# THE EFFECTS OF READING-WHILE-LISTENING AND THE CLOZE PROCEDURE ON THE READING ABILITY AND GRAMMATICAL PROFICIENCY OF ESL STUDENTS

by

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## Abstract

This study investigated the effects of repeated reading-while-listening in conjunction with cloze exercises on the reading ability and grammatical proficiency of 14 secondary level English as a Second Language students. The experimental group completed 17 cloze exercises at the rate of one per week. The method of presentation had three steps: the viewing of a film strip while listening to the accompanying commercially-produced tape, an attempt to complete a short written cloze exercise (every 10th word deleted) on a passage transcribed from the tape, and four attempts to complete the cloze exercise while simultaneously listening to the taped, unmutilated version.

The Gates-MacGinitie Reading Test, Level E, and the Structure Test--English Language, Advanced Level were administered both before and after the treatment period. A teacher-constructed reading/listening cloze posttest and an attitude questionnaire were administered after the treatment.

Separate analyses of covariance indicated a significant difference between the experimental group and the control group on the Gates-MacGinitie Reading Test, $F$ (1,26) = 6.997, $P$ <.014, but no significant difference between the groups on the Structure Test-English Language, $F$ (1,26) = 1.306, $P$ < .265. An independent samples $t$-test indicated a significant difference

between the experimental group and the control group on the teacher-constructed reading/listening cloze, $t(25) = 3.67$, $P < .01$. Student responses to the attitude questionnaire indicated that they regarded the cloze exercises as helpful.

It is recommended that the type of cloze exercises investigated in the present study be used as supplementary exercises for ESL students. It is noted that further research should be done on the effects of choosing passages for the grammatical points which they contain and the effects of repeating vocabulary and/or content in the passages.

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# I. INTRODUCTION

## 1. Statement of the Problem

The present study examines the effects of cloze exercises in conjunction with repeated reading-while-listening on the reading ability and grammatical proficiency of secondary level English as a Second Language (ESL) students.

## 2. Background of the Problem

The nature of the reading process has been the subject of discussion and research for many years. Some scholars have postulated a bottom-up model (Gough, 1972; LaBerge & Samuels, 1974), while others have postulated a top-down model (Goodman, 1967; Smith, 1973). More recently, interactive models have been suggested by Rumelhart (1977) and Stanovich (1980).

Stanovich's reading model is neither bottom-up nor top-down; it is both interactive and compensatory. The model is interactive because it assumes that the reader synthesizes from prior knowledge in his head as well as information derived from the printed page. The model is compensatory because "a deficit in any knowledge source results in a heavier reliance on other knowledge sources, regardless of their level in the processing hierarchy" (p.63).

The combination of repeated reading-while-listening and the cloze procedure should be an effective way of teaching reading. The cloze procedure requires the use of higher level cognitive processes as the reader samples, forms hypotheses

using syntactic and semantic cues, predicts, and then confirms or rejects his hypotheses as he completes the cloze exercise. If students subsequently have the opportunity to listen repeatedly to a tape containing the unmutilated version of the text, they will be able to confirm or reject these hypotheses immediately. Repeated reading-while-listening allows the student to access the printed word via two modalities simultaneously. If word attack skills are weak, the student can rely on the spoken word. On the other hand, if listening skills are weak, the student can rely upon the printed word. A student is able to compensate for weakness by heavier reliance upon the other modality.

Many researchers have investigated the cloze procedure since its introduction by Taylor in 1953 as a means of measuring text readability. Moreover, researchers have considered the efficacy of using the cloze procedure for reading instruction because it requires intelligent guessing based on contextual and semantic cues. Jongsma (1971; 1980) summed up the research on the cloze procedure as a teaching technique in the first language classroom and concluded that the cloze procedure can be as effective an instructional technique as many of the conventional methods. He also concluded that further research was needed to examine the relationships between types of students, types of clozes, scoring procedures, and the kinds and amounts of skills learned.

Research has been done with primary, secondary, and

college students using the cloze procedure in the first language classroom. Some researchers have concluded that remedial and poorer students benefitted from cloze exercises (Bloomer, 1962; Carr, Dewitz & Patberg, 1983; Kennedy & Weener, 1973; McGee, 1981). Others have concluded that the cloze procedure was a viable alternative technique for teaching reading (Peters, 1983; Rogers, 1982; Wilson, 1977).

In the foreign and second language classroom, the cloze procedure is most commonly used as a test of language proficiency (Oller, 1973). Although some practitioners (Bensoussan, 1983; Brown, 1986; Eskey, 1973; Greenewald, 1981; Plaister (in Carl), 1983; Woytak, 1984) have recommended using the cloze procedure for teaching reading in the second language classroom, research on the use of cloze exercises for this purpose has been limited and inconclusive.

Reading-while-listening and repeated reading methods have been used to teach reading in a first language since the advent of writing. A child has sat upon a parent's lap listening again and again to a story being read aloud and students have learned to read in many countries by listening to others, teacher or fellow students, reading aloud in class. Some teachers and researchers have suggested using various reading-while-listening and repeated reading methods for teaching reading (Chomsky, 1978; Heckelman, 1969; Hoskisson, 1975; Samuels, 1979).

Reading-while-listening techniques are believed to develop reading fluency through automaticity of decoding. Samuels

(1979) theorizes that the amount of attention which a reader can bring to the complex task of reading is limited; if decoding requires a great deal of attention, then comprehension will suffer. Furthermore, because reading-while-listening supplies prosodic markers which are absent in the printed text, students can learn to recognize syntactic phrases (Schreiber, 1980). Syntactic competency can also be expected to develop through listening repeatedly to the same material (Kann, 1983).

With the exceptiuon of one study, research in reading-while-listening methods has been limited to first language situations and to small groups of students who are either beginning readers or poor readers. The results have been mixed. Samuels (1979; 1976) reported significant gains in comprehension and speed; Laffey, Kelly & Perry (1980) found a significant difference in reading comprehension between a control and an experimental group; and Laffey and Kelley (1981) found significant gains. Reitsma (1988) found reading-while-listening to be a less effective instructional method than either guided reading or independent reading with computer-generated speech feedback. Regardless of results, most researchers reported improved motivation and attitudes toward reading (Carbo, 1978; Chomsky, 1978; Rashotte & Torgeson, 1985; Reitsma, 1988).

The present study examines the effect of combining the cloze procedure with repeated reading-while-listening in teaching reading to ESL students. The cloze procedure was used to encourage higher order processing and the repeated reading-

while-listening was used to facilitate lower order processing. In accordance with Stanovich's model of the reading process, the technique is both interactive and compensatory.

3. Need for the Study

The number of people learning foreign and second languages grows each year. Throughout the world English is regarded as the most important foreign language to learn and is taught in most countries. In addition, the number of immigrants to Canada who need to learn English as a second or additional language grows each year. Approximately 50 percent of the students in the Vancouver School District speak English as a second or additional language.

Practitioners in the field of English as a Second Language continually seek effective methods of teaching English but frequently find there is no research evidence to inform their choices. There is an inadequate amount of research in the field of English as a Second Language because it is a new and developing field.

The cloze method used in conjunction with repeated reading-while-listening is often used by ESL teachers in the classroom but there are no studies on its efficacy. It is important that the effect of this teaching technique be systemically investigated. This after the fact investigation of what is presently being practised in the classroom is the way that applied linguistics research has been conducted historically in both North America and the rest of the world (Gaies, 1987).

## 4. Research Hypotheses

The following three null hypotheses were made concerning the effect upon secondary level ESL students of the cloze procedure in conjunction with repeated reading-while-listening on (a) reading ability, (b) grammatical proficiency, and (c) the ability to complete a reading/listening cloze.

### 4.1 Reading ability

After a semester of experimental treatment, there will be no difference between the experimental group and the control group in reading ability as measured by a standardized reading test.

### 4.2 Grammatical proficiency

After a semester of experimental treatment there will be no difference between the experimental group and the control group on grammatical proficiency as measured by a standardized grammar test.

### 4.3 Reading/listening clozes

After a semester of experimental treatment, there will be no difference between the experimental group and the control group in the ability to complete a reading/listening cloze as measured by a researcher-developed reading/listening cloze exercise.

## 5. Definition of Terms

The following definitions apply to terms used in this study.

### 5.1 Cloze procedure

A procedure in which words are deleted from passages of connected text and the reader is required to replace the missing words correctly. In the cloze exercises in this experiment every tenth word was deleted except when the tenth word was a proper noun.

### 5.2 Reading-while-listening

Subjects are given a printed text to read while at the same time the text of the passage is read aloud.

### 5.3 Reading/listening cloze or cloze procedure in conjunction with reading-while-listening

Subjects first listen to a passage with no printed text provided. Following that, subjects are given the printed text in cloze form with every tenth word deleted. Subjects attempt to complete the cloze exercise. Following that, subjects listen four times to the complete, unmutilated text and attempt to fill in the missing words on the cloze exercise. For ease of writing, this procedure is referred to as a reading/listening cloze.

## 6. Assumptions

Three assumptions have been made in this study. First, that the standardized reading test is an appropriate test of reading ability for ESL students. Second, that the standardized grammer test measures grammatical proficiency. Third, that the readability measures used to assess the experimental texts measure the degree of difficulty of the texts.

## 7. Limitations of the Study

The study was conducted with a limited sample of a population of ESL students from one secondary school in Vancouver. There was no opportunity for random selection of subjects as the computer-generated timetable within the school determined the experimental and control groups. The students in the sample came from various ethnic and educational backgrounds. Thus, care should be taken if the results are to be generalized to other populations especially those of different ethnic and educational backgrounds.

The Gates-MacGinitie Reading Test which was used to test reading comprehension was designed and intended for native English speakers. At the time of the experiment, there was no ESL reading test with parallel forms. For that reason, it was necessary to use a first language reading test which may not be an appropriate measure of reading ability for non-native speakers.

# II. REVIEW OF LITERATURE

Two major bodies of literature relevant to the present study will be reviewed: first, literature on the use of the cloze procedure for reading instruction and secondly, literature on the use of repeated reading-while-listening techniques for teaching reading. Both first language and second language situations will be considered.

Reading is a multi-faceted, complex, interactive process involving many subskills and many types of reader and text variables. Viewed in the past as either a conceptually driven (top-down) (Goodman, 1967; Smith, 1973) or data driven (bottom-up) (Gough, 1972; LaBerge & Samuels, 1974) process, reading is now commonly regarded as a simultaneous interaction between numerous variables rather than a sequential process (Rumelhart, 1977).

Top-down models view the fluent reader as one who is actively engaged in hypothesis testing as he proceeds through a text. On the other hand, bottom-up models depict information processing as a series of discrete stages with the sequence of processing operations proceeding from the incoming data to the higher-level encodings. Stanovich (1980) postulates a reading model which is both interactive and compensatory. The model is interactive because it is based on the simultaneous interaction between cognition and data and it is compensatory because "a deficit in any knowledge source results in a heavier reliance on other knowledge sources, regardless of their level in the processing hierarchy" (p.63).

Early work in ESL reading, in accordance with the model of first language reading, assumed a rather passive, bottom-up view of second language reading. Reading was viewed primarily as a decoding process: a reconstruction of the author's intended meaning by recognizing the letters and words and building up the meaning of the text. About ten years ago, the psycholinguistic view of reading began to have an impact upon views regarding reading in a second language. Recently, however, it has been stated that efficient and effective second language reading requires both top-down and bottom-up strategies operating interactively (Devine, Carrell & Eskey, 1987).

Because the cloze procedure requires the use of higher level cognitive processes as the reader samples, forms hypotheses, and then confirms or rejects his hypotheses and because reading-while-listening allows the student to access the printed word via two modalities simultaneously, the combination of cloze procedure with reading-while-listening should be an effective method of teaching reading. It is a method which is both interactive and compensatory.

## 1. The Cloze Procedure

The cloze procedure was first introduced by Taylor in 1953 as a tool for measuring readability. Since that time it has been used as a measurement, evaluation, diagnostic, and instructional device. For many who regard reading as a "complex process by which a reader reconstructs, to some

degree, a message encoded by a writer in graphic language" (Goodman, 1970, p.5), the cloze procedure seems well suited for the purpose of teaching reading because it requires the student to sample, predict, and guess in order to fill in deleted words in a text and thus is related to the way in which language is processed in reading (Blachowicz, 1977; Bortnick & Lopardo, 1973; Kaminsky, 1979). The reader must be active and constructive (Kennedy & Weener, 1973; Paradis & Bayne, 1977; Thomas, 1978) he must use grapho-phonic, syntactic and semantic cues simultaneously as he decodes printed symbols surrounding the missing words, attaches meaning and perceives relationships, recalls prior knowledge, and predicts the language unit which has been deleted (Marino, 1981; Thomas, 1978).

The underlying assumption in a cloze procedure exercise is that if the reader can reconstruct the author's words, he has understood the author's meaning (Richardson, 1980).

During a cloze procedure exercise the reader must pay close attention to the author's representation of meaning (Bloomer, 1962; Culhane, 1970; Marino, 1981; Thomas, 1978). Readers can be expected to learn to grasp the main idea (Bloomer, 1962), to make inferences and generalizations (Bloomer, 1962; Gomberg, 1976), and to sense relationships and make comparisons (Gomberg, 1976). They learn to focus, not on single words, but on relationships in context (Gomberg, 1976; Kennedy, 1974). Many who recommend the use of the cloze procedure for reading instruction mention its importance for instructing learners in the effective use of contextual cues

(Bullock, 1975; Grant, 1978; Kennedy & Weener, 1973).

In first language instruction, the cloze procedure has been recommended at all levels of instruction from Grade 1 (Kennedy & Weener, 1973) through college (Bloomer, 1962), for disabled readers (Gomberg, 1976; Kennedy, 1974; Lopardo, 1975; Robinson, 1972), and for teaching poetry (Blanc, 1977; Davies & Greene, 1981).

The cloze procedure is recommended in part because of its practicality: it is inexpensive, versatile and easily constructed and scored (Pikulski, 1976). Furthermore, it can use materials taken from students' regular instructional programs (Bortnick & Lopardo, 1973; Pikulski, 1976). Some who recommend it point out that the students enjoy doing the exercises and are highly motivated (Bloomer, 1962); they do not become overburdened or discouraged (Blachowicz, 1977).

