous questions were rewritten. The revised Inventory was administered to a class of graduate students a week later to insure that the rewritten questions were not ambiguous.

Pilot testing the Inventory also provided data on the variety of possible correct answers to those questions requiring written responses. These data were included on the answer sheets of the Teacher's Edition of the Inventory. This enhanced scorer reliability by reducing the need for those scoring the Inventory to be judgmental.

Reliability of instruments such as the ESL Group IRI is best determined by first administering two equivalent forms to individuals and then calculating a Pearson Product Moment Correlation Coefficient (the symbol of which is r) from the two sets of scores. This method of correlation of equivalent forms eliminates or reduces to a minimum the practice effect which is present when reliability is calculated by administering a single form of the Inventory twice. The two forms of the Inventory are virtually two equal halves of the same instrument. Equivalent forms are the same in degree and range of difficulty; they cover the same areas of knowledge and skill, even though they use different items or questions. The degree of consistency of measurement of the two forms of the Inventory can be judged by the extent to which students tend to hold the same relative positions in the ranking of their Inventory scores on both forms. Conversely, a lack of reliability is shown by the degree to which
individuals do not hold the same or similar relative positions in a
group when measured by the two equivalent forms.

The specific procedure followed in assessing the reliability of
the ESL Group IRI was based on a consideration of three factors. First,
forms A and B of the Inventory were constructed to be equivalent in
length, difficulty, time limits, format, and all other such aspects
in accordance with the procedures enumerated by Robert Thorndike. Second, it was recognized that it was inappropriate and impractical in
terms of time constraints to administer both forms of the Inventory in
their entirety to the students. Third, it was felt to be inappropriate
to administer the Inventory to those students just beginning to learn
how to read English as a second language. (It is a very frustrating
experience for foreign students at the primary stage of decoding
letters and words to try to read passages at a sixth grade reading
level.)

After taking into consideration these factors, a decision was
made to administer only the first six selections (reading grade levels
one through six) of Forms A and B to students in levels three through
six enrolled in the English Language Institute at Oregon State Univer-
sity and in the American English Institute at the University of Oregon.
The two forms of the Inventory were integrated so that selection
one of Form B immediately followed that of Form A. The two forms were
administered to 121 students in their two hour Vocabulary and Reading

---

112 Robert L. Thorndike, *Educational Measurement*, (Washington,
classes. They were permitted one hour and forty minutes to complete the twelve selections. The instructors administering the Inventory were given ten minutes to read the directions, distribute and collect the Inventories.

The Inventories were corrected by two instructors independently using the Teacher's Edition for reference to insure that there were no scoring errors in the correction of either the multiple-choice or written answers. Student scores were then tabulated for each form and recorded on the student record sheet. In addition to student scores, the means, standard deviations and histograms were computed for each form. (Appendix IV).

The machine formula for computing the Pearson r from the raw scores was used to facilitate computer analysis.

\[
\begin{align*}
  r &= \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2][N \sum Y^2 - (\sum Y)^2]}} \\
  X &= \text{form A scores} \\
  Y &= \text{form B scores}
\end{align*}
\]

Figure 4.1 Machine formula for Pearson r

The coefficient of correlation between the two forms of the ESL Group IRI was calculated to be:

\begin{verbatim}
**********************************************************************************************************
*                                               *
*                 r = .87                            *
*                                               *
**********************************************************************************************************
\end{verbatim}
Perhaps the easiest way of appreciating the value of the correlation coefficient in terms of the Inventory's reliability is to investigate the scattergram of the given relationship. The scatter diagram (Appendix IV) illustrates how score pairs for each student taking the Inventory can be graphically plotted. The direction of the closed oval curve from lower left to upper right indicates that the $r$ is positive. A perfect positive relationship would be reflected by an $r$ of +1.00. A perfect negative relationship by an $r$ of -1.00, and a lack of any relationship reflected by an $r$ of zero. The shape of the oval itself indicates the strength of the relationship. The more closely the oval resembles a straight line, the closer $r$ approaches a perfect relationship of +1.00. The obtained coefficient of .87 indicates a high degree of consistency of measurement of equivalent scores based on parallel forms of the Inventory administered simultaneously without interrupting practice or instruction. While the coefficient is slightly lower than the 9.0 minimum suggested for the best standardized achievement tests, it must be remembered that only one-half of the Inventory was administered. The Spearman-Brown Prophecy Formula can be used to predict the reliability of the entire Inventory (selections 1-12.) The Spearman-Brown Prophecy formula is:

$$r_n = \frac{nr}{1+(n-1)r}$$

Where $r =$ known reliability coefficient
Where $n =$ number of times the Inventory whose reliability to be estimated is longer than the one whose reliability is known.
Where $r_n =$ estimated reliability coefficient for Inventory of increased length.

Figure 4.2  Spearman-Brown Prophecy Formula
The predicted reliability of the entire Inventory would be:

\[ r_n = .93 \]

David P. Harris believes that it is probably safe to say that any standardized test designed to make individual diagnosis (that is, to separate one examinee from another) should have a reliability quotient of at least .90 and preferably higher. The predicted reliability of the Inventory suggests that the instrument is reliable in the evidence it provides regarding foreign student reading proficiency.

A further step that is useful in interpreting the reliability of the Inventory is to calculate a standard error of measurement. Few if any forms of educational measurement are "perfectly" reliable. An obtained score on any test consists of the "true" score plus a certain amount of test error. In other words if it were possible to administer the same test repeatedly to the same individual without changes occurring in the individual, the scores would be different. The mean of all of them would serve as an estimate of the individual's true score, and the standard deviation of these scores about the true score would be referred to as the standard error of measurement, the symbol of which is \( S_e \). It is not reasonable to readminister the same

---

test or Inventory to the same individuals many times. It is possible however, to use the following formula to estimate the standard error of measurement:

\[ S_e = s \sqrt{1-r_{tt}} \]

Where \( S_e \) = standard error of measurement

Where \( s \) = the average standard deviation of the two forms

Where \( r_{tt} \) = reliability of the test

Figure 4.3 Standard Error of Measurement

The standard error of measurement for the first six selections of the Inventory measured:

********************************************
*                          *
*  \( S_e = 2.72 \)          *
*                          *
********************************************

Having obtained the standard error of measurement it is possible to set up a confidence interval. "A confidence interval may be defined as a range of obtained scores that will, when it is applied to one obtained score after another, include the individual's true score a designated percentage of the times it is so applied."\(^{114}\) The confidence interval is determined by multiplying the standard error of measurement by a constant chosen to yield an interval that includes the true score the desired percentage of times it is applied.\(^{115}\) Figure 4.4

---

\(^{114}\) Frederick B. Davis, Educational Measurements and the Interpretation, (Belmont, Cal.; Wadsworth Publishing Co., 1964), p. 82.

\(^{115}\) Ibid.
gives the multipliers for establishing confidence intervals that include the true score with five different frequencies out of every 100 applications and the resulting confidence range given a standard error of measurement of 2.72.

<table>
<thead>
<tr>
<th>Confidence Interval Desired</th>
<th>Multiplier (to two decimal places)</th>
<th>Confidence Range given $S_e$ of 2.72</th>
</tr>
</thead>
<tbody>
<tr>
<td>99 per cent</td>
<td>5.15</td>
<td>14.21</td>
</tr>
<tr>
<td>95 per cent</td>
<td>3.92</td>
<td>10.47</td>
</tr>
<tr>
<td>90 per cent</td>
<td>3.29</td>
<td>9.08</td>
</tr>
<tr>
<td>85 per cent</td>
<td>2.88</td>
<td>7.94</td>
</tr>
<tr>
<td>68 per cent</td>
<td>2.00</td>
<td>5.52</td>
</tr>
</tbody>
</table>

Figure 4.4 Multipliers used to set up confidence intervals at selected levels

Frederick B. Davis suggests that for most practical purposes in education the 85 per cent confidence interval is satisfactory. The reading specialist using an 85 per cent confidence interval will be correct 85 out of every 100 decisions s/he makes that a student's true Inventory score lies within approximately four points positive or negative from her/his obtained score.

Instrument Validity

In addition to reliability, one of the primary requisites of good measurement is validity. The term validity is used in reference to the appropriateness of a test or inventory in measuring what it purports to

116 Each multiplier in Figure 4.5 represents simply the length of a confidence interval expressed in standard deviations. Centered around the mean of normal distribution, each one of these includes the designated percentage of the scores in the distribution.
measure. The validity of an instrument such as the ESL Group IRI is always specific to the purpose for which it is used. An inventory will not have validity in general, but only in terms of its use for specific purposes and with specific groups. Consequently, the validity of the ESL Group IRI can be inferred on the basis of how adequately it serves to measure the reading comprehension of English as a second or foreign language of foreign students enrolled in intensive ESL programs such as the English Language Institute at Oregon State University.

Establishing the validity of the Inventory is a difficult task. For this reason the validity can best be confirmed by analysing the Inventory from two different perspectives. One perspective focuses on content validity. The other concerns empirical criterion-related validity.

Content Validity

Content validity is evaluated by determining how well the content of the Inventory samples the subject matter about which conclusions are to be drawn. The specific purpose of the Inventory dictates the subject matter of the passages selected. The Inventory is designed to match each student with ESL reading materials at her/his instructional reading level in order to facilitate the acquisition of reading skills. The selections were chosen from well-known ESL readers and textbooks. The excerpts are clear and meaningful when taken out of context, and do not require outside subject-matter information to be fully comprehended. Nor does the subject matter give a marked
advantage to students in particular fields. On the other hand, the passages do not deal with information that is universally known, for in this case the students may be able to answer the questions correctly without paying much attention to the passages. The Inventory includes a variety of paragraphs which deal chronologically with a series of events, compare or contrast two or more people, objects or events and present an author's opinion on a familiar subject. 117

In addition to establishing the validity of the content of the reading selections, it is important to check the validity of the content of the comprehension questions. Gwyneth Britton believes that "question variety is essential when evaluating a student's reading performance since comprehension skills are many faceted and need to be assessed."118 The classification of questions as vocabulary (V), inference (I), and fact (F) is based on an analysis of the abilities needed in reading a second or foreign language.

The lexical content of a passage must be understood in order for reading comprehension to occur. Vocabulary questions measure the ability to understand the meanings and uses of words. The technique selected to assess students' understanding of vocabulary follows the

117  Harris, op. cit., p. 61.

recommendation of Robert Lado. He believes that the multiple-choice type of item has probably achieved its most spectacular success in testing vocabulary. The item consists of a lead or stem containing the problem, one alternative representing the best response, and two to five alternatives representing distractors or decoys to lure the student who does not recognize the best answer. The following example illustrates the classic format of multiple-choice vocabulary questions.

Example: What is the meaning of sinister?
A) happy
B) sad
C) evil

Since in this style the lead is the same in every item and does not contribute anything to the context, the test word is often presented alone as the lead. This technique is utilized in the Inventory to assess students' understanding of vocabulary. To eliminate any possible misunderstanding, the directions to the Inventory inform the student that s/he is to select a synonym for the lead. Furthermore, an attempt was made to select an alternative representing the best response in terms of the context of the reading selection.

120 Harris, op. cit., pp. 54-56.
In addition, the formulation of the Inventory's vocabulary items was based on five principles suggested by David P. Harris. 120

1) The definition is expressed in simple words readily comprehensible to all students.

2) All the alternatives are on approximately the same level of difficulty.

3) Whenever possible, all choices are related to the same general area or kind of activity.

4) The choices in each item are of approximately the same length.

4) Items are kept free of extraneous spelling problems. (No attempt is made to mislead students with distractors that look or sound like possible right answers.)

Two basic types of multiple-choice questions are used to assess the students' understanding of the main points or facts of the passage and their ability to make inferences. In some items, the options complete a grammatical sentence begun in the item stem. In others, the options are either words, phrases or sentences that answer the questions in the item stem.

In all items, the questions can be answered only by reading and understanding the passage, previous or specific knowledge of the subject matter is not necessary. The vocabulary and syntax of the items is as simple as possible so that the real problem is the interpretation

120 Harris, op. cit., pp. 54-56.
of the passage, not of the questions that are asked about it. 121

Furthermore, insofar as possible, the stem or lead of the item establishes the problem - that is makes clear what kind of information is being asked for. 122

In addition to the eight multiple-choice type questions, each selection of the inventory contains two items that require students to respond with short written answers to fact questions. This type of question encourages the students to draw on their understanding of the passage to produce in their own words an answer in writing. The guessing factor is greatly reduced or eliminated in this type of question.

The Inventory assesses the student's reading skills of recall and recognition. When a student writes out an answer, s/he is utilizing her/his power of recall. S/he must actively remember the necessary facts or structures before formulating the response. On the multiple choice items, s/he might not remember the right answer, but when s/he sees it presented in the Inventory s/he passively recognizes it as being appropriate. 123

121 To insure that the readability level of the questions was equal to or lower than the readability of the reading selection, the questions were written so that the average sentence length was less than the average sentence length of the passage. High frequency familiar words were used as synonyms and distractors.

122 Harris, op. cit., pp. 62-63.

The variety and construction of the Inventory's reading passages and items suggests that the Inventory provides a relevant enough sample of foreign students' reading comprehension in ESL to allow the reading specialist to make preliminary judgements about the appropriate level of materials for them to begin reading. Content validity can thus be judged as acceptable.

Robert Thorndike places the question of content validity into perspective when he states:

One cannot hope to perfect items to the point where a hypercritical reviewer cannot quibble over conceivable ambiguities or exceptions to the keyed answers. Test items (whether essay or objective) are especially hard to write because they must be so brief. . . . Technical errors and ambiguities are not likely to impair test validity seriously unless they are sufficiently numerous to make a difference of several points in a person's score or unless items are to be interpreted one at a time. 124

**Empirical Validity**

In addition to an examination of the Inventory's content validity, it is useful to assess the empirical validity of the instrument. To do this, the Inventory's scores are correlated with scores on a criterion measure, the Test of English as a Foreign Language (TOEFL) Vocabulary and Reading section. This procedure was based on the technique of establishing instrument empirical validity by the

correlation of instrument scores with scores from a criterion measure of established validity taken at or near the same time. Empirical validity is reported by giving a coefficient of correlation between the scores of the instrument and the criterion.

In order to use this procedure, it is important to: (1) set forth clearly the basis for judgement of the criterion's validity, (2) determine the adequacy of the criterion, and (3) detail the validity and reliability of the criterion itself.

Most universities in the United States now rely on one of three standardized English language proficiency tests in determining the admission of foreign students to their undergraduate and graduate programs; The Test of English as a Foreign Language (TOEFL), The Michigan Test of English Language Proficiency (MTELP) and the Georgetown University American Language Institute Proficiency Test (ALIGU). Of the three the TOEFL is the most frequently used. Oregon State University utilizes the TOEFL in screening foreign students for admission. Admission is restricted to undergraduates who score at least 500 on the test. Some graduate departments require a score of at least 550 for admission.

First developed by the Educational Testing Service (ETS) in 1963, the TOEFL is designed to assess the English language skills of persons whose native language is not English and who are applicants for admission to American universities and colleges. There are three subtests: Listening Comprehension, Structure and Written Expression, and Reading Comprehension and Vocabulary.
The Reading Comprehension and Vocabulary section tests knowledge of the written language. "The questions measure the ability to understand meanings and uses of words as well as the ability to understand a variety of reading materials." The reading selections included in the test were chosen so as not to give any advantage to individuals in one particular field of study.

The section is divided into two parts. The vocabulary part contains sentences in which one word or phrase is underlined. Each sentence is followed by a choice of one word or phrase that would best preserve the meaning of the original sentence if it were substituted for the underlined word(s). Although some of the choices may include words or phrases that would have the same meaning as the underlined segment if they were placed in different sentences, only one of the four choices will fit the sentence given. The underlined words, with a balance between words of different origins—e.g., Romance and Anglo-Saxon—include various parts of speech.

The reading comprehension part of the section is the same general type of test long used to measure the reading ability of native speakers of English. The examinee must read a variety of short passages and answer multiple-choice questions about the meaning of the passage. Although some questions are based on inferences or analogies, most are primarily concerned with the main and secondary ideas in the passages. The questions can...


126 Ibid., p. 8.
be answered only by reading and understanding the passage; previous or specific knowledge of the subject matter involved is not necessary.  

The Reading Comprehension and Vocabulary section contains sixty questions. Students are given forty-five minutes to complete the section. ETS has calculated that approximately 80 percent of those taking the test are able to answer nearly every question in the section. ETS believes that speed is not an important factor in TOEFL scores.

The level of difficulty of the TOEFL is determined not by the use of readability formulas but by the percent correct.

Percent correct, as a measure of difficulty, depends both on the inherent difficulty of the test and on the ability level of the group of examinees that took the test. If the identical test were given to two groups of different ability, the percent correct would differ inversely with the ability level. Both factors are of concern in determining whether the test difficulty is properly matched to the ability level of the examinees. However, for the scaled scores that are reported to examinees and institutions, the effect of the differences in difficulty level among the various forms of the test is removed or adjusted for, by the statistical process called score equating.

The validity of the TOEFL is reflected in three types of studies: concurrent validity studies, predictive studies and construct validity. Extensive research on the validity of the TOEFL has been conducted and is detailed in the TOEFL Test and Score Manual. The following is a summary of the more important findings.

---

127 Ibid.,
Concurrent validity has been established by correlating the TOEFL with other English language proficiency tests. A coefficient of .87 was calculated when the TOEFL was correlated with the University of California English Language Proficiency Test used for placement of foreign students at that campus. An even higher coefficient of .89 was calculated when the Michigan Test of English Language Proficiency and the TOEFL were correlated. A somewhat lower coefficient was calculated when the TOEFL was correlated with the Georgetown University American Language Institute English Language Proficiency Test. Another study at Georgetown University found a correlation of .73 to exist between the TOEFL and teacher ratings of 115 students. Four other institutes reported similar correlations in parallel studies.

When the TOEFL was correlated with ratings of actual writing, a coefficient of .78 was obtained. The TOEFL has been correlated with a number of alternate criterion measures, including writing samples, cloze tests, oral interviews and sentence-combining exercises. "In general, the results confirmed a close relationship between the three sections of the TOEFL and the skills they were intended to measure."\(^\text{130}\)

The TOEFL has been correlated with other widely used aptitude tests designed to assess reading comprehension and verbal understanding. Scores of foreign students taking both the Graduate Record Examination (GRE) section on Verbal Understanding and the TOEFL section on Reading Comprehension and Vocabulary were correlated and a coefficient of

\(^\text{130}\) Ibid., p. 26.
.623 was determined. A similar coefficient of .681 was calculated when the Standard Achievement Test (SAT) Verbal section and the TOEFL Reading Comprehension and Vocabulary were correlated. Likewise, when the Graduate Management Admission Test (GMAT) Verbal section was correlated with the TOEFL Reading Comprehension and Vocabulary section, a coefficient of .69 was obtained.

Studies showing the validity of the TOEFL as a predictor of later criterion performance, typically grade point average, produce much lower correlations than do the concurrent validity studies. A very low coefficient of .17 was calculated when the TOEFL was correlated with grade point averages for foreign students at the University of California. A similar study at the University of Washington resulted in a coefficient of .26. The correlations are so low as to suggest that the test may be of little value as a predictor of grade achievement.131

In studies to determine the construct validity of the TOEFL, research was conducted to compare the performance of native and non-native speakers on the test. Evidence confirmed that the test was inappropriately easy for American university freshman. It was found that their scores were not only high but homogeneously high relative to those of the foreign students, that their score distributions were highly negatively skewed, and that a high proportion of them earned maximum or near-maximum scores on the test.

The reliability of the entire TOEFL was computed using the Kuder-Richardson formula. The reliability coefficient was .94 and the standard error of measurement was 14.6. For the Reading Comprehension and Vocabulary section the reliability coefficient was .89 and the standard error of measurement was 2.5. 132

While the TOEFL has been shown to be a valid and reliable instrument for assessing the overall English language proficiency of foreign applicants seeking admission to American universities, diagnostic application of the test is clearly limited. Since no information is provided on the readability of the test, it is difficult to equate students' scores with reading grade levels. This fact does not however limit the adequacy of the Reading Comprehension and Vocabulary section of the test as a criterion in the present study given the section's high degree of validity and reliability.

The empirical validity of the ESL Group IRI was determined by calculating the Pearson Product Moment Coefficient of Correlation between student scores on the first half of the Inventory and their scores on the Reading Comprehension and Vocabulary section of the TOEFL.

Of the 121 students who completed the first six selections of the two forms of the Inventory only 82 took the TOEFL at the University of Oregon and at Oregon State University. The Pearson Product Moment Coefficient was correlated using the formula for machine scoring. The

132 TOEFL Test and Score Manual, op. cit., p. 28.
validity coefficient for forms A and B were

<table>
<thead>
<tr>
<th>Form</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>.62</td>
</tr>
<tr>
<td>B</td>
<td>.60</td>
</tr>
</tbody>
</table>

One way to interpret the validity coefficient is to refer to a correlation value table. The standards shown below can be used for interpreting the strength of the linear relationship for the r value.

<table>
<thead>
<tr>
<th>CORRELATION VALUE</th>
<th>APPROXIMATE DESCRIPTIVE MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than .20</td>
<td>slight, almost negligible relationship</td>
</tr>
<tr>
<td>.20 - .40</td>
<td>low correlation; definite but small relationship</td>
</tr>
<tr>
<td>.40 - .70</td>
<td>moderate correlation; substantial relationship</td>
</tr>
<tr>
<td>.70 - .90</td>
<td>high correlation; marked relationship</td>
</tr>
<tr>
<td>.90 - 1.00</td>
<td>very high correlation; very dependable</td>
</tr>
</tbody>
</table>

Figure 4. Correlation Values Table 133

On the basis of the preceding description, there appears to exist a substantial relationship between TOEFL Reading Comprehension and Vocabulary section scores and Inventory scores. Another way to interpret the size of the validity coefficient is to compare it with the coefficients of other instruments correlated with the TOEFL Reading Comprehension and Vocabulary section. The validity coefficient for the

Inventory is very similar to the coefficients calculated from scores on the TOEFL Reading Comprehension and Vocabulary section and scores on the GRE (.623) and the SAT (.681) Verbal sections. On the basis of these considerations, it can be concluded that the Inventory is valid for the purposes for which it is used.

An examination of the scattergrams for the scores on the two forms of the Inventory and the scores on the TOEFL Reading Comprehension and Vocabulary section permits speculation regarding the factors that limited the size of the validity coefficient. (See Appendix V for scattergrams, means and standard deviations.) It appears that the scores of students who did well on the Inventory and TOEFL Reading Comprehension and Vocabulary section are more highly correlated than the scores of students who did not do well on the two instruments. The evidence suggests that students not proficient in reading may find the TOEFL Reading Comprehension and Vocabulary section frustrating. Their frustration may cause them to be less motivated or to guess more frequently. Likewise, the limited number of Inventory selections might not have discriminated between students proficient in reading English. Advanced level students might have found the first six selections at reading grade levels 1 - 6 very easy to read.

The logical step after computing a validity coefficient is to set up the regression equation for the data, so that predictions can be made when future individuals take the Inventory. This procedure is useful because it enables students to gauge their performance in reading in terms of a criterion that is relevant to their educational
goals. For example a student with low scores on the Inventory will be able to recognize that s/he will have to focus on reading intensively if s/he wishes to pass the TOEFL and begin her/his academic program. In this sense, regression analysis provides data that can be used by the reading specialist to motivate students.

For individual prediction of a TOEFL Reading Comprehension and Vocabulary section score from a score on the first six selections of Form A of the Inventory, a regression line is first determined. The regression line can be stated in the following equation.

\[ Y' = r_{yx} \frac{S_y}{S_x} (X - \bar{X}) + \bar{Y} \]

where
- \( Y' \) = predicted value of \( Y \) (TOEFL Reading Comprehension and Vocabulary section score)
- \( r_{yx} \) = validity coefficient, correlation between \( y \) and \( x \)
- \( S_y \) = standard deviation of predicted variable
- \( S_x \) = standard deviation of predictor variable
- \( \bar{Y} \) = mean of predicted variable
- \( \bar{X} \) = mean of predictor
- \( X \) = obtained score on the predictor variable (Inventory Score)

Figure 4.5 Regression line equation

By substituting obtained values in the above equation, a more usable one is obtained.

\[ Y' = .53 (X - 48.07) + 43.28 \]

For example, when \( X \) is found to be 50, the predicted value of \( Y \) is 44.31.
Because the validity of the Inventory is less than +1.00, it is necessary to attach a probability statement to the predictions. This can be done by using a statistic called the standard error of estimate, the equation of which is:

\[ s_{yx} = s_y \sqrt{1 - r_{xy}} \]

where

- \( s_{yx} \) = standard error of estimate in predicting \( Y \) from \( X \)
- \( s_y \) = standard deviation of the predicted variable
- \( r_{xy} \) = the validity coefficient

Figure 4.6 Standard error of estimate

The standard error of the estimate was calculated to be 4.88. For any given \( X \) score on the Inventory, the chances would be 2 out of 3 that the predicted score \( Y \) would be equal to the \( Y \) score obtained from the regression equation plus or minus one standard error of estimate. From the example given where \( X = 50, Y' = 44.31 \), the chances are 2 out of 3 that the predicted \( Y \) score would fall within the band 49.19 and 39.50. Thus the standard error of estimate determines a band on each side of the regression line between which two thirds of the predicted scores would be expected to fall.

