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A STUDY OF THE EFFECTIVENESS OF THE CLOZE PROCEDURE IN DEVELOPING READING COMPREHENSION

University of Hawaii

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A STUDY OF THE EFFECTIVENESS OF THE CLOZE PROCEDURE
IN DEVELOPING READING COMPREHENSION

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE
UNIVERSITY OF HAWAII IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF EDUCATION
IN CURRICULUM AND INSTRUCTION

DECEMBER, 1981

By
Drake Beil

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Richard Alm, Chairman
Peter Dunn-Rankin
Charles Araki
Mary Austin
Kelvin Young
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Thanks to Jim Dannemiller who helped with the data processing and to Alton Higashi who carefully prepared the manuscript. Finally, special thanks to my wife Judi for her encouragement and understanding throughout this study.
ABSTRACT

The purpose of this study was to design, construct, validate, and employ cloze instructional materials in order to improve the reading comprehension of Title I students in secondary grade levels in the State of Hawaii. A total of 114 students in three schools received twenty cloze activities, one every five to ten days, during the course of the 1980-1981 school year. Instruction included having students complete each 200-500 word passage on world mythology, and conducting discussions on whether answers were meaningful, caused meaning changes, or were meaningless. The passages increased in difficulty from second through tenth grade level. An every tenth word deletion pattern was used throughout the passages, and additional cueing was made available to students as the passages grew more difficult.

The instructional level range (40-66%) was employed to determine where additional cueing would be included, and synonym scoring was used during the instructional discussions.

In two of three districts in Hawaii public schools, secondary Title I students in cloze treatment groups had significantly (p < .01) greater gains in comprehension, as measured by the Metropolitan Achievement Test (MAT), than non-treatment Title I students in the same districts and grade levels. Where statistically significant gains were reported, the gains were shown, in an analysis of covariance, to be the main effect of the treatment. Further, the amount of explained variance in the gain scores was also
significant (p<.01) in both districts. In one district
treatment group gain scores were not significantly different
from the control group scores.

Multiple regression equations and correlation matrices
were constructed in order to examine which aspect of cloze
instruction, semantic or syntactic development, was respon­sible for producing the improvement in MAT reading compre­
hension gain scores. Neither semantic nor syntactic growth,
as measured by a cloze pre-post test, had clear effects on
treatment groups.