In second language situations, the cloze test is commonly used as an integrative test of language proficiency. Oller (1973), in discussing cloze tests, points out the importance of a grammar of expectancy which he believes to be the chief mechanism underlying the skills of thinking, understanding, speaking, reading and writing. It is the learner's grammar of expectancy which is measured by the cloze procedure; the incomplete information in the cloze passage allows the student to analyze, then synthesize, to use both productive and receptive skills. The learner formulates hypotheses or expectations about what will follow, then either confirms or disconfirms his predictions by sampling subsequent sentences.

Oller feels that memory constraints are an aspect of underlying competence for second language learners. Because in a cloze passage there are usually several items in sequence which are interdependent, the ability to complete the cloze is related to the length of memory in the second language learner. As he says, "If ... language competence is best characterized by a grammar of expectancy, then memory constraints are clearly an aspect of competence. It is my belief that this is the sort of competence measured by cloze tests" (Oller, 1973, p.116).

A number of practitioners have recommended the use of cloze exercises for second language teaching. Woytak (1984), Harrison & Dolan (1976), Sherwood (1975), Larson (1979), Brown (1986) and Plaister (in Carl, 1983) recommend using the cloze procedure for teaching reading to ESL students. Brown (1986) recommends immediate feedback and suggests the use of computer software to accomplish this. Greenewald (1981) recommends using the cloze procedure in the French-as-a-Foreign-Language classroom to help word-by-word readers acquire more mature reading strategies. Bensoussan (1983) recommends using cloze exercises with English-as-a-Foreign-Language students because the student must deal directly with the text. Discussion of cloze responses stimulates students to consider the text as a whole and the lexical, grammatical, logical, conceptual cues in the text which led them to choose a particular word. This discussion uncovers assumptions and misconceptions better than more conventional exercises and questions.

Eskey (1973) strongly recommends cloze exercises for teaching reading in the ESL classroom because the cloze procedure draws on four critical skills: the ability to interpret English syntax, the ability to understand English vocabulary, the ability to access the writer's underlying assumptions about the subject and the world, the ability to understand rhetorical signals of purpose, attitude and logic. "It forces the hesitant student to think, to attack his reading problems actively by drawing on his several kinds of knowledge about English. There is also the important pedagogical virtue of its game-like appeal: cloze procedure generates a series of puzzles which the restless student mind finds it hard to resist" (Eskey, 1973, p.182).

### 1.1 First language research

Although the cloze procedure has been recommended for teaching reading in both the first and second language classroom, research on the use of the procedure has been limited and inconclusive. Jongsma, reviewing the literature on the use of the cloze procedure as a teaching technique in the first language classroom in 1971, concluded on the basis of the research evidence at that time that "...the cloze procedure, used either as a supplement to or in lieu of 'regular' reading instruction, does not produce significantly improved results in reading proficiency" (Jongsma, 1971, p.18). Because of the problems with the reviewed research, Jongsma suggested that there were many research opportunities still to be explored.

In particular, he called for research into instructional strategies, longer and more intense periods of instruction, more specific identification by researchers of the type of improvement they expected after treatment, randomization in selection of subjects and their assignment to treatment, and research into the effects of various types of cloze procedures (e.g., different deletion techniques, scoring procedures, methods of presentation) rather than comparing +cloze experimental groups with -cloze control groups.

In 1980 Jongsma again examined research in the use of the cloze procedure as an instructional technique and found that in 17 of 27 studies there were no significant differences between cloze and other methods. In three studies there was some difference favouring cloze and in seven, there was a strong difference in favour of cloze, Jongsma concluded that the cloze procedure can be an effective instructional technique but that it is not more or less effective than many of the conventional methods widely used. He concluded that variations in students and in the construction and scoring of cloze exercises result in differences in the kind and amount of skills learned. Researchers must find out which variations serve which purposes for which students. Grant (1978), surveying the research on the cloze procedure as an instructional method in the first language classroom, concluded that the following conditions produced positive results: working actively with students, synonym scoring, and a deletion pattern other than a random one.

The following studies, some cited by Jongsma and/or Grant and some conducted since their reviews, show the cloze procedure to have had a positive effect. Bloomer (1962), in one of the first cloze procedure studies, investigated the use of the cloze procedure as a remedial-reading teaching technique for college students. The experimental group of 44 remedial students completed ten levels of cloze exercises. There were five exercises per level; if the student had not achieved the required level of proficiency at the end of five exercises, he moved automatically to the next level. The fastest student required 12 sessions and the slowest required 50, extending through two semesters.

There were two control groups. The first control group worked individually through a self-instructional text in reading. The second control group received no reading instruction at all but wrote the pretests and posttests. No comparison was possible between the experimental group and the first control group because only two students completed the text, but comparisons were made with the second control group. A significant increase was found in comprehension between the pretest and posttest results of the experimental group. Although the pretest scores showed the control group to be significantly superior to the experimental group (as was to be expected as the experimental group had volunteered for remedial reading instruction whereas the control group was randomly selected), for the posttest, the experimental group made superior though not significantly different scores from the

control group.

The rate of reading was also investigated and no significant difference was found between the rate on the initial test and the rate on the final test for either the experimental or control group. This was not unexpected because the cloze procedure fosters close attention to detail rather than speed. Bloomer wondered whether work on speed reading employed at the same time as the cloze procedure would produce greater effectiveness and called for further experimentation in this area.

Kennedy and Weener (1973) concluded that training in the cloze procedure warrants serious consideration as a remedial program for below average readers. They tested the effectiveness of individualized training with the cloze procedure to improve reading and listening comprehension by training poor readers to attend auditorially or visually to the contextual cues in a sentence. The study used four groups of 20 Grade 3 students who were below average in reading. Two experimental groups were trained in the cloze procedure using reading and listening modes respectively. One control group received an individualized oral reading program and the other control group remained in the regular classroom. The training period was a total of 1 hour and 40 minutes.

When the effects of the training were measured with reading and listening comprehension tests, it was found that the visual-training experimental group did significantly better than any of the other three groups on the reading comprehension

test. Although the experimental reading group did significantly better on the listening comprehension test than did the control class group which remained in the classroom and received no treatment, it did not score significantly higher than the control reading group which spent their time practising oral reading.

The listening group, which had listened to short stories from which words had been deleted and replaced by the sound of a bell, did not do significantly better than the experimental reading group on the listening comprehension test. In addition, the experimental listening group did no better on the reading comprehension test than the two control groups, indicating no significant transfer from auditory training to the reading comprehension test. However, although the results on the tests were not always statistically significant, the differences were always in the direction of improvement.

Wardrop and Essex (1973) criticized the research of Kennedy and Weener on five grounds: the rationale for the hypotheses was inadequate, the control groups failed to control for critical variables, subjects could not justifiably be called underachievers, the design and analysis were mismatched, and the repeated measures analysis was inappropriate. Kennedy and Weener wrote a lengthy reply (1973) in which they stated that the standards which Wardrop and Essex sought to apply were not the standards which are commonly applied by other researchers and methodologists and that their criticisms were based on over-simplified principles which do not take into

account the complexity of the issues.

Sampson (1979) examined the effectiveness of instructional cloze in improving reading comprehension, strengthening vocabulary and encouraging divergent production of students in Grade 3. The treatment for the experimental group of 46 students consisted of the substitution of a cloze instructional centre for various reading centres during the 15 weeks of the study. The 27 cloze lessons emphasized the structure of language and the selection of creative answers which met contextual requirements in the cloze exercises. Because an every-fifth-word deletion pattern used in a pilot study proved to be too difficult and frustrating for the students, an every-tenth-word deletion pattern was used. Discussion in small groups focussed on the many possible answers which could be used in each blank. The control group of 46 students differed from the experimental group only in the absence of the experimental treatment; the control group activities consisted of regular reading instruction provided by the teacher. The experimental group did significantly better than the control group on reading comprehension and divergent production. There was no significant difference between the two groups in vocabulary development. The measurement instrument for reading comprehension was the Gates-MacGinitie Reading Test, Form C. Sampson concluded that cloze is an effective technique in the area of reading comprehension development.

Peters (1983) studied the effect of the cloze procedure on the reading comprehension of Grade 10 students enrolled in remedial reading classes. The experimental group of 16 students had 27 cloze lessons over 14 weeks and the control group of 17 students had no cloze lessons. Apart from that, instruction by the teacher/researcher was the same for both groups. On the posttest in reading comprehension (Gates-MacGinitie) a significant gain in reading comprehension was found for students in the experimental group.

Green (1982) randomly assigned a group of 96 Grade 6 students to one of three instructional strategy groups: cloze training--product approach--in which only the exact word was accepted; cloze training--process approach--in which synonyms were accepted; and traditional reading instruction. Students receiving instruction through the process method showed significant increases in reading comprehension and divergent production. These increases were significantly greater than the increases for those in the product group or the traditional instruction group. Furthermore, in all instances, the exact word group achieved higher, though not significantly higher, mean scores than the group instructed traditionally. Green concluded that the cloze procedure is a viable and efficient method of instruction.

McGee (1981) looked at the effect of the cloze procedure on good and poor readers' comprehension. The subjects were 20 Grade 3 good readers and 20 Grade 5 poor readers; the students in the study were chosen so that their reading abilities were

similar. Results indicated that fifth grade poor readers remembered more from reading an easy cloze passage than from reading a normal passage in immediate recall. Third grade good readers showed no difference in recalling easy cloze or normal passages. Neither group recalled easy cloze passages better than normal passages in delayed recall. McGee concluded that the older poor readers benefitted from reading easy cloze passages and that the cloze technique may be especially beneficial for poor readers.

Harding (1977) evaluated direct instruction in cloze procedure with ninth grade students. Ninety-two experimental subjects had direct instruction for 9 weeks using a series of graded cloze exercises while the 105 students in the control group had an individualized reading program. Significantly greater gains were achieved by the experimental group on the Comprehensive Tests of Basic Skills (CTBS) with no significant difference between male and female gains in the experimental group. Black and Spanish students achieved greater gains than other students. Harding concluded that as direct instruction in cloze caused significant improvement in reading with the probability of change effects at the 0.01 level, the cloze procedure was an important supplementary measure for reading instruction.

Carr, Dewitz, and Patberg (1983) used three procedures to help Grade 6 students increase their inferential reading comprehension with expository text: a structured overview to activate background knowledge, the cloze procedure to develop

an inferential thinking strategy, and a self-monitoring checklist to train the subjects to use the strategy independently. There were two experimental groups: one used the cloze procedure to integrate text and background knowledge and the checklist to maintain the strategy; the other used both the structured overview and the cloze procedure with the checklist. The control group read the same materials as the other two groups, but was not trained in any strategy. Results of posttests measuring the students' ability to infer indicated that students in both treatment groups increased their inferential comprehension skills as measured on both immediate and delayed transfer tests. Results also indicated that below average readers benefitted most from the instruction. Carr et al. concluded that further research was needed to clarify the effect of the cloze procedure as distinct from the effects of the other instructional techniques used in the study. They also concluded that because the growth in inferential comprehension was not immediate but occurred only after four weeks of instruction, students need time to learn, practise and possibly internalize these skills.

Phandinh (1986) studied the effectiveness of cloze exercises given before and after reading an intact passage as an instructional method for improving the reading comprehension of Grade 9 students. There were two experimental groups of 14 students: the first group did a cloze exercise before reading an intact passage and then followed the reading by a cloze exercise and the second group read the passage and then did a

cloze exercise. There was one control group of 14 students which had traditional reading instruction. Following treatment, students using the cloze procedure generally scored higher on reading comprehension tests. While the experiment did not statistically identify a best method, it did demonstrate the tendency for pre and post cloze methods to be superior.

Rankin, Haase, Stewart and Howard (1980) examined the effect of using sequence strategies on teaching reading comprehension with the cloze procedure. By "sequence strategies," the researchers meant "teaching plans useful in attaining an educational goal by organizing instruction in a given order of succession" (p. 195). The sequence which the sequence strategy experimental group followed was as follows: an aural cloze treatment during the first 2 weeks in which the students listened to the teacher read the selection, substituting the word "blank" for each deletion, both prior to the cloze passage and during the cloze passage itself; an aural-visual treatment for 2 weeks in which the teacher read the entire selection down to the beginning of the cloze passage and then passed out the cloze passage for the students to read silently before completing while the teacher read the cloze passage orally; and a visual cloze treatment for 2 weeks in which the students read the intact passage down to the cloze passage and then completed the cloze exercise without any simultaneous oral reading by the teacher. The 86 Grade 7 students, with an average grade equivalent reading score of

7.4, were divided into three groups: the sequence strategy experimental group, a visual cloze group, and a control group. The researchers found that the use of a three-step sequence strategy proceeding through the aural cloze, the aural-visual cloze, and the visual cloze produced superior results on cloze test performance and recommended this sequence be used when using the cloze procedure for teaching reading comprehension. Of particular interest in this study is the fact that, of the total group of students, only 49 spoke English at home.

Some cloze studies have not shown such positive results. Schneyer (1965), investigated the effects of the cloze procedure on the reading comprehension of sixth grade students. The experimental group consisted of 32 students and the control group, which did not use cloze exercises, consisted of 34 students. Two types of cloze exercises were used: a tenth word deletion pattern and a nouns/verbs only deletion pattern. There were 19 exercises in all and the students were given one per day. When the final comprehension test scores were analyzed by analysis of covariance with control of initial scores, the difference between the means of the two groups was not significant; the pupils who had completed the cloze exercises did not show significantly greater improvement in reading comprehension. However, despite the lack of significant difference in the scores, Schneyer states, "...it would seem that the skills involved in determining the precise word required for each blank in the cloze exercise ... should result in such (reading comprehension) improvement" (p. 178)

and postulates that the crucial factor involved in improving comprehension ability through cloze exercises may be the reader's awareness of the reasons for the appropriateness of particular words for each blank in the passage.

Paradis and Bayne (1977) examined the effectiveness of systematic cloze task instruction on primary grade reading success. First and second grade students from a university lab school, none of whom was experiencing severe difficulty in learning to read, were divided randomly into an experimental (n = 16) and a control group (n = 13). The experimental treatment consisted of cloze tasks developed from basal reader materials; the control treatment consisted of motivated self-selected reading coupled with phonic reinforcement activities. Over an 8 week period, subjects received 4 hours of treatment instruction. No significant differences were found between experimental and control groups in reading achievement using the Stanford Achievement Test. In their discussion of the results, Paradis and Bayne felt that the results might have been affected by the fact that the subjects were not disabled readers. Disabled readers for whom reading may be a series of separate skills may benefit more from cloze instruction than able readers for whom reading may be a unitary process.