Future Research

The development of two forms of a valid and reliable ESL Group IRI is the first step in an evaluation of the effectiveness of the Oregon State University English Language Institute's Reading Laboratory. The purpose of such research would be to answer the question:
Does student attendance at the Reading Laboratory hasten the acquisition of reading skills? The availability of two reliable forms of the Inventory makes it possible to administer pre and post tests to an experimental and a control group to measure the improvement of student reading skills. Further research also needs to focus on the application of the cloze procedure and readability formulas to the reading materials currently being used in Vocabulary and Reading classes in intensive ESL programs. The recent development of computerized readability programs greatly increases the feasibility of analyzing large numbers of reading selections rapidly. The resulting data could be used in conjunction with the data obtained from the Inventory to match each student with reading material at her/his instructional level. This method of analysis should enhance the textbook evaluation and selection procedure. Finally, research needs to be undertaken to determine the reading grade level of the Reading Comprehension and Vocabulary section of the TOEFL. It would be beneficial for both students and instructors to know how difficult the TOEFL is in terms of the variables utilized in readability formulas.
BIBLIOGRAPHY

Books


Meritt, John (ed.), New Horizons in Reading. Proceedings Fifth International Reading Association Congress on Reading, Newark, Del.: International Reading Association, 1976.


Articles and Periodicals


Other Sources


Parker, Mickey. "ELI Reading Laboratory Catalogue." English Language Institute, Oregon State University, 1980.


Appendix I

**Harris-Jacobson Readability**

**Formula Worksheet**

Harris-Jacobson have developed two formulas, one recommended for use with primary-grade materials and the other for materials intended for grades 4-6.

<table>
<thead>
<tr>
<th>Formula 1 Worksheet</th>
<th>Formula 2 Worksheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. No. of words in sample</td>
<td>A. No. of words in sample</td>
</tr>
<tr>
<td>B. No. of words not in list</td>
<td>B. No. of words not in list</td>
</tr>
<tr>
<td>C. No. of sentences</td>
<td>C. No. of sentences</td>
</tr>
</tbody>
</table>

**Step**

1. \( V_1 = B + A \times 100 \)
2. \( V_2 = A + C \)
3. \( V_1 \times 0.094 \)
4. \( V_2 \times 0.168 \)
5. Add Steps 3 and 4 and 0.502 = Predicted Score
6. Readability level from Table A

**Step**

1. \( V_1 = B + A \times 100 \)
2. \( V_2 = A + C \)
3. \( V_1 \times 0.140 \)
4. \( V_2 \times 0.153 \)
5. Add Steps 3 and 4 and 0.560 = Predicted Score
6. Readability level from Table

---


135 Ibid., The Harris-Jacobson Short Readability Word List is compiled on pages 720-729.
### TABLE A

Readability levels corresponding to predicted scores on two H-J Formulas

<table>
<thead>
<tr>
<th>Readability Level</th>
<th>Predicted Score Formula 1</th>
<th>Predicted Score Formula 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-primer</td>
<td>1.0 -1.53</td>
<td>1.0 -1.63</td>
</tr>
<tr>
<td>Primer</td>
<td>1.54-1.74</td>
<td>1.64-1.83</td>
</tr>
<tr>
<td>First reader</td>
<td>1.75-1.98</td>
<td>1.84-2.07</td>
</tr>
<tr>
<td>Low second</td>
<td>1.99-2.37</td>
<td>2.08-2.42</td>
</tr>
<tr>
<td>High second</td>
<td>2.38-2.84</td>
<td>2.43-2.98</td>
</tr>
<tr>
<td>Low third</td>
<td>2.85-3.30</td>
<td>2.99-3.70</td>
</tr>
<tr>
<td>High third</td>
<td>3.31-3.74</td>
<td>3.71-4.21</td>
</tr>
<tr>
<td>Fourth</td>
<td>3.75 and up</td>
<td>4.22-4.80</td>
</tr>
<tr>
<td>Fifth</td>
<td></td>
<td>4.81-5.28</td>
</tr>
<tr>
<td>Sixth</td>
<td></td>
<td>5.29-4.67</td>
</tr>
<tr>
<td>Seventh</td>
<td></td>
<td>5.68-6.05*</td>
</tr>
<tr>
<td>Eighth and up</td>
<td></td>
<td>6.06 and up</td>
</tr>
</tbody>
</table>

Since the two formulas overlap, a problem arises when Formula 1 is used and the obtained readability is above third grade. In such cases Harris-Jacobson recommend that Formula 2 be computed and its score used, disregarding the Formula 1 score. Similarly if Formula 2 is used and the obtained level is below fourth grade, they recommend that Formula 1 be computed and its results used.

**Spache Readability Formula For Grades 1-3 Worksheet**

1. Total number words
2. Number of sentences
3. Number of words not on Revised Word List
4. Average sentence length (divide 1 by 2)
5. Multiply 4 by .121
6. Multiply 3 by .082

---

136 George Space, *Good Reading for Poor Readers*, (Champaign, Ill.: Garrard, 1974), pp. 196-204.
7. Add constant .659
8. Estimated grade level (Add 5, 6, and 7)

The Dale-Chall Readability Formula
Worksheet

1. Number of words in sample
2. Number of sentences in the sample
3. Number of words not on Dale List
4. Average sentence length (divide 1 by 2)
5. Dale score (divide 3 by 1, multiply by 100)
6. Multiply average sentence length (4) by .0496
7. Multiply Dale score (5) by .1579
8. Constant 3.6365
9. Formula raw score (add 6, 7, and 8)

Correction Table B

<table>
<thead>
<tr>
<th>Formula Raw Score</th>
<th>Corrected Grade-Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.9 and below</td>
<td>4th grade and below</td>
</tr>
<tr>
<td>5.0 to 5.9</td>
<td>5-6th grade</td>
</tr>
<tr>
<td>6.0 to 6.9</td>
<td>7-8th grade</td>
</tr>
<tr>
<td>7.0 to 7.9</td>
<td>9-10th grade</td>
</tr>
<tr>
<td>8.0 to 8.9</td>
<td>11-12th grade</td>
</tr>
<tr>
<td>9.0 to 9.9</td>
<td>13-15th grade (college)</td>
</tr>
<tr>
<td>10.0 and above</td>
<td>16 + (college graduate)</td>
</tr>
</tbody>
</table>


139 Ibid., The Dale List is compiled on pages 19-28.
Appendix II

AN ESL GROUP INFORMAL READING INVENTORY

Meritt W. Stark Jr.
INTRODUCTION

Instructors and administrators in English as a second language programs, at community colleges and universities in the United States and abroad, have struggled with the responsibility of placing students in classes with other students at similar levels of reading proficiency and selecting materials that are at the students' appropriate reading level so that fruitful instruction can take place. The ESL Group Informal Reading Inventory is an instrument that can enhance the effectiveness of the placement procedure. It can be appropriately used for the assessment of students at beginning, intermediate or advanced levels of proficiency in reading English. The assessment takes place while students read stories of high interest and can be beneficially employed either during placement testing or at the beginning of vocabulary and reading classes for individual or group evaluation.
ESL Group Informal Reading Inventory

DEFINITION of the ESL Group Informal Reading Inventory

The ESL Group Informal Reading Inventory is a diagnostic instrument to be used in assessing the reading ability of those students for whom English is a second or foreign language. The instrument provides the reading specialist or ESL instructor with an opportunity to determine how well a student can silently read passages of varying degrees of sophistication.

The ESL Group Informal Reading Inventory has two forms. Each form consists of twelve reading selections arranged according to their reading grade level. All selections were chosen from recently published ESL readers and texts. They focus on topics of high interest for young adults and college students.

The student reads a 100-200 word selection and then answers comprehension questions designed to evaluate her/his understanding of facts, ability to draw inferences and knowledge of word meaning.

The instrument can be administered to an individual or to a group of students. The answer sheets contain a variety of multiple-choice and short written questions. Data provided by the Inventory provides the reading specialist or instructor with information to assess the reading grade level of materials the student can comprehend with varying degrees of difficulty.
DEFINITION

Three classification levels of reading are identified as follows:

1) Independent Level. At the independent level the student can handle the material independently from the classroom or the teacher. The student's range of scores on the Inventory is between 90% and 100%.

2) Instructional Level. When functioning on the instructional level the student can cope with the material with guidance or assistance from an instructor or reading specialist. The reading lesson should be taught at this level. The student's range of scores on the Inventory would be between 70% and 80%.

3) Frustration Level. At the frustration level the student cannot understand the material. Material rated in this score range would be much too challenging. The student's range of scores on the Inventory would be less than 69%.

Comprehension Questions:

The Inventory contains three types of questions to assess student comprehension skills: factual, inference and vocabulary. Each question is labeled according to type in the Teacher's Edition by the letters (F), (I) and (V). The sequence of questions follows that of the story. The variety and selection of questions were developed to assess the many aspects of students' reading comprehension.
ESL Group Informal Reading Inventory

ADMINISTRATION:

1. Read the following explanation to the students so that they know why they are being asked to do the following reading exercises in section one of the inventory (selections 1-3).

"Students, I want to see how well you read so that I can give you books and materials that are not too difficult for you to read. This is not a test. It is a way for us to help you improve your reading ability. There are stories for you to read and questions for you to answer. Now I will read the directions with you."

(Read directions to the students.)

2. When students have signaled their understanding of the directions, tell them to begin reading.

3. The inventory is divided into four sections: selections 1-3, selections 4-6, selections 7-9 and selections 10-12. Students should be allowed thirty minutes for each section. They should be given only one section at a time.

4. If the students have not completed the first three selections in thirty minutes, permit them to answer the questions on the section they are working on and then collect the inventory.

5. Refer to the Teacher's Edition to correct the inventory. When correcting the written responses, do not count as incorrect spelling errors or errors in sentence structure. If the student has not written a complete sentence but has supplied a satisfactory short answer, count it as correct.

6. Calculate the student's total number of errors on each selection and check the student's IRI classification level rating at the bottom of the student's answer sheet.

7. If a student obtains scores of 69% or less on two of the three selections in section one, there is no need to administer additional more difficult selections. If a student has obtained scores of 70% or better on at least two of three selections, give the student section two of the inventory.

8. When the student obtains 69% or less on any two consecutive selections, it should be assumed that s/he has reached her/his frustration level and no additional sections should be administered.

9. The same procedure is followed for the administration of sections three and four.
ESL GROUP INFORMAL READING INVENTORY I
READING LEVELS 1-12
STUDENT EDITION
ESL GROUP INFORMAL READING INVENTORY

Directions:
1. Read the following directions carefully.
2. Read the first story on the next page when I tell you to.
3. Remember as much information as you can.
4. After you finish reading the story, turn the page over.
5. You must not turn back to the story after you have turned the page.
6. Answer the questions.
7. Select the best answer and write an (x) in the answer space.
8. Some questions will test your vocabulary. Write an (x) next to the word that has the same meaning.
9. Sometimes you must write the answer using a complete sentence.
10. Write a complete sentence on the line below the question.
11. Remember that you cannot look back at the story to answer the questions.
12. After you have finished reading story one, go to story two and answer the questions. Then go on to the next story.
13. When you understand the directions, raise your hand.
14. You have thirty minutes to read the first three stories and answer the questions.
On Wednesday evening, we went to the Town Hall. It was the last day of the year. A large crowd of people had gathered under the Town Hall clock. It would strike twelve in eight minutes' time. Three minutes passed and then, at five to twelve, the clock stopped. The big minute hand did not move. We waited and waited, but nothing happened. Suddenly someone yelled, 'It's two minutes past twelve! The clock has stopped!'
I looked at my watch. It was true. The big clock refused to welcome the New Year. At that moment the people began to laugh and sing.
1. Where had a large crowd gathered?
   ( ) in the Town Hall.
   ( ) under the Town Hall clock.
   ( ) across the street from the Town Hall.
2. In the story, the word "strike" means:
   ( ) hit
   ( ) sing
   ( ) laugh
3. At what time did the clock stop?
   ( ) eight minutes to twelve
   ( ) two minutes to twelve
   ( ) five minutes to twelve
4. gather:
   ( ) meet
   ( ) dance
   ( ) left
5. How did the person know the clock had stopped?

6. The Town Hall clock was probably:
   ( ) new
   ( ) old
   ( ) working well
7. refuse:
   ( ) agree to
   ( ) want to
   ( ) not agree to
8. It took the person:
   ( ) a long time to realize the clock had stopped.
   ( ) a short time to realize the clock had stopped.
   ( ) an hour to realize the clock had stopped.
9. What did the people do to welcome the New Year?

10. The main idea of the story is:
    ( ) Clocks are not very good.
    ( ) People welcome the New Year by singing and laughing.
    ( ) The clock had stopped.
Ted Robinson has been worried all the week. Last Tuesday he received a letter from the local police. In the letter he was asked to call at the station. Ted wondered why he was wanted by the police, but he went to the station yesterday and now he is not worried any more. At the station, he was told by a smiling policeman that his bicycle had been found. Five days ago, the policeman told him, the bicycle was picked up in a small village four hundred miles away. It is now being sent to his home by train. Ted was most surprised when he heard the news. He was amused too, because he never expected the bicycle to be found. It was stolen twenty years ago when Ted was a boy of fifteen.
1. When did Ted receive the letter?
   ( ) Monday night.
   ( ) last night.
   ( ) last Tuesday.

2. What did the letter say?

3. A train that stops in every little town is:
   ( ) an old train
   ( ) a fast train
   ( ) a local train

4. Ted was worried because:
   ( ) he had forgotten to call the police.
   ( ) he couldn't understand why the police had written to him.
   ( ) he had stolen the bicycle.

5. The policeman smiled at Ted because:
   ( ) he had arrested a thief.
   ( ) he had good news.
   ( ) he wanted Ted to give him some money.

6. How did Ted feel when he heard the news?

7. Wondered:
   ( ) thought about
   ( ) remembered
   ( ) forgot

8. A village is:
   ( ) smaller than a town.
   ( ) larger than a town.
   ( ) the same size as a city.

9. Ted left the station after he:
   ( ) thanked the policeman.
   ( ) picked up his bicycle.
   ( ) identified his bicycle.

10. How old was Ted when he went to the police station?
    ( ) 20
     ( ) 15
     ( ) 35
Dentists always ask questions when it is impossible for you to answer. My dentist had just pulled out one of my teeth and had told me to rest for a while. I tried to say something, but my mouth was full of cotton-wool. He knew I collected birds' eggs and asked me whether my collection was growing. He then asked me how my brother was and whether I liked my new job in London. In answer to these questions I either nodded or made strange noises. Meanwhile, my tongue was busy searching out the hole where the tooth had been. I suddenly felt very worried, but could not say anything. When the dentist at last removed the cotton-wool from my mouth, I was able to tell him that he had pulled out the wrong tooth.
1. When did the dentist always ask the patient questions?

2. How many of the patient's teeth did the dentist pull?
   ( ) three
   ( ) two
   ( ) one

3. Cotton-wool was used to:
   ( ) keep the patient warm?
   ( ) make it easy for the dentist to work.
   ( ) make the patient feel pain.

4. whether:
   ( ) asked
   ( ) if
   ( ) rain

5. What did the patient collect?
   ( ) teeth
   ( ) birds' eggs
   ( ) cotton-wool

6. search:
   ( ) collect
   ( ) explore
   ( ) close

7. The patient felt:
   ( ) happy
   ( ) pain
   ( ) friendly

8. meanwhile:
   ( ) at the same time
   ( ) later
   ( ) earlier

9. What did the patient do with his tongue?

10. The patient will:
    ( ) find a new job.
    ( ) pay the doctor extra money.
    ( ) look for a new dentist.
Frank Lloyd Wright did not call himself an artist. He called himself an architect. But the buildings he designed were works of art. He looked at the ugly square buildings around him, and he did not like what he saw. He wondered why people built ugly homes, when they could have beautiful ones.

Frank Lloyd Wright lived from 1869 to 1959. When he was young, there were no courses in architecture, so he went to work in an architect’s office in order to learn how to design buildings. Soon he was designing buildings that were beautiful.

He also wanted to make his buildings fit into the land around them. One of the houses he designed is on top of a high hill. Other people built tall, square houses on hills, but Wright did not want to lose the beauty of the hill. He built the house low and wide.

Now other architects know how to design buildings to fit into the land. Frank Lloyd Wright showed them how to do it.
Student Edition
Selection 4
ESL Group IRI I

1. Wright did not call himself:
   ( ) an artist.
   ( ) an architect.
   ( ) a builder.

2. An architect's work is:
   ( ) painting.
   ( ) writing.
   ( ) drawing.

3. Why did he not like the buildings he saw around him?

4. Where did he learn to design buildings?

5. design:
   ( ) build a house
   ( ) draw a plan
   ( ) hire an architect

6. square:
   ( ) O
   ( ) △
   ( ) □

7. Before he designed a house, he first considered:
   ( ) the building materials.
   ( ) the cost.
   ( ) the land.

8. Young architects take courses:
   ( ) to ask Wright questions.
   ( ) to study Wright's designs.
   ( ) to listen to Wright speak.

9. The house he designed on the hill was:
   ( ) tall and square.
   ( ) square and wide.
   ( ) low and wide.

10. Frank Lloyd Wright's houses:
    ( ) are similar to one another.
    ( ) look quite different from one another.
    ( ) are exact copies of each other.

NUMBER OF 
COMPREHENSION 
ERRORS | 0 | 1 | 2 | 3 | 4
---|---|---|---|---|---
PERCENT CORRECT | 100 | 90 | 70 | 70 | 60
CLASSIFICATION | Ind | Ind | Inst | Inst | Frus
STUDENT RATING (✓) | |
STUDENT CLASSIFICATION: (circle one) Independent Independent Independent Frustration
When he had killed the guard, the prisoner of war dragged him into the bushes. Working rapidly in the darkness, he soon changed into the dead man's clothes. Now, dressed in a blue uniform and with a rifle over his shoulder, the prisoner marched boldly up and down in front of the camp. He could hear shouting in the camp itself. Lights were blazing and men were running here and there: they had discovered that a prisoner had escaped. At that moment, a large black car with four officers inside it, stopped at the camp gates. The officers got out and the prisoner stood to attention and saluted as they passed. When they had gone, the driver of the car came towards him. The man obviously wanted to talk. He was rather elderly with grey hair and clear blue eyes. The prisoner felt sorry for him, but there was nothing else to do. As the man came near, the prisoner knocked him to the ground with a sharp blow. Then, jumping into the car, he drove off as quickly as he could.
1. Why was the man in prison?
   ( ) He was a killer.
   ( ) He was captured by the enemy.
   ( ) He was a thief.

2. Where did the prisoner hide the guard's body?
   ( ) in the car
   ( ) in the ground
   ( ) in the bushes

3. Why did the prisoner work rapidly?

4. Who wears a uniform?
   ( ) a baby
   ( ) a policeman
   ( ) a grandmother

5. Who came in the car?
   ( ) four soldiers
   ( ) four prisoners
   ( ) four officers

6. Where did the car stop?

7. The driver was probably:
   ( ) lonely
   ( ) drunk
   ( ) angry

8. When do soldiers salute?
   ( ) when they go to bed
   ( ) when they have a drink
   ( ) when they see an officer

9. elderly:
   ( ) old
   ( ) young
   ( ) middle aged

10. How did the prisoner drive away from the camp?
    ( ) carefully
    ( ) slowly
    ( ) quickly

<table>
<thead>
<tr>
<th>NUMBER OF ERRORS</th>
<th>COMPREHENSION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>PERCENT CORRECT</td>
<td>100</td>
</tr>
<tr>
<td>CLASSIFICATION</td>
<td>Ind</td>
</tr>
<tr>
<td>STUDENT RATING</td>
<td></td>
</tr>
</tbody>
</table>

STUDENT CLASSIFICATION: (circle one) Independent Independent Independent Frustration
Rudy K married Lily before he went into the service. He was sent overseas after basic training with only a brief leave home. In actual time spent together, you could say their married life has been short. But Rudy feels married, and has been having his allotment checks sent to Lily.

Now Rudy has his discharge from the Army. Within a week of his return he can tell that something is wrong. The friends he knew in high school seem glad to see him, but they don't talk to him the way they once did. There are special looks when Lily's name is mentioned, and it doesn't take him long to realize that his wife has been unfaithful and with more than one man.

His suspicions are confirmed when his sister assures him that Lily ran around a lot. She even supplies names and other details until Rudy tells her he doesn't want to hear any more.
1. Before he went into the Army, how long was Rudy married?

2. While he was in the Army, Lily:
   ( ) had no money.
   ( ) had enough money.
   ( ) became rich.

3. allotment:
   ( ) payment
   ( ) gift
   ( ) reward

4. discharge:
   ( ) omit
   ( ) collect
   ( ) release

5. How did he learn that his wife had been unfaithful?
   ( ) His father told him in a letter.
   ( ) His friends told him when they went out for dinner.
   ( ) He received special looks when his wife's name was mentioned.

6. mention:
   ( ) look at
   ( ) speak about
   ( ) figure

7. Who gave him evidence that his wife was unfaithful?

8. He saw his friends from:
   ( ) the Army.
   ( ) work.
   ( ) high school.

9. Why doesn't he want to hear any more details about Lily from his sister?
   ( ) He doesn't believe her.
   ( ) Because Lily already told him.
   ( ) He believes her.

10. Their marriage will be:
    ( ) happy.
    ( ) difficult.
    ( ) better than before.

---

**NUMBER OF COMPREHENSION ERRORS**

<table>
<thead>
<tr>
<th>ERRORS</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCENT CORRECT</td>
<td>100</td>
<td>90</td>
<td>70</td>
<td>70</td>
<td>60</td>
</tr>
<tr>
<td>CLASSIFICATION</td>
<td>Ind</td>
<td>Ind</td>
<td>Inst</td>
<td>Inst</td>
<td>Frus</td>
</tr>
<tr>
<td>STUDENT RATING (✓)</td>
<td>Ind</td>
<td>Ind</td>
<td>Inst</td>
<td>Inst</td>
<td>Fru</td>
</tr>
</tbody>
</table>

**STUDENT CLASSIFICATION:** (circle one) Independent Independent Independent Frustration
It was fifteen years since he had first come to the village. He was then simply a pallid young man with prominent, short-sighted brown eyes. His appearance would not have seemed strange to people of average education and experience. But the villagers found his appearance peculiar because of the exceptional kind of work he did and because he had come from an unknown region.

His way of life was also strange. He invited no one to walk across his doorstep and he never went to the village bar for a drink or to gossip. He spoke to no one, except when it was necessary for his work.

It soon became clear to the young women of the village that he would never urge one of them to marry him. It was as if he had heard them say that they would never marry a man like him.
1. The man had come to the village:
   ( ) two years ago.
   ( ) very recently.
   ( ) fifteen years ago.

2. pallid:
   ( ) healthy
   ( ) gray
   ( ) pale

3. The villagers found his appearance:
   ( ) usual
   ( ) unusual
   ( ) frightening

4. The villagers considered the man:
   ( ) a member of the community.
   ( ) a foreigner.
   ( ) a happy person.

5. Where did the man never go?

6. When did he speak to the villagers?

7. region:
   ( ) area
   ( ) part
   ( ) country

8. gossip:
   ( ) debate
   ( ) dream
   ( ) conversation

9. The man had:
   ( ) many friends in the village.
   ( ) no friends in the village.
   ( ) a few friends in the village.

10. The main point of the story is:
    ( ) the man never entered into the life of the village.
    ( ) the women in the village were looking for husbands.
    ( ) the man had unusual work.

NUMBER OF COMPREHENSION
ERRORS

PERCENT CORRECT

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>STUDENT RATING (x)</td>
<td>ind</td>
<td>ind</td>
<td>Inst</td>
<td>Inst</td>
<td>Frus</td>
</tr>
<tr>
<td>STUDENT CLASSIFICATION: (circle one)</td>
<td>Independent</td>
<td>Independent</td>
<td>Independent</td>
<td>Frustration</td>
<td></td>
</tr>
</tbody>
</table>

CLASSIFICATION

Ind | Ind | Inst | Inst | Frus

100 | 90 | 80 | 70 | 60
Albert is a high school senior in a class with more girls than boys. In his neighborhood the boys are less likely to finish school than the girls. Nevertheless, Albert has tried to be a "good student" with his eye on a better future. He delivers newspapers in the afternoon, sells tickets for school athletic events, and is working toward a college scholarship.