Thus, significant gains in reading comprehension were
produced in two of three districts in which cloze instruc­
tional programs were conducted. However, the reason for the
positive effect of the treatment could not be determined in
statistically significant terms.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>ix</td>
</tr>
<tr>
<td>CHAPTER ONE. INTRODUCTION</td>
<td></td>
</tr>
<tr>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td>Statement of Purpose</td>
<td>3</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>5</td>
</tr>
<tr>
<td>CHAPTER TWO. REVIEW OF THE LITERATURE</td>
<td></td>
</tr>
<tr>
<td>Readability</td>
<td>7</td>
</tr>
<tr>
<td>Cloze Procedure for Determining Readability</td>
<td>12</td>
</tr>
<tr>
<td>Testing Reading Comprehension</td>
<td>16</td>
</tr>
<tr>
<td>Teaching Technique</td>
<td>20</td>
</tr>
<tr>
<td>Diagnostic Tool</td>
<td>26</td>
</tr>
<tr>
<td>Summary of Research</td>
<td>28</td>
</tr>
<tr>
<td>CHAPTER THREE. METHODOLOGY</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>29</td>
</tr>
<tr>
<td>Design</td>
<td>29</td>
</tr>
<tr>
<td>Threats to Internal Validity</td>
<td>31</td>
</tr>
<tr>
<td>Threats to External Validity</td>
<td>37</td>
</tr>
<tr>
<td>Field Testing</td>
<td>37</td>
</tr>
<tr>
<td>Cloze Treatment Materials</td>
<td>42</td>
</tr>
<tr>
<td>Implementation</td>
<td>45</td>
</tr>
<tr>
<td>Summary</td>
<td>49</td>
</tr>
<tr>
<td>CHAPTER FOUR. FINDINGS</td>
<td></td>
</tr>
<tr>
<td>First Hypothesis</td>
<td>50</td>
</tr>
<tr>
<td>Second Hypothesis</td>
<td>55</td>
</tr>
<tr>
<td>Project Reports</td>
<td>64</td>
</tr>
<tr>
<td>CHAPTER FIVE. SUMMARY, CONCLUSIONS, AND IMPLICATIONS</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td>67</td>
</tr>
<tr>
<td>Conclusions</td>
<td>69</td>
</tr>
<tr>
<td>Implications</td>
<td>72</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A Comparison of Readability Formulas</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>Reading Comprehension Levels and Corresponding Percentage Scores on IRI, Multiple-Choice, and Cloze Tests</td>
<td>19</td>
</tr>
<tr>
<td>3</td>
<td>Cloze and Standardized Test Correlations</td>
<td>21</td>
</tr>
<tr>
<td>4</td>
<td>Treatment Schools, Title I Enrollment, Number in Treatment, District Total and Treatment Size as a Percentage of District</td>
<td>32</td>
</tr>
<tr>
<td>5</td>
<td>Hawaii District Achievement Test Data, 1979-1980</td>
<td>33</td>
</tr>
<tr>
<td>6</td>
<td>Honolulu District Achievement Test Data, 1979-1980</td>
<td>34</td>
</tr>
<tr>
<td>7</td>
<td>Kauai District Achievement Test Data, 1979-1980</td>
<td>35</td>
</tr>
<tr>
<td>8</td>
<td>Mortality of Treatment Groups and Reasons Students Were Not Included in the Study</td>
<td>37</td>
</tr>
<tr>
<td>9</td>
<td>Correlation Matrix Between Standardized Reading Comprehension Test Scores, Two Cloze Passage Test Scores, and Sex of Students</td>
<td>39</td>
</tr>
<tr>
<td>10</td>
<td>Reliability Coefficients of Semantic and Syntactic Scale Scores</td>
<td>41</td>
</tr>
<tr>
<td>11</td>
<td>Cloze Passage Descriptions</td>
<td>43</td>
</tr>
<tr>
<td>12</td>
<td>Test for Homogeneity of Variance Between Treatment and Control Groups in Three Districts</td>
<td>51</td>
</tr>
<tr>
<td>13</td>
<td>F-values and Adjusted Mean Gain Scores Between Treatment and Control Groups</td>
<td>52</td>
</tr>
<tr>
<td>14</td>
<td>Analysis of Covariance F-values Using the MAT Pretest as the Covariate</td>
<td>54</td>
</tr>
<tr>
<td>15</td>
<td>Cloze Pretest and Posttest Scores by District and Grade Level</td>
<td>56</td>
</tr>
<tr>
<td>16</td>
<td>Cloze Test Scale Score Results</td>
<td>58</td>
</tr>
<tr>
<td>17</td>
<td>Multiple Regression Summary</td>
<td>59</td>
</tr>
<tr>
<td>18</td>
<td>Correlation Matrices Between NCE Gain, MAT Pretest, Semantic Gain, Syntactic Gain, and Grade Level</td>
<td>63</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>1.</td>
<td>Gestalt Circle</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>Perceptual Closure</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>Graph for Estimating Readability: Extended</td>
<td>10</td>
</tr>
<tr>
<td>4.</td>
<td>Pre-Post Multiple Group Design</td>
<td>30</td>
</tr>
<tr>
<td>5.</td>
<td>Treatment Material Readability</td>
<td>44</td>
</tr>
<tr>
<td>6.</td>
<td>Multiple Regression Equations</td>
<td>61</td>
</tr>
</tbody>
</table>
CHAPTER ONE. INTRODUCTION

Background

The term "cloze" comes from the Gestalt psychology theory of "closure"--that the human mind tends to complete incomplete experiences to make them meaningful. The birth of this idea took place one evening during