Duke (1977) with 90 Grade 3 subjects in New Hampshire examined the effectiveness of a modified cloze procedure using context clues in improving reading comprehension. Both the experimental and the control group used the Ginn 360 basal reading series but the experimental group also did 36 cloze

lessons. Lessons were done three times a week for 15 minutes each time. Duke found that the modified cloze procedure was as effective as the conventional method in producing significant gains in word knowledge, reading comprehension, and total reading achievement; however, it was not more effective.

Rogers (1982) attempted to improve the reading comprehension of 159 low-comprehending community college students through 18 hours of cloze instruction. There were four treatment groups: cloze only, cloze with discussion, traditional method, traditional method with discussion. All groups improved their scores in reading comprehension and Rogers concluded that cloze is as effective as more traditional programs and, therefore, a viable alternative although the effectiveness of the cloze procedure may vary among teachers.

Yellin (1978) compared two cloze instructional strategies using 104 fifth graders as subjects: a product approach where there was only one correct answer and a process approach where synonyms were acceptable. With the process approach students engaged in small group discussion. Yellin found no significant difference between the two groups in reading comprehension performance. The posttest cloze measures did not reveal significantly higher cloze scores for those students in small group discussions compared with students who worked individually and silently.

Wilson (1977) studied the use of the cloze procedure with four different classes of elementary school students: two classes of Grade 4 students and two classes of Grade 6

students. One class in each grade formed the experimental group and the other class formed the control group. The cloze treatment consisted of a pretest, nine cloze lessons, a posttest, nine more cloze lessons, and a second posttest. He found no significant difference between the groups in doing grammatical exercises, but all groups did improve slightly in reading ability. For that reason, he recommended using cloze as one method of instruction believing it to be as effective as traditional methods of instruction.

McNamara (1977) used three instructional strategies with Grade 12 students in an American government course: cloze procedure, SQ3R, and lecture/discussion. All three methods were found to be effective as teaching techniques since each promoted significant growth in content knowledge. There were no significant differences between any of the methods of instruction except in the second semester when the lecture/discussion group was significantly better than the cloze group.

Shoop (1982) also investigated the effects of three instructional strategies on inferential comprehension of textbook material: cloze, study guide, and combination method of cloze and study guide. One hundred and forty-four Grade 8 students were randomly assigned to one of the three treatments. Those in the cloze treatment group completed passages from social studies textbooks deleted in a regular pattern. The study guide treatment group answered inferential questions over the same intact passages. The combination group alternated

these treatments. Data from a posttest of inferential comprehension revealed that the combination of cloze and study guide was a significantly better instructional treatment than cloze instruction alone regardless of teacher or achievement level.

### 1.2 Second language research

There has been very limited research in the use of the cloze procedure for teaching reading in a second language. In 1972 Oller, discussing the use of the cloze procedure as a teaching technique, called for research into the effect of repeated practice in the taking of cloze tests to determine whether the ability to do cloze tests is associated with improved reading comprehension. Despite this call, there has been little research on the cloze procedure as a teaching technique in the second language classroom although there has been a considerable amount of research in the use of the cloze procedure for testing language proficiency.

Friedman (1964) studied the use of the cloze procedure for improving the reading comprehension of foreign students at the college level. She found significant gains in reading comprehension with a group of students who did 20 cloze exercises from the McColl-Crabbes Standard Test Lessons in Reading. Although the experimental group failed to show significant difference from a control group which did half as many cloze exercises, both groups did show significant gains in reading comprehension. She concluded that cloze exercises are

useful for teaching reading comprehension to non-native speakers.

Greenewald (1974) studied the effects of training in cloze and contextual clue exercises upon high school students' ability to utilize context. Two hundred students in third year French were assigned at random to one of five groups, each group using self-instructional materials: training in English contextual clue exercises, training in French contextual clue exercises, training in English cloze exercises, training in French cloze exercises, and a control treatment of vocabulary exercises in French. At the end of the experimental period students were tested with a researcher-made cloze test in French and a context test in French. The group training in cloze exercises in English showed a significant improvement in the cloze test and the group training in cloze exercises in French showed a gain closely approaching a statistically significant level. However, no statistically significant group-against-group differences were found to exist between pre to post gains of the five treatments on either of the two tests. Greenewald attributed her lack of clear cut results to four possible factors: the high difficulty level of the test instruments; the possible inadequacies of the training materials; the length of the instructional period; or the fact that the sample population may not have attained the level of language development demanded by the task. Despite these non-significant results, Greenewald (1981) recommended the use of cloze materials to teach reading.

Whitmer (1971) investigated the effectiveness of cloze and inferential techniques upon French reading comprehension at the intermediate college level. There were a total of 52 subjects in two classes of intermediate college French. The experimental group had four phases of treatment: cognates and false cognates; affixes, roots and word families; locating main elements, key words, and central ideas; inferential techniques and cloze. The control group had extra oral drills and informal chats. Whitmer observed that students in the experimental group paid closer attention to contextual and structural clues after being exposed to cloze units in French. Although the experimental group did better in French reading comprehension following treatment, the results were not statistically significant. In this particular study, the effect of the cloze treatment was confounded by the other treatments which the experimental group also underwent.

Beck (1985) examined the effectiveness of using cloze procedure for teaching reading and writing of intermediate German. Two instructional methods, the cloze method and teacher-led discussion, were used with high school students enrolled in third year German. The cloze group of 20 students silently read and restored a cloze passage taken from an intermediate level German reader for 20 minutes then spent 10 minutes correcting their work after being given the original version. The other group read the original version silently for 10 minutes then discussed it under the guidance of the teacher for 20 minutes. The treatment occurred once a week for

10 weeks. The discussion group outperformed the cloze group on the weekly tests by generating more words in the extended summaries which they wrote. The discussion group also found the tests easier. No direct testing of reading comprehension was done.

2. Repeated Reading-While-Listening

There are a number of related reading-while-listening methods. One of the first to be described was the neurological-impress method of remedial-reading instruction (Heckelman, 1969) in which the student and teacher read aloud simultaneously at a rapid rate while the instructor slides his finger along the words being spoken. The teacher's voice is directed into the student's ear so that the student can read and listen simultaneously. New material is read at each reading session. Assisted reading (Hoskisson, 1975) is a method for parents and teachers in which an adult reads to the child and has the child repeat the words, phrases or sentences after hearing them. In this way children "begin to learn to read by reading, much as they learned to talk by talking." In a school setting, Hoskisson and Krohm (1974) used a tape recorder and listening posts in order to provide more practice in reading-while-listening. Repeated readings (Samuels, 1979) is a method in which a short, meaningful passage of 50-200 words is reread several times until a satisfactory level of fluency is reached. Repeated readings can be done with or without audio support; if audio support is given, the student

reads the passage silently while listening simultaneously to the tape-recorded narration. Chomsky (1978) used a method of reading-while-listening with nonreading Grade 3 students. She had each child memorize story books by reading and rereading while listening individually to the commercial tapes which accompanied the books. The student also read orally with the tape or alone after listening to the tape. When the student could read the book independently, he read it to the teacher and to his classmates, parents, or younger children. This method combined Heckelman's reading-while-listening with Samuel's repeated readings. All four of these methods have the following characteristics: the presence of a reading "model" either in person or on audio tape, the tracking of the line of print by the student, and the reading aloud, by the student, of the same material to which he listens (Janiak, 1983).

An important reason given for advocating the various reading-while-listening techniques is the development of reading fluency, "that level of reading competence at which nontechnical textual materials can be effortlessly, smoothly, and automatically understood" (Schreiber, 1980). Learning to compensate for the absence of prosodic cues is an important task of readers (Fries, 1963). Because a written text does not signal intonation, stress, or pauses, a fluent reader must learn to supply the missing signals rapidly and automatically in order to make semantic sense of the text.

Schreiber's rationale for using the method of repeated readings combined with oral reading by a teacher or other

competent reader is based upon Fries' comments. Because written English often does not signal syntactic structure by means of punctuation cues, parsing a written sentence is a difficult task for a beginning reader. Take, for example, the sentence which Schreiber gives: "Our dog's bark sometimes frightens people" (p. 180). Based upon experimental evidence, Schreiber concludes that beginning readers have difficulty reading this sentence because they do not know how to "put together into meaningfully related phrases words which they can decode and which they could of course comprehend in the form of a sentence spoken or read aloud to them" (p. 180). This is because "punctuation does not divide written sentences into phrases as clearly and systematically as prosody does for spoken sentences" (p. 180). Transferring knowledge from an aural/oral system where phrases are clearly marked to a written system where they are not indicated is difficult for a beginning reader.

Samuels' rationale for the method of repeated readings differs from Schreiber's and stems from his notion of automaticity. He states (1979) that "attention is required in order to derive meaning from text and that the amount of attentional resource which any individual possesses is limited" (1984, p. 197). Both tasks, that of decoding and that of comprehension, require attention. The amount of attention required by each task differs from reader to reader and from text to text. Beginning readers must pay close attention to decoding and, hence, have little attention left for

comprehension. Skilled readers develop automaticity in decoding which frees attention for the task of comprehending. In Samuels' opinion, the method of repeated readings enhances comprehension because the decoding barrier is gradually overcome. The analogy which he draws is between the development of reading skills and the development of similarly complex musical or athletic skills. At beginning stages, both music and athletics require repeated practice of small units for automaticity to develop and so, he argues, does reading.

Kann (1983), citing and agreeing with Schreiber, believes that the method of repeated readings is particularly appropriate for learning-disabled children because "it promotes the development of syntactic competency.... Syntactic competency is a prerequisite to comprehension of the text" (p. 91). By hearing appropriate phrasing of a passage and repeating the passage with correct phrasing, the reader will have less difficulty imposing such phrasing himself and will eventually become a more fluent reader.

Since 1969, the various methods of repeated reading and/or reading-while-listening have been recommended by many teachers, specialists, and researchers for both remedial and regular first language students. The method is recommended for children (Chomsky, 1978; Janiak, 1983; Samuels, 1979), for older students (Carbo, 1978), for students who are weak in reading (Johns, 1986), for learning-disabled children (Kann, 1983), and for adults with learning disabilities (Moyer, 1982). Repeated reading-while-listening for second language learners

is not discussed in the literature but Chomsky, Samuels (1979), and Heckelman all point out that repeated reading-while-listening is a traditional method of teaching reading still used in schools in other parts of the world.

## 2.1 First language research

Many researchers have reported gains of various kinds through the use of reading-while-listening techniques. Heckelman (1969) reported on a study of the neurological-impress method with 24 students from Grades 7 to 10, all of whom were reading at least 3 years below grade level but had an I.Q. score of 90 or above. The mean gain in reading comprehension after only 7 1/4 hours of instruction was 1.9 grade levels and the top gain was 5.9 grade levels. The gains were significant at the 0.001 level.

Samuels (1979) reported on a study of repeated readings done by Dahl and Samuels (1976) with elementary students who were poor readers but of normal intelligence. Students who received supplementary work in repeated reading made significant gains in both comprehension and speed compared to the control group.

Carbo (1978) reported that after using talking books with children with severe learning handicaps, all of the students made substantial gains in reading comprehension, word recognition and word meaning. Eight learning-disabled students of average intelligence, in Grades 2 to 6, who had memory

problems, attention difficulties, and auditory perception deficiencies were taught with the talking books reading method. At the end of 3 months of listening to individual tape recordings especially made for each student, it was found that the average gain in word recognition was 8 months. Carbo does not give figures for the gains in reading comprehension or word meaning.

Chomsky (1978) used taped books for 4 months with five Grade 3 readers who were reading below grade level. Pretest and posttest scores on several reading diagnostic tests showed encouraging gains. On the Wide Range Achievement Test reading subtest, the students averaged a gain of 5 months. The Durrell Analysis of Reading Difficulty showed gains in oral speed of several months to one year. The Gates-McKillop subtest, Phrases: Flash Presentation, showed gains of 0.9 in grade score for two children and 1.1 for a third child.

Gonzales and Elijah (1975), using two oral readings of short passages but no taped model, found a reduction in the number of errors made by the 26 Grade 3 developmental readers at both the instructional and frustration levels. "Since the number of errors are indications of the difficulty of the material read, this reduction then reflects a decrease in difficulty encountered by the reader upon rereading the material" (p. 651). Of particular interest in the present study was the fact that Gonzales and Elijah found that structural analysis of text improved significantly from first to second reading. This occurred at both the instructional and

frustration reading levels. This suggests that repeated reading may help improve grammatical proficiency.

Moyer (1982), using multiple oral readings but no taped model, reported an increase in reading rate with both an adult reader and a small number of elementary and secondary school students. The adult, who had suffered a severe loss in the ability to read as the result of cerebral trauma following surgery, achieved a gain in reading rate of 40-50% over a 12 week period. With elementary and secondary dyslexic students, Moyer found that daily practice with multiple oral rereading consistently resulted in an increase in the rate of reading new material. (No figures given.)

A number of the researchers have reported improvement in attitude and motivation through the use of the reading-while-listening methods. Carbo (1978) states "the success which youngsters experience with the talking book method builds their self-confidence and makes them more willing to invest further effort in learning to read" (p. 268). Samuels (1979) gives anecdotal evidence of students who now enjoy reading and who are motivated to improve their reading speed. Chomsky (1978) mentions the increase in confidence and motivation which the children showed after 4 months of reading-while-listening.

Laffey and Kelly (1981) found that nine poor readers who took part in repeated reading made greater gains in comprehension and reading achievement in the year of the treatment than in the year prior to the treatment. In a different study, Laffey, Kelly, and Perry (1980) found that

there was a significant difference in reading comprehension between a control group and an experimental group of culturally different (rural Virginia) students in Grades 5 and 6 who listened two to three times to taped literature then read along orally until fluency was achieved. The treatment lasted 13 weeks and was 15 minutes daily. Although the comprehension, vocabulary and accuracy scores were consistently higher for the experimental group, only the reading comprehension score was statistically significant. The authors contended, however, that all scores were educationally significant because of the extremely positive attitudes toward reading on the part of the students after the program.