One day there is a school-wide strike against the food in the school cafeteria. The students spill out of the building and onto the school grounds. Bad lunches are only a part of their complaints. Albert is shouting slogans along with the rest of them and is caught up in a crowd in the front of the school. They ignore administration demands that they return to afternoon classes. Instead, three of the boys climb the flagpole and remove the flag. With help from police summoned to the school, the boys around the flagpole, including Albert, are disciplined by the school. They are suspended for the rest of the year. Albert's explanation that he had nothing to do with the flag incident is disregarded. He was in the area, and he got caught with the rest.
Student Edition
Selection 8
ESL Group IRI I

ANSWER SHEET

1. Albert is planning on going to:
   ( ) college.
   ( ) work.
   ( ) the army.

2. Albert probably receives:
   ( ) a lot of money from his family.
   ( ) little money from his family.
   ( ) enough money from his family.

3. strike:
   ( ) stop attending work or school
   ( ) stop doing homework
   ( ) stop receiving money for work

4. What was one of the students' complaints.

5. slogan:
   ( ) an often repeated prayer
   ( ) an often repeated phrase
   ( ) an often sung song

6. Albert:
   ( ) took part in the strike.
   ( ) did not take part in the strike.
   ( ) was a leader of the strike.

7. disciplined:
   ( ) judged
   ( ) punished
   ( ) encouraged

8. How was Albert disciplined?

9. The school administration:
   ( ) could not maintain control of the students without outside help.
   ( ) controlled the strike easily without outside help.
   ( ) agreed to the students' demand for better food.

10. Albert will probably be able to graduate:
    ( ) on time as he expected.
    ( ) later than he expected.
    ( ) earlier than he expected.

---

NUMBER OF COMPREHENSION ERRORS | 0 | 1 | 2 | 3 | 4
PERCENT CORRECT | 100 | 90 | 70 | 70 | 60
CLASSIFICATION | inc | ind | inst | inst | frus
STUDENT RATING (c) | Independent | Independent | Independent | Frustration

STUDENT CLASSIFICATION: (circle one) Independent Independent Independent Frustration
In the 1840's and 1850's, America developed the famous clipper ships, the fastest sailing vessels the world had ever known. These graceful, three-masted ships were built mostly in New England shipyards, and they carried goods and people to every part of the world. During the era of the clipper ships the United States rapidly developed its merchant marine until it was the second largest in the world. With the commencement of the American Civil War, however, ocean commerce was reduced and fewer ships were built. The Southern navy destroyed many Northern merchant vessels, and the historic battle between the Monitor and the Merrimac proved that iron ships were going to take the place of wooden vessels. The United States never did build iron ships on as large a scale as it had built the clipper ships. After the war there was a tendency on the part of American businessmen and bankers to invest their money in railroads and other industries rather than in ocean shipping.
1. Most clipper ships were built in:
   ( ) New England.
   ( ) the American South.
   ( ) England.

2. graceful:
   ( ) beautiful
   ( ) awkward
   ( ) fast

3. What was special about the clipper ships?

4. At the beginning of the American Civil War, the American merchant
   marine was:
   ( ) the largest in the world.
   ( ) the second largest in the world.
   ( ) one of the smallest in the world.

5. vessels:
   ( ) shipyards
   ( ) ships
   ( ) vehicles

6. What did the historic battle between the Monitor and Merrimac
   prove?

7. commencement:
   ( ) middle
   ( ) end
   ( ) beginning

8. After the Civil War, a banker would probably make more money in:
   ( ) ocean shipping.
   ( ) railroads.
   ( ) shipbuilding.

9. Which ships were the more modern?
   ( ) iron ships
   ( ) clipper ships
   ( ) three masted ships

10. After the Civil War the American navy built mostly:
    ( ) iron warships.
    ( ) wooden ships.
    ( ) clipper ships.

---

Student Edition
Selection 9
ESL Group IRI I

NUMBER OF COMPREHENSION
ERRORS               0   1   2   3   4
PERCENT CORRECT     100 90 80 70 60
CLASSIFICATION      Ind Ind Ind Ind Frus
STUDENT RATING (W)  Ind Ind Ind Ind Frus
STUDENT CLASSIFICATION: (circle one) Independent Independent Frustration
Some of the notebooks that George Washington kept as a young man are still in existence, and they show that he learned a little Latin, that he acquired some of the basic elements of good conduct, and that he read a little English literature. At school he seems to have cared only for mathematics. His was a brief and most incomplete education for a gentleman, and it was all the formal education he was to have, since, unlike some of the other young Virginia gentlemen of his time, he did not go on to the College of William and Mary in the Virginia capital of Williamsburg. In terms of intellectual preparation and power, then, Washington is in sharp contrast with some other early American presidents, such as John Adams, Thomas Jefferson, and James Madison. In later years, Washington probably regretted his lack of intellectual training. He never felt comfortable in formal debate, or in discussions that were not concerned with everyday, practical matters. And inasmuch as he never learned to speak French, he refused to visit France because he felt he would be embarrassed at not being able to speak directly to the statesmen of that country. Thus, unlike Jefferson and Adams, he never reached Europe.
1. How do we know about George Washington's education?

2. element
   ( ) principle
   ( ) container
   ( ) organism

3. What was Washington's favorite subject?
   ( ) English Literature
   ( ) Latin
   ( ) Mathmatics

4. Where did young Virginia gentlemen go for their formal education?

5. Washington was more interested in:
   ( ) English Literature.
   ( ) Latin.
   ( ) practical matters.

6. Presidents Jefferson and Adams probably studied:
   ( ) only English.
   ( ) English and French.
   ( ) English, French and Latin.

7. regret:
   ( ) happy
   ( ) sorry
   ( ) love

8. intellectual
   ( ) artistic
   ( ) social
   ( ) mental

9. Why did Washington never go to France?
   ( ) He didn't like to travel abroad.
   ( ) He couldn't speak French.
   ( ) He could not afford the trip.

10. Washington was different from other early American presidents
     in terms of his:
        ( ) education
        ( ) wealth
        ( ) power

<table>
<thead>
<tr>
<th>NUMBER OF ERRORS</th>
<th>COMPREHENSION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERCENT CORRECT</th>
<th>100</th>
<th>90</th>
<th>70</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLASSIFICATION</td>
<td>ind</td>
<td>ind</td>
<td>inst</td>
<td>inst</td>
</tr>
<tr>
<td>STUDENT RATING (x)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STUDENT CLASSIFICATION: (circle one) Independent Independent Independent Frustration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The best known of the miracle drugs are the antibiotics, but there are other and newer types. The antibiotic substances, produced by living organisms (mostly molds) have the power to kill or check the growth of bacteria. The job of the antibiotics generally is to aid the white blood cells by stopping the bacteria from multiplying.

When a person is killed by a disease, it means that the bacteria have multiplied faster than the white blood cells could devour them, and that the bacterial toxins increased more rapidly than the antibodies could neutralize them. The help that the antibiotics give the white blood cells and antibodies is generally enough to repulse an attack of the germs.

Before the use of antibiotics, many patients recovered through the strength of their natural defenses. But with the introduction of the antibiotics, the proportion of fatalities has been greatly decreased.
1. miracle
   ( ) ordinary event
   ( ) supernatural event
   ( ) disturbing event

2. What produces antibiotic substances?
   ( ) white blood cells
   ( ) bacteria
   ( ) molds

3. What is the job of the antibiotics?

4. "Toxins:
   ( ) drugs
   ( ) poisons
   ( ) medicines

5. What helped patients get well before antibiotics were discovered?

6. Among the miracle drugs, antibiotics are:
   ( ) the newest.
   ( ) the most effective.
   ( ) the best known.

7. repulse:
   ( ) drive back
   ( ) drive forward
   ( ) push together

8. When should you take antibiotics?
   ( ) when you exercise regularly
   ( ) when you have a low white blood count
   ( ) when you have a high white blood cell count.

9. When a person recovers from an illness, it means that:
   ( ) bacteria have increased faster than the antibodies.
   ( ) white blood cells have not been devoured.
   ( ) antibodies have repulsed an attack of germs.

10. One cause for the increase in population in the world is:
    ( ) fewer wars throughout the world.
    ( ) more food for children everywhere.
    ( ) the increased use of antibiotics.
Until about 1850 the common elementary school was considered adequate for the education of the large majority of children in the United States. Secondary schools, starting with the establishment of Benjamin Franklin's Academy in Philadelphia a hundred years earlier, were mostly private or at least were financed by private funds. The establishment of the first public high schools in 1821 marked the beginning of the upward extension of the tax-supported schools. In 1872 the decision of the Michigan Supreme Court in what is known as the "Kalamazoo Case" established that communities could tax themselves to provide educational activities beyond the elementary school. Previously the academies had satisfied the desire for continued education and preparation for college—at least for those who were willing to pay for it.
1. adequate:  
   ( ) sufficient  
   ( ) necessary  
   ( ) extra

2. Until 1850, the common elementary school was considered:  
   ( ) inadequate for most Americans.  
   ( ) sufficient for most Americans.  
   ( ) necessary for only a few Americans.

3. Most secondary schools before 1850 were financed by:  
   ( ) the state.  
   ( ) the national government.  
   ( ) individuals.

4. funds:  
   ( ) taxes  
   ( ) money  
   ( ) wages

5. What was the importance of the "Kalamazoo Case" in the history of United States education?

6. Why did young people attend academies before 1872?

7. The students who attended Benjamin Franklin's Academy were preparing for:  
   ( ) secondary school.  
   ( ) college.  
   ( ) high school.

8. Those who argued that a community should tax itself to pay for high schools probably believed that:  
   ( ) educational opportunities should be available to all.  
   ( ) education should be for those who could pay for it.  
   ( ) an elementary education was adequate for most Americans.

9. extension:  
   ( ) requirement  
   ( ) degree  
   ( ) range

10. In the 1700's most students who attended college:  
    ( ) came from wealthy families.  
    ( ) worked their way through school.  
    ( ) got scholarships.

---

**NURSER OF COMPREHENSION**

**ERRORS**

<table>
<thead>
<tr>
<th>PERCENT CORRECT</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLASSIFICATION</td>
<td>Ind</td>
<td>Ind</td>
<td>Inst</td>
<td>Inst</td>
<td>Frus</td>
</tr>
<tr>
<td>STUDENT RATING (W)</td>
<td>Ind</td>
<td>Ind</td>
<td>Inst</td>
<td>Inst</td>
<td>Frus</td>
</tr>
<tr>
<td>STUDENT CLASSIFICATION: (circle one) Independent Independent Independent Frustration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ESL GROUP INFORMAL READING INVENTORY II
READING LEVELS 1-12
STUDENT EDITION
I got a letter from my sister today. She lives in Nigeria. In her letter, she said that she would come to England next year. If she comes, she will get a surprise. We are now living in a beautiful new house in the country. Work on it had started before my sister left. The house was finished five months ago. In my letter, I told her that she could stay with us. The house has many large rooms and there is a lovely garden. It is a very modern house, so it looks strange to some people. It must be the only modern house on the street.
1. Whom did the person receive a letter from?
   ( ) a brother
   ( ) a sister
   ( ) a mother

2. When is the person's relative planning on coming to England?
   ( ) next week
   ( ) next year
   ( ) in two weeks

3. Why will the person's relative be surprised?

4. lovely:
   ( ) pretty
   ( ) ugly
   ( ) new

5. started:
   ( ) finished
   ( ) completed
   ( ) begun

6. The house was probably:
   ( ) expensive.
   ( ) cheap.
   ( ) poorly made.

7. The house is:
   ( ) new.
   ( ) old.
   ( ) not finished.

8. country:
   ( ) inside the city
   ( ) outside the city
   ( ) downtown

9. Why is the house strange to some people?

10. Most houses in the country near their new house were:
    ( ) modern.
    ( ) old.
    ( ) new.

<table>
<thead>
<tr>
<th>NUMBER OF ERRORS</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCENT CORRECT</td>
<td>100</td>
<td>70</td>
<td>70</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>CLASSIFICATION</td>
<td>Ind</td>
<td>Ind</td>
<td>Inst</td>
<td>Inst</td>
<td>Fru</td>
</tr>
<tr>
<td>STUDENT RATING</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| STUDENT CLASSIFICATION: (circle one) Independent Independent Independent Frustration
Many folk stories tell about people who are given three wishes, and only three. This is one such story.

A man and his wife were very poor. They kept hoping for new clothes and good food. The man enjoyed eating, and he especially liked pancakes. One night an old woman came to their house and told them she would let them have three wishes. They could wish for anything they wanted.

The man had just finished eating a little bread for his dinner, and he was still hungry. He said, "I wish I had a big pancake!"

Suddenly a pancake appeared on his plate.

"You fool!" his wife cried, "You could have wished for a house full of wonderful food, but you wished for a pancake. I wish that pancake was on the end of your foolish nose!"

Immediately the pancake stuck to the end of his nose.

Then the man and his wife started blaming each other. "It's your fault!" the man cried. "No, it's your fault!" she answered. What could they do? The pancake was still stuck on the husband's nose.

"Oh!" the wife cried. "I wish none of this had ever happened!"

Immediately the pancake was gone, and the man was saying "I'm still hungry. How I wish I had some pancakes!"

But of course nothing happened.
1. folk:
   ( ) traditional
   ( ) modern
   ( ) interesting
2. The man and his wife had:
   ( ) lots of clothes
   ( ) enough clothes
   ( ) few clothes
3. When did the old woman come to the house?
   ( ) in the morning
   ( ) in the evening
   ( ) in the afternoon
4. What did the man eat for his dinner?
   ( ) several pancakes
   ( ) one pancake
   ( ) a little bread
5. What was the wife's first wish?

6. especially:
   ( ) seldom
   ( ) never
   ( ) really
7. The man was most concerned about his:
   ( ) future needs.
   ( ) present needs.
   ( ) past needs.
8. fault:
   ( ) reason
   ( ) choice
   ( ) mistake
9. The point of the story is that:
   ( ) it is wrong to waste food.
   ( ) wives are often wiser than their husbands.
   ( ) foolish people waste their opportunities.
10. What was the wife's second wish?

<table>
<thead>
<tr>
<th>NUMBER OF COMPREHENSION ERRORS</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCENT CORRECT</td>
<td>100</td>
<td>90</td>
<td>80</td>
<td>70</td>
<td>60</td>
</tr>
<tr>
<td>CLASSIFICATION</td>
<td>Ind</td>
<td>Ind</td>
<td>Inst</td>
<td>Inst</td>
<td>Frus</td>
</tr>
<tr>
<td>STUDENT RATING</td>
<td>( )</td>
<td>Ind</td>
<td>Ind</td>
<td>Inst</td>
<td>Inst</td>
</tr>
<tr>
<td>STUDENT CLASSIFICATION: (circle one) Independent Independent Independent Frustration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
One day a hungry fox approached a rooster and said: "I remember what a wonderful singer your father was. I wonder whether you can sing as well." The rooster shut his eyes and began to sing. The fox snatched him with his mouth and carried him away. The people of the town cried: "Look, look! The fox is carrying off our rooster."

Then the rooster said to the fox: "Good heavens, do you understand? The people are saying that you are carrying off their rooster. Tell them quickly that it's yours, and not theirs." The fox opened his mouth and said, "It's not yours; it's mine!" At that moment the rooster escaped from the fox's mouth and flew into a tree.

The fox was furious. He was hungry and now the rooster was out of reach. He could have eaten that rooster if he hadn't talked so much!
1. rooster:
   ( ) female chicken
   ( ) male chicken
   ( ) baby chicken
2. When he approached the rooster, the fox felt:
   ( ) angry.
   ( ) hungry.
   ( ) tired.
3. What did the fox remember about the rooster's father?
4. snatch:
   ( ) release
   ( ) grab
   ( ) hold
5. The town's people probably:
   ( ) wanted to kill the fox.
   ( ) wanted to keep the fox around.
   ( ) wanted to raise foxes.
6. Whom did the rooster belong to?
7. The main point of the story is that:
   ( ) it is better not to talk too much.
   ( ) it is wise not to eat roosters.
   ( ) roosters are more intelligent than foxes.
8. furious:
   ( ) surprised
   ( ) happy
   ( ) angry
9. The rooster escaped to:
   ( ) the town
   ( ) a tree
   ( ) the chicken house
10. In the future the rooster will not:
    ( ) hide in a tree.
    ( ) sing in the morning.
    ( ) sing near a fox.

NUMBER OF COMPREHENSION ERRORS

<table>
<thead>
<tr>
<th>ERRORS</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCENT CORRECT</td>
<td>100</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>60</td>
</tr>
<tr>
<td>CLASSIFICATION</td>
<td>Ind</td>
<td>Ind</td>
<td>Inst</td>
<td>Inst</td>
<td>Frus</td>
</tr>
<tr>
<td>STUDENT RATING (✓)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| STUDENT CLASSIFICATION: (circle one) Independent Independent Frustration
New Mexico did not become one of the United States until 1912, but it is old in history. The Pueblo Indians, who were the earliest settlers, built whole cities in New Mexico while most Europeans were members of wild tribes.

Before the English started colonies on the east coast, the Spanish explorers came up from Mexico. Spanish settlers followed them. For a long time the city of Santa Fe, which is now the capital of New Mexico, was the Spanish capital of the new land. Santa Fe still looks like a Spanish town.

The Spanish families of New Mexico are very proud. In that part of the United States there are many Mexican-Americans who have moved across the border from Mexico during the past hundred years. But the old Spanish families call themselves Spanish-Americans because their ancestors came directly from Spain long ago.

Pueblo Indians still live in New Mexico. They follow many of their old ways, but they are modern in many ways, too. New Mexicans love their strangely beautiful desert state that they call "the land of enchantment."
1. Who were the earliest settlers in New Mexico?
   ( ) Europeans
   ( ) Indians
   ( ) Mexican Americans

2. tribe:
   ( ) group of horses
   ( ) group of cities
   ( ) group of people

3. When did the Indians build cities in New Mexico?
   ( ) while most Europeans were members of tribes
   ( ) when the Spanish came to Mexico
   ( ) when the English came to the east coast

4. Why do some people in New Mexico call themselves Spanish-Americans?

5. Why does Santa Fe look like a Spanish town?
   ( ) because it is in Spain
   ( ) because of its Indian buildings
   ( ) because it was the Spanish capital of the new land

6. ancestors:
   ( ) cousins
   ( ) forefathers
   ( ) children

7. Why is the state called New Mexico?

8. New Mexico is mostly:
   ( ) jungle
   ( ) forest
   ( ) desert

9. Have the Pueblo Indians changed since they came to New Mexico?
   ( ) completely
   ( ) in some ways
   ( ) not at all

10. enchantment:
    ( ) heat and dryness
    ( ) charm and delight
    ( ) pride and respect
One of the greatest sea tragedies that has ever occurred was that of the steamship Titanic. It was the first trip of the giant ship. There were more than two thousand people aboard on their way to the United States from England.

It was on the night of April 14, 1912. The sea was calm, the weather beautiful. People were dancing in the spacious salons. Music, laughter, and singing could be heard everywhere. The thought of danger was far away.

Suddenly, just before midnight the sailor on guard cried: "Iceberg!" Before the ship could change her course the iceberg had torn a huge hole in the bottom of the ship. Nothing could be done. The new ship went down into the sea. More than fifteen hundred people lost their lives on that tragic night.
1. tragedy:
   ( ) unhappy event
   ( ) exciting event
   ( ) wonderful event

2. occurred:
   ( ) changed
   ( ) turned
   ( ) happened

3. The Titanic was going:
   ( ) from England to the United States.
   ( ) from the United States to England.
   ( ) from England to Spain.

4. What happened when the ship struck the iceberg?

5. What were the people on the ship doing before it struck the iceberg?

6. salon:
   ( ) deck
   ( ) room
   ( ) game

7. Who was the first person to see the iceberg?
   ( ) a sailor
   ( ) the captain
   ( ) a passenger

8. How many people survived the tragedy?
   ( ) about 1,500
   ( ) about 2,000
   ( ) about 500

9. Why couldn't the ship turn quickly away from the iceberg?
   ( ) The captain was dancing.
   ( ) The ship was too large.
   ( ) The wind was too strong.

10. The ship probably carried:
    ( ) extra small life boats.
        ( ) enough small life boats.
        ( ) not enough small life boats.
Mrs. Anne Sterling did not think of the risk she was taking when she ran through a forest after two men. They had rushed up to her while she was having a picnic at the edge of a forest with her children and tried to steal her handbag. In the struggle, the strap broke and, with the bag in their possession, both men started running through the trees. Mrs. Sterling got so angry that she ran after them. She was soon out of breath, but she continued to run. When she caught up with them, she saw that they had sat down and were going through the contents of the bag, so she ran straight at them. The men got such a fright that they dropped the bag and ran away. "The strap needs mending," said Mrs. Sterling later, "but they did not steal anything."
Student Edition
Selection 6
ESL Group IRI II
ANSWER SHEET

1. Why did the woman run after the two men?

2. What was the woman doing on the edge of the forest?

3. risk:
   ( ) pleasure
   ( ) danger
   ( ) opportunity

4. When the man grabbed her handbag, she:
   ( ) let go quickly.
   ( ) held on to it tightly.
   ( ) dropped it.

5. Why did the men drop the handbag?
   ( ) They were frightened.
   ( ) They didn't want anything in it.
   ( ) the strap broke.

6. What did the two men get away with?
   ( ) Mrs. Sterling's money
   ( ) Mrs. Sterling's jewelry
   ( ) nothing

7. contents:
   ( ) things inside
   ( ) things outside
   ( ) things stolen

8. Mrs. Sterling guessed that the men:
   ( ) had knives.
   ( ) had guns.
   ( ) didn't have weapons.

9. Probably on that day it was:
   ( ) raining
   ( ) snowing
   ( ) clear

10. mending:
    ( ) cutting
    ( ) shaping
    ( ) fixing

<table>
<thead>
<tr>
<th>NUMBER OF ERRORS</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCENT CORRECT</td>
<td>100</td>
<td>20</td>
<td>30</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>CLASSIFICATION</td>
<td>Ind</td>
<td>Ind</td>
<td>Inst</td>
<td>Inst</td>
<td>Frus</td>
</tr>
<tr>
<td>STUDENT RATING (v)</td>
<td>Ind</td>
<td>Ind</td>
<td>Inst</td>
<td>Inst</td>
<td>Frus</td>
</tr>
</tbody>
</table>

STUDENT CLASSIFICATION: (circle one) Independent Independent Independent Frustration
Leon has had to stop working because his doctor has told him he has emphysema. The disease will become progressively worse until he dies, and Leon will have to stay home where he can be close to a mechanical device to aid his breathing.

Added to Leon's problems is his wife, Clara. That is, Leon isn't sure if she is a problem or not, but finding out will be expensive. Having been married twice before, Leon knows how it feels to have a marriage break up. Now that he is no longer able to make a living, he fears that Clara will leave him and he will be left to the care of strangers.

Leon's only income is his small monthly social security check for total disability. His wife earns some money as the manager of a small dress shop. If she stays with him and adds her income to his, they can get along and can afford doctors' bills and special equipment Leon needs to stay alive. Without her, Leon will probably live with much less comfort and for a shorter length of time.
1. The disease emphysema causes difficulty:
   ( ) eating
   ( ) speaking
   ( ) breathing
2. progressively:
   ( ) more and more
   ( ) decreasingly
   ( ) significantly
3. What will he need to use at home because of his disease?
   ( ) a special bed
   ( ) a breathing device
   ( ) a wheelchair
4. Leon's first two wives:
   ( ) died.
   ( ) left him.
   ( ) became ill.
5. In the future where will he get money from?
   ( ) his company
   ( ) his savings
   ( ) social security
6. afford:
   ( ) to be able to pay for
   ( ) to sell things
   ( ) to receive money
7. What is his wife's job?
8. If Clara leaves him:
   ( ) Leon will have to move to a nursing home.
   ( ) Leon will move in with his brother.
   ( ) Leon will move in with his friends.
9. Why does Leon need his wife's income?
10. Leon probably:
    ( ) drank a lot.
    ( ) smoked a lot.
    ( ) ate a lot.
To Americans the word 'frontier' has a meaning quite different from its use in Europe. There the frontier is a stopping place, a place patrolled by guards, where one must show his papers before passing through. But the American frontier has meant freedom, opportunity, room to expand in. It is not a stopping place but an open door, not a place where you must identify yourself, but a place where you can escape identification if you wish, a place where civilization has not established its rigid pattern, where spaces are wide and men can make their own laws.

The feeling that the frontier was there, to the west, even if a man did not choose to go there has always been a conditioning factor in the American temperament. The frontier in American thought, was a place beyond civilization where nature took over from man and where the evils concocted by human duplicity were washed away by the great rivers, the wide sky, the brisk, clean air.
Student Edition
Selection 8
ESL Group IRI II

1. The word 'frontier' has:
   ( ) the same meaning in Europe and the United States.
   ( ) a similar meaning in Europe and the United States.
   ( ) a different meaning in Europe and the United States.

2. What did the word 'frontier' suggest to Europeans?

3. In Europe it was:
   ( ) difficult to cross the frontier.
   ( ) easy to cross the frontier.
   ( ) impossible to cross the frontier.

4. In American thought, the frontier was:
   ( ) a place where you had to identify yourself.
   ( ) a place patrolled by guards.
   ( ) a place to escape identification.

5. What area of the country was associated with the frontier?

6. At the American frontier a system of laws:
   ( ) was not well established.
   ( ) was firmly established.
   ( ) was the same as in the East.

7. temperament:
   ( ) weather
   ( ) personality
   ( ) anger

8. concocted:
   ( ) thought up
   ( ) worked with
   ( ) put away

9. The author suggests that there is:
   ( ) less evil when men return to nature.
   ( ) more evil when men move to the lawless frontier.
   ( ) less evil when people move to cities.

10. duplicity:
     ( ) repetition
         ( ) trickery
         ( ) reproduction

---

<table>
<thead>
<tr>
<th>NUMBER OF ERROR</th>
<th>COMPREHENSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>1</td>
<td>70</td>
</tr>
<tr>
<td>2</td>
<td>70</td>
</tr>
<tr>
<td>3</td>
<td>70</td>
</tr>
<tr>
<td>4</td>
<td>50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERCENT CORRECT</th>
<th>100</th>
<th>70</th>
<th>70</th>
<th>70</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLASSIFICATION</td>
<td>Ind</td>
<td>Ind</td>
<td>Inst</td>
<td>Inst</td>
<td>Frus</td>
</tr>
<tr>
<td>STUDENT RATING</td>
<td>I</td>
<td>I</td>
<td>Inst</td>
<td>Inst</td>
<td>Frus</td>
</tr>
</tbody>
</table>

STUDENT CLASSIFICATION: (circle one) Independent Independent Independent Frustion
Ever since the dawn--no doubt the cloudy dawn--of time, man has been trying to change the weather. For a long time while he relied on magic and prayer; later he switched to what he can loosely call science.

Until quite recently, all such efforts failed. Only within the last fifteen years--since a young scientist hit upon the technique called cloud-seeding--have we made any real progress. And even the first experiments with that method, after raising exciting hopes, proved disappointing.

Cloud-seeding . . . has touched off one of the most baffling controversies in meteorological history. It has been blamed for, or credited with, practically all kinds of weather. Some scientists claim seeding can produce floods or hail. Others insist it creates droughts and dissipates clouds. Still others staunchly maintain it has no effect at all. The battle is far from over, but at least one clear conclusion is beginning to emerge: man can change the weather, and he is getting better at it.
1. What did man rely on to change the weather before he studied science?

2. Who developed the technique of cloud-seeding?
   ( ) a doctor
   ( ) a farmer
   ( ) a scientist

3. What was the reaction to the first experiments with cloud-seeding?

4. For cloud seeding, scientists use:
   ( ) cars.
   ( ) airplanes.
   ( ) tractors.

5. baffling:
   ( ) organized
   ( ) confusing
   ( ) scientific

6. The results of the first experiments with cloud seeding were:
   ( ) conclusive.
   ( ) inconclusive.
   ( ) inaccurate.

7. drought:
   ( ) rainy weather
   ( ) freezing weather
   ( ) dry weather

8. Scientists:
   ( ) generally agree about the results of cloud-seeding.
   ( ) generally disagree about the results of cloud-seeding.
   ( ) are convinced about the results of cloud seeding.

9. staunchly:
   ( ) weakly.
   ( ) scientifically.
   ( ) strongly

10. The use of cloud-seeding is:
    ( ) widespread.
       ( ) not widespread.
       ( ) very economical.

---

### Answer Sheet Summary

#### Comprehension Errors

<table>
<thead>
<tr>
<th>Errors</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>100</td>
<td>90</td>
<td>80</td>
<td>70</td>
<td>60</td>
</tr>
</tbody>
</table>

#### Classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Ind</th>
<th>Ind</th>
<th>Inst</th>
<th>Inst</th>
<th>Frus</th>
</tr>
</thead>
</table>

#### Student Rating

- ( ) Independent
- ( ) Independent
- ( ) Frustration
In the early twentieth century Henry Ford, the automobile manufacturer, played a prominent part in the industrial development of America.

Born in 1863, he had grown up on a farm near Detroit. He loved machinery and was eager to see machinery replace human labor on the farm. As early as 1893 he built a horseless carriage. When he started automobile manufacturing in 1903, the automobile was still an elaborate, expensive, and undependable vehicle. Ford wanted to manufacture a dependable, inexpensive, easily-repaired automobile in large quantities. He hoped farmers could use it to go to town from their often remote farms.

By concentrating on a single model, introducing standardized methods of manufacture, and constantly lowering prices, Ford steadily increased his sales. In the year 1914, he manufactured about 250,000 cars; in the year 1921, about 1,250,000 cars.
1. Henry Ford spent his youth:
   () on a farm.
   () in a city.
   () in a factory.

2. manufacturer:
   () salesman
   () consumer
   () producer

3. prominent:
   () common
   () important
   () unusual

4. What did he want to replace human labor with?

5. In addition to producing automobiles, Ford probably mass produced:
   () horseless carriages.
   () motorized farm machinery.
   () trains.

6. The first automobile was:
   () easily-repaired.
   () inexpensive.
   () undependable.

7. What was one way Ford increased his sales?

8. remote:
   () nearby
   () far away
   () local

9. As a common means of transportation, the automobile replaced the:
   () horseless carriage.
   () horse.
   () the bus.

10. The main idea of the passage is:
    () cars were expensive in the early twentieth century.
    () Ford concentrated on a cheap model.
    () Ford wanted to replace human labor with machinery.
During early Roman history all physicians were either slaves or representatives of lower Roman society. Medicine was a Greek science, and many Greek physicians, attracted by the prospect of great profits at the capital of the empire, moved to Rome to set up their practices. As a consequence, many doctors were foreigners, and as such were considered in a very low position by the people of high social rank. Frequently, a rich Roman supplied one of his slaves with a medical education for the sake of convenience. Having one's own doctor was obviously an advantage not to be overlooked, and slaves who had a knowledge of the healing art commanded the highest prices in the Roman slave market. Recognizing the importance of the medical profession, however, Julius Caesar conferred citizenship on all who practiced medicine in Rome to make them more desirous of living in the city.
1. Why were Greek physicians attracted to Rome?

2. The language of medicine in Rome was:
   - ( ) Latin
   - ( ) Greek
   - ( ) English

3. In early Roman history, physicians had:
   - ( ) high social positions.
   - ( ) low social positions.
   - ( ) changing social positions.

4. rank:
   - ( ) list
   - ( ) position
   - ( ) slave

5. healing:
   - ( ) changing
   - ( ) sorting
   - ( ) making well

6. Slaves with medical education:
   - ( ) were sold for a high price.
   - ( ) were never sold at the slave market.
   - ( ) were sold for a low price.

7. For a Roman youth from the upper class, to choose the study of medicine as a profession was:
   - ( ) acceptable.
   - ( ) unusual.
   - ( ) encouraged.

8. Julius Caesar believed that the supply of physicians was:
   - ( ) adequate.
   - ( ) inadequate.
   - ( ) excessive.

9. How did Julius Caesar improve the position of physicians?

10. conferred:
    - ( ) gave
    - ( ) returned
    - ( ) took away

<table>
<thead>
<tr>
<th>NUMBER OF ERRORS</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCENT CORRECT</td>
<td>100</td>
<td>90</td>
<td>80</td>
<td>70</td>
<td>60</td>
</tr>
<tr>
<td>CLASSIFICATION</td>
<td>Ind</td>
<td>Ind</td>
<td>Inst</td>
<td>Inst</td>
<td>Frus</td>
</tr>
<tr>
<td>STUDENT RATING</td>
<td>Ind</td>
<td>Ind</td>
<td>Inst</td>
<td>Inst</td>
<td>Fru</td>
</tr>
<tr>
<td>STUDENT CLASSIFICATION</td>
<td>(circle one)</td>
<td>Independent</td>
<td>Independent</td>
<td>Independent</td>
<td>Frustration</td>
</tr>
</tbody>
</table>
The invention of the process of printing from movable type, which occurred in Germany about the middle of the fifteenth century, was destined to exercise a far-reaching influence on all the living languages of Europe. Introduced into England about 1476 by William Caxton, who had learned the art on the continent, printing made such rapid progress that a mere century later it was observed that handwritten books were seldom to be met with and almost never used. Some idea of the rapidity with which the new process swept forward may be had from the fact that in Europe the number of books printed before the year 1500 reaches the surprising figure of 35,000. The majority of these, it is true, were in Latin, whereas it is in the modern languages that the effect of the printing press was chiefly to be felt.
1. In which century was printing invented?
   ( ) the nineteenth
   ( ) the fifteenth
   ( ) the fourteenth

2. century:
   ( ) ten years
   ( ) one hundred years
   ( ) one thousand years

3. In what country did the invention of printing occur?

4. Before the year 1500 what language was used in most books?
   ( ) English
   ( ) French
   ( ) Latin

5. How were most books produced before the invention of printing?

6. continent:
   ( ) land mass
   ( ) country
   ( ) island

7. Printing made books:
   ( ) more difficult to read.
   ( ) more difficult to write.
   ( ) easier to read.

8. The invention of printing:
   ( ) greatly increased the number of books written in modern languages.
   ( ) increased the number of books in Latin.
   ( ) increased the number of handwritten books.

9. influence:
   ( ) affect
   ( ) react
   ( ) exercise.

10. The process of printing from moveable type:
    ( ) greatly increased the price of books.
    ( ) greatly increased the number of books available.
    ( ) greatly increased the demand for handwritten books.
On Wednesday evening, we went to the Town Hall. It was the last day of the year. A large crowd of people had gathered under the Town Hall clock. It would strike twelve in eight minutes' time. Three minutes passed and then, at five to twelve, the clock stopped. The big minute hand did not move. We waited and waited, but nothing happened. Suddenly someone yelled, 'It's two minutes past twelve! The clock has stopped!' I looked at my watch. It was true. The big clock refused to welcome the New Year. At that moment the people began to laugh and sing.
### READABILITY ANALYSIS

**SELECTION 1**

**ESL GROUP IRI I**

<table>
<thead>
<tr>
<th>FORMULA</th>
<th>READING GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPACHE</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>READABILITY FACTORS OF SAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words: 102</td>
</tr>
<tr>
<td>Total number of sentences: 13</td>
</tr>
<tr>
<td>Average sentence length (words): 7.85</td>
</tr>
<tr>
<td>Average word length (letters): 7.12</td>
</tr>
<tr>
<td>Average word length (syllables): 1.21</td>
</tr>
</tbody>
</table>

- Words not on Spache list: 4
- Number of sentences with 10 or fewer words: 11
- Number of sentences with 11 to 20 words: 2
- Number of sentences with 21 to 30 words: 0
- Number of sentences with over 30 words: 0
- Number of words with 5 or fewer letters: 75
- Number of words with 6 to 10 letters: 27
- Number of words with over 10 letters: 0

Words not on Spache word list:
- crowd
- gathered
- someone
- welcome

---

1. (F) Where had a large crowd gathered?
   ( ) in the Town Hall.
   (x) under the Town Hall clock.
   ( ) across the street from the Town Hall.

2. (V) In the story, the word "strike" means:
   (x) hit
   ( ) sing
   ( ) laugh

3. (F) At what time did the clock stop?
   ( ) eight minutes to twelve
   ( ) two minutes to twelve
   (x) five minutes to twelve

4. (V) gather:
   (x) meet
   ( ) dance
   ( ) left

5. (F) How did the person know the clock had stopped?
   The person heard someone yell, "It's two minutes past twelve!" The person noticed that the big hand did not move.

6. (I) The Town Hall clock was probably:
   ( ) new
   (x) old
   ( ) working well

7. (V) refuse:
   ( ) agree to
   ( ) want to
   (x) not agree to

8. (I) It took the person:
   ( ) a long time to realize the clock had stopped.
   (x) a short time to realize the clock had stopped.
   ( ) an hour to realize the clock had stopped.

9. (F) What did the people do to welcome the New Year?
   They began to laugh and sing.

10. (I) The main idea of the story is:
    ( ) Clocks are not very good.
    (x) People welcome the New Year by singing and laughing.
    ( ) The clock has stopped.
Sample

Ted Robinson has been worried all the week. Last Tuesday he received a letter from the local police. In the letter he was asked to call at the station. Ted wondered why he was wanted by the police, but he went to the station yesterday and now he is not worried any more. At the station, he was told by a smiling policeman that his bicycle had been found. Five days ago, the policeman told him, the bicycle was picked up in a small village four hundred miles away. It is now being sent to his home by train. Ted was most surprised when he heard the news. He was amused too, because he never expected the bicycle to be found. It was stolen twenty years ago when Ted was a boy of fifteen.
**READABILITY ANALYSIS**  
**SELECTION 2**  
**ESL GROUP IRI I**

<table>
<thead>
<tr>
<th>FORMULA</th>
<th>READING GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPACHE</td>
<td>2</td>
</tr>
</tbody>
</table>

**READABILITY FACTORS OF SAMPLE**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>99</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>7</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>14.14</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>4.01</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.26</td>
</tr>
<tr>
<td>Words not on the Spache list</td>
<td>5</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>3</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>3</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>1</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>76</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>23</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>0</td>
</tr>
</tbody>
</table>

Words not on the Spache list:
- received
- local
- police
- yesterday
- bicycle
Teacher's Edition
Answer Sheet
Selection 2
ESL Group IRI I

1. (F) When did Ted receive the letter?
   ( ) Monday night.
   ( ) last night.
   (x) last Tuesday.

2. (F) What did the letter say?
   He was asked to call at the police station.

3. (V) A train that stops in every little town is:
   ( ) an old train
   ( ) a fast train
   (x) a local train

4. (I) Ted was worried because:
   ( ) he had forgotten to call the police.
   (x) he couldn't understand why the police had written to him
   ( ) he had stolen the bicycle

5. (I) The policeman smiled at Ted because:
   ( ) he had arrested a thief.
   (x) he had good news.
   ( ) he wanted Ted to give him some money.

6. (F) How did Ted feel when he heard the news?
   He was surprised and amused.

7. (V) wondered:
   (x) thought about
   ( ) remembered
   ( ) forgot

8. (V) A village is:
   (x) smaller than a town.
   ( ) larger than a town
   ( ) the same size as a city.

9. (I) Ted left the station after he:
   (x) thanked the policeman.
   ( ) picked up his bicycle.
   ( ) identified his bicycle.

10. (F) How old was Ted when he went to the police station?
    ( ) 20
    ( ) 15
    (x) 35
Sample

Dentists always ask questions when it is impossible for you to answer. My dentist had just pulled out one of my teeth and had told me to rest for a while. I tried to say something, but my mouth was full of cotton-wool. He knew I collected birds' eggs and asked me whether my collection was growing. He then asked me how my brother was and whether I liked my new job in London. In answer to these questions I either nodded or made strange noises. Meanwhile, my tongue was busy searching out the hole where the tooth had been. I suddenly felt very worried, but could not say anything. When the dentist at last removed the cotton-wool from my mouth, I was able to tell him that he had pulled out the wrong tooth.
# READABILITY ANALYSIS
## SELECTION 3
### ESL GROUP IRI I

<table>
<thead>
<tr>
<th><strong>FORMULA</strong></th>
<th><strong>READING GRADE LEVEL</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>SPACHE</td>
<td>3</td>
</tr>
</tbody>
</table>

### READABILITY FACTORS
**OF SAMPLE**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>101</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>7</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>14.43</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>4.11</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.29</td>
</tr>
<tr>
<td>Number of words not on Spache list</td>
<td>11</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>0</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>7</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>75</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>25</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>0</td>
</tr>
<tr>
<td>Words not on Spache word list: <strong>dentists</strong></td>
<td></td>
</tr>
<tr>
<td><strong>questions</strong></td>
<td></td>
</tr>
<tr>
<td><strong>impossible</strong></td>
<td></td>
</tr>
<tr>
<td><strong>tried</strong></td>
<td></td>
</tr>
<tr>
<td><strong>cotton</strong></td>
<td></td>
</tr>
<tr>
<td><strong>wool</strong></td>
<td></td>
</tr>
<tr>
<td><strong>collected</strong></td>
<td></td>
</tr>
<tr>
<td><strong>whether</strong></td>
<td></td>
</tr>
<tr>
<td><strong>meanwhile</strong></td>
<td></td>
</tr>
<tr>
<td><strong>tongue</strong></td>
<td></td>
</tr>
<tr>
<td><strong>searching</strong></td>
<td></td>
</tr>
</tbody>
</table>


1. (F) When did the dentist always ask the patient questions?

   He asked the patient questions when it was impossible for him to answer.

2. (F) How many of the patient's teeth did the dentist pull?
   ( ) three
   ( ) two
   (x) one

3. (I) Cotton-wool was used to:
   ( ) keep the patient warm
   (x) make it easy for the dentist to work.
   ( ) make the patient feel pain.

4. (V) whether:
   ( ) asked
   (x) if
   ( ) rain

5. (F) What did the patient collect?
   ( ) teeth
   (x) birds' eggs
   ( ) cotton-wool

6. (V) search:
   ( ) collect
   (x) explore
   ( ) close

7. (I) The patient felt?
   ( ) happy
   (x) pain
   ( ) friendly

8. (V) meanwhile:
   (x) at the same time
   ( ) later
   ( ) earlier

9. (F) What did the patient do with his tongue?

   The patient searched out the hole where his tooth had been.

10. (I) The patient will:
    ( ) find a new job.
    ( ) pay the doctor extra money.
    (x) look for a new dentist
Sample

Frank Lloyd Wright did not call himself an artist. He called himself an architect. But the buildings he designed were works of art. He looked at the ugly square buildings around him, and he did not like what he saw. He wondered why people built ugly homes, when they could have beautiful ones.

Frank Lloyd Wright lived from 1869 to 1959. When he was young, there were no courses in architecture, so he went to work in an architect’s office in order to learn how to design buildings. Soon he was designing buildings that were beautiful.

He also wanted to make his buildings fit into the land around them. One of the houses he designed is on top of a high hill. Other people built tall, square houses on hills, but Wright did not want to lose the beauty of the hill. He built the house low and wide.

Now other architects know how to design buildings to fit into the land. Frank Lloyd Wright showed them how to do it.
READABILITY ANALYSIS
SELECTION 4
ESL GROUP IRI I
SAMPLE 1

******************************************************

** FORMULA **
** READING GRADE LEVEL **

** HARRIS-JACOBSON **

4

******************************************************

READABILITY FACTORS
OF SAMPLE 1

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>109</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>9</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>12.11</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>4.42</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.39</td>
</tr>
<tr>
<td>Words not on Harris-Jacobson list</td>
<td>14</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>5</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>3</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>1</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>81</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>26</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>2</td>
</tr>
</tbody>
</table>

Words not on Harris-Jacobson word list:

artist
courses
architect
architecture
buildings
architect
design
office
art
order
square
design
built
designing
### READABILITY ANALYSIS
**SELECTION 4**
**ESL GROUP IRI I**

<table>
<thead>
<tr>
<th>FORMULA</th>
<th>READING GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harris-Jacobson</td>
<td>4</td>
</tr>
</tbody>
</table>

### READABILITY FACTORS
**OF SAMPLE 2**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>54</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>4</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>13.50</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>3.93</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.24</td>
</tr>
<tr>
<td>Words not on Harris-Jacobson list</td>
<td>8</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>1</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>3</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>44</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>10</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>0</td>
</tr>
<tr>
<td>Words not on Harris-Jacobson word list:</td>
<td></td>
</tr>
<tr>
<td>designed</td>
<td>beauty</td>
</tr>
<tr>
<td>built</td>
<td>architects</td>
</tr>
<tr>
<td>square</td>
<td>design</td>
</tr>
<tr>
<td>lose</td>
<td>buildings</td>
</tr>
</tbody>
</table>
1. (F) Wright did not call himself:
   (x) an artist.
   ( ) an architect.
   ( ) a builder.

2. (V) An architect's work is:
   ( ) painting.
   ( ) writing.
   (x) drawing.

3. (F) Why did he not like the buildings he saw around him?
   He thought they were ugly.

4. (F) Where did he learn to design buildings?
   He learned in an architect's office.

5. (V) design:
   ( ) build a house
   (x) draw a plan
   ( ) hire an architect

6. (V) square:
   ( )
   ( )
   (x)

7. (I) Before he designed a house, he first considered:
   ( ) the building materials.
   ( ) the cost.
   (x) the land.

8. (I) Young architects take courses:
   ( ) to ask Wright questions.
   (x) to study Wright's designs.
   ( ) to listen to Wright speak.

9. (F) The house he designed on the hill was:
   ( ) tall and square.
   ( ) square and wide.
   (x) low and wide.

10. (I) Frank Lloyd Wright's houses:
    ( ) are similar to one another.
    (x) look quite different from one another.
    ( ) are exact copies of each other.
Sample 1
/When he had killed the guard, the prisoner of war dragged him into the bushes. Working rapidly in the darkness, he soon changed into the dead man's clothes. Now, dressed in a blue uniform and with a rifle over his shoulder, the prisoner marched boldly up and down in front of the camp. He could hear shouting in the camp itself. Lights were blazing and men were running here and there: they had just discovered that a prisoner had escaped. At that moment, a large black car with four officers inside it, stopped at the camp gates. The officers got out and the prisoner stood to attention and saluted as they passed. // When they had gone, the driver of the car came towards him. The man obviously wanted to talk. He was rather elderly with grey hair and clear blue eyes. The prisoner felt sorry for him, but there was nothing else he could do. As the man came near, the prisoner knocked him to the ground with a sharp blow. Then, jumping into the car, he drove off as quickly as he could. /
### READABILITY ANALYSIS

**SELECTION 5**

**ESL GROUP IRI I**

**SAMPLE 1**

---

**FORMULA**

<table>
<thead>
<tr>
<th>READING GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

---

**READABILITY FACTORS OF SAMPLE 1**

<table>
<thead>
<tr>
<th>Total number of words</th>
<th>113</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of sentences</td>
<td>7</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>16.14</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>4.40</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.39</td>
</tr>
</tbody>
</table>

| Words not on Dale-Chall list | 6 |
|------------------------------|
| Number of sentences with 10 or fewer words | 1 |
| Number of sentences with 11 to 20 words | 5 |
| Number of sentences with 21 to 30 words | 1 |
| Number of sentences with over 30 words | 0 |
| Number of words with 5 or fewer letters | 80 |
| Number of words with 6 to 10 letters | 33 |
| Number of words with over 10 letters | 0 |

**Words not on Dale-Chall list:**

- prisoner
- rifle
- prisoner
- prisoner
- saluted
READABILITY ANALYSIS
SELECTION 5
ESL GROUP IRI I
SAMPLE 2

*******************************************************
FORMULA
Dale-Chall.......................................5

READABILITY FACTORS
OF SAMPLE 2

<table>
<thead>
<tr>
<th>Total number of words</th>
<th>85</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of sentences</td>
<td>7</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>12.14</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>3.95</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.25</td>
</tr>
<tr>
<td>Words not on Dale-Chall list</td>
<td>5</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>1</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>6</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>70</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>15</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>0</td>
</tr>
</tbody>
</table>

Words not on Dale-Chall list:

- obviously
- elderly
- grey
- prisoner
- prisoner
1. (F) Why was the man in prison?  
   (x) He was a killer.  
   ( ) He was captured by the enemy.  
   ( ) He was a thief.
2. (F) Where did the prisoner hide the guard's body?  
   (x) in the car.  
   ( ) in the ground.  
   ( ) in the bushes.  
3. (I) Why did the prisoner work rapidly?  
   He was eager to escape and did not want to be discovered.
4. (V) Who wears a uniform?  
   ( ) a baby  
   (x) a policeman  
   ( ) a grandmother  
5. (F) Who came in the car?  
   ( ) four soldiers.  
   ( ) four prisoners.  
   (x) four officers.  
6. (F) Where did the car stop?  
   It stopped at the camp gates.
7. (I) The driver was:  
   (x) lonely.  
   ( ) drunk.  
   ( ) angry.  
8. (V) When do soldiers salute?  
   ( ) when they go to bed.  
   (x) when they have a drink.  
   ( ) when they see an officer.  
9. (V) elderly:  
   (x) old.  
   ( ) young.  
   ( ) middle aged.  
10. (I) How did the prisoner drive away from the camp?  
   (x) quickly.
Sample

/Rudy K married Lily before he went into the service. He was sent overseas after basic training with only a brief leave home. In actual time spent together, you could say their married life has been short. But Rudy feels married, and has been having his allotment checks sent to Lily.