Skouge (1984) compared the effects of three previewing procedures on the oral decoding proficiencies of five dysfluent readers at the junior high level. The three previewing procedures were repeated reading-while-listening, repeated reading with word supply, and unrehearsed practice with word supply. Skouge looked at the number of training sessions needed for students to attain an oral decoding rate of 100 or more words correct per minute with five or fewer words incorrect per minute and concluded that the techniques of repeated reading-while-listening and repeated reading with word supply were similarly powerful for reaching criterion level.

Rashotte and Torgesen (1985) examined the process of repeated reading itself and found with 12 nonfluent, learning-disabled students in Grades 2 through 5 that increases in reading speed with the repeated reading method depended on the

number of shared words among the stories. If the stories had few shared words, repeated reading was not more effective for improving speed than an equivalent amount of nonrepetitive reading. No oral model was provided for the students. Rashotte and Torgesen reported that students liked the repeated reading method regardless of the degree of improvement attained. At the end of the study, after daily reading practice for a month, half of the students asked to continue the story reading sessions. Rashotte and Torgesen commented, "... one point of usefulness for this technique may be that it encourages students to read more, or at least, to have a more positive attitude toward reading, because with each repetition of the same story the student usually achieves speed improvement" (p. 188).

Carver and Hoffman (1981) considered the effect of practice through repeated reading on gain in reading ability using a computer-based instructional system. High school students who read poorly were given individualized reading training over a period of 50 to 70 hours using a new computer program of prose passages. Students had to make a choice between two possible words to fill blanks occurring every fifth word (a cloze exercise, although not called that by Carver and Hoffman) before they could continue with the reading. The results showed that the students gained fluency on the specific task but gain in reading ability was not so clearly evident. One measure showed a three grade reading gain but a second measure showed little or no evidence of gain.

Reitsma (1988) had clearly negative results when he compared three ways of practicing reading for beginners: quided reading, reading-while-listening, or independent reading with computer-generated feedback available for students to use when they wished. He found that both guided reading and independent reading with self-selected speech feedback were significantly more effective than the reading-while-listening condition or the control condition. However, subjects in the reading-while-listening group read each story only once; no attempt was made to provide repeated readings of the story. It is noteworthy that Reitsma comments that the subjects in the study were enthusiastic about the reading-along method; they were motivated to participate and indicated a desire to continue with reading exercises of this kind.

## 2.2 Second language research

There is only one piece of research on either repeated reading or reading-while-listening in a second language. Layton (1984) examined the effects of repeated and serial reading in oral and silent modes on the reading rate, accuracy and comprehension of ESL adults. The subjects, 71 Spanish-speaking college students who were learning to read in English as a Second Language, were randomly assigned to one of four groups: oral repeated readings (the students did the oral reading); oral serial readings (a different passage each time); silent repeated readings; and silent serial readings. The

students practised reading for a total of 16 practice sessions. Layton found that the students who had practised reading orally read significantly faster orally, but that they read significantly less accurately than those who had practised silently. She concluded that, based on the results and practical considerations, silent serial reading is the preferred practice technique for ESL students.

3. Summary and Considerations of the Present Study

The research on the use of the cloze procedure as a teaching technique seems to suggest that the cloze procedure may be more effective with poor readers than with skilled ones. The studies of McGee (1981) and Harding (1977) are of particular interest to the present study. McGee compared good and poor readers and concluded that the cloze technique may be especially beneficial for poor readers. Harding found that black and Spanish students, who did not speak standard English, achieved greater gains than the other students in the experimental group. That which is effective for poor first-language readers should be effective for ESL readers as ESL readers are normally poor readers. In fact, Clarke (1979), who compared good and poor first-language readers, found that good first-language readers, when reading in the second language, used the same reading strategies as the poor readers. Differences between good and poor readers were greatly reduced when reading in the second language.

It appears that an aural component may help students

complete a cloze exercise. Rankin et al. (1980), who organized cloze instruction sequentially in an attempt to make it a more effective method of reading instruction, found that the inclusion of a spoken component was helpful for students. (Of the 86 students in their study, 38 had a language other than English for their mother tongue.) Rye (1982) also commented that students, in this case first-language students, often read the content aloud to themselves when they found cloze passages difficult. The auditory signal appeared to aid understanding and subsequent production of the missing words.

The research on repeated reading and reading-while-listening has focussed on readers who are non-fluent readers either because they are beginning readers or because of learning disabilities. It appears from the research evidence that the listening component may be important in repeated reading as Heckelman (1969), Chomsky (1978), Laffey et al. (1980), and Carbo (1979) all reported increases in reading comprehension with reading-while-listening methods. On the other hand, Carver and Hoffman's study of repeated reading (1981), using a computer-based reading system with no aural component, found that students' general reading ability did not increase significantly. The ESL students whom Layton (1984) studied had no opportunity to listen to the text; this might account for the lack of success of the repeated reading method. In the Reitsma study (1988) of reading-while-listening, students listened to the text only one time; this lack of repeated aural input may have been the cause of the

ineffectiveness of the method.

Bloomer (1961) suggested combining the cloze procedure with instructional techniques for increasing reading speed to see what the effect of the combination would be. The combination of repeated reading-while-listening and the cloze procedure appears to exemplify the type of instructional technique which Bloomer envisioned. The combination of repeated reading-while-listening and the cloze procedure also serves to circumvent a problem which Reitsma (1988) commented on with regard to the customary reading-while-listening methods: There is no guarantee that a reader is attending to the printed text while the words are being spoken. However, in order to develop correct associations between the printed and spoken words, it is imperative that the student look at the word as it is spoken. A cloze exercise in conjunction with reading-while-listening compels students to read the text at the same speed as the tape recording. Students are forced to take an active role in the reading process if they are to complete the cloze exercise successfully.

Krashen (1982) believes that second language learners acquire syntactical competency in the same manner as native speakers, through natural acquisition rather than through teaching and learning of rules. What is important in the second language classroom, according to Krashen, is sufficient, understandable, interesting input. Repeated reading of a text while simultaneously listening to it should enable ESL learners to hear and acquire correct syntactical constructions as well

as to learn to read more fluently. Gonzales and Elijah (1975) found that structural analysis improved significantly between a first and second reading. This suggests that repeated reading-while-listening may be effective for improving grammatical proficiency.

The speed of the taped reading in reading-while-listening has varied from study to study. Chomsky (1978) used commercial recordings but others (Carbo, 1978; Reitsma, 1988) have recorded passages at slower speeds. Reitsma used a speed of 55 words per minute in his study of Grade 1 students; Carbo varied the speed of the recording according to the ability of the individual student. McMahon (1983) found that first grade readers could not combine reading and listening well when the material was presented at rates typical of published read-along tape recordings (about 112 words per minute). Nonetheless, in the present study it was decided to use commercial recordings with speeds averaging 150 words per minute because secondary ESL students must cope with lecture and audio-visual presentations in their regular (non-ESL) classes.

The present study was undertaken to examine the effects of the cloze procedure in conjunction with repeated reading-while-listening for many reasons. The interactive model of reading provides theoretical justification for joining the two techniques. The research on the cloze procedure and repeated reading-while-listening suggests that both techniques may be successful in increasing ESL students' reading ability.

Krashen's belief that language is acquired through optimal input, not learned, suggests that repeated reading-while-listening will increase the grammatical proficiency of ESL students. Finally, many classroom teachers presently use reading/listening cloze exercises with ESL students although their use has never been substantiated by research.

# III. DESIGN AND METHODOLOGY

The present study was designed and conducted to examine the effects of cloze exercises in conjunction with repeated reading-while-listening on the reading ability and grammatical proficiency of secondary level ESL students.

## 1. Subjects

The subjects for this study were 27 ESL students enrolled in the English Language Centre of an urban Vancouver secondary school. The English Language Centre at Britannia Secondary School in the Vancouver School District was chosen for this study because the researcher taught there and the principal was willing to have the study conducted.

Enrollment in the English Language Centre generally indicates that the student's English is considered proficient enough for the student to be simultaneously enrolled in regular classes at the school. However, some students are placed in the English Language Centre only because they have been in Canada for a long period of time (5 to 7 years) and because it is considered inappropriate to continue restricting them to beginner and intermediate ESL classes. The students in this study had attended school in Canada for between 1 and 7 years. The self-reported number of years of schooling before coming to Canada ranged from zero to ten years.

The students ranged in age from 13 to 20. However, it must be noted that it is not unusual for refugees to lower a child's age on official documents in order to expedite entry

into Canada and to ensure enrollment in the public school system. It is the opinion of the researcher that one or two of the students may have been over 20 years of age.

The students were registered in grades eight to twelve. However, the grade levels of the students are of little importance as grade levels are assigned rather arbitrarily based on age and ability.

The countries of origin were Vietnam, China, Hong Kong, Iran, the Philippines, Japan and Cambodia. The languages spoken at home were Vietnamese, Cantonese, Persian, Ilocano, Japanese, and Cambodian.

It is difficult to comment on the socio-economic background of the students without greater knowledge of the circumstances under which they lived in their country of origin. At the time of this study, all of the students would have been classified as being of lower socio-economic status but some had parents who had been professionals before the children came to Canada. A number of the students had no parents in Canada and lived with older brothers or sisters or aunts and uncles.

Because of timetabling constraints, it was not possible to select students randomly for treatment. The experimental group consisted of all the students enrolled in Blocks C and D of the English Language Centre and the control group consisted of the students enrolled in Blocks B and E. (Block A was a spare for the teacher.) The assignment to the experimental or control group was done randomly by the timetabling program of the

Vancouver School Board computer. There were 14 students in the experimental group and 13 students in the control group.

Intuitively, it appeared that the two groups were well matched. In the experimental group there were eight females and six males. The mean number of years of schooling in Canada was 4. The mean number of years of schooling before coming to Canada was 4.9. The mean age of the subjects was 15.57 although this may be incorrect because of the possibility of inaccurate self-reporting. In the control group there were ten males and three females. The mean number of years of schooling in Canada was 4.07. The mean number of years of schooling before coming to Canada was 4.23. The mean age of the subjects was 15.92, but, again, this may be inaccurate.

In the experimental group there were ten Chinese speakers, three Vietnamese speakers, one Persian speaker and one Ilocano speaker. (One student reported speaking both Vietnamese and Chinese.) In the control group, there were ten Chinese speakers, two Vietnamese speakers, one Persian speaker, one Japanese speaker, and one Cambodian speaker. (One student reported speaking Cambodian, Chinese and Vietnamese.)

## 2. The Experimental Materials

Seventeen reading/listening cloze exercises were prepared for use during the study. Commercially prepared film strips with accompanying cassette tapes were the source of the reading/listening cloze exercises. There were five types of film strips:

a. stories well-known in western culture, but not known to the students; e.g., Tom Sawyer, Frankenstein, Arete, Shane;

b. topics in science and technology; e.g., logging, magnetism, glass manufacture, oil recovery;

c. history; e.g., pioneer life;

d. life skills; e.g., how to find a job, how to study effectively;

e. grammar; one film strip was on grammar.

These subjects were chosen because it was felt that the information in the film strips would be of benefit to the students.

The cloze exercises were prepared by transcribing a short passage near the beginning of each tape and then deleting every tenth word, provided that the tenth word was not a proper noun. If the tenth word was a proper noun, then the next word which was not a proper noun was deleted. The length of the passages ranged from 190 words (Shane) to 344 words (Pioneer Farming) but most were between 250 and 325 words. As is customary, the first and last sentences of each passage were left intact. (See Appendix A for copies of the cloze exercises.) The chosen passage was also re-recorded four times on a separate tape so that it could be played easily while students were checking or completing the cloze exercise.

The cloze passages were tested for readability using the Readability Index program developed for the Apple computer by Irving and Arnold (1979). The cloze passages were then ranked

in ascending order of readability as follows:

Table 1

Readability Level of Reading/Listening Cloze Passages

| Title | No. Words | Raw No.[a] | Grade |
|---|---|---|---|
| 1. Tom Sawyer | 272 | 43 | 2.4 |
| 2. Frankenstein | 260 | 48 | 3.2 |
| 3. Job Hunting--Problem | 339 | 48 | 3.2 |
| 4. Grammar--Sentences | 257 | 51 | 4.28 |
| 5. Shane | 190 | 53.9 | 4.7 |
| 6. Steel | 250 | 54.2 | 5-6 |
| 7. Magnets | 286 | 54.9 | 5-6 |
| 8. Clothes | 318 | 55.2 | 5-6 |
| 9. Arete | 325 | 55.2 | 5-6 |
| 10. Dairy Foods | 290 | 55.3 | 5-6 |
| 11. Oil | 278 | 55.6 | 5-6 |
| 12. Glass Making | 258 | 55.6 | 5-6 |
| 13. Pioneer Farming | 344 | 55.8 | 5-6 |
| 14. Homework | 292 | 56.3 | 5-6 |
| 15. Pioneer Village | 318 | 57.2 | 5-6 |
| 16. Logging | 274 | 57.7 | 5-6 |
| 17. Noble Hercules | 302 | 60.3 | 7-8 |

[a] The raw number given by the Readability Index program allows a finer distinction between the reading level of the cloze exercises than does the grade level number and is included for that reason.

Materials with reading levels between Grades 2 and 8 were chosen because previous experience in the English Language Centre had indicated that students in the Centre usually read at a level between Grades 3 and 6. Students of any age who read at a seventh grade level, whether they be Grade 7 or Grade 12 students, are usually considered ready to leave the English Language Centre and to take a full program of regular courses.

Each cloze passage was typed in two different ways: first, with each deletion consecutively numbered and a line drawn so that students could write in the missing word (Appendix A) and secondly, with no words deleted. This second, unmutiliated version was typed on the back of the answer sheet which consisted of a numbered list of the missing words. (See Appendix B for an example of an answer sheet.)

The individual cloze passages were then compiled in a booklet, one for each student in the experimental group. At the end of the booklet a bar chart was provided where the student's scores, calculated as percents, were recorded. (See Appendix C for an example.) The seventeenth cloze passage, Noble Hercules, was used for the cloze passage posttest.