Now Rudy has his discharge from the Army. Within a week of his return he can tell that something is wrong. The friends he knew in high school seem glad to see him, but they don't talk to him the way they once did. There are special looks when Lily's name is mentioned, and it doesn't take him long to realize that his wife has been unfaithful and with more than one man. /

His suspicions are confirmed when his sister assures him that Lily ran around a lot. She even supplies names and other details until Rudy tells her he doesn't want to hear any more.
### READABILITY ANALYSIS

**SELECTION 6**  
**ESL GROUP IRI I**

<table>
<thead>
<tr>
<th>FORMULA</th>
<th>READING GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dale-Chall</td>
<td>6</td>
</tr>
</tbody>
</table>

### READABILITY FACTORS OF SAMPLE

- **Total number of words**: 124
- **Total number of sentences**: 8
- **Average sentence length (words)**: 15.50
- **Average word length (letters)**: 4.19
- **Average word length (syllables)**: 1.32
- **Words not on Dale-Chall list**: 11
  - Number of sentences with 10 or fewer words: 2
  - Number of sentences with 11 to 20 words: 4
  - Number of sentences with 21 to 30 words: 2
  - Number of sentences with over 30 words: 0
  - Number of words with 5 or fewer letters: 99
  - Number of words with 6 to 10 letters: 25
  - Number of words with over 10 letters: 0

**Words not on Dale-Chall list:**
- overseas
- within
- basic
- special
- brief
- mentioned
- actual
- realize
- allotment
- unfaithful
- discharge
1. (F) Before he went into the Army, how long was Rudy married?
   
   He was married for a short time.

2. (I) While he was in the Army, Lily:
   
   ( ) had no money.
   (x) had enough money.
   ( ) became rich.

3. (V) allotment:
   
   (x) payment
   ( ) gift
   ( ) reward

4. (V) discharge:
   
   ( ) omit
   ( ) collect
   (x) release

5. (F) How did he learn that his wife had been unfaithful?

   ( ) His father told him in a letter.
   ( ) His friends told him when they went out for dinner.
   (x) He received special looks when his wife's name was mentioned.

6. (V) mention:
   
   ( ) look at
   (x) speak about
   ( ) figure

7. (F) Who gave him evidence that his wife was unfaithful?

   His sister told him.

8. (F) He saw his friends from:

   ( ) the Army.
   (x) work.
   ( ) high school.

9. (I) Why doesn't he want to hear any more details about Lily from his sister?

   ( ) He doesn't believe her.
   ( ) Because Lily already told him.
   (x) He believes her.

10. (I) Their marriage will be:

    ( ) happy.
    (x) difficult.
    ( ) better than before.
Sample

/It was fifteen years since he had first come to the village. He was then simply a pallid young man with prominent, short-sighted brown eyes. His appearance would not have seemed strange to people of average education and experience. But the villagers found his appearance peculiar because of the exceptional kind of work he did and because he had come from an unknown region.

His way of life was also strange. He invited no one to walk across his doorstep and he never went to the village bar for a drink or to gossip. He spoke to no one, except when it was necessary for his work. /

It soon became clear to the young women of the village that he would never urge one of them to marry him. It was as if he had heard them say that they would never marry a man like him.
## READABILITY ANALYSIS
### SELECTION 7
### ESL GROUP IRI I

<table>
<thead>
<tr>
<th>FORMULA</th>
<th>READING GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dale-Chall</td>
<td>7</td>
</tr>
</tbody>
</table>

### READABILITY FACTORS
#### OF SAMPLE

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>108</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>7</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>15.43</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>4.31</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.36</td>
</tr>
</tbody>
</table>

**Words not on Dale-Chall list:**
- pallid
- prominent
- appearance
- peculiar
- average
- exceptional
- region
- education
- gossip
- experience
- necessary
- villagers
- 184
1. (F) The man had come to the village:
   ( ) two years ago.
   ( ) very recently.
   (X) fifteen years ago.

2. (V) pallid:
   ( ) healthy
   ( ) gray
   (X) pale

3. (F) The villages found his appearance:
   ( ) usual.
   (X) unusual
   ( ) frightening.

4. (I) The villagers considered the man:
   ( ) a member of the community.
   (X) a foreigner.
   ( ) a happy person.

5. (F) Where did the man never go?
   He never went to the village bar.

6. (F) When did he speak to the villagers?
   He spoke to them only when it was necessary for work.

7. (V) region:
   (X) area
   ( ) part
   ( ) country

8. (V) gossip:
   ( ) debate
   ( ) dream
   (X) conversation

9. (I) The man had:
   ( ) many friends in the village.
   (X) no friends in the village.
   ( ) a few friends in the village.

10. (I) The main point of the story is:
    (X) the man never entered into the life of the village.
    ( ) the women in the village were looking for husbands.
    ( ) the man had unusual.
Sample 1

Albert is a high school senior in a class with more girls than boys. In his neighborhood the boys are less likely to finish school than the girls. Nevertheless, Albert has tried to be a "good student" with his eye on a better future. He delivers newspapers in the afternoon, sells tickets for school athletic events, and is working toward a college scholarship.

One day there is a school-wide strike against the food in the school cafeteria. The students spill out of the building and onto the school grounds. Bad lunches are only a part of their complaints. // Albert is shouting slogans along with the rest of them and is caught up in a crowd in the front of the school. They ignore administration demands that they return to afternoon classes. Instead, three of the boys climb the flagpole and remove the flag. With help from the police summoned to the school, the boys around the flagpole, including Albert, are disciplined by the school. They are suspended for the rest of the year. Albert's explanation that he had nothing to do with the flag incident is disregarded. He was in the area, and he got caught with the rest.//
READABILITY ANALYSIS
SELECTION 8
ESL GROUP IRI I
SAMPLE 1

FORMULA

| Dale-Chall | 8 |

READABILITY FACTORS
OF SAMPLE 1

<table>
<thead>
<tr>
<th>Total number of words</th>
<th>99</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of sentences</td>
<td>7</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>14.14</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>4.54</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.43</td>
</tr>
<tr>
<td>Words not on Dale-Chall list</td>
<td>13</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>1</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>6</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>65</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>31</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>3</td>
</tr>
</tbody>
</table>

Words not on Dale-Chall list:

- senior
- nevertheless
- future
- delivers
- athletic
- events
- scholarship
- schoolwide
- strike
- cafeteria
- students
- onto
- complaints
READABILITY ANALYSIS
SELECTION 8
ESL GROUP IRI I

READABILITY FACTORS
OF SAMPLE 2

Total number of words: 101
Total number of sentences: 7
Average sentence length (words): 14.43
Average word length (letters): 4.43
Average word length (syllables): 1.41
Words not on Dale-Chall list: 14
Number of sentences with 10 or fewer words: 2
Number of sentences with 11 to 20 words: 3
Number of sentences with 21 to 30 words: 2
Number of sentences with over 30 words: 0
Number of words with 5 or fewer letters: 71
Number of words with 6 to 10 letters: 25
Number of words with over 10 letters: 8

Words not on Dale-Chall list:
slogans, ignore
administration, demands
flagpole, summoned
flagpole, including
discipline, suspended
explanation, incident
disregarded, area
1. (F) Albert is planning on going to:
   (x) college.
   ( ) work.
   ( ) the army.

2. (I) Albert probably receives:
   ( ) a lot of money from his family.
   (x) little money from his family.
   ( ) enough money from his family.

3. (V) strike:
   (x) stop attending work or school
   ( ) stop doing homework
   ( ) stop receiving money for work

4. (F) What was one of the students' complaints?
   One of the complaints was the school's bad lunches.

5. (V) slogan:
   ( ) an often repeated prayer
   (x) an often repeated phrase
   ( ) an often sung song

6. (F) Albert:
   (x) took part in the strike.
   ( ) did not take part in the strike.
   ( ) was a leader of the strike.

7. (V) disciplined:
   ( ) judged
   (x) punished
   ( ) encouraged

8. (F) How was Albert disciplined?
   He was suspended for the rest of the year.

9. (I) The school administration:
   (x) could not maintain control of the students without
   outside help.
   ( ) controlled the strike easily without outside help.
   ( ) agreed to the students' demand for better food.

10. (I) Albert will probably be able to graduate:
    ( ) on time as he expected.
    (x) later than he expected.
    ( ) earlier than he expected.
190

Teacher's Edition
Selection 9
ESL Group IRI I
Dale-Chall readability level 3


Sample
In the 1840's and 1850's, America developed the famous clipper ships, the fastest sailing vessels the world had ever known. These graceful, three-masted ships were built mostly in New England shipyards, and they carried goods and people to every part of the world. During the era of the clipper ships the United States rapidly developed its merchant marine until it was the second largest in the world. With the commencement of the American Civil War, however, ocean commerce was reduced and fewer ships were built. The Southern navy destroyed many Northern merchant vessels, and the historic battle between the Monitor and the Merrimac proved that iron ships were going to take the place of wooden vessels. The United States never did build iron ships on as large a scale as it had built the clipper ships. After the war there was a tendency on the part of American businessmen and bankers to invest their money in railroads and other industries rather than in ocean shipping.
**READABILITY ANALYSIS**

**SELECTION 9**

**ESL GROUP IRI I**

---

**FORMULA**

<table>
<thead>
<tr>
<th>READING GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Dale-Chall........9</td>
</tr>
</tbody>
</table>

---

**READABILITY FACTORS OF SAMPLE**

- **Total number of words**: 117
- **Total number of sentences**: 5
- **Average sentence length (words)**: 23.40
- **Average word length (letters)**: 4.95
- **Average word length (syllables)**: 1.56
- **Words not on Dale-Chall list**: 16
- **Number of sentences with 10 or fewer words**: 0
- **Number of sentences with 11 to 20 words**: 2
- **Number of sentences with 21 to 30 words**: 2
- **Number of sentences with over 30 words**: 1
- **Number of words with 5 or fewer letters**: 73
- **Number of words with 6 to 10 letters**: 43
- **Number of words with over 10 letters**: 1

**Words not on Dale-Chall list:**

- developed
- clipper
- masted
- era
- developed
- marine
- commerce
- merchant
- famous
- graceful
- shipyards
- clipper
- merchant
- commencement
- reduced
- historic
1. (F) Most clipper ships were built in:
   (x) New England.
   ( ) the American South.
   ( ) England.
2. (V) graceful:
   (x) beautiful
   ( ) awkward
   ( ) fast
3. (F) What was special about the clipper ships?
   They were the fastest sailing vessels the world had ever known.
4. (F) At the beginning of the American Civil War, the American merchant marine was:
   ( ) the largest in the world.
   (x) the second largest in the world.
   ( ) one of the smallest in the world.
5. (V) vessels:
   ( ) shipyards
   (x) ships
   ( ) vehicles
6. (F) What did the historic battle between the Monitor and Merrimac prove?
   The battle proved that iron ships were going to take the place of wooden vessels.
7. (V) commencement:
   ( ) middle
   ( ) end
   (x) beginning
8. (I) After the Civil War, a banker would probably make more money in:
   ( ) ocean shipping.
   (x) railroads.
   ( ) shipbuilding.
9. (I) Which ships were the more modern?
   (x) iron ships
   ( ) clipper ships
   ( ) three masted ships
10. (I) After the Civil War the American navy built mostly:
    (x) iron warships.
    ( ) wooden ships.
    ( ) clipper ships.
Sample 1

Some of the notebooks that George Washington kept as a young man are still in existence, and they show that he learned a little Latin, that he acquired some of the basic elements of good conduct, and that he read a little English literature. At school he seems to have cared only for mathematics. His was a brief and most incomplete education for a gentleman, and it was all the formal education he was to have, since, unlike some of the other young Virginia gentlemen of his time, he did not go on to the College of William and Mary in the Virginia capital of Williamsburg. // In terms of intellectual preparation and power, then, Washington is in sharp contrast with some other early American presidents, such as John Adams, Thomas Jefferson, and James Madison. In later years, Washington probably regretted his lack of intellectual training. He never felt comfortable in formal debate, or in discussions that were not concerned with everyday, practical matters. And inasmuch as he never learned to speak French, he refused to visit France because he felt he would be embarrassed at not being able to speak directly to the statesmen of that country. Thus, unlike Jefferson and Adams, he never reached Europe. /
READABILITY ANALYSIS
SELECTION 10
ESL GROUP IRI I
SAMPLE 1

*d* FORMULA
* READING GRADE LEVEL
* Dale-Chall..........................10

READABILITY FACTORS
OF SAMPLE 1

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>106</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>3</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>35.33</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>4.33</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.36</td>
</tr>
<tr>
<td>Words not on Dale-Chall list</td>
<td>14</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>1</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>2</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>79</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>25</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>2</td>
</tr>
</tbody>
</table>

Words not on Dale-Chall list:
- notebooks
- acquired
- elements
- literature
- brief
- education
- education
- existence
- basic
- conduct
- mathematics
- incomplete
- formal
- unlike
READABILITY ANALYSIS
SELECTION 10
ESL GROUP IRI I

READABILITY FACTORS
OF SAMPLE 2

<table>
<thead>
<tr>
<th>Total number of words</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of sentences</td>
<td>5</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>20.00</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>5.17</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.63</td>
</tr>
<tr>
<td>Words not on Dale-Chall list</td>
<td>19</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>1</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>2</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>1</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>1</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>64</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>30</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>6</td>
</tr>
</tbody>
</table>

Words not on Dale-Chall list:
- intellectual
- contrast
- probably
- lack
- comfortable
- debate
- concerned
- inasmuch
- statesmen
- unlike

preparation
presidents
regretted
intellectual
formal
discussion
practical
embarrassed
thus
Teacher's Edition
Answer Sheet
Selection 10
ESL Group IAI I

1. (F) How do we know about George Washington's education?
   Some of the notebooks he kept are still in existence.

2. (V) element
   (x) principle
   ( ) container
   ( ) organism

3. (F) What was Washington's favorite subject?
   ( ) English Literature
   ( ) Latin
   (x) Mathematics

4. (F) Where did young Virginia gentlemen go for their formal education?
   They went to the College of William and Mary.

5. (I) Washington was more interested in:
   ( ) English Literature.
   ( ) Latin.
   (x) practical matters.

6. (I) Presidents Jefferson and Adams probably studied:
   ( ) only English.
   ( ) English and French.
   (x) English, French and Latin.

7. (V) regret:
   ( ) happy
   (x) sorry
   ( ) love

8. (V) intellectual
   ( ) artistic
   ( ) social
   (x) mental

9. (F) Why did Washington never go to France?
   ( ) He didn't like to travel abroad.
   (x) He couldn't speak French.

10. (I) Washington was different from other early American presidents in terms of his:
    (x) education
    ( ) wealth
    ( ) power
The best known of the miracle drugs are the antibiotics, but there are other and newer types. The antibiotic substances, produced by living organisms (mostly molds) have the power to kill or check the growth of bacteria. The job of the antibiotics generally is to aid the white blood cells by stopping the bacteria from multiplying.

When a person is killed by a disease, it means that the bacteria have multiplied faster than the white blood cells could devour them, and that the bacterial toxins increased more rapidly than the antibodies could neutralize them. The help that the antibiotics give the white blood cells and antibodies is generally enough to repulse an attack of the germs.

Before the use of antibiotics, many patients recovered through the strength of their natural defenses. But with the introduction of the antibiotics, the proportion of fatalities has been greatly decreased.
# READABILITY ANALYSIS
## SELECTION 11
### ESL GROUP IRI I

<table>
<thead>
<tr>
<th>FORMULA</th>
<th>READING GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dale-Chall</td>
<td>11</td>
</tr>
</tbody>
</table>

---

## READABILITY FACTORS
### OF SAMPLE

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>115</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>5</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>23.00</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>4.83</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.52</td>
</tr>
<tr>
<td>Words not on Dale-Chall list</td>
<td>26</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>0</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>3</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>1</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>1</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>82</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>29</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>4</td>
</tr>
</tbody>
</table>

Words not on Dale-Chall list:

- miracle
- antibiotic
- types
- antibiotic
- substances
- produced
- organisms
- molds
- growth
- bacteria
- antibiotic
generally
- bacteria
disease
devour
- bacterial
toxins
- increased
- antibiotics
- neutralize
- antibody
generally
- antibodies
- germs
- repulse
1. (V) miracle:  
   ( ) ordinary event  
   (x) supernatural event  
   ( ) disturbing event  

2. (F) What produces antibiotic substances?  
   ( ) white blood cells  
   ( ) bacteria  
   (x) molds  

3. (F) What is the job of the antibiotics?  
   The job is to aid the white blood cells by stopping the bacteria from multiplying.  

4. (V) toxins:  
   ( ) drugs  
   (x) poisons  
   ( ) medicines  

5. (F) What helped patients get well before antibiotics were discovered?  
   Their own natural defenses helped patients get well.  

6. (F) Among the miracle drugs, antibiotics are:  
   ( ) the newest.  
   ( ) the most effective.  
   (x) the best known.  

7. (V) repulse:  
   (x) drive back  
   ( ) drive forward  
   ( ) push together  

8. (I) When should you take antibiotics?  
   ( ) when you exercise regularly  
   (x) when you have a low white blood count  
   ( ) when you have a high white blood cell count.  

9. (I) When a person recovers from an illness, it means that:  
   ( ) bacteria have increased faster than the antibodies.  
   ( ) white blood cells have not been devoured.  
   (x) antibodies have repulsed an attack of germs.  

10. (I) One cause for the increase in population in the world is:  
    ( ) fewer wars throughout the world.  
    ( ) more food for children everywhere.  
    (x) the increased use of antibiotics.
Until about 1850 the common elementary school was considered adequate for the education of the large majority of children in the United States. Secondary schools, starting with the establishment of Benjamin Franklin's Academy in Philadelphia a hundred years earlier, were mostly private or at least were financed by private funds. The establishment of the first public high schools in 1821 marked the beginning of the upward extension of the tax-supported schools. In 1872 the decision of the Michigan Supreme Court in what is known as the "Kalamazoo Case" established that communities could tax themselves to provide educational activities beyond the elementary school. Previously the academies had satisfied the desire for continued education and preparation for college--at least for those who were willing to pay for it.
### READABILITY ANALYSIS

**SELECTION 12**

**ESL GROUP IRI I**

<table>
<thead>
<tr>
<th>FORMULA</th>
<th>READING GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dale-Chall</td>
<td>12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>READABILITY FACTORS OF SAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
</tr>
<tr>
<td>Total number of sentences</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
</tr>
<tr>
<td>Average word length (letters)</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
</tr>
<tr>
<td>Words not on Dale-Chall list</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
</tr>
</tbody>
</table>

Words not on Dale-Chall list:

- common
- considered
- education
- secondary
- private
- private
- establishment
- supported
- communities
- provide
- activities
- elementary
- elementary
- adequate
- majority
- establishment
- financed
- funds
- extension
- decision
- themselves
- educational
- beyond
1. (V) adequate:  
   (x) sufficient  
   ( ) necessary  
   ( ) extra

2. (F) Until 1850, the common elementary school was considered:  
   ( ) inadequate for most Americans.  
   (x) sufficient for most Americans.  
   ( ) necessary for only a few Americans.

3. (F) Most secondary schools before 1850 were financed by:  
   ( ) the state.  
   ( ) the national government.  
   (x) individuals.

4. (V) funds:  
   ( ) taxes  
   (x) money  
   ( ) wages

5. (F) What was the importance of the "Kalamazoo Case" in the history of United States education?  
   The case established that communities could tax themselves to provide educational activities beyond the elementary school.

6. (I) Why did young people attend academies before 1872?  
   They wanted to prepare for college.

7. (F) The students who attended Benjamin Franklin's Academy were preparing for:  
   ( ) secondary school.  
   (x) college.  
   ( ) high school.

8. (I) Those who argued that a community should tax itself to pay for high schools probably believed that:  
   (x) educational opportunities should be available to all.  
   ( ) education should be for those who could pay for it.  
   ( ) an elementary education was adequate for most Americans.

9. (V) extension:  
   ( ) requirement  
   ( ) degree  
   (x) range

10. (I) In the 1700's most students who attended college:  
   (x) came from wealthy families.  
   ( ) worked their way through school.  
   ( ) got scholarships.
ESL GROUP INFORMAL READING INVENTORY II
READING LEVELS 1-12
TEACHER'S EDITION
I got a letter from my sister today. She lives in Nigeria. In her letter, she said that she would come to England next year. If she comes, she will get a surprise. We are now living in a beautiful new house in the country. Work on it had started before my sister left. The house was finished five months ago. In my letter, I told her that she could stay with us. The house has many large rooms and there is a lovely garden. It is a very modern house, so it looks strange to some people. It must be the only modern house on the street.
READABILITY ANALYSIS
SELECTION 1
ESL GROUP IRI II

READABILITY FACTORS
OF SAMPLE

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>108</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>11</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>9.82</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>3.81</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.25</td>
</tr>
<tr>
<td>Words not on Spache list</td>
<td>1</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>6</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>5</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>86</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>22</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>0</td>
</tr>
</tbody>
</table>

Words not on Spache word list:
modern
1. (F) Whom did the person receive a letter from?
   ( ) a brother
   (x) a sister
   ( ) a mother

2. (F) When is the person's relative planning on coming to England?
   ( ) next week
   (x) next year
   ( ) in two weeks

3. (I) Why will the person's relative be surprised?
   She will be surprised to find her relatives have moved to a new modern house.

4. (V) lovely:
   (x) pretty
   ( ) ugly
   ( ) new

5. (V) started:
   ( ) finished
   ( ) completed
   (x) begun

6. (I) The house was probably:
   (x) expensive.
   ( ) cheap.
   ( ) poorly made.

7. (F) The house is:
   (x) new.
   ( ) old.
   ( ) not finished.

8. (V) country:
   ( ) inside the city
   (x) outside the city
   ( ) downtown

9. (F) Why is the house strange to some people?
   It is strange to some people because it is very modern.

10. (I) Most houses in the country near their new house were:
    ( ) modern.
    (x) old.
    ( ) new.
Sample 1

"Many folk stories tell about people who are given three wishes, and only three. This is one such story.

A man and his wife were very poor. They kept hoping for new clothes and good food. The man enjoyed eating, and he especially liked pancakes. One night an old woman came to their house and told them she would let them have three wishes. They could wish for anything they wanted.

The man had just finished eating a little bread for his dinner, and he was still hungry. He said, "I wish I had a big pancake!"

Suddenly a pancake appeared on his plate. /

Sample 2

"You fool!" his wife cried, "You could have wished for a house full of wonderful food, but you wished for a pancake. I wish that pancake was on the end of your foolish nose!"

Immediately the pancake stuck to the end of his nose.

Then the man and his wife started blaming each other. "It's your fault!" the man cried. "No, it's your fault!" she answered. What could they do? The pancake was still stuck on the husband's nose.

"Oh!" the wife cried. "I wish none of this had ever happened!"

Immediately the pancake was gone, and the man was saying "I'm still hungry. / How I wish I had some pancakes!"

But of course nothing happened.
READABILITY ANALYSIS
SELECTION 2
ESL GROUP IRI II

***********************************************************
* FORMULA READING GRADE LEVEL *
* Spache.................................. 2 *
***********************************************************

READABILITY FACTORS
OF SAMPLE 1

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>104</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>9</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>11.56</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>4.15</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.31</td>
</tr>
<tr>
<td>Words not on Spache list</td>
<td>6</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>5</td>
</tr>
<tr>
<td>Number of Sentences with 11 to 20 words</td>
<td>4</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>83</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>21</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>0</td>
</tr>
<tr>
<td>Words not on Spache word list:</td>
<td></td>
</tr>
<tr>
<td>folk</td>
<td></td>
</tr>
<tr>
<td>hoping</td>
<td></td>
</tr>
<tr>
<td>enjoyed</td>
<td></td>
</tr>
<tr>
<td>especially</td>
<td></td>
</tr>
<tr>
<td>pancakes</td>
<td></td>
</tr>
<tr>
<td>plate</td>
<td></td>
</tr>
</tbody>
</table>
# READABILITY ANALYSIS
## SELECTION 2
### ESL GROUP IRI II

<table>
<thead>
<tr>
<th>FORMULA</th>
<th>READING GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spache</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>READABILITY FACTORS</th>
<th>OF SAMPLE 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>104</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>9</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>11.56</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>4.20</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.32</td>
</tr>
<tr>
<td>Words not on Spache list</td>
<td>5</td>
</tr>
</tbody>
</table>

Number of sentences with 10 or fewer words: 6
Number of sentences with 11 to 20 words: 0
Number of sentences with 21 to 30 words: 3
Number of sentences with over 30 words: 0
Number of words with 5 or fewer letters: 34
Number of words with 6 to 10 letters: 18
Number of words with over 10 letters: 2

Words not on Spache word list:
- wonderful
- pancake
- foolish
- immediately
- stuck
- blaming
Teacher's Edition
Answer Sheet
Selection 2
ESL Group IRI II

1. (V) folk:
   (x) traditional
   ( ) modern
   ( ) interesting

2. (I) The man and his wife had:
   ( ) lots of clothes
   ( ) enough clothes
   (x) few clothes

3. (F) When did the old woman come to the house?
   ( ) in the morning
   ( ) in the evening
   ( ) in the afternoon

4. (F) What did the man eat for his dinner?
   ( ) several pancakes
   ( ) one pancake
   (x) a little bread

5. (F) What was the wife's first wish?
   She wished that the pancake was on the end of her husband's nose.

6. (V) especially:
   ( ) seldom
   ( ) never
   (x) really

7. (I) The man was most concerned about his:
   ( ) future needs.
   (x) present needs.
   ( ) past needs.

8. (V) fault:
   ( ) reason
   ( ) choice
   (x) mistake

9. (I) The point of the story is that:
   ( ) it is wrong to waste food.
   (x) wives are often wiser than their husbands.
   ( ) foolish people waste their opportunities.

10. (F) What was the wife's second wish?
    She wished that none of the situation had ever happened.
One day a hungry fox approached a rooster and said: "I remember what a wonderful singer your father was. I wonder whether you can sing as well." The rooster shut his eyes and began to sing. The fox snatched him with his mouth and carried him away. The people of the town cried: "Look, look! The fox is carrying off our rooster."

Then the rooster said to the fox: "Good heavens, do you understand? The people are saying that you are carrying off their rooster. Tell them quickly that it's yours, and not theirs." The fox opened his mouth and said, "It's not yours; it's mine!" At that moment the rooster escaped from the fox's mouth and flew into a tree.

The fox was furious. He was hungry and now the rooster was out of reach. He could have eaten that rooster if he hadn't talked so much!
### READABILITY ANALYSIS

**SELECTION 3**

**ESL GROUP IRI II**

<table>
<thead>
<tr>
<th>FORMULA</th>
<th>READING GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spache</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>READABILITY FACTORS</th>
<th>OF SAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>106</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>8</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>13.25</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>4.21</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.33</td>
</tr>
<tr>
<td>Words not on Spache list</td>
<td>10</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>3</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>5</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>81</td>
</tr>
<tr>
<td>Number of words with 5 to 10 letters</td>
<td>25</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>0</td>
</tr>
</tbody>
</table>

Words not approached: wonderful, whether, snatched, heavens

Words not approached on Spache word list: rooster, singer, shut, carrying, understand
1. (V) rooster:
   ( ) female chicken
   (x) male chicken
   ( ) baby chicken

2. (F) When he approached the rooster, the fox felt:
   ( ) angry.
   (x) hungry.
   ( ) tired.

3. (F) What did the fox remember about the rooster's father?

He remembered what a wonderful singer the rooster's father was.

4. (V) snatch:
   ( ) release
   (x) grab
   ( ) hold

5. (I) The town's people probably:
   (x) wanted to kill the fox.
   ( ) wanted to keep the fox around.
   ( ) wanted to raise foxes.

6. (F) Whom did the rooster belong to?

The rooster belonged to the town people.

7. (I) The main point of the story is that:
   (x) it is better not to talk too much.
   ( ) it is wise not to eat roosters.
   ( ) roosters are more intelligent than foxes.

8. (V) furious:
   ( ) surprised
   ( ) upset
   (x) angry

9. (F) Where did the rooster escape to?
   ( ) the town
   (x) a tree
   ( ) the chicken house

10. (I) In the future the rooster will not:
    ( ) hide in a tree.
    ( ) sing in the morning.
    (x) sing near a fox.
Sample 1

New Mexico did not become one of the United States until 1912, but it is old in history. The Pueblo Indians, who were the earliest settlers, built whole cities in New Mexico while most Europeans were members of wild tribes.

Before the English started colonies on the east coast, the Spanish explorers came up from Mexico. Spanish settlers followed them. For a long time the city of Santa Fe, which is now the capital of New Mexico, was the Spanish capital of the new land. Santa Fe still looks like a Spanish town.

The Spanish families of New Mexico are very proud. Sample 2

In that part of the United States there are many Mexican-Americans who have moved across the border from Mexico during the past hundred years. But the old Spanish families call themselves Spanish-Americans because their ancestors came directly from Spain long ago.

Pueblo Indians still live in New Mexico. They follow many of their old ways, but they are modern in many ways, too.

New Mexicans love their strangely beautiful desert state that they call "the land of enchantment." /
### READABILITY ANALYSIS

**SELECTION 4**

**ESL GROUP IRI II**

<table>
<thead>
<tr>
<th>FORMULA</th>
<th>READING GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harris-Jacobson...</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>READABILITY FACTORS OF SAMPLE 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
</tr>
<tr>
<td>Total number of sentences</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
</tr>
<tr>
<td>Average word length (letters)</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
</tr>
</tbody>
</table>

Words not on Harris-Jacobson list: 12

Number of sentences with 10 or fewer words: 3
Number of sentences with 11 to 20 words: 2
Number of sentences with 21 to 30 words: 2
Number of sentences with over 30 words: 0

Number of words with 5 or fewer letters: 70
Number of words with 6 to 10 letters: 32
Number of words with over 10 letters: 0

Words not on Harris-Jacobson word list:

- become
- settlers
- members
- tribes
- east
- explorers
- history
- whole
- wild
- colonies
- coast
- capital
### READABILITY ANALYSIS
**SELECTION 4**
**ESL GROUP IRI II**

<table>
<thead>
<tr>
<th>FORMULA</th>
<th>READING GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harris-Jacobson</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>READABILITY FACTORS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OF SAMPLE 2</td>
<td></td>
</tr>
<tr>
<td>Total number of words</td>
<td>95</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>6</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>15.83</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>4.97</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.56</td>
</tr>
<tr>
<td>Words not on Harris-Jacobson list</td>
<td>10</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>1</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>4</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>1</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>63</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>30</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>2</td>
</tr>
</tbody>
</table>

**Words not on Harris-Jacobson word list:**
- border
- hundred
- ancestors
- modern
- state
- during
- themselves
- directly
- desert
- enchantment
1. (F) Who were the earliest settlers in New Mexico?
   ( ) Europeans
   (x) Indians
   ( ) Mexican Americans

2. (V) tribe:
   ( ) group of horses
   ( ) group of cities
   (x) group of people

3. (F) When did the Indians build cities in New Mexico?
   (x) while most Europeans were members of tribes
   ( ) when the Spanish came to Mexico
   ( ) when the English came to the east coast

4. (I) Why do some people call themselves Spanish-Americans?

   They do so because their ancestors came directly from Spain long ago.

5. (F) Why does Santa Fe look like a Spanish town?
   ( ) because it is in Spain
   ( ) because of its Indian buildings
   (x) because it was the Spanish capital of the new land

6. (V) ancestors:
   ( ) cousins
   (x) forefathers
   ( ) children

7. (I) Why is the state called New Mexico?

   Because many of the people who live there came from Mexico

8. (F) New Mexico is mostly:
   ( ) jungle
   ( ) forest
   (x) desert

9. (I) Have the Pueblo Indians changed since they came to New Mexico?
   ( ) completely
   (x) in some ways
   ( ) not at all

10. (V) enchantment:
    ( ) heat and dryness
    (x) charm and delight
    ( ) pride and respect
One of the greatest sea tragedies that ever occurred was that of the steamship Titanic. It was the first trip of the giant ship. There were more than two thousand people aboard on their way to the United States from England.

It was on the night of April 14, 1912. The sea was calm, the weather beautiful. People were dancing in the spacious salons. Music, laughter, and singing could be heard everywhere. The thought of danger was far away.

Suddenly, just before midnight the sailor on guard cried: "Iceberg!" Before the ship could change her course the iceberg had torn a huge hole in the bottom of the ship. Nothing could be done. The new ship went down into the sea. More than fifteen hundred people lost their lives on that tragic night.
READABILITY ANALYSIS
SELECTION 5
ESL GROUP IAI II

********************
* FORMULA         READING GRADE LEVEL *
* Dale-Chall...............5 *

********************

READABILITY FACTORS
OF SAMPLE

Total number of words: 110
Total number of sentences: 9
Average sentence length (words): 12.22
Average word length (letters): 4.42
Average word length (syllables): 1.39
Words not on Dale-Chall list: 8
Number of sentences with 10 or fewer words: 6
Number of sentences with 11 to 20 words: 2
Number of sentences with 21 to 30 words: 1
Number of sentences with over 30 words: 0
Number of words with 5 or fewer letters: 78
Number of words with 6 to 10 letters: 32
Number of words with over 10 letters: 0

Words not on Dale-Chall list:
tragedies
steamship
spacious
laughter
 occurred
calm
salons
iceberg
1. (V) tragedy:
   (x) unhappy event
   ( ) exciting event
   ( ) wonderful event
2. (V) occurred
   ( ) changed
   ( ) turned
   (x) happened
3. (F) The Titanic was going:
   (x) from England to the United States.
   ( ) from the United States to England.
   ( ) from England to Spain
4. (F) What happened when the ship struck the iceberg?
   The iceberg tore a huge hole in the bottom of the ship and caused it to sink.
5. (F) What were the people on the ship doing before it struck the iceberg?
   The people were dancing, singing and laughing.
6. (V) salon:
   ( ) deck
   (x) room
   ( ) game
7. (I) Who was the first person to see the iceberg?
   (x) a sailor
   ( ) the captain
   ( ) a passenger
8. (F) How many people survived the tragedy?
   ( ) about 1,500
   ( ) about 2,000
   (x) about 500
9. (I) Why couldn't the ship turn quickly away from the iceberg?
   ( ) The captain was dancing.
   (x) The ship was too large.
   ( ) the wind was too strong.
10. (I) The ship probably carried:
    ( ) extra small life boats.
    ( ) enough small life boats.
    (x) not enough small life boats.
Sample

Mrs. Anne Sterling did not think of the risk she was taking when she ran through a forest after two men. They had rushed up to her while she was having a picnic at the edge of a forest with her children and tried to steal her handbag. In the struggle, the strap broke and, with the bag in their possession, both men started running through the trees. Mrs. Sterling got so angry that she ran after them. She was soon out of breath, but she continued to run. When she caught up with them, she saw that they had sat down and were going through the contents of the bag, so she ran straight at them. The men got such a fright that they dropped the bag and ran away. "The strap needs mending," said Mrs. Sterling later, "but they did not steal anything."
READABILITY ANALYSIS
SELECTION 8
ESL GROUP IRI II

FORMULA

<table>
<thead>
<tr>
<th>FORMULA</th>
<th>READING GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dale-Chall</td>
<td>5</td>
</tr>
</tbody>
</table>

READABILITY FACTORS
OF SAMPLES

<table>
<thead>
<tr>
<th>Total number of words</th>
<th>117</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of sentences</td>
<td>6</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>19.50</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>3.37</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.25</td>
</tr>
<tr>
<td>Words not on Dale-Chall list</td>
<td>6</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>1</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>2</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>3</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>95</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>22</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>0</td>
</tr>
<tr>
<td>Words not on Dale-Chall list:</td>
<td>risk, handbag, struggle, possession, continued, contents</td>
</tr>
</tbody>
</table>
1. (F) Why did the woman run after the two men?
   She ran after them because they had stolen her handbag.

2. (F) What was the woman doing on the edge of the forest?
   She was having a picnic with her children.

3. (V) risk:
   ( ) pleasure
   (x) danger
   ( ) opportunity

4. (I) When the man grabbed her handbag, she
   ( ) let go quickly.
   (x) held on to it tightly.
   ( ) dropped it.

5. (F) Why did the men drop the handbag?
   (x) They were frightened.
   ( ) They didn't want anything in it.
   ( ) the strap broke.

6. (F) What did the two men get away with?
   ( ) Mrs. Sterling's money
   ( ) Mrs. Sterling's jewelry
   (x) nothing

7. (V) contents:
   (x) things inside
   ( ) things outside
   ( ) things stolen

8. (I) Mrs. Sterling guessed that the men:
   ( ) had knives.
   ( ) had guns.
   (x) didn't have weapons.

9. (I) Probably on that day it was:
   ( ) raining
   ( ) snowing
   (x) clear

10. (V) mending:
    ( ) cutting
    ( ) shaping
    (x) fixing
Sample 1

Leon has had to stop working because his doctor has told him he has emphysema. The disease will become progressively worse until he dies, and Leon will have to stay home where he can be close to a mechanical device to aid his breathing.

Added to Leon's problems is his wife, Clara. That is, Leon isn't sure if she is a problem or not, but finding out will be expensive. Having been married twice before, Leon knows how it feels to have a marriage break up. Now that he is no longer able to make a living, he fears that Clara will leave him and he will be left to the care of strangers.

Sample 2

Leon's only income is his small monthly social security check for total disability. His wife earns some money as the manager of a small dress shop. If she stays with him and adds her income to his, they can get along and can afford doctors' bills and special equipment Leon needs to stay alive. Without her, Leon will probably live with much less comfort and for a shorter length of time.
READABILITY ANALYSIS
SELECTION 7
ESL GROUP IRI II

FORMULA

READING GRADE LEVEL

Dale-Chall ......................... 7

READABILITY FACTORS
OF SAMPLE 1

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>115</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>6</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>19.17</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>4.01</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.26</td>
</tr>
<tr>
<td>Words not on Dale-Chall list</td>
<td>8</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>1</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>3</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>2</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>93</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>21</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>1</td>
</tr>
<tr>
<td>Words not on Dale-Chall list:</td>
<td></td>
</tr>
<tr>
<td>emphysema</td>
<td></td>
</tr>
<tr>
<td>progressive</td>
<td></td>
</tr>
<tr>
<td>problems</td>
<td></td>
</tr>
<tr>
<td>expensive</td>
<td></td>
</tr>
<tr>
<td>disease</td>
<td></td>
</tr>
<tr>
<td>mechanical devise</td>
<td></td>
</tr>
<tr>
<td>problem</td>
<td></td>
</tr>
<tr>
<td>strangers</td>
<td></td>
</tr>
</tbody>
</table>
## READABILITY ANALYSIS
### SELECTION 7
### ESL GROUP IRI II

**FORMULA**

<table>
<thead>
<tr>
<th>Formula</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>READ/1:G</td>
<td>Grade Level</td>
<td>7</td>
</tr>
</tbody>
</table>

### READABILITY FACTORS

**OF SAMPLE 2**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>39</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>5</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>17.20</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>4.38</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.33</td>
</tr>
<tr>
<td>Words not on Dale-Chall list</td>
<td>9</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>0</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>4</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>1</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>67</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>22</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>3</td>
</tr>
</tbody>
</table>

**Words not on Dale-Chall list:**

- social
- total
- afford
- equipment
- security
- disability
- special
- probably
1. (V) The disease emphysema causes difficulty:
   ( ) eating
   ( ) speaking
   (x) breathing

2. (V) progressively:
   (x) more and more
   ( ) decreasingly
   ( ) significantly

3. (F) What will he need to use at home because of his disease?
   ( ) a special bed
   (x) a breathing device
   ( ) a wheel chair

4. (I) Leon's first two wives:
   ( ) died
   (x) left him
   ( ) became ill

5. (F) In the future where will he get money from?
   ( ) his company
   ( ) his savings
   (x) social security

6. (V) afford:
   (x) to be able to pay for
   ( ) to sell things
   ( ) to receive money

7. (F) What is his wife's job?
   She is the manager of a small dress shop.

8. (I) If Clara leaves him:
   (x) Leon will have to move to a nursing home.
   ( ) Leon will move in with his brother.
   ( ) Leon will move in with his friends.

9. (F) Why does Leon need his wife's income?
   He needs the money for doctor bills and equipment to live longer and more comfortably.

10. (I) Leon probably:
    ( ) drank a lot.
    (x) smoked a lot.
    ( ) ate a lot.
Teacher's Edition
Selection 8
ESL Group IRI II
Dale-Chall readability level 8

Sample

To Americans the word "frontier" has a meaning quite different from its use in Europe. There the frontier is a stopping place, a place patrolled by guards, where one must show his papers before passing through. But the American frontier has meant freedom, opportunity, room to expand in. It is not a stopping place but an open door, not a place where you must identify yourself, but a place where you can escape identification if you wish, a place where civilization has not established its rigid pattern, where spaces are wide and men can make their own laws.

The feeling that the frontier was there, to the west, even if a man did not choose to go there has always been a conditioning factor in the American temperament. The frontier in American thought, was a place beyond civilization where nature took over from man and where the evils concocted by human duplicity were washed away by the great rivers, the wide sky, the brisk, clean air.
### READABILITY ANALYSIS

**SELECTION 3**

**ESL GROUP IRI II**

<table>
<thead>
<tr>
<th>FORMULA</th>
<th>READING GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dale-Chall</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

******************************************************

**READABILITY FACTORS**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>128</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>5</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>25.60</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>4.52</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.42</td>
</tr>
<tr>
<td>Words not on Dale-Chall list</td>
<td>15</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>0</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>2</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>2</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>1</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>93</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>29</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>5</td>
</tr>
</tbody>
</table>

Words not on Dale-Chall list:
- frontier
- patrolled
- opportunity
- identify
- civilization
- rigid
- frontier
- factor
- expand
- identification
- established
- pattern
- conditioned
- temperament
1. (F) The word 'frontier' has:
   ( ) the same meaning in Europe and the United States.
   ( ) a similar meaning in Europe and the United States.
   (x) a different meaning in Europe and the United States.

2. (F) What did the word 'frontier' suggest to Europeans?

   For Europeans the 'frontier' was a stopping place - a place patrolled by guards.

3. (I) In Europe it was:
   (x) difficult to cross the frontier.
   ( ) easy to cross the frontier.
   ( ) impossible to cross the frontier.

4. (I) In American thought, the frontier was:
   ( ) a place where you had to identify yourself.
   ( ) a place patrolled by guards.
   (x) a place to escape identification.

5. (F) What area of the country was associated with the frontier?

   The West was associated with the frontier.

6. (I) At the American frontier a system of laws:
   (x) was not well established.
   ( ) was firmly established.
   ( ) was the same as in the East.

7. (V) temperament:
   ( ) weather
   (x) personality
   ( ) anger

8. (V) concocted:
   (x) thought up
   ( ) worked with
   ( ) put away

9. (I) The author suggests that there is:
   (x) less evil when men return to nature.
   ( ) more evil when men move to the lawless frontier.
   ( ) less evil when people move to cities.

10. (V) duplicity:
    ( ) repetition
    (x) trickery
    ( ) reproduction
Ever since the dawn—no doubt the cloudy dawn—of time, man has been trying to change the weather. For a long time while he relied on magic and prayer; later he switched to what he can loosely call science.

Until quite recently, all such efforts failed. Only within the last fifteen years—since a young scientist hit upon the technique called cloud-seeding—have we made any real progress. And even the first experiments with that method, after raising excited hopes, proved disappointing.

Cloud-seeding . . . has touched off one of the most baffling controversies in meteorological history. It has been blamed for, or credited with, practically all kinds of weather. Some scientists claim seeding can produce floods or hail. Others staunchly maintain it has no effect at all. The battle is far from over, but at least one clear conclusion is beginning to emerge: man can change the weather, and he is getting better at it.
READABILITY ANALYSIS
SELECTION 9
ESL GROUP IRI II

FORMULA

Dale-Chall

READABILITY FACTORS
OF SAMPLE 2

Total number of words 83
Total number of sentences 5
Average sentence length (words) 18.50
Average word length (letters) 4.48
Average word length (syllables) 1.41
Words not on Dale-Chall list 14
Number of sentences with 10 or fewer words 3
Number of sentences with 11 to 20 words 0
Number of sentences with 21 to 30 words 2
Number of sentences with over 30 words 0
Number of words with 5 or fewer letters 53
Number of words with 6 to 10 letters 30
Number of words with over 10 letters 0

Words not on Dale-Chall List:

scientists claim
produce insist
creates droughts
dissipates staunchly
maintain effect
conclusion emerge
conclusion emerge
READABILITY ANALYSIS
SELECTION 9
ESL GROUP IRI II

FORMULA

READING GRADE LEVEL

Dale-Chall..........................9

READABILITY FACTORS OF SAMPLE 1

Total number of words 109
Total number of sentences 7

Average sentence length (words) 15.57
Average word length (letters) 4.85
Average word length (syllables) 1.53

Words not on Dale-Chall list 16

Number of sentences with 10 or fewer words 1
Number of sentences with 11 to 20 words 5
Number of sentences with 21 to 30 words 1
Number of sentences with over 30 words 0

Number of words with 5 or fewer letters 73
Number of words with 6 to 10 letters 31
Number of words with over 10 letters 5

Words not on Dale-Chall list:

doubt
science
efforts
scientist
progress
method
baffling
meteorological

relied
Recently
within
technique
experiment
controversy
credited
practically
1. (F) What did man rely on to change the weather before he studied science?
   Man relied on prayer and magic.

2. (F) Who developed the technique of cloud-seeding?
   ( ) a doctor
   ( ) a farmer
   (X) a scientist

3. (F) What was the reaction to the first experiments with cloud-seeding?
   At first people were excited.

4. (I) For cloud seeding, scientists use:
   ( ) cars.
   (X) airplanes.
   ( ) tractors.

5. (V) baffling:
   ( ) organized
   (X) confusing
   ( ) scientific

6. (I) The results of the first experiments with cloud seeding were:
   ( ) conclusive.
   (X) inconclusive.
   ( ) inaccurate.

7. (V) drought:
   ( ) rainy weather
   ( ) freezing weather
   (X) dry weather

8. (F) Scientists:
   ( ) generally agree about the results of cloud-seeding.
   (X) generally disagree about the results of cloud-seeding.
   ( ) are convinced about the results of cloud seeding.

9. (V) staunchly:
   ( ) weakly
   ( ) scientifically:
   (X) strongly

10. (I) The use of cloud-seeding is:
    ( ) widespread.
    (X) not widespread.
    ( ) very economical.
In the early twentieth century Henry Ford, the automobile manufacturer, played a prominent part in the industrial development of America. Born in 1863, he had grown up on a farm near Detroit. He loved machinery and was eager to see machinery replace human labor on the farm. As early as 1893 he built a horseless carriage. When he started automobile manufacturing in 1903, the automobile was still an elaborate, expensive, and undependable vehicle. Ford wanted to manufacture a dependable, inexpensive, easily-repaired automobile in large quantities. He hoped farmers could use it to go to town from their often remote farms.

By concentrating on a single model, introducing standardized methods of manufacture, and constantly lowering prices, Ford steadily increased his sales. In the year 1914, he manufactured about 250,000 cars; in the year 1921, about 1,250,000 cars.
READABILITY ANALYSIS
SELECTION 10
ESL GROUP IRI II

FORMULA

<table>
<thead>
<tr>
<th>READING GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dale-Chall</td>
</tr>
<tr>
<td>10</td>
</tr>
</tbody>
</table>

READABILITY FACTORS

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>98</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>7</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>14.00</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>5.11</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.51</td>
</tr>
<tr>
<td>Words not on Dale-Chall list</td>
<td>21</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>2</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>5</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>0</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>27</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>6</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td></td>
</tr>
</tbody>
</table>

Words not on Dale-Chall list:

- twentieth
- manufacturer
- industrial
- replace
- labor
- manufacturing
- elaborate
- undependable
- manufacture
- inexpensive
- easily
- century
- prominent
- development
- human
- horseless
- remote
- expensive
- vehicle
- dependable
- quantities
1. (F) Henry Ford spent his youth:
   (x) on a farm.
   ( ) in a city.
   ( ) in a factory.
2. (V) manufacturer:
   ( ) salesman
   ( ) consumer
   (x) producer
3. (V) prominent:
   ( ) common
   (x) important
   ( ) unusual
4. (F) What did he want to replace human labor with?
   He wanted to replace human labor with machinery.
5. (I) In addition to producing automobiles, Ford probably mass
produced:
   ( ) horseless carriages.
   (x) motorized farm machinery.
   ( ) trains.
6. (F) The first automobile was:
   ( ) easily-repaired.
   ( ) inexpensive.
   (x) undependable.
7. (F) What was one way Ford increased his sales?
   He concentrated on a single model. (He introduced standardized methods

c manufacture. [He lowered prices.]
8. (V) remote:
   ( ) nearby
   (x) far away
   ( ) local
9. (I) As a common means of transportation, the automobile
replaced the:
   ( ) horseless carriage.
   (x) horse.
   ( ) the bus.
10. (I) The main idea of the passage is:
    ( ) cars were expensive in the early twentieth century.
    ( ) Ford concentrated on a cheap model.
    (x) Ford wanted to replace human labor with machinery.
Sample

During early Roman history all physicians were either slaves or representatives of lower Roman society. Medicine was a Greek science, and many Greek physicians, attracted by the prospect of great profits at the capital of the empire, moved to Rome to set up their practices. As a consequence, many doctors were foreigners, and as such were considered in a very low position by the people of high social rank. Frequently, a rich Roman supplied one of his slaves with a medical education for the sake of convenience. Having one's own doctor was obviously an advantage not to be overlooked, and slaves who had a knowledge of the healing art commanded the highest prices in the Roman slave market. / Recognizing the importance of the medical profession, however, Julius Caesar conferred citizenship on all who practiced medicine in Rome to make them more desirous of living in the city.
## READABILITY ANALYSIS
### SELECTION II
### ESL GROUP IRI II

<table>
<thead>
<tr>
<th><strong>FORMULA</strong></th>
<th><strong>READING GRADE LEVEL</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dale-Chall</td>
<td>11</td>
</tr>
</tbody>
</table>

### READABILITY FACTORS OF SAMPLE

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>117</td>
</tr>
<tr>
<td>Total number of sentences</td>
<td>5</td>
</tr>
<tr>
<td>Average sentence length (words)</td>
<td>23.40</td>
</tr>
<tr>
<td>Average word length (letters)</td>
<td>4.91</td>
</tr>
<tr>
<td>Average word length (syllables)</td>
<td>1.55</td>
</tr>
<tr>
<td>Words not on Dale-Chall list</td>
<td>27</td>
</tr>
<tr>
<td>Number of sentences with 10 or fewer words</td>
<td>0</td>
</tr>
<tr>
<td>Number of sentences with 11 to 20 words</td>
<td>2</td>
</tr>
<tr>
<td>Number of sentences with 21 to 30 words</td>
<td>2</td>
</tr>
<tr>
<td>Number of sentences with over 30 words</td>
<td>1</td>
</tr>
<tr>
<td>Number of words with 5 or fewer letters</td>
<td>73</td>
</tr>
<tr>
<td>Number of words with 6 to 10 letters</td>
<td>41</td>
</tr>
<tr>
<td>Number of words with over 10 letters</td>
<td>3</td>
</tr>
</tbody>
</table>

Words not on Dale-Chall list:

- physicians
- society
- physicians
- prospect
- empire
- consequence
- considered
- social
- frequently
- medical
- sake
- obviously
- overlooked
- knowledge
- representatives
- science
- attracted
- profits
- practices
- foreigners
- position
- rank
- supplied
- education
- convenience
- advantage
- commanded
1. (F) Why were Greek physicians attracted to Rome?  
   They were attracted by the prospect of great profits.