## 3. The Measuring Instruments

The four measuring instruments used in the study are listed and described below:

### 3.1 Gates-MacGinitie Reading Test

The standardized test used to identify reading ability was

the Gates-MacGinitie Reading Test, Level E. At the time of the study, because there was no reading test for ESL learners which had parallel forms, the Gates-MacGinitie test was used although it is a test developed for and normed on native English speakers. Before the treatment, students were given Form 1 and after the treatment, students were given Form 2.

### 3.2 Structure Test--English Language (STEL)

The Structure Test--English Language (STEL), Advanced Level, was the standardized test used to identify the grammatical proficiency of the students. The STEL test was developed by ESL teachers Jeanette Best and Donna Ilyin and normed on ESL students in California. Before the treatment period, students were given Form 2 of the test and after the treatment period, students were given Form 1.

### 3.3 Researcher-designed reading/listening cloze

At the end of the treatment period, students in both the experimental and control group were shown a film strip on the story of Hercules and them completed a reading/listening cloze exercise in the same manner as the experimental group had been doing during the semester. As indicated in Table 1, this 302-word cloze passage had a readability of Grade 7-8. An every-tenth-word deletion pattern was followed.

### 3.4 Researcher-designed attitude questionnaire

After the treatment period, students were given a 13-item attitude questionnaire to complete in order to determine student attitude towards doing the reading/listening cloze exercises. (See Appendix D for a copy of the questionnaire.)

## 4. The Experimental Procedure

In this study the experimental group of 14 students received the experimental treatment of reading/listening cloze exercises and the control group of 13 students received the control treatment.

### 4.1 The experimental treatment

For a period of 17 weeks during the first semester of the academic year 1986-87, reading/listening cloze exercises were administered once a week to the experimental group. First, the film strip was shown in its entirety with the tape being heard simultaneously; in other words, the students watched the film strip in the conventional manner. Often the showing of the film strip was preceded by a teacher-led discussion intended to stimulate student interest in the film strip which was about to be shown. This discussion also attempted to activate the background knowledge which students could bring to bear upon the subject. Viewing the film strips was intended to establish schemata in the students' minds so that they could understand what they were reading during the completion of the cloze exercises.

After the film strip was shown, the cloze booklets were distributed. First, the students were given approximately 5 minutes to read through the cloze exercise silently, filling in with pencil any of the missing words that they knew. When most had finished doing this, students listened to the cloze tape 4 times with a pause after each playing to provide time to write the missing words or to correct the words they had previously written. While students were completing the cloze passages, the teacher moved about the class giving hints such as "You've left off one 's' somewhere."; "Don't forget to look for past tenses."; "You've got a spelling mistake."; "No one has number 11 correct."

Students preferred to work independently during this time; although they were permitted to consult with neighbours, few students ever did so. They appeared to regard the cloze exercise as a puzzle and tried very hard to achieve a perfect score working on their own. Students often physically separated their desks from those of their classmates during this part of the exercise.

Following the fourth playing of the tape, students were given a little additional time to complete the cloze exercise. This was a period of mounting excitement with frequent questions to the teacher: "Do I have any mistakes now?" The teacher would glance at the paper and answer with comments such as "I can see three mistakes, but there may be more." At no time did the teacher indicate exactly where the errors were.

The cloze booklets were then collected for later marking by the teacher and the students were each given a copy of the answer sheet with the list of the missing words on the back. Students greeted the answer sheet with strong emotion. They immediately turned to the word list and calculated the number of words which they had wrong. Groans or cries of delight were heard: "Oh, no, I forgot an 's'."; "I added the 'ed' and I was right." Students were very excited during this time.

Students then listened to the tape one more time while following along with the complete, unmutilated text. This allowed them to simultaneously read and hear the passage correctly. Following that, students were asked either to read the passage as a class simultaneously with the tape or to read the passage individually "round robin" style. The whole process took approximately 30 to 45 minutes depending upon the length of the film strip, length of the selected passage, and difficulty of the cloze exercise itself.

The cloze exercises were subsequently marked by the teacher. Only exact-word and exact-spelling answers were accepted. This method was used because students had had the opportunity to hear the word and because of the difficulty of determining which words are acceptable if one is required to make judgements. For example, if a native speaker were to leave off the plural marker, 's', one might assume that it was a careless error. If an ESL learner leaves off an 's', it is indicative of probable weakness in English.

## 4.2 The control treatment

The 13 students in the control group did no cloze exercises during the first semester. They followed a regular English Language Centre program which is based upon student needs and attempts to provide reading, writing, speaking and listening practice so that students can improve in all four skills and function better in their regular classes.

# IV. ANALYSIS AND RESULTS

The purpose of this study was to examine the effects of repeated reading-while-listening in conjunction with the cloze procedure on the reading ability and grammatical proficiency of secondary school ESL students. Three sets of dependent variables were analyzed: reading ability as measured by posttest scores on the Gates-MacGinitie Reading Tests, grammatical proficiency as measured by posttest scores on the Structure Test--English Language (STEL), and the score on a researcher-designed reading/ listening cloze exercise. The dependent variables of reading ability and grammatical proficiency were analyzed in separate analyses of covariance (ANCOVA) using the pre-treatment scores in each as covariates. The percentage scores of the experimental and control groups on the posttest reading/ listening cloze test were compared using an independent samples *t*-test. In addition, students' attitudes toward doing the reading/listening cloze exercises were measured by a researcher-designed attitude questionnaire. The responses to the attitude questionnaire were counted and categorized.

## 1. Reading Ability

The results of the analysis of covariance on means from the Gates-MacGinitie Reading Test indicate a significant difference between the experimental group and the control group, $F\ (1,26) = 6.977$, $p < 0.014$. The experimental group scored significantly higher than the control group at the time

of the posttest; therefore, the first hypothesis, that there will be no difference between the reading ability of the experimental and control group after a semester of experimental treatment, is rejected. Pretest and posttest means are presented in Table 2.

Table 2

Pretest and Posttest Means - Reading and Grammar Tests

| | Reading Scores | | Grammar Scores | |
|---|---|---|---|---|
| | Pretest | Posttest | Pretest | Posttest |
| Exp. Group (n = 14) | 38 | 43.07 | 29.93 | 32.79 |
| Con. Group (n = 13) | 35 | 36.23 | 27.08 | 27.69 |
| Total Group | 36.56 | 39.80 | 28.56 | 30.33 |

2. Grammatical Proficiency

The results of the analysis of covariance on means from the Structure Test--English Language grammatical proficiency test indicate no statistically significant difference between the experimental group and the control group, $F$ (1,26) = 1.306, $p < 0.265$. Therefore, the second hypothesis, that there will be no difference between the grammatical proficiency of the experimental and control group after a semester of experimental treatment, cannot be rejected. Pretest and posttest means are presented in Table 2.

3. Reading/Listening Cloze

The percentage scores of the experimental and control group on the posttest listening cloze test (Table 3) were compared using an independent samples *t*-test. The results indicate a statistically significant difference between the experimental group and the control group, $t$ (25) = 3.67, $p < 0.01$. Therefore, the third hypothesis, that there will be no difference between the experimental group and the control group in their ability to complete a reading/listening cloze exercise, is rejected.

Table 3

Reading/listening Cloze Means

| | Posttest |
|---|---|
| Exp. Group (n = 14) | 87.71 |
| Con. Group (n = 13) | 80.73 |

4. Attitude Questionnaire

The students believed the cloze exercises to have been beneficial to them. Students were asked whether they thought that doing the cloze exercises had helped to improve their grammar, listening, reading, writing, spelling and/or pronunciation. The largest number of students (11) replied that doing the cloze exercises had helped them with their listening; seven replied that their spelling had been helped;

the same number said that their pronunciation had been helped; five said that their grammar had been helped; three said that their writing had been helped; and two said their reading had been helped.

The students enjoyed trying to fill in the missing words while listening to the tapes every time (four), most of the time (four), some of the time (seven) and never (one). They thought that doing the cloze exercises was interesting all of the time (two), most of the time (five), some of the time (six) and hardly ever (one).

Of the 11 open-ended responses to the question, "What I want to say about doing the clozes is...", only two were negative ("boring" and "have more interesting topics for the film strips that are used"); the other replies indicated that the students believed the cloze exercises were helpful. The attitude of the students toward reading/listening cloze exercises was generally positive and the cloze exercises appeared to have an educational legitimacy in the eyes of the students.

# V. DISCUSSION AND CONCLUSIONS

In this chapter the findings reported in Chapter IV are discussed and evaluated and possible implications for educational practice are presented. Conclusions drawn from the study are reported and implications for further research are proposed.

The present study was designed to answer three questions about the effects of repeated reading-while-listening in conjunction with the cloze procedure for secondary level ESL students. The questions were these:

1. Does repeated reading-while-listening in conjunction with the cloze procedure improve reading ability?

2. Does repeated reading-while-listening in conjunction with the cloze procedure improve grammatical proficiency?

3. Does repeated reading-while-listening in conjunction with the cloze procedure result in an increased ability to do reading/listening cloze exercises?

Another question considered in this study concerned student attitude toward repeated reading-while-listening in conjunction with the cloze procedure. A questionnaire sought the answer to this question:

4. Do students find these activities enjoyable and worthwhile?

## 1. Effects on Reading Ability

There was a significant difference in reading ability at the time of the posttest between the experimental and the

control group as measured by the Gates-MacGinitie Reading Test. The mean of the experimental group rose from 38 to 43.07 whereas the mean of the control group remained approximately the same from pretest to posttest. There was also a significant difference between the experimental and the control group in the ability to do a reading/listening cloze exercise as measured by the teacher-designed cloze posttest although this result must be interpreted cautiously because of the lack of a pretest comparison.

These results indicate that practice in doing cloze exercises together with repeated reading-while-listening can be a beneficial supplementary teaching method for ESL students at the secondary level. The students' individual scores were also examined in an attempt to discern relationships between improvement in reading ability and general academic achievement, age, sex, years in Canada, languages spoken, or amount of schooling. The experimental students were a diverse group with respect to all of these attributes and it was hoped that some patterns might emerge in order that conclusions could be drawn as to which type of ESL student would most benefit from doing cloze exercises in conjunction with repeated reading-while-listening. No such patterns emerged. The small size of the experimental group makes it difficult, of course, to discern such relationships.

The results of the present study replicate the findings of the positive effects of repeated reading and reading-while-listening by Heckelman (1969), Moyer (1982), Laffey et al.

(1980), Chomsky (1978), Samuels (1979), and Carbo (1978). They also corroborate the cloze research of Kennedy and Weener (1973), McGee (1981), Sampson (1979) Carr et al. (1983), Rankin et al, (1980), Bloomer (1962) and Harding (1977), all of whom found the cloze procedure to improve reading ability.

In an earlier study, Carver and Hoffman (1981) suggested that repeated reading methods produce gain in reading ability for students only when their listening ability is higher than their reading ability. As the students in the present study did not have their listening ability tested and as there is no test which attempts to compare reading and listening ability for ESL students, it is difficult to comment on this suggestion. However, judged subjectively, it appears that two experimental subjects whose reading scores rose, had listening ability lower than reading ability and three subjects whose reading comprehension scores fell, had listening ability higher than reading ability. On the basis of this subjective evidence, it appears that Carver and Hoffman's suggestion is unlikely to hold true for ESL students. However, motivation of individual students plays a crucial role in determining reading improvement and the small size of the sample makes it impossible to say with certainty that Carver and Hoffman are incorrect.

Because substantial correlations have been reported for many years between cloze tests and tests of general reading achievement, a number of researchers (Greenewald, 1974; Harding, 1977; Kennedy & Weener, 1973; Paradis & Bayne, 1977;

Rankin et al., 1980; Sampson, 1979) used cloze posttests to determine the effect of the cloze procedure. One research team (Rankin et al., 1980) argued that a cloze posttest should be used because it constitutes a more sensitive test for short term treatment effects in reading comprehension than standardized reading tests. All of these researchers, as in the present study, have found significant improvement on the cloze posttest. In fact, it would have been surprising had this not been the case because the experimental students in each study received opportunities to practice doing cloze exercises.

It is possible that an individualized program would have improved reading ability even more. One difference between the repeated reading and reading-while-listening research reviewed in Chapter II and the present study is that the present study used a whole class method of presentation whereas the studies in the literature used individualized programs. This choice was deliberate. In order to be practical and generalizable in a larger context, ESL methodology studies should be done in classroom settings because, in much of the world, English is taught as a foreign language to classes of fifty or more students. To speak of an individualized program in Asia, Africa, or South America is to signal immediately the irrelevance of the research.

However, if the procedure works with a class, might it not work even better with individual students? A student could then choose materials of particular interest, proceed at his

own pace, and check his own work when completed. The equipment needed is minimal: a tape recorder, tape, and cloze exercise sheet. In the near future, computer technology may be such that it will be possible to have computers which can present reading material with digitized voice accompaniment. At the present time, there is expensive computer equipment capable of reading material orally for the blind; a computer such as that could be used by ESL students doing repeated reading-while-listening.

Students reported that doing the cloze exercises had improved their reading ability a lot (1), somewhat (5), a little (8), and hardly at all (2). In the opinion of the researcher/teacher, the oral reading of the students improved considerably as a result of the cloze exercises and repeated reading. Phrasing, expression, fluency all appeared to improve although no quantitative or qualitative measures were made.

2. Effects on Grammatical Proficiency

No significant difference was found between the control group and the experimental group with regard to grammatical proficiency. Although the grammatical proficiency scores of the experimental group increased during the period of the experimental treatment, this increase was not statistically significant.

It is impossible to give a definitive reason for this finding. It is possible that the small size of the sample is responsible for the lack of significant results. In addition

to its small size, the sample also was extremely varied in its composition. The variety of age, background, and ability may have affected the results.

It is also possible that the nature of the posttest is part of the reason for the lack of significant results; the grammar treatment consisted of repeated aural exposure to grammatical sentences whereas the posttest was of a written nature. It is also possible that the students in this school, in which 85% of the student body have English as a second or additional language, do not hear correctly spoken English from their peers. As a consequence, incorrect constructions become part of their grammatical knowledge and the short treatment period was insufficient for changing these patterns. However, the results agreed with those of Wilson (1977) who found that instruction in the cloze procedure did not improve grammatical performance with students in Grades 4 and 6.