2. (I) The language of medicine in Rome was:  
   ( ) Latin  
   (x) Greek  
   ( ) English

3. (F) In early Roman history, physicians had:  
   ( ) high social positions.  
   (x) low social positions.  
   ( ) changing social positions.

4. (Y) rank:  
   ( ) list  
   (x) position  
   ( ) slave

5. (Y) healing:  
   ( ) changing  
   ( ) sorting  
   (x) making well

6. (F) Slaves with medical education:  
   (x) were sold for a high price.  
   ( ) were never sold at the slave market.  
   ( ) were sold for a low price.

7. (I) For a Roman youth from the upper class, to choose the study of medicine as a profession was:  
   ( ) acceptable.  
   (x) unusual.  
   ( ) encouraged.

8. (I) Julius Caesar believed that the supply of physicians was:  
   ( ) adequate.  
   (x) inadequate.  
   ( ) excessive.

9. (F) How did Julius Caesar improve the position of physicians?  
   He conferred citizenship on all who practiced medicine in Rome.

10. (Y) conferred:  
    (x) gave  
    ( ) returned  
    ( ) took away
Sample 1

The invention of the process of printing from movable type, which occurred in Germany about the middle of the fifteenth century, was destined to exercise a far-reaching influence on all the living languages of Europe. Introduced into England about 1476 by William Caxton, who had learned the art on the continent, printing made such rapid progress that a mere century later it was observed that handwritten books were seldom to be met with and almost never used. Some idea of the rapidity with which the new process swept forward may be had from the fact that in Europe the number of books printed before the year 1500 reaches the surprising figure of 35,000. / The majority of these, it is true, were in Latin, whereas it is in the modern languages that the effect of the printing press was chiefly to be felt.
READABILITY ANALYSIS
SELECTION 12
ESL GROUP IRI II

***************************************************************
# FORMULA
# READING GRADE LEVEL
# Dale-Chall...............................12
#***************************************************************

READABILITY FACTORS
OF SAMPLE

Total number of words 115
Total number of sentences 3

Average sentence length (words) 35.33
Average word length (letters) 4.67
Average word length (syllables) 1.47

Words not on Dale-Chall list 22

Number of sentences with 10 or fewer words 0
Number of sentences with 11 to 20 words 0
Number of sentences with 21 to 30 words 0
Number of sentences with over 30 words 3

Number of words with 5 or fewer letters 76
Number of words with 6 to 10 letters 33
Number of words with over 10 letters 1

Words not on Dale-Chall list:

invention
movable
occurred
century
exercise
introduced
rapid
mere
observed
seldom
process

process
type
fifteenth
destined
influence
continent
progress
century
handwritten
rapidity
forward
1. (F) In which century was printing invented?
   ( ) the nineteenth
   (x) the fifteenth
   ( ) the fourteenth

2. (V) century:
   ( ) ten years
   (x) one hundred years
   ( ) one thousand years

3. (F) In what country did the invention of printing occur?
   The invention occurred in Germany.

4. (F) Before the year 1500 what language was used in most books?
   ( ) English
   ( ) French
   (x) Latin

5. (F) How were most books produced before the invention of printing?
   They were handwritten.

6. (V) continent:
   (x) land mass
   ( ) country
   ( ) island

7. (I) Printing made books:
   ( ) more difficult to read.
   ( ) more difficult to write.
   (x) easier to read.

8. (I) The invention of printing:
   (x) greatly increased the number of books written in modern languages.
   ( ) increased the number of books in Latin.
   ( ) increased the number of handwritten books.

9. (V) influence:
   (x) affect
   ( ) react
   ( ) exercise

10. (I) The process of printing from moveable type:
    ( ) greatly increased the price of books.
    (x) greatly increased the number of books available.
    ( ) greatly increased the demand for handwritten books.
# READING CATALOGUE

**REQUIREMENTS:** GROUP C (seventh grade reading level)

<table>
<thead>
<tr>
<th>SERIES</th>
<th>DIRECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>-----</td>
<td>Read 2 stories that do not have questions.</td>
</tr>
<tr>
<td>SR</td>
<td>Read 2 stories that do have questions on which you get scores of 80-100.</td>
</tr>
<tr>
<td></td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>SSR</td>
<td>Read 2 stories that do not have questions.</td>
</tr>
<tr>
<td></td>
<td>Read 2 stories that do have questions on which you get scores of 80-100.</td>
</tr>
<tr>
<td></td>
<td>Do 1 Glossary exercise from Book 3, 4, 5, 6, or 9. Answer the questions in the back of the Question Book. Do ONLY 1 Glossary exercise.</td>
</tr>
<tr>
<td></td>
<td>Read the 2 starred (***) articles in Book 8.</td>
</tr>
<tr>
<td>TR</td>
<td>Read 3 stories in Book 2 on which you get scores of 80-100.</td>
</tr>
<tr>
<td>RDL</td>
<td>Read 3 articles.</td>
</tr>
</tbody>
</table>

Ask your Instructor to help you with EACH of the SERIES below.

<table>
<thead>
<tr>
<th>HOR</th>
<th>Read 2 stories on which you get scores of 80-100.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRA</td>
<td>Read 2 stories on which you get scores of 80-100.</td>
</tr>
<tr>
<td>------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>RFU</td>
<td>Take the RFU Placement Test.</td>
</tr>
<tr>
<td></td>
<td>Do 5 RFU's on which you get scores of 80-100.</td>
</tr>
</tbody>
</table>

**NAME** __________________________  **ELI LEVEL** _____________
<table>
<thead>
<tr>
<th>GROUP G</th>
<th>SERIES</th>
<th>STORY TITLE</th>
<th>SUMMARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCIENCE READER (SR) Book 4</td>
<td>The Voyage to Venus Pages 4-10 (?)</td>
<td>Discusses early trips to Venus and Mars by Mariner Spacecraft.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Our World of Weather Pages 40-44</td>
<td>Explains about cold fronts and warm fronts.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cooling Facts Pages 116-119 (?)</td>
<td>Explains how evaporation makes things cooler.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What Makes It Rain? Page 18-21 (?)</td>
<td>Examines the theory (idea) that meteor dust causes rain.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Great Meteor of 1947 Page 24-29</td>
<td>Discusses meteors.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A New Window in the Sky Page 32-37 (?)</td>
<td>Discusses radio waves and the science of radio astronomy.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Size of Living Things Page 66-71</td>
<td>Discusses the relationship between size and survival for living things.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How Odd the Oyster Page 83-86 (?)</td>
<td>Explains the life cycle of the oyster and discusses the problems oyster farmers face.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How Glasses Help You See Page 87-90 (?)</td>
<td>Discusses how the eye works and how glasses improve vision.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ABC of the Atom Page 108-113 (?)</td>
<td>Explains the structure of atoms.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fastest Man on Earth Page 114-117 (?)</td>
<td>Describes early experiments of the effects of sudden stops on man.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Magic of TV Page 120-123</td>
<td>Explains how TV works.</td>
<td></td>
</tr>
<tr>
<td>GROUP G</td>
<td>SERIES</td>
<td>STORY TITLE</td>
<td>SUMMARY</td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(SR continued)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Book 5 continued)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Titan - From Blast-Off to Target</td>
<td>Describes the blast-off, flight, and landing of a Titan ICBM rocket.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page 129-135</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Steps to the World Beyond</td>
<td>Discusses the landings of men and space craft on the moon.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page 48-52 (?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Don't Pity the Animals In the Zoo</td>
<td>Discusses animal life in modern zoos.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page 67-72</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Watch For Cicadas - In 1979!</td>
<td>Discusses the life cycle of the 17-year cicada (an insect).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page 85-88 (?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Man's Most Playful Friend - The Otter</td>
<td>Discusses the habits of otters (a type of animal).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page 95-99 (?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Book 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 Sun Power Comes Down to Earth</td>
<td>Discusses uses of the sun's energy.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page 100-105 (?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>More Power to Us</td>
<td>Discusses one method of harnessing (trapping, collecting) the sun's energy for use here on earth (solar power).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page 106</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wonders From Wood</td>
<td>Discusses new products that come from wood and better ways to work with wood.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page 107-111 (?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mirages - Tricks of Nature</td>
<td>Explains mirages (false images).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 117-121</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Book 7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Most Mysterious Force in the Universe</td>
<td>Discusses gravity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page 21-25 (?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Water of Life</td>
<td>Explains how and why water acts as it does.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page 26-29 (?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Postmortem Pioneer</td>
<td>Story of Bethenia Owens and how she overcame many obstacles to become a doctor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 41-45 (?)</td>
<td></td>
</tr>
<tr>
<td>GROUP G SERIES</td>
<td>STORY TITLE</td>
<td>SUMMARY</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>------------------------------------------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Coconut Palm: A Living Supermarket</td>
<td>Discusses the various uses of the coconut palm (a type of tropical tree).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pages 55-59 (?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(SR continued)</td>
<td>The Boy Who Redeemed His Father's Name</td>
<td>Story of a Japanese boy who saved the family name by discovering a new comet.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pages 65-73 (?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flying Saucers - Are They Real?</td>
<td>Describes some U.S. sightings and briefly discusses various theories.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pages 81-85 (?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Winds - Wicked and Wonderful/</td>
<td>Discusses locations and causes of winds. Second part questions 13 common weather beliefs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How Weather-Wise Are You?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pages 86-95 (?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Great Mont Blanc Tunnel</td>
<td>Discusses the problems encountered while digging the Mont Blanc Tunnel through the Alps, joining France and Italy.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pages 115-122 (?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Look What's Happening to Glass</td>
<td>Discusses some new discoveries about glass.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pages 18-23</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>+ Captains of the Skies</td>
<td>Discusses the sport of hot-air ballooning.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pages 32-37 (?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Beware the Witch's Wind</td>
<td>Discusses and explains the dangerous winds that scientists call foehn (pronounced fern).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Page 41-45 (?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pretty Poison</td>
<td>Discusses one of America's most polluted rivers - the Blackstone in New England.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pages 51-51 (?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>California's Earthquake &quot;Laboratory&quot;</td>
<td>Discusses earthquakes and what causes them.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pages 55-62 (?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To Preserve America's American Glories</td>
<td>Briefly discusses the problem of vanishing wilderness lands.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pages 63-67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Book 8
<table>
<thead>
<tr>
<th>GROUP G</th>
<th>SERIES</th>
<th>STORY TITLE</th>
<th>SUMMARY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>(Book 8 continued)</strong></td>
<td><strong>SUMMARY</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>I Watched Acupuncture Work</td>
<td>Discusses how doctors in China use acupuncture in operations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 68-71 (?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dandelions: Golden Heralds of Spring</td>
<td>Discuss the common wild dandelion plant.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 78-79</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>In Defence of the Wolf</td>
<td>Discusses the life-style and value of wolves (a dog-like animal)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 93-97 (?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>He Blazed a Pathway to the Heavens</td>
<td>Discusses the life of Johannes Kepler, a famous German astronomer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 98-106 (?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>They Caught a Falling Star</td>
<td>Discusses rocks and meteorites that fall to earth.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 107-111</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Our First Soft Landing on the Moon</td>
<td>Describes Surveyor 1's (a space craft name) soft moon landing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 114-119 (?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Air Surfing: A Nervy New Sport</strong></td>
<td>Discusses the exciting sport of hang gliding.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 4-9 (?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Why Tires Skid</td>
<td>Explains what causes tires to skid (slide) on the road.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 14-15</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Miracle of the Sunbeam</td>
<td>Explains how sunlight supplies us with food and oxygen.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 16-20 (?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>In the Balance</td>
<td>Brief discussion of balance. Balancing tricks described.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 28-29</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Have You Ever Noticed?</td>
<td>Very brief explanation of how ice skates work.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 32-33</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Journey to Infinity</td>
<td>Discusses Pioneer 10's (name of a famous spaceship) trip into space.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 34-41 (?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hurricane Warning!</td>
<td>Briefly discusses hurricanes (violent winds).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 62-64 (?)</td>
<td></td>
</tr>
<tr>
<td>GROUP G</td>
<td>SERIES</td>
<td>STORY TITLE</td>
<td>SUMMARY</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
<td>------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>(SR continued)</td>
<td></td>
<td>Out Vanishing Tidelands</td>
<td>Discusses the value and misuses of our tidelands (land that is between solid ground and the ocean - usually not sandy beaches).</td>
</tr>
<tr>
<td>(Book 9 continued)</td>
<td></td>
<td>Can There Be a &quot;Good&quot; Forest Fire?</td>
<td>Discusses the values of man-controlled forest fires.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Man With Three Birthdays</td>
<td>The true story of Louis Byron Russell Jr. and his heart transplant.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 84-88(?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Warning From Great Gull Island</td>
<td>Discusses man's influence on nature.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pages 118-122</td>
<td></td>
</tr>
</tbody>
</table>

**TIMED READINGS (TR)**

Book 2

Read any 2 stories in the book and answer the questions.
(questions are on the back of the story page.)
(Stories begin on page 15.)
<table>
<thead>
<tr>
<th>STORY TITLE</th>
<th>SUMMARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congress Argues</td>
<td>Tells about the first Continental Congress voting for independence.</td>
</tr>
<tr>
<td>Pages 77-78 and 87</td>
<td></td>
</tr>
<tr>
<td>In the Mines of the Sun God</td>
<td>A young boy tells about life in Bolivia.</td>
</tr>
<tr>
<td>Pages 32-41 (7)</td>
<td></td>
</tr>
<tr>
<td>The Mayor and the City</td>
<td>Discusses some of the problems that face a large, fast-growing and under-educated city.</td>
</tr>
<tr>
<td>Pages 44-51 (7)</td>
<td></td>
</tr>
<tr>
<td>Natural Resources</td>
<td>Brief discussion of Central and South American natural resources. Illustrated map included.</td>
</tr>
<tr>
<td>Pages 110-111</td>
<td></td>
</tr>
<tr>
<td>Latin-American Recipes</td>
<td>Explains how to cook 5 different South American foods.</td>
</tr>
<tr>
<td>Pages 122-126 (7)</td>
<td></td>
</tr>
<tr>
<td>Hard Hit by Hurricane Hazel</td>
<td>Tells about a hurricane that hit the U.S. and Canada in 1954.</td>
</tr>
<tr>
<td>Pages 38-43</td>
<td></td>
</tr>
<tr>
<td>Treasure Hunt</td>
<td>Tells about the many attempts to recover the gold and other treasures that are believed to be buried on an island in Nova Scotia.</td>
</tr>
<tr>
<td>Pages 44-51 (7)</td>
<td></td>
</tr>
<tr>
<td>Habitat</td>
<td>Discusses a new concept in apartment building.</td>
</tr>
<tr>
<td>Pages 52-57</td>
<td></td>
</tr>
<tr>
<td>Send Her on Along/A Price of Progress</td>
<td>A poem about Canada. Also, an article about the building of the St. Lawrence Seaway.</td>
</tr>
<tr>
<td>Pages 106-113 (7)</td>
<td></td>
</tr>
<tr>
<td>The Removal of the Nanticoke Indians</td>
<td>Tells how the Nanticoke Indians travelled from Delaware to Canada in an effort to escape the English soldiers.</td>
</tr>
<tr>
<td>Pages 120-125 (7)</td>
<td></td>
</tr>
<tr>
<td>GROUP G SERIES</td>
<td>STORY TITLE</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>(SSR continued)</td>
<td>Family</td>
</tr>
<tr>
<td>Book 8</td>
<td>The First Big Radio Broadcast</td>
</tr>
<tr>
<td></td>
<td>Wheels and Reels</td>
</tr>
<tr>
<td></td>
<td>** Hep Talk for Big Cheeses</td>
</tr>
<tr>
<td></td>
<td>** A Nation of Immigrants</td>
</tr>
<tr>
<td>** Please read these 2 articles, if you have not already done so.</td>
<td>Do Thi Hien</td>
</tr>
<tr>
<td></td>
<td>Sumo</td>
</tr>
<tr>
<td></td>
<td>A Long Story</td>
</tr>
<tr>
<td></td>
<td>African Coffee</td>
</tr>
<tr>
<td>Book 9</td>
<td>Glossary</td>
</tr>
<tr>
<td>Book 3, 4, 5, 6, or 9 (only ONE book)</td>
<td></td>
</tr>
<tr>
<td>GROUP G</td>
<td>SERIES</td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Book 1</td>
<td></td>
</tr>
<tr>
<td>Book 2</td>
<td></td>
</tr>
<tr>
<td>Book 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Book 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Book 5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>GROUP C</td>
<td>SERIES</td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>(RDL continued)</td>
<td></td>
</tr>
<tr>
<td>Book 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Book 7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Book 9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>STORY TITLE</td>
<td>SUMMARY</td>
</tr>
<tr>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td>Take a Driving Test</td>
<td>Discusses driving rules in England.</td>
</tr>
<tr>
<td>A Poncho for Pennies</td>
<td>Explains how to cut and sew a poncho for you to wear.</td>
</tr>
<tr>
<td>Let's Choose the Right Programs</td>
<td>Gives you practice understanding a TV program schedule.</td>
</tr>
<tr>
<td>Fly Away to Excitement: Fly to East Africa</td>
<td>Lists some of the interesting places to visit in East Africa.</td>
</tr>
<tr>
<td>The Honda Remedy for Transport Sickness</td>
<td>Advertises Honda scooters.</td>
</tr>
<tr>
<td>Whoever Heard of Ship Lag?</td>
<td>An advertisement for the ship, Queen Elizabeth.</td>
</tr>
<tr>
<td>Have You Ever flown a Kite?</td>
<td>Explains how to make a kite.</td>
</tr>
<tr>
<td>Help Them Live!</td>
<td>Teaches some important facts of emergency first aid.</td>
</tr>
<tr>
<td>Would You Like to Be a Photographer?</td>
<td>Discusses what it is like to be a professional photographer.</td>
</tr>
<tr>
<td>A Bread-and-Butter Letter</td>
<td>This is about writing letters.</td>
</tr>
<tr>
<td>Let's Give a Party!</td>
<td>Gives some ideas about parties.</td>
</tr>
<tr>
<td>GROUP G SERIES</td>
<td>STORY TITLE</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>SRA Gold (G)</td>
<td>Dead as a Dodo #3 (?)</td>
</tr>
<tr>
<td>Green (Gr)</td>
<td>Treetops Hotel #8 (?)</td>
</tr>
<tr>
<td>Silver (S)</td>
<td>The Mighty Atom #1 (?)</td>
</tr>
<tr>
<td>Blue (B)</td>
<td>Men Hunters of the U.S.A. #1 (?)</td>
</tr>
<tr>
<td></td>
<td>The Mayflower Pilgrims #3 (?)</td>
</tr>
<tr>
<td></td>
<td>The York Ghost #4 (?)</td>
</tr>
<tr>
<td></td>
<td>The Food We Eat #6 (?)</td>
</tr>
<tr>
<td></td>
<td>Birthplace #11 (?)</td>
</tr>
<tr>
<td>Violet (V)</td>
<td>Saved by the Bell #3 (?)</td>
</tr>
<tr>
<td></td>
<td>Composer of the Blues #5 (?)</td>
</tr>
<tr>
<td>GROUP G SERIES</td>
<td>STORY TITLE</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>(SKA continued)</td>
<td><strong>A London Shopping Spree</strong> #6 (?)</td>
</tr>
<tr>
<td>(Violet (V) continued)</td>
<td><strong>Martin Luther King</strong> #7</td>
</tr>
<tr>
<td></td>
<td><strong>The Last of the Fosters</strong> #8 (?)</td>
</tr>
<tr>
<td></td>
<td><strong>A Clear Case</strong> #9 (?)</td>
</tr>
<tr>
<td></td>
<td><strong>Lawrence, Friend of the Arabs</strong> #12 (?)</td>
</tr>
</tbody>
</table>
STATISTICS...
CORRELATION (P) - 0.75325  R SQUARED - 0.56976  SIGNIFICANCE R - 0.00001
STD ERR OF EST - 2.15224  INTERCEPT (A) - 7.47976  STD ERR OF A - 2.19239
SIGNIFICANCE A - 0.00256  SLOPE (B) - 0.41502  STD ERR OF B - 0.04333
SIGNIFICANCE B - 0.00001

PLOTTED VALUES - 121  EXCLUDED VALUES - 0  MISSING VALUES - 0
<table>
<thead>
<tr>
<th>CON.</th>
<th>ABSOLUTE FREQ</th>
<th>RELATIVE FREQ (PCT)</th>
<th>ADJUSTED FREQ (PCT)</th>
<th>CUM FREQ (PCT)</th>
<th>CON.</th>
<th>ABSOLUTE FREQ</th>
<th>RELATIVE FREQ (PCT)</th>
<th>ADJUSTED FREQ (PCT)</th>
<th>CUM FREQ (PCT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.</td>
<td>1</td>
<td>.8</td>
<td>.8</td>
<td>.8</td>
<td>25.</td>
<td>1</td>
<td>.8</td>
<td>.8</td>
<td>.8</td>
</tr>
<tr>
<td>29.</td>
<td>2</td>
<td>1.7</td>
<td>2.5</td>
<td>3.3</td>
<td>19.</td>
<td>2</td>
<td>1.7</td>
<td>1.7</td>
<td>2.6</td>
</tr>
<tr>
<td>30.</td>
<td>1</td>
<td>.8</td>
<td>.8</td>
<td>.8</td>
<td>32.</td>
<td>1</td>
<td>.8</td>
<td>.8</td>
<td>6.1</td>
</tr>
<tr>
<td>31.</td>
<td>1</td>
<td>.8</td>
<td>.8</td>
<td>.8</td>
<td>31.</td>
<td>1</td>
<td>.8</td>
<td>.8</td>
<td>5.0</td>
</tr>
<tr>
<td>32.</td>
<td>1</td>
<td>.8</td>
<td>.8</td>
<td>5.0</td>
<td>36.</td>
<td>2</td>
<td>1.7</td>
<td>1.7</td>
<td>6.6</td>
</tr>
<tr>
<td>36.</td>
<td>1</td>
<td>2.5</td>
<td>2.5</td>
<td>9.9</td>
<td>37.</td>
<td>1</td>
<td>2.5</td>
<td>2.5</td>
<td>14.0</td>
</tr>
<tr>
<td>38.</td>
<td>1</td>
<td>.8</td>
<td>.8</td>
<td>10.7</td>
<td>40.</td>
<td>5</td>
<td>4.1</td>
<td>4.1</td>
<td>14.9</td>
</tr>
<tr>
<td>39.</td>
<td>5</td>
<td>4.1</td>
<td>4.1</td>
<td>14.9</td>
<td>40.</td>
<td>4</td>
<td>3.3</td>
<td>3.3</td>
<td>17.3</td>
</tr>
<tr>
<td>41.</td>
<td>1</td>
<td>.8</td>
<td>.8</td>
<td>19.0</td>
<td>41.</td>
<td>1</td>
<td>.8</td>
<td>.8</td>
<td>19.8</td>
</tr>
<tr>
<td>42.</td>
<td>3</td>
<td>2.5</td>
<td>2.5</td>
<td>21.5</td>
<td>43.</td>
<td>2</td>
<td>1.7</td>
<td>1.7</td>
<td>24.0</td>
</tr>
<tr>
<td>44.</td>
<td>1</td>
<td>2.5</td>
<td>2.5</td>
<td>24.0</td>
<td>44.</td>
<td>1</td>
<td>2.5</td>
<td>2.5</td>
<td>26.2</td>
</tr>
<tr>
<td>45.</td>
<td>5</td>
<td>3.3</td>
<td>3.3</td>
<td>29.6</td>
<td>46.</td>
<td>4</td>
<td>1.3</td>
<td>1.3</td>
<td>30.6</td>
</tr>
<tr>
<td>46.</td>
<td>6</td>
<td>4.1</td>
<td>4.1</td>
<td>33.9</td>
<td>47.</td>
<td>5</td>
<td>4.1</td>
<td>4.1</td>
<td>34.7</td>
</tr>
<tr>
<td>47.</td>
<td>4</td>
<td>1.1</td>
<td>1.1</td>
<td>37.2</td>
<td>48.</td>
<td>6</td>
<td>5.0</td>
<td>5.0</td>
<td>41.0</td>
</tr>
<tr>
<td>49.</td>
<td>4</td>
<td>3.3</td>
<td>3.3</td>
<td>65.5</td>
<td>50.</td>
<td>2</td>
<td>1.7</td>
<td>1.7</td>
<td>67.1</td>
</tr>
<tr>
<td>50.</td>
<td>2</td>
<td>1.7</td>
<td>1.7</td>
<td>67.1</td>
<td>51.</td>
<td>10</td>
<td>4.1</td>
<td>4.1</td>
<td>69.5</td>
</tr>
<tr>
<td>54.</td>
<td>3</td>
<td>6.6</td>
<td>6.6</td>
<td>62.0</td>
<td>52.</td>
<td>1</td>
<td>5.6</td>
<td>5.6</td>
<td>66.1</td>
</tr>
<tr>
<td>55.</td>
<td>4</td>
<td>6.6</td>
<td>6.6</td>
<td>68.6</td>
<td>54.</td>
<td>2</td>
<td>1.7</td>
<td>1.7</td>
<td>73.3</td>
</tr>
<tr>
<td>56.</td>
<td>7</td>
<td>8.9</td>
<td>8.9</td>
<td>74.4</td>
<td>55.</td>
<td>6</td>
<td>5.0</td>
<td>5.0</td>
<td>74.3</td>
</tr>
<tr>
<td>59.</td>
<td>4</td>
<td>5.0</td>
<td>5.0</td>
<td>94.3</td>
<td>60.</td>
<td>1</td>
<td>4.1</td>
<td>4.1</td>
<td>98.0</td>
</tr>
<tr>
<td>62.</td>
<td>1</td>
<td>.8</td>
<td>.8</td>
<td>99.2</td>
<td>63.</td>
<td>1</td>
<td>.8</td>
<td>.8</td>
<td>100.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>121</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
DISTRIBUTION OF ESL GROUP IRI SCORES FORM A