The best method of teaching grammar in ESL classrooms has been a topic of discussion for many years and teaching methods have varied from the grammar-translation method, the direct method, the audio-lingual method, the silent way, community language learning, suggestopedia, total physical response, to the communicative approach. Some of these methods call for conscious attention to grammar, while others call for incidental learning of grammar.

If conscious attention to grammar is the best way to teach grammar, then the cloze procedure should promote grammatical proficiency. If, on the other hand, the best way to teach

grammar is through subconscious acquisition, then repeated reading-while-listening should aid in this process. Theoretically, it would appear that the combination of repeated reading-while-listening with the cloze procedure should facilitate grammatical proficiency.

Subconscious acquisition of grammar is undoubtedly the source of first language grammatical proficiency; Krashen (1982) argues that second language grammatical proficiency is acquired in a similar manner through input which is comprehensible, in sufficient quantity, interesting and/or relevant, and not grammatically sequenced. Kann (1983), looking at the method of repeated reading-while-listening, contends, although there is no research to back his contention, that it is an appropriate method for overcoming syntactical deficiencies often found in learning-disabled first language children. Similarly, ESL students frequently have language patterns which bear little resemblance to those of native speakers. The results of Gonzales and Elijah (1975), who found that structural analysis improved significantly between a first and second reading, suggest that repeated reading-while-listening may be effective for improving grammatical proficiency.

The passages in the present study were not grammatically sequenced, were interesting in the sense that students were motivated to attend to them closely, and were comprehensible because visual clues were provided and the language level kept low. However, the experimental group listened to the tape

recordings for a maximum total time of approximately three hours. It is probable that this was an insufficient amount of input for significant change effects to occur. If the students had had more time to listen to repeated readings, perhaps their grammatical proficiency would have increased more.

In the present study no attempt was made to select reading passages which covered certain grammar points. In particular, no attempt was made to match reading passages to the 50 grammatical items tested on the Structure Test--English Language. If the passages had been chosen with the intention of improving grammatical proficiency in areas tested by the STEL rather than improving overall grammatical proficiency, perhaps the experimental group would have made greater improvement. Selecting passages to illustrate particular grammar points and having students complete reading/listening cloze exercises might be a method to be considered for teaching grammar.

The grammar test which the students wrote was a pencil and paper test. As such, it tested their reading ability as well as their grammatical ability and was also unrelated to the training method. An oral grammar test might be a more appropriate method of testing and would certainly be an interesting development in the field of English as a Second Language. Students could, for example, hear a list of 50 sentences and be asked to indicate whether each was well-formed or not. At present, there is no such test.

Another possible explanation for the failure of the

treatment to produce significant improvement in grammatical proficiency is that the language on the tapes may have been spoken too quickly. However, for each cloze exercise there were always one or two students who managed to achieve a perfect or near-perfect score. Furthermore, first language acquisition occurs even though much of the intake is spoken at normal speed by adults whom the child overhears.

As the students worked through the cloze exercises, they appeared to be focussing closely on grammatical features such as the plural "s" and the past tense marker "ed". The students generally considered the cloze exercises to be helpful for their grammar and enjoyed them. One student completed the open-ended sentence, "What I want to say about doing the cloze exercises is ...", by writing "good for my grammer [sic] I think doing it." Twelve students reported that doing the cloze exercises had improved their grammar a lot (1), somewhat (6), or a little (5). One student replied "hardly at all" and one replied "not at all". In the opinion of the students, the exercises were interesting all of the time (2), most of the time (5), or some of the time (6).

3. Other Effects

The attitude of the students toward the repeated reading-while-listening in conjunction with cloze exercises was, as expected, positive. When asked how often exercises such as these should be done by ESL students, 13 replied "once a week". (The fourteenth student replied "once a semester".) When

asked whether doing the cloze exercises was useful, three students replied "all of the time", seven students replied "most of the time", and four students replied "some of the time". The responses to the open-ended question, "What I want to say about doing the cloze exercises...." elicited eight responses which indicated that the students found the work helpful. Two of the open-ended responses mentioned improvement in listening. In addition, in answer to a multiple choice question, six students said that doing the cloze exercises had improved their listening ability a lot and eight said that doing the exercises had improved their listening somewhat. It appears that students felt that the experimental treatment had the greatest effect upon their listening ability.

## 4. Summary and Conclusions

The use of repeated reading-while-listening in conjunction with the cloze procedure with secondary level ESL students was effective in improving reading comprehension but not effective in improving grammatical proficiency. The method appears, therefore, to be a useful method; it is not suggested, however, that it be used to the exclusion of other methods. The fact that students believed the method to be useful further suggests that it should be retained.

## 5. Implications for Further Research

Although the use of repeated reading-while-listening in conjunction with the cloze procedure did not bring about

significant improvement in grammatical proficiency, there was greater gain for the experimental group than the control group. It is not known what the effect would be of a longer period of treatment; in the present study, the total listening time was only three hours. It is also not known what the effect would be of choosing taped passages on the basis of the grammar points which they illustrated. Would students acquire the grammar points which they had heard? A further question concerns the rate of reading on the tapes: Is there an optimum speed for language and grammar acquisition and for improving reading comprehension?

The present study used the experimental treatment with a whole class of diverse students. It would be valuable to investigate the effects when the treatment was used in an individualized program where students could determine their own rates of progress. Such an individualized program could even be done at home for homework. It would also be valuable to develop a computer program capable of providing voiced reading and cloze exercises and then investigate the effects of training with such a program.

Another question concerns the content of the repeated reading-while-listening passages. Rashotte and Torgesen (1985) found that the experimental condition in which vocabulary was repeated from one passage to another led to increased reading fluency in learning-disabled children on new material, but that if passages did not have shared words, repeated reading was no more effective that an equivalent

amount of non-repeated reading. Similarly, Krashen (1981) recommends "narrow reading"; that is, reading confined to a single topic or the texts of a single author. The present study did not attempt to group the readings by content or vocabulary. By confining the passages presented to the ESL student to texts about one topic, the students would have the opportunity to develop familiarity with the specialized vocabulary of that topic. This, if Rashotte and Torgessen's research is applicable to second language learners, would facilitate increased fluency. Further research is needed to determine the effects of repeated reading-while-listening in conjunction with the cloze procedure when all passages relate to a single topic. If the vocabulary and/or content were repeated, would there be greater gains?

Finally, listening comprehension was not investigated in the present study. Intuitively, it seems that doing reading/listening cloze exercises should improve listening comprehension. Furthermore, the students in the experimental group felt that their listening ability had improved. The only cloze study to consider listening comprehension was that done by Kennedy and Weener (1973) who used an auditory cloze procedure in which the sound of a bell replaced the missing word. They found that training in auditory cloze had a transfer effect to listening tests but that students trained in auditory cloze did not score significantly higher on a standardized listening test than the students trained in visual cloze.

The effect of reading/listening clozes on the listening

comprehension of ESL students needs to be investigated. At the time of the present study, there was no appropriate listening test available. In the past, listening tests for students of English as a Second or Foreign Language have been discrete point tests which are not appropriate for a study such as this because the cloze procedure is an integrative treatment. The only listening test which might have been suitable (SLEP -- Secondary Level English Proficiency) did not then have parallel forms. Because it now has parallel forms, this investigation could be done.

Finally, this preliminary study was done with a small group of students. Future research should be done with a larger sample, if possible, and with more than one teacher so as to lessen the teacher effect.

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# APPENDIX A: CLOZE EXERCISES

## Cloze 1: Tom Sawyer

NARRATOR: Tom dashed down the street. Then he saw her -- (1) _____ lovely little blue-eyed girl he'd never seen before. He (2) _____ a few handsprings to get her attention. But she (3) _____ seem to notice. But Tom was in love! He (4) _____ home with his poor head full of visions.

On (5) _____ morning Tom took his time getting to school. He (6) _____ to shoot the breeze with Huckleberry Finn. Huck was (7) _____ son of the town drunk.

TOM: What you got there, Huck?

HUCK: (8) _____ gotta dead cat. It's gonna cure my warts. You gotta (9) _____ a dead cat to a graveyard at midnight. Hey, wanna (10) _____ out with me tonight?

TOM: Yeah, sure thing.

NARRATOR: Huckleberry came (11) _____ went of his own free will. He did not (12) _____ to go to school or church. He could go (13) _____ or swimming whenever he chose. Nobody told him not (14) _____ fight. He never had to wash or put on (15) _____ clothes. In a word, he had everything that goes (16) _____ make life precious.

But poor Tom Sawyer, a slave (17) _____ cleanliness and civilization, had to go to school. As (18) _____, he was punished for being late. He took his (19) _____ like a man.

He had to go sit on (20) _____ girls' side of the class! Well, in half an (21) _____ he'd gotten to know the new girl. Her name (22) _____ Becky Thatcher. Tom passed Becky a note that said, (23) _____ love you." She seemed pleased.

Becky wasn't so pleased (24) _____ Tom tried to steal a kiss.

TOM: Ow!

NARRATOR: Becky had (25) _____ him down! Well, he'd show her.

Tonight, after he (26) _____ off with Huck Finn, he just wouldn't come back. Then she'd be sorry.

## Cloze 2: Frankenstein

My name is Robert Walton, and the fantastic tale I tell begins in the far northern part of Russia, north of the Arctic Circle. I am a man with a dream. And like (1) _____ other dreamers, I am a lonely man, without without a (2) _____ to share my hopes and fears. For many years, (3) _____ see, I have been trying to find the North Pole.

(4) _____ long ago I hired a ship and a crew (5) _____ sailors to undertake the dangerous voyage. We sailed for (6) _____ weeks. Then one day thick fog forced us to (7) _____to. When the fog cleared, we discovered that we (8) _____ surrounded on all sides. Vast plains of ice stretchd (9) _____ every direction. The ice seemed to have no end.

(10) _____, there appeared a very strange sight. About a half-mile (11) _____ a dogsled raced across the ice. The sled was (12) _____ north. Guiding the dogs was a creature that--that (13) _____ the shape of a man, but was a giant (14) _____ size. We thought we were hundreds of miles from (15) _____. Where could that giant creature have come from?

The (16) _____ day, another strange thing happened. The ice broke into (17) _____ chunks. On one of the chunks was another dogsled, (18) _____ a very different state. Only one dog remained alive. (19) _____ man with this sled was of normal size, but (20) _____ was nearly frozen.

You have never seen anyone so (21) _____! When the sailors brought him onto the ship, he (22) _____ to be dead. Suddenly there was a spark of (23) _____. The man demanded to see the captain.

Cloze 3: Job Hunting - Facing the Problem

DON: Can you believe it, Cheryl? We're graduates! World get ready! What are you planning (1) _____ do?

CHERYL: Sleep for a week! Then I guess I'll (2) _____ to start thinking about a job.

DON: You haven't even (3) _____ about a job? What are you going to look (4) _____ ?

CHERYL: How do I know? You've got your food service (5) _____ so it's easy for you. All I have is (6) _____ diploma, a typing course, and a couple of business (7) _____. What can you do with that?

DON: I know I've (8) _____ some training but it's still hard to know where (9) _____ start. And scary, too, thinking about phone calls and (10) _____ and all that. I keep telling myself --get organized--(11) _____ a fact sheet, check the want ads, go on (12) _____, the whole bit. Well, I'm going to get started (13) _____ and early Monday morning.

CHERYL: I don't want to hear (14) _____ it. You make getting a job sound like a (15) _____.

NARRATOR: After graduation, Cheryl did what a lot of job (16) _____ do--she procrastinated. She did look at the want (17) _____ every day, but that mostly made her feel confused. (18) _____ were so many! Sometimes she saw an ad that (19) _____ her. But she ususally found excuses not to call-- (2) _____ was too far away; they probably wanted someone with (21) _____; the pay was too low. Some days she did (22) _____ a call or two. But if the line was (23) _____, or the person wasn't in she would find an (24) _____ not to follow up on it. As the days (25) _____ by, she found herself sleeping later, watching the

soaps, (26) _____. It wasn't that she was lazy. She just didn't (27) _____ how to proceed. And deep down Cheryl was afraid (28) _____ didn't have much to offer an employer. Without realizing (29) _____, she was teling herself that it was no use (30) _____ look for a job--no one would want to (31) _____ her anyway. So she let the days slip by--and each day that she didn't do anything reinforced her fear that there was no place for her out there in the working world.

## Cloze 4: Grammar: Sentences

BROTHER: I don't get this homework assignment!

SISTER: Shhh. I'm trying (1) _____ watch this cooking show.

BROTHER: But I need help!

SISTER: All (2) _____, let me see what your book says.

SISTER: One. Decide (3) _____ the following groups of words are sentences. Two. In (4) _____ sentences, identify the complete subject and the complete predicate.

BROTHER: (5) _____ don't forget number three. Identify any compound subjects, compound (6) _____, or compound sentences. I might be able to do (7) _____ homework myself if I knew what a sentence is!

CHEF: (8) _____, I've always thought that sentences were a lot like recipes.

BROTHER AND SISTER: (9) _____ said that? Yeah, who said that?

CHEF: Me, the TV (10) _____!

SISTER: What do you mean--sentences are a lot like (11) _____?

CHEF: I mean that sentences, like recipes, are made up (12) _____ lots of different things.

BROTHER: What kinds of things?

CHEF: Capital (13) _____, for example. You see, a sentence is simply a (14) _____ of words which expresses a complete thought. And all (15) _____ begin with capital letters. All sentences also end with (16) _____ marks. A sentence which states a fact ends with (17) _____ period. A sentence which gives instructions also ends with (18) _____ period. A sentence which expresses strong feelings ends with (19) _____ exclamation

point. A sentence which asks a question ends (20) _____ a question mark.

BROTHER: But this homework assignment is tricky. (21) _____ are no capital letters or punctuation marks in these (22) _____ of words.

CHEF: That's because your teacher wants you to (23) _____ out which groups of words should get them. As in a recipe, you need to pay attention to the order in which the ingredients are put together.

Cloze 5: Shane

Young Bob Starret watched the man ride into the valley--not a big man, slender really, but slender like a steel blade--graceful, yet with a deadly look about him. (1) _____ was dressed differently from the men Bob knew, (2) _____ a kind of elegance that was evident despite (3) _____ dust from the road.

He and his horse were (4) _____. That was obvious long before he asked Joe Starrett, Bob's (5) _____, if he could use the pump.

What fascinated Bob (6) _____ the way the stranger carefully washed his face and (7) _____ and brushed the dust off his clothes. He even (8) _____ his hair. It seemed strange to Bob that somebody (9) _____ take such care about how he looked out here (10) _____ the range.

Then, as the man started to leave, Bob's (11) _____ did an unexpected thing. He asked the stranger to (12) _____ for dinner and bed down for the night.

The (13) _____ was appreciative and Bob's father introduced himself and his (14) _____. The stranger also introduced himself.

"Call me Shane," he (15) _____. 'Shane'--it was a name that people around here would not forget for a while--not for a long, long while.

## Cloze 6: Steel

Next time you see a giant skyscraper being built, look for the tons of steel in its frame. Steel makes modern transportation work. It's used in building (1) _____, trains and planes as well as the engines that (2) _____ them.

Different kinds of steel do different jobs. A (3) _____ steel cable at the top of a bridge can (4) _____ a road that's over twelve hundred metres long.

Steel (5) _____ many other uses too. Without it, modern farming would (6) _____ difficult. It's used to make equipment ranging from tractors (7) _____ make milk pails.

But where does steel come from? The (8) _____ of steel starts with iron.

Some think that our (9) _____ look at iron might have come long ago from (10) _____ which fell to earth. This close-up view of a (11) _____ surface shows hunks of rocks rich in iron. Or, (12) _____ thousands of years ago, a hot fire burned over (13) _____ area rich in iron revealing the iron that was (14) _____ below the ground. Eventually, people learned that the earth (15) _____ has a lot of iron in the form of (16) _____ iron ore. An ore is any mineral from which (17) _____ metal can be taken.

Today we know that about (18) _____ percent of the earth's crust is composed of iron (19) _____ iron-bearing minerals. America has vast deposits of iron-bearing (20) _____ in Minnesota, Wisconsin, and Michigan--areas near Lake Superior.

(21) _____ way to remove iron ore from the ground is (22) _____ pit mining. It requires skilled people, gigantic machinery and roads for all the equipment.

Cloze 7: Magnets

A girl picks up paper clips, tacks, and pins with a horseshoe magnet. Magnets are made in many sizes, shapes and strengths.

(1) _____ and paper clips cling to a lodestone. Thousands of (2) _____ ago, people in China made an important discovery. When (3) _____ small lodestone was hung from a thread, one end (4) _____ always turn toward the north. Early compasses were made (5) _____ lodestones. Modern compasses like the one this boy holds (6) _____ made with magnets shaped like needles. The needle always (7) _____ north and south. For many hundreds of years, people (8) _____ compasses without understanding why they worked. But by 1600, (9) _____ had discovered that a compass works because the earth (10) _____ is a magnet. Its magnetic force affects the needle (11) _____ a compass. All magnets, including the earth, are alike (12) _____ several ways.

This picture shows some of the characteristics (13) _____ magnets. Thin yellow paper has been placed over a (14) _____ magnet, and iron filings have been sprinkled on the (15) _____. The filings are drawn to the magnet, which shows (16) _____ the paper. The dark filings form a pattern of (17) _____ that curve between the ends, or poles, of the (18) _____. The lines, called lines of force, indicate the area (19) _____ the magnet's pull is felt. This area is known (20) _____ the magnetic field.

Think of the earth as if (21) _____ had a bar magnet buried inside. In this drawing, (22) _____ yellow lines represent the lines of force. The earth's (23) _____ field reaches thousands of miles into space. It is (24) _____ at the north magnetic pole

and at the south (25) _____ pole, which are on the earth's surface. Here, a (26) _____ line passes through the bar magnet, the magnetic poles, (27) _____ into space. Like the earth, every magnet has a north pole and a south pole.

## Cloze 8: Clothes

You may buy your clothes in a store but have you ever wondered where department stores get the clothes they sell? Cloth is made in a textile mill like this (1) _____. But how does the textile mill make the cloth and (2) _____ does the cloth come from?

Some cloth, like cotton, (3) _____ from plants. Linen comes from the flax plant. Some (5) _____ comes from animals--wool from sheep and silk from (6) _____. In some countries cloth is still made by hand (7) _____ way it was centuries ago.

But the modern textile (8) _____ makes cloth faster. Automatic looms do much of the (9) _____. Other machines are used in the textile industry for (10) _____, knitting, and spinning. Special dyeing machines can dye long (11) _____ of material into any colour of the rainbow.

Not (12) _____ fibres come from nature like wool, silk, cotton and (13) _____. Some fabrics come from chemical processing and are developed (14) _____ a laboratory. They are called synthetics. Some synthetics like (15) _____ rayon pyjamas come from wood pulp that is dissolved (16) _____ chemicals and then spun by machines into long thin (17) _____ which can be woven into fabric. Nylon fabrics like (18) _____ socks and this blouse come from petroleum products which (19) _____ chemically treated and spun into filaments just as rayon (20) _____. Polyesters are made this way too. So you see, (21) _____ are lots of different fibres to choose from, natural (22) _____ well as synthetics, and no end to a choice (23) _____ colours.

The first step in making clothing is a (24) _____ or drawing. The designer's job is to create new (25) _____ for clothing. Many hours of thought may be spent (26) _____ one particular detail of the style.

The designer has (27) _____ think about how clothes will look on people as (28) _____ as what type of fabric to use. Colour, form and texture are all important elements of good fabric design.

## Cloze 9: Arete

NARRATOR:

Arete refused to get out of bed and would not speak to anyone. She said she was ill, and by no means (1) (1) _____ she compete in the poetry contest that day. Arete's (2) _____ was worried. Arete had been practising the songs she (3) _____ composed for the contest enthusiastically until just that morning. (4) _____ her lyre lay silent beside her bed. So her (5) _____ had sent for Theano, the healer. Ageless Theano was (6) _____ her way through the streets of Athens. No one (7) _____ just how old Theano was, or how many places (8) _____ had seen in her long career as a midwife (9) _____ nurse. In one hand she held her walking staff; (10) _____ in the other, her medicine bag woven with intricate (11) _____ and many bright colours. People said, that invisibly woven (12) _____ the threads of her bag, she kept a thousand (13) _____, for she was a famous teller of tales.

Around (14) _____, the streets of Athens bustled with excitement. Already, banners (15) _____ flying and more decorations appeared each minute. The greatest (16) _____ of the year was about to begin--the Pan Athenaic Games--(17) _____ all of Athens would honour its patron goddess, Athena, (18) _____ competitions of every sort.

From her bed, Arete heard Theano (19) _____, and her mother's voice welcoming the famous nurse. Arete (20) _____ not like the look on Theano's face. It was (21) _____ though the old woman could read her every thought.

(22) _____ a few minutes passed as Theano made her diagnosis. (23) _____ she called the girl's mother in.

THEANO:

Arete knows there (24) _____ nothing wrong with her--except a bad case of (25) _____ caused by her pride. The junior competition has become (26) _____ whole world to her. She has always won first (27) _____ because of her talent. But she fears her world (28) _____ end if she loses.

Arete, much of the world (29) _____ little, even for the most beautiful song. Beauty should (30) _____ its own reward. Learn to live without the praise of others and you will be free.

Cloze 10: Dairy Foods

If you tasted all the different kinds of milk, you'd probably like the milk from the brown Jersey cows the best. It has a rich taste because of all the (1) _____ it contains. But the black and white Holstein cow (2) _____ the most milk. Average milk production for cows is (3) _____ 10 litres a cow each day.

Cows usually graze (4) _____ pastureland during the summer. In the winter they eat (5) _____ and corn silage. Corn silage is field corn that (6) _____ been processed so it won't spoil.

Milking is done (7) _____ by machine. With one of these electric milkers, about (8) _____ cows can be milked in an hour. And, if (9) _____ farmer has more than one machine, he can milk (10) _____ cows at once. Everything in this milking parlour is (11) _____. Machines milk the cows, then the milk flows through (12) _____ pipes directly into tanks that hold about 2,300 litres. (13) _____ the tanks the milk is refrigerated until it's transported (14) _____ the milk processor. After every milking the equipment is (15) _____ and sterilized and the cows are checked regularly by (16) _____ veterinarian to be sure they are healthy.

Although some (17) _____ are pretty small, the trend today is toward larger (18) _____, especially in the big dairy states like Wisconsin, New York, (19) _____ Minnesota.

Milk processing plants get deliveries every day from (20) _____ all over the country. The milk arrives by refrigerated (21) _____. It is the foreman's job to check every tank (22) _____ flavour, temperature, and odour. The milk is then sent (23) _____ a spinning machine called a clarifier. It cleans the (24) _____ of any tiny dirt or dust that may have (25) _____ in it. Then the milk is homogenized. During homogenization milk is pumped through small openings under great pressure.

Cloze 11: Oil

The energy you need for an automobile trip is possible because of a process that started underground millions of years ago. What is petroleum? How was it formed? How do (1) _____ get it?

The name 'petroleum' comes from two different Latin (2) _____. 'Petro' means rock. "Oleum' means oil. When drillers strike (3) _____, they hit a layer of rock that is trapping (4) _____ oil.

Most scientists believe that petroleum probably comes from (5) _____ remains of ancient sea life that sank to the (6) _____ of prehistoric oceans. Eventually, these remains were buried by (7) _____ bits of sand and mud called sediment. This process (8) _____ for millions of years. As sediments piled up, their (9) _____ weight eventually presssed them into layers of rock (10) _____ sedimentary rock. At the same time, heat and pressure (11) _____ two of the forces that changed the remains into (12) _____ droplets. These droplets seeped into tiny openings in the (13) _____ eventually made their way into larger traps or (14) _____.

Meanwhile, the earth's surface changed many times. Its crust (15) _____ and then shrank. Mountain ranges appeared. Oceans disappeared. In (16) _____ process, layers of dense rock covered the petroleum deposits. (17) _____ accumulated underground and under water. It remained there until (18) _____ discovered how to find it.

The job of the geologist (19) _____ to explore for oil. Once they think they've (20) _____ an oil field, they need to test the surface (21) _____. Sandstone, limestone and shale are the kinds of rocks (22) _____ suggest oil is in the area. They may take (23) _____ by drilling holes in the ground. Sometimes they drill through layers of ice or skin-dive to examine the ocean floor for off-shore drilling sites.

Cloze 12: Glass Making

Making and shaping glass is a very old art. Becoming a master glass blower, or gaffer, isn't any (1) _____ now than it was hundreds of years ago. There (2) _____ probably no better way to create fine glass then (3) _____ hand craftsmanship. But modern needs for glass products are (4) _____ great that only a few glassmakers can take the (5) _____ to make glass this way.

Most glass is produced (6) _____ machinery that turns out many, many items in the (7) _____ it takes a glassblower to make just one.

But (8) _____ it's made by hand or by machine, the main (9) _____ in glass is silica, or sand. Clean, white (10) _____ is the best source of silica. Most sands contain (11) _____ iron and other impurities. Darker glass made from iron-heavy (12) _____ is green because of the way the impurities react (13) _____ the melting.

Besides sand, the glassmaker adds two chemical (14) _____ --sodium carbonate, called soda, and lime which help the (15) _____ melt. This mixture of raw materials is called a (16) _____.

Fragments of old glass called cullets are mixed with the (17) _____ and chemicals. Glassmakers add these scraps to help (18) _____ sand melt. In a modern glass plant, batches of (19) _____ materials are carefully measured on big scales. Then (20) _____ kept in steel vats like these until they're (21) _____ for the furnace.

The heart of the furnace is (22) _____ a crucible or melting chamber which can withstand intense (23) _____. It gets so hot that the mixture of raw (24) _____ melts. When melted, the soft, hot glass pours easily, like honey.

Cloze 13: Pioneer Farming

Most pioneers of the 1800's, such as the Cunninghams, were basically farmers. Instead of horses, pioneer farmers used oxen for field (1) _____. Oxen are big and powerful beasts, but Bert Cunningham (2) _____ been taught to control them at a very early (3) _____.

Mr. Cunningham keeps the oxen still while Bert hooks (4) _____the plow. The wooden frame by which the oxen (5) _____ joined together is called the yoke. This is why (6) _____ job is called yoking the oxen to the plow.

(7) _____ Cunningham's main crop is wheat. It will supply the (8) _____ with much of its food for the year ahead. (9) _____father guides the plow, Bert steers the oxen in (10) _____ right direction. The part of the plow that actually (11) _____ into the soil and turns it over is called (12) _____ plowshare. The rows of plowed soil are called furrows. (13) _____ lot of work goes into creating these long, neat (14) _____. The first step is preparing the ground for planting the (15) _____ year. Before the whole field is finished, Bert and Mr. Cunningham (16) _____ back and forth many, many times from one end (17) _____ the field to the other.

The job of plowing (18) _____ finally completed, and Bert hooks up the harrow. This (19) _____ an implement that is used to break up the (20) _____ clumps of earth left after plowing.

The farm implements (21) _____ pioneers such as the Cunnninghams used weren't made in (22) _____ as they would be today. The farmer made most (23) _____ his tools himself, but sometimes parts were made by (24) _____ people in the nearby village. For instance, Mr. Cunningham (25) _____ the frame for this harrow, but the spikes from (26) _____ Bert is pulling the weeds were forged by the (27) _____.

The clumps of earth break easily as the harrow's (28) _____ are pulled through them because the soil is very (29) _____. This rich soil on Mr. Cunningham's property doesn't need (30) _____ fertilizers of the type we use today to enrich (31) _____. The soil was rich because of the high content of humus--the natural decaying vegetable and animal matter in the soil.

Cloze 14: Homework: Attitudes and Skills

SANDY: I honestly hate homework. I can't stand doing it.

NARRATOR: (1) _____ was Sandy Slavin ten weeks ago... and this is Sandy (2) _____.

SANDY: There is some homework that I like to do. (3) _____ the homework will do something for me, I don't (4) _____ doing it.

DON: I've never liked homework. And I don't (5) _____ I ever will. It just gets in the way (6) _____ things I want to do.

NARRATOR: That was Don Harrison (7) _____ weeks ago...and this is Don Harrison today.

DON: Well, (8) _____ haven't changed my mind that much, except it's just (9) _____ worse. I can tolerate it now.