<table>
<thead>
<tr>
<th>CODE</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.</td>
<td>(1)</td>
</tr>
<tr>
<td>10.</td>
<td>(2)</td>
</tr>
<tr>
<td>32.</td>
<td>(1)</td>
</tr>
<tr>
<td>37.</td>
<td>(1)</td>
</tr>
<tr>
<td>36.</td>
<td>(1)</td>
</tr>
<tr>
<td>35.</td>
<td>(1)</td>
</tr>
<tr>
<td>34.</td>
<td>(1)</td>
</tr>
<tr>
<td>33.</td>
<td>(1)</td>
</tr>
<tr>
<td>32.</td>
<td>(1)</td>
</tr>
<tr>
<td>31.</td>
<td>(1)</td>
</tr>
<tr>
<td>30.</td>
<td>(1)</td>
</tr>
<tr>
<td>49.</td>
<td>(1)</td>
</tr>
<tr>
<td>48.</td>
<td>(1)</td>
</tr>
<tr>
<td>47.</td>
<td>(1)</td>
</tr>
<tr>
<td>46.</td>
<td>(1)</td>
</tr>
<tr>
<td>45.</td>
<td>(1)</td>
</tr>
<tr>
<td>44.</td>
<td>(1)</td>
</tr>
<tr>
<td>50.</td>
<td>(1)</td>
</tr>
<tr>
<td>51.</td>
<td>(1)</td>
</tr>
<tr>
<td>52.</td>
<td>(1)</td>
</tr>
<tr>
<td>53.</td>
<td>(1)</td>
</tr>
<tr>
<td>54.</td>
<td>(1)</td>
</tr>
<tr>
<td>55.</td>
<td>(1)</td>
</tr>
<tr>
<td>56.</td>
<td>(1)</td>
</tr>
<tr>
<td>57.</td>
<td>(1)</td>
</tr>
<tr>
<td>58.</td>
<td>(1)</td>
</tr>
<tr>
<td>59.</td>
<td>(1)</td>
</tr>
<tr>
<td>60.</td>
<td>(1)</td>
</tr>
</tbody>
</table>

**MEAN**: 48.174 | **STANDARD ERRORS**: 6.676 | **MEDIAN**: 49.358
**MODE**: 50.000 | **SKEWNESS**: 7.434 | **VARIANCE**: 53.861
**KURTOSIS**: -1.100 | **KURTOSIS**: -1.716 | **GAUGEC**: 53.000
**MINIMUM**: 26.000 | **MAXIMUM**: 59.000 | **SUM**: 5429.000
**C.V. PCT**: 19.431 | **44 C.T.**: 44.416 | **SUM TO**: 49.512

**VALID CASES**: 121 | **MISSING CASES**: 0
### Distribution of ESL Group IRI Scores Form B

**Mean:** 45.496

**Mode:** 44.089

**Minimum:** 25.000

**Maximum:** 55.000

**C.V. Pct:** 15.130

**Valid Cases:** 121

**Median:** 43.732

**Skewness:** 1.936

**Kurtosis:** 7.726

**Variance:** 5.000

**Range:** 30.000

**Sum:** 561.356

**Frequency Distribution:**

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>26</td>
<td>1</td>
</tr>
<tr>
<td>27</td>
<td>3</td>
</tr>
<tr>
<td>28</td>
<td>1</td>
</tr>
<tr>
<td>29</td>
<td>1</td>
</tr>
<tr>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>31</td>
<td>1</td>
</tr>
<tr>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td>33</td>
<td>1</td>
</tr>
<tr>
<td>34</td>
<td>1</td>
</tr>
<tr>
<td>35</td>
<td>1</td>
</tr>
<tr>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td>37</td>
<td>1</td>
</tr>
<tr>
<td>38</td>
<td>1</td>
</tr>
<tr>
<td>39</td>
<td>1</td>
</tr>
<tr>
<td>40</td>
<td>1</td>
</tr>
<tr>
<td>41</td>
<td>1</td>
</tr>
<tr>
<td>42</td>
<td>1</td>
</tr>
<tr>
<td>43</td>
<td>1</td>
</tr>
<tr>
<td>44</td>
<td>1</td>
</tr>
<tr>
<td>45</td>
<td>1</td>
</tr>
<tr>
<td>46</td>
<td>1</td>
</tr>
<tr>
<td>47</td>
<td>1</td>
</tr>
<tr>
<td>48</td>
<td>1</td>
</tr>
<tr>
<td>49</td>
<td>1</td>
</tr>
<tr>
<td>50</td>
<td>1</td>
</tr>
<tr>
<td>51</td>
<td>1</td>
</tr>
<tr>
<td>52</td>
<td>1</td>
</tr>
<tr>
<td>53</td>
<td>1</td>
</tr>
<tr>
<td>54</td>
<td>1</td>
</tr>
<tr>
<td>55</td>
<td>1</td>
</tr>
<tr>
<td>56</td>
<td>1</td>
</tr>
<tr>
<td>57</td>
<td>1</td>
</tr>
<tr>
<td>58</td>
<td>1</td>
</tr>
<tr>
<td>59</td>
<td>1</td>
</tr>
<tr>
<td>60</td>
<td>1</td>
</tr>
<tr>
<td>61</td>
<td>1</td>
</tr>
<tr>
<td>62</td>
<td>1</td>
</tr>
<tr>
<td>63</td>
<td>1</td>
</tr>
<tr>
<td>64</td>
<td>1</td>
</tr>
<tr>
<td>65</td>
<td>1</td>
</tr>
<tr>
<td>66</td>
<td>1</td>
</tr>
<tr>
<td>67</td>
<td>1</td>
</tr>
<tr>
<td>68</td>
<td>1</td>
</tr>
<tr>
<td>69</td>
<td>1</td>
</tr>
<tr>
<td>70</td>
<td>1</td>
</tr>
<tr>
<td>71</td>
<td>1</td>
</tr>
<tr>
<td>72</td>
<td>1</td>
</tr>
<tr>
<td>73</td>
<td>1</td>
</tr>
<tr>
<td>74</td>
<td>1</td>
</tr>
<tr>
<td>75</td>
<td>1</td>
</tr>
<tr>
<td>76</td>
<td>1</td>
</tr>
<tr>
<td>77</td>
<td>1</td>
</tr>
<tr>
<td>78</td>
<td>1</td>
</tr>
<tr>
<td>79</td>
<td>1</td>
</tr>
<tr>
<td>80</td>
<td>1</td>
</tr>
<tr>
<td>81</td>
<td>1</td>
</tr>
<tr>
<td>82</td>
<td>1</td>
</tr>
<tr>
<td>83</td>
<td>1</td>
</tr>
<tr>
<td>84</td>
<td>1</td>
</tr>
<tr>
<td>85</td>
<td>1</td>
</tr>
<tr>
<td>86</td>
<td>1</td>
</tr>
<tr>
<td>87</td>
<td>1</td>
</tr>
<tr>
<td>88</td>
<td>1</td>
</tr>
<tr>
<td>89</td>
<td>1</td>
</tr>
<tr>
<td>90</td>
<td>1</td>
</tr>
<tr>
<td>91</td>
<td>1</td>
</tr>
<tr>
<td>92</td>
<td>1</td>
</tr>
<tr>
<td>93</td>
<td>1</td>
</tr>
<tr>
<td>94</td>
<td>1</td>
</tr>
<tr>
<td>95</td>
<td>1</td>
</tr>
<tr>
<td>96</td>
<td>1</td>
</tr>
<tr>
<td>97</td>
<td>1</td>
</tr>
<tr>
<td>98</td>
<td>1</td>
</tr>
<tr>
<td>99</td>
<td>1</td>
</tr>
<tr>
<td>100</td>
<td>1</td>
</tr>
<tr>
<td>101</td>
<td>1</td>
</tr>
<tr>
<td>102</td>
<td>1</td>
</tr>
<tr>
<td>103</td>
<td>1</td>
</tr>
<tr>
<td>104</td>
<td>1</td>
</tr>
<tr>
<td>105</td>
<td>1</td>
</tr>
<tr>
<td>106</td>
<td>1</td>
</tr>
<tr>
<td>107</td>
<td>1</td>
</tr>
<tr>
<td>108</td>
<td>1</td>
</tr>
<tr>
<td>109</td>
<td>1</td>
</tr>
<tr>
<td>110</td>
<td>1</td>
</tr>
<tr>
<td>111</td>
<td>1</td>
</tr>
<tr>
<td>112</td>
<td>1</td>
</tr>
<tr>
<td>113</td>
<td>1</td>
</tr>
<tr>
<td>114</td>
<td>1</td>
</tr>
<tr>
<td>115</td>
<td>1</td>
</tr>
<tr>
<td>116</td>
<td>1</td>
</tr>
<tr>
<td>117</td>
<td>1</td>
</tr>
<tr>
<td>118</td>
<td>1</td>
</tr>
<tr>
<td>119</td>
<td>1</td>
</tr>
<tr>
<td>120</td>
<td>1</td>
</tr>
</tbody>
</table>

**Frequency:** 4, 8, 12, 16, 20
SCATTERGRAM OF TOEFL READING COMPREHENSION SCORES AND ESL GROUP IRI FORM A

STATISTICS:
CORRELATION R = 0.62954
R-SQUARE = 0.45780
INTERCEPT (A) = 17.70584
SLOPE (B) = 0.31999
SIGNIFICANCE R = 0.00001
SIGNIFICANCE A = 0.0001
SIGNIFICANCE B = 0.0001
PLOTTED VALUES = 42
EXCLUDED VALUES = 0
MISSING VALUES = 0
<table>
<thead>
<tr>
<th>CODE</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>31</td>
<td>1</td>
</tr>
<tr>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td>33</td>
<td>1</td>
</tr>
<tr>
<td>34</td>
<td>1</td>
</tr>
<tr>
<td>35</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>2</td>
</tr>
<tr>
<td>37</td>
<td>6</td>
</tr>
<tr>
<td>38</td>
<td>1</td>
</tr>
<tr>
<td>39</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>1</td>
</tr>
<tr>
<td>41</td>
<td>2</td>
</tr>
<tr>
<td>42</td>
<td>1</td>
</tr>
<tr>
<td>43</td>
<td>1</td>
</tr>
<tr>
<td>44</td>
<td>1</td>
</tr>
<tr>
<td>45</td>
<td>1</td>
</tr>
<tr>
<td>46</td>
<td>4</td>
</tr>
<tr>
<td>47</td>
<td>3</td>
</tr>
<tr>
<td>48</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>2</td>
</tr>
<tr>
<td>51</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td></td>
</tr>
<tr>
<td>53</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>5</td>
</tr>
</tbody>
</table>

**Statistics:**

- **Mean:** 43.972
- **Mode:** 36.000
- **Kurtosis:** -7.647
- **Variance:** 6.968
- **Valid Cases:** 42
- **Missing Cases:** 6
- **Sum:** 1928.400
- **Range:** 25.000
- **Median:** 47.000
- **Maximum:** 55.000
- **Minimum:** 25.000
- **Coefficient of Variation:** 0.161
- **Coefficient of Skewness:** 0.257
- **Coefficient of Kurtosis:** 0.399
- **Coefficient of Variance:** 0.638
- **Mean of Distances:** 52.846
- **Median of Distances:** 29.333
### FREQUENCY OF ESL GROUP IRI SCORES

#### Form A

<table>
<thead>
<tr>
<th>Code</th>
<th>Absolute Freq</th>
<th>Relative Freq (PCT)</th>
<th>Adjusted Freq (PCT)</th>
<th>Sum Freq (PCT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50.</td>
<td>2</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>42.</td>
<td>1</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
</tr>
<tr>
<td>36.</td>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>35.</td>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>37.</td>
<td>5</td>
<td>6.1</td>
<td>15.6</td>
<td></td>
</tr>
<tr>
<td>47.</td>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>50.</td>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>51.</td>
<td>2</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>42.</td>
<td>3</td>
<td>3.7</td>
<td>7.8</td>
<td></td>
</tr>
<tr>
<td>43.</td>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>53.</td>
<td>3</td>
<td>3.7</td>
<td>11.2</td>
<td></td>
</tr>
<tr>
<td>46.</td>
<td>4</td>
<td>4.9</td>
<td>19.6</td>
<td></td>
</tr>
<tr>
<td>47.</td>
<td>3</td>
<td>3.7</td>
<td>11.1</td>
<td></td>
</tr>
<tr>
<td>49.</td>
<td>5</td>
<td>6.1</td>
<td>30.1</td>
<td></td>
</tr>
<tr>
<td>50.</td>
<td>2</td>
<td>2.4</td>
<td>4.8</td>
<td></td>
</tr>
<tr>
<td>51.</td>
<td>4</td>
<td>4.9</td>
<td>19.6</td>
<td></td>
</tr>
<tr>
<td>52.</td>
<td>7</td>
<td>8.5</td>
<td>59.4</td>
<td></td>
</tr>
<tr>
<td>53.</td>
<td>2</td>
<td>2.4</td>
<td>4.8</td>
<td></td>
</tr>
<tr>
<td>54.</td>
<td>10</td>
<td>12.2</td>
<td>12.2</td>
<td>24.4</td>
</tr>
<tr>
<td>55.</td>
<td>4</td>
<td>4.9</td>
<td>19.6</td>
<td></td>
</tr>
<tr>
<td>56.</td>
<td>4</td>
<td>4.9</td>
<td>19.6</td>
<td></td>
</tr>
<tr>
<td>57.</td>
<td>6</td>
<td>7.3</td>
<td>7.3</td>
<td>14.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>42</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

#### Form B

<table>
<thead>
<tr>
<th>Code</th>
<th>Absolute Freq</th>
<th>Relative Freq (PCT)</th>
<th>Adjusted Freq (PCT)</th>
<th>Sum Freq (PCT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50.</td>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>42.</td>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>36.</td>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>35.</td>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>37.</td>
<td>2</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>47.</td>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>50.</td>
<td>4</td>
<td>4.9</td>
<td>19.6</td>
<td></td>
</tr>
<tr>
<td>51.</td>
<td>5</td>
<td>6.1</td>
<td>30.1</td>
<td></td>
</tr>
<tr>
<td>52.</td>
<td>3</td>
<td>3.7</td>
<td>11.1</td>
<td></td>
</tr>
<tr>
<td>53.</td>
<td>2</td>
<td>2.4</td>
<td>4.8</td>
<td></td>
</tr>
<tr>
<td>54.</td>
<td>10</td>
<td>12.2</td>
<td>12.2</td>
<td>24.4</td>
</tr>
<tr>
<td>55.</td>
<td>4</td>
<td>4.9</td>
<td>19.6</td>
<td></td>
</tr>
<tr>
<td>56.</td>
<td>4</td>
<td>4.9</td>
<td>19.6</td>
<td></td>
</tr>
<tr>
<td>57.</td>
<td>6</td>
<td>7.3</td>
<td>7.3</td>
<td>14.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>42</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
### DISTRIBUTION OF TOEFL READING COMPREHENSION AND VOCABULARY SCORES

<table>
<thead>
<tr>
<th>SCORE</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>32.1</td>
<td>1</td>
</tr>
<tr>
<td>32.4</td>
<td>1</td>
</tr>
<tr>
<td>32.7</td>
<td>1</td>
</tr>
<tr>
<td>33.1</td>
<td>1</td>
</tr>
<tr>
<td>33.4</td>
<td>1</td>
</tr>
<tr>
<td>33.7</td>
<td>1</td>
</tr>
<tr>
<td>34.0</td>
<td>1</td>
</tr>
<tr>
<td>34.3</td>
<td>1</td>
</tr>
<tr>
<td>34.6</td>
<td>1</td>
</tr>
<tr>
<td>35.0</td>
<td>1</td>
</tr>
<tr>
<td>36.3</td>
<td>1</td>
</tr>
<tr>
<td>37.6</td>
<td>1</td>
</tr>
<tr>
<td>38.9</td>
<td>1</td>
</tr>
<tr>
<td>39.2</td>
<td>1</td>
</tr>
<tr>
<td>40.5</td>
<td>1</td>
</tr>
<tr>
<td>41.8</td>
<td>1</td>
</tr>
<tr>
<td>43.1</td>
<td>1</td>
</tr>
<tr>
<td>44.4</td>
<td>1</td>
</tr>
<tr>
<td>45.7</td>
<td>1</td>
</tr>
<tr>
<td>47.0</td>
<td>1</td>
</tr>
<tr>
<td>48.3</td>
<td>1</td>
</tr>
<tr>
<td>49.6</td>
<td>1</td>
</tr>
<tr>
<td>50.9</td>
<td>1</td>
</tr>
<tr>
<td>52.2</td>
<td>1</td>
</tr>
<tr>
<td>53.5</td>
<td>1</td>
</tr>
<tr>
<td>54.8</td>
<td>1</td>
</tr>
<tr>
<td>56.1</td>
<td>1</td>
</tr>
<tr>
<td>57.4</td>
<td>1</td>
</tr>
<tr>
<td>58.7</td>
<td>1</td>
</tr>
<tr>
<td>60.0</td>
<td>1</td>
</tr>
<tr>
<td>61.3</td>
<td>1</td>
</tr>
<tr>
<td>62.6</td>
<td>1</td>
</tr>
<tr>
<td>63.9</td>
<td>1</td>
</tr>
<tr>
<td>65.2</td>
<td>1</td>
</tr>
<tr>
<td>66.5</td>
<td>1</td>
</tr>
<tr>
<td>67.8</td>
<td>1</td>
</tr>
<tr>
<td>69.1</td>
<td>1</td>
</tr>
<tr>
<td>70.4</td>
<td>1</td>
</tr>
<tr>
<td>71.7</td>
<td>1</td>
</tr>
<tr>
<td>73.0</td>
<td>1</td>
</tr>
<tr>
<td>74.3</td>
<td>1</td>
</tr>
<tr>
<td>75.6</td>
<td>1</td>
</tr>
<tr>
<td>76.9</td>
<td>1</td>
</tr>
<tr>
<td>78.2</td>
<td>1</td>
</tr>
<tr>
<td>79.5</td>
<td>1</td>
</tr>
<tr>
<td>80.8</td>
<td>1</td>
</tr>
<tr>
<td>82.1</td>
<td>1</td>
</tr>
<tr>
<td>83.4</td>
<td>1</td>
</tr>
<tr>
<td>84.7</td>
<td>1</td>
</tr>
<tr>
<td>86.0</td>
<td>1</td>
</tr>
<tr>
<td>87.3</td>
<td>1</td>
</tr>
<tr>
<td>88.6</td>
<td>1</td>
</tr>
<tr>
<td>90.0</td>
<td>1</td>
</tr>
<tr>
<td>91.3</td>
<td>1</td>
</tr>
<tr>
<td>92.6</td>
<td>1</td>
</tr>
<tr>
<td>93.9</td>
<td>1</td>
</tr>
<tr>
<td>95.2</td>
<td>1</td>
</tr>
<tr>
<td>96.5</td>
<td>1</td>
</tr>
<tr>
<td>97.8</td>
<td>1</td>
</tr>
<tr>
<td>99.1</td>
<td>1</td>
</tr>
<tr>
<td>100.4</td>
<td>1</td>
</tr>
</tbody>
</table>

**MEAN =** 53.342  **Mode =** 42.333  **Median =** 43.157  **Variance =** 24.397  **Range =** 34.600

**Valid Cases =** 92  **Missing Cases =** 0
## FREQUENCY OF TOEFL READING COMPREHENSION AND VOCABULARY SCORES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>ABSOLUTE</th>
<th>RELATIVE (%)</th>
<th>ADJUSTED (%)</th>
<th>CUM (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>36</td>
<td>6</td>
<td>7.3</td>
<td>7.3</td>
<td>13.4</td>
</tr>
<tr>
<td>37</td>
<td>7</td>
<td>4.5</td>
<td>4.5</td>
<td>22.0</td>
</tr>
<tr>
<td>38</td>
<td>6</td>
<td>7.3</td>
<td>7.3</td>
<td>29.3</td>
</tr>
<tr>
<td>39</td>
<td>5</td>
<td>6.1</td>
<td>6.1</td>
<td>35.4</td>
</tr>
<tr>
<td>40</td>
<td>3</td>
<td>3.7</td>
<td>3.7</td>
<td>39.0</td>
</tr>
<tr>
<td>41</td>
<td>5</td>
<td>6.1</td>
<td>6.1</td>
<td>45.1</td>
</tr>
<tr>
<td>42</td>
<td>6</td>
<td>7.3</td>
<td>7.3</td>
<td>52.4</td>
</tr>
<tr>
<td>43</td>
<td>7</td>
<td>8.5</td>
<td>8.5</td>
<td>61.0</td>
</tr>
<tr>
<td>44</td>
<td>3</td>
<td>3.7</td>
<td>3.7</td>
<td>64.6</td>
</tr>
<tr>
<td>45</td>
<td>6</td>
<td>7.3</td>
<td>7.3</td>
<td>72.0</td>
</tr>
<tr>
<td>46</td>
<td>2</td>
<td>2.4</td>
<td>2.4</td>
<td>74.4</td>
</tr>
<tr>
<td>47</td>
<td>4</td>
<td>4.9</td>
<td>4.9</td>
<td>79.3</td>
</tr>
<tr>
<td>48</td>
<td>2</td>
<td>2.4</td>
<td>2.4</td>
<td>81.7</td>
</tr>
<tr>
<td>49</td>
<td>4</td>
<td>4.9</td>
<td>4.9</td>
<td>86.6</td>
</tr>
<tr>
<td>50</td>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
<td>87.8</td>
</tr>
<tr>
<td>51</td>
<td>2</td>
<td>2.4</td>
<td>2.4</td>
<td>90.2</td>
</tr>
<tr>
<td>52</td>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
<td>91.5</td>
</tr>
<tr>
<td>53</td>
<td>3</td>
<td>3.7</td>
<td>3.7</td>
<td>95.1</td>
</tr>
<tr>
<td>54</td>
<td>2</td>
<td>2.4</td>
<td>2.4</td>
<td>97.6</td>
</tr>
<tr>
<td>55</td>
<td>2</td>
<td>2.4</td>
<td>2.4</td>
<td>100.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>42</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>