NARRATOR: Ten weeks ago Sandy (10) _____ Don were like you possibly are; they thought homework (11) _____ just about as appealing as the black plague. And (12) _____ we chose them for an experiment. We gave them (13) _____ set of guidelines and asked that they follow it (14) _____ doing their homework. The guidelines, developed by a group (15) _____ educational researchers and consultants, were designed to help students (16) _____ their homework assignments. We said we'd be back to (17) _____ the results at the end of one grading period. (18) _____ we returned, this is what we found: Sandy's grades, (19) _____ in yellow, went up...her previous term's grades are (20) _____ in red. Don's grades went up too--in some (21) _____ significantly.

Clearly, the guidelines were helpful. Whether they could (22) _____ helpful to other students--including you--is, of course, (23) _____ open question because all students differ, as do their (24) _____, and the approaches their instructors take when teaching.

Still, (25) _____ you're not happy with your grades--or if you (26) _____ know you can do better, but don't know how, (27) _____ probably want to consider the information Sandy and Don (28) _____ to improve their grades. Basically, the guidelines take these factors into consideration: planning, concentration, and physical surroundings.

Cloze 15: Pioneer Villages

This was an exciting day for Billy Barkley. He was going to the village with his parents. The Barkleys were pioneers who lived on a farm (1) _____ the early 1800's. They didn't make a trip to (2) _____ village very often. When the family did go to (3) _____ village, it was usually for supplies or to have (4) _____ made to farm implements that Mr. Barkley couldn't fix (5) _____ home. Mrs. Barkley was also taking some eggs to (6) _____ traded for other goods at the general store.

The Barkleys' (7) _____ horses were used to pull the wagon. One of (8) _____ horses, Murray, would have to be shod at the (9) _____ before returning home.

When they arrived at the village, Mr. Barkley (10) _____ drove up to the general store where he let (11) _____ wife off before riding on to attend to his (12) _____ business. Billy was going with his father. Mrs. Barkley (13) _____ to exchange the eggs for some imported spices.

Inside (14) _____ general store Mrs. Barkely felt quite at home because (15) _____ was rather like a community meeting place. It gave (16) _____ a chance to visit and exchange bits of news (17) _____ to the amusement of Mr. Harrison, the proprietor. His (18) _____, however, sometimes disappeared when it came to businesss. Like (19) _____ pioneer store-keeprs, Harrison's business with the farmers was (20) _____ done by bartering which meant to trade or exchange (21) _____ without using money.

Meanwhile, Mr. Barkley and Billy were arriving (22) _____ the blacksmith's to get a new shoe made for (23) _____ horse. The blacksmith's was usually one of the first (24) _____ to be established in the village

as it provided (25) _____ important services supplying and repairing many metal implements and (26) _____ and shoeing the horses and oxen. Mr. Doyle, the (27) _____, was inside hammering a piece of metal on the (28) _____. He was a very busy man because he made most of the metal tools that the community used.

Cloze 16: Logging

Loggers help transform trees into paper, houses, baseball bats, and thousands of other products. The trees come from great forests all over the United States. (1) _____ Oregon, Washington, and California, forests of Douglas fir, hemlock, (2) _____, and other trees stretch over the rugged mountains. Ash, (3) _____, and varieties of oak trees grow in the area (4) _____ the sourthern forest. It covers the region between the Atlantic (5) _____ Gulf Coasts, from New Jersey to Eastern Texas.

The (6) _____ step in harvesting a forest is a logging plan (7) _____ out by foresters and forest engineers. Foresters are concerned (8) _____ ecology and the growth of forest resources.

One way (9) _____ harvest timber and at the same time ensure a (10) _____ supply for the future is to block cut--that (11) _____, to cut only certain sections of the forest at (12) _____ time.

Young trees are grown in the cut-out (13) _____ in one of two ways. Winds can blow seeds (14) _____ the uncut trees into the cut-out area, promoting new (15)_____. This method is called natural reforestation. But artificial reforestation (16) _____ more common today since it is faster and surer (17) _____ natural reforestation. Seedlings are grown in nurseries and then (18) _____ in the cut-out areas.

Forest engineers design roads for (19) _____ logging trucks that bring people and equipment to the (20)_____ site and carry cut logs to the sawmills. And (21)_____ set up emergency plans and fire fighting gear, including (22) _____ in case of fire.

It used to be that (23) _____ axes and cross-cut hand saws were used for felling (24) _____. But now most tree felling is done with a (25) _____ power-driven chain saw. It's quicker but noisier.

## Cloze 17: Noble Hercules

The lands of ancient Greece were ruled by powerful gods who lived on the summit of Mount Olympus. The strongest of these gods was Zeus, the supreme (1) _____ of the heavens and the earth. Zeus was the (2) _____ of many famous heroes, both mortal and immortal; yet, (3) _____ night, many centuries ago, he was watching the events (4) _____ earth very closely, for soon the greatest of all (5) _____ children was to be born.

As Zeus watched the (6) _____ of his kingdom, his wife, Hera, was doing the (7) _____. Jealous of all of Zeus' earth-born children, she had (8) _____ vowed to destroy the newborn child.

Meanwhile, in the (9) _____ state of Thebes, Alcmene, wife of exiled King Amphitryon, (10) _____ birth to a boy. The parents, not knowing that (11) _____ child's true father was the great Zeus, named him Hercules (12) _____ meant 'to the glory of Hera'. Only a few (13) _____ later, a twin brother was born. He was given (14) _____ name Iphicles. Both Hercules and his brother Iphicles were (15) _____ strong and healthy but Hercules soon showed that he (16) _____ much stronger and larger than his brother.

One night, (17) _____ long after their first birthday, Hercules was to prove (18) _____ how strong he was. The goddess Hera, seeing that (19) _____ husband Zeus was busy elsewhere, sent two enormous serpents (20) _____ the palace of King Amphitryon to kill young Hercules (21) _____ he slept. The huge serpents silently entered the room (22) _____ the twins slept on a huge shield but Iphicles (23) _____ awoke and, seeing the monsters above him, screamed in (24) _____. Immediately, the king grabbed his sword and rushed towards (25) _____ bedroom. But he was very surprised when he reached the bedroom, for Hercules, unaware of his own strength, had playfully grabbed the two serpents by the neck and strangled them, one in each hand.

# APPENDIX B

## Cloze Answer Sheet Page 1

### NOBLE HERCULES ANSWERS

1. ruler
2. father
3. this
4. on
5. his
6. events
7. same
8. already
9. city
10. gave
11. the
12. which
13. seconds
14. the
15. very
16. was
17. not
18. just
19. her
20. to
21. while
22. where
23. suddenly
24. terror
25. the

### PERCENT SCORES

25.....100%
24.....96%
23.....92%
22.....88%
21.....84%
20.....80%
19.....76%
18.....72%
17.....68%
16.....64%
15.....60%
14.....56%
13.....52%
12.....48%

Cloze Answer Sheet Page 2

NOBLE HERCULES

The lands of ancient Greece were ruled by powerful gods who lived on the summit of Mount Olympus. The strongest of these gods was Zeus, the supreme ruler of the heavens and the earth. Zeus was the father of many famous heroes, both mortal and immortal; yet, this night, many centuries ago, he was watching the events on earth very closely, for soon the greatest of all his children was to be born.

As Zeus watched the events of his kingdom, his wife, Hera, was doing the same. Jealous of all of Zeus' earth-born children, she had already vowed to destroy the newborn child.

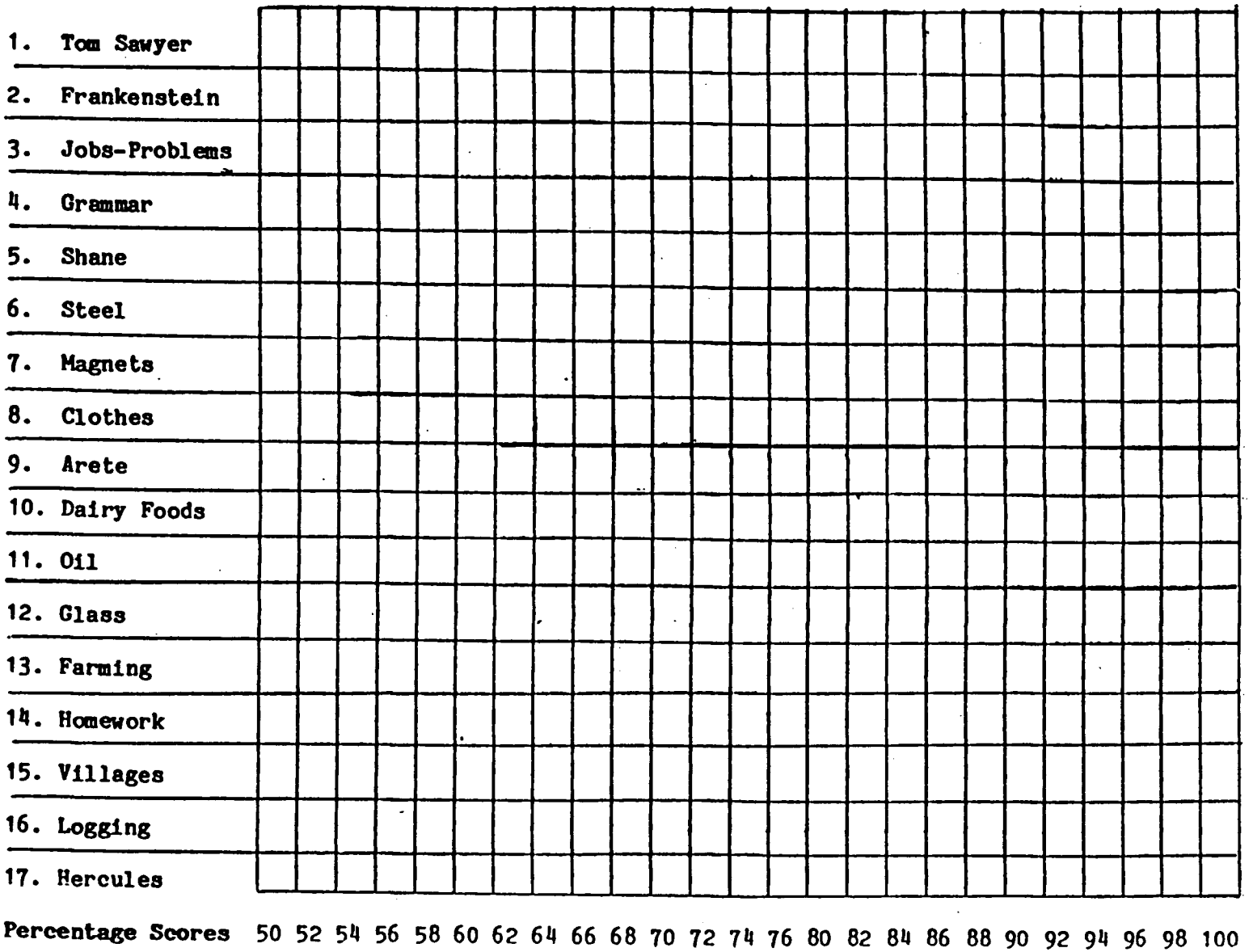
Meanwhile, in the city state of Thebes, Alcmene, wife of exiled King Amphitryon, gave birth to a boy. The parents, not knowing that the child's true father was the great Zeus, named him Hercules which meant 'to the glory of Hera'. Only a few seconds later, a twin brother was born. He was given the name Iphicles. Both Hercules and his brother Iphicles were very strong and healthy but Hercules soon showed that he was much stronger and larger than his brother.

One night, not long after their first birthday, Hercules was to prove just how strong he was. The goddess Hera, seeing that her husband Zeus was busy elsewhere, sent two enormous serpents to the palace of King Amphitryon to kill young Hercules while he slept. The huge serpents silently entered the room where the twins slept on a huge shield but Iphicles suddenly awoke and, seeing the monsters above him, screamed in terror. Immediately, the king grabbed his sword and rushed towards the bedroom. But he was very surprised when he reached the bedroom, for Hercules, unaware of his own strength, had playfully grabbed the two serpents by the neck and strangled them, one in each hand.

# APPENDIX C

## Bar Graph of Scores

**Cloze Exercises**



# APPENDIX D

## Attitude Questionnaire

During this semester you have been doing a listening exercise once a week. You have watched a film strip while listening to a tape and then you have listened to the tape four times while trying to complete a written cloze exercise. (A cloze exercise is a passage with some of the words taken out).

Please answer the following questions about doing the cloze exercises. Use a check mark.

1. I enjoyed watching the film strips

   Every time ☐
   Most of the time ☐
   Some of the time ☐
   Hardly ever ☐
   Never ☐

2. I learned some information from watching the film strips

   Every time ☐
   Most of the time ☐
   Some of the time ☐
   Hardly ever ☐
   Never ☐

3. I enjoyed trying to fill in the missing words while listening to the tapes

   Every time ☐
   Most of the time ☐
   Some of the time ☐
   Hardly ever ☐
   Never ☐

4. I tried hard to hear the correct word when I was filling in the missing words

   Every time ☐
   Most of the time ☐
   Some of the time ☐
   Hardly ever ☐
   Never ☐

5. I think that doing the cloze exercises helped to improve my (check ONE OR MORE of the following)

Grammar ☐
Listening ☐
Reading ☐
Writing ☐
Spelling ☐
Pronunciation ☐

6. I think that doing the cloze exercises improved my grammar

A lot ☐
Somewhat ☐
A little ☐
Hardly at all ☐
Not at all ☐

7. I think that doing the cloze exercises improved my listening ability

A lot ☐
Somewhat ☐
A little ☐
Hardly at all ☐
Not at all ☐

8. I think that doing the cloze exercises improved my reading ability

A lot ☐
Somewhat ☐
A little ☐
Hardly at all ☐
Not at all ☐

9. I think that doing the cloze exercises improved my pronunciation

A lot ☐
Somewhat ☐
A little ☐
Hardly at all ☐
Not at all ☐

10. I think that doing the cloze exercises was useful

All of the time ☐
Most of the time ☐
Some of the time ☐
Hardly ever ☐
Never ☐

11. I think that doing the cloze exercises was interesting

All of the time ☐
Most of the time ☐
Some of the time ☐
Hardly ever ☐
Never ☐

12. I think that cloze exercises like these should be done by ESL/ELC students

Every day ☐
Once a week ☐
Once every two weeks ☐
Once a month ☐
Once a semester ☐
Never ☐

13. What I would like to say about doing the cloze exercises is

.....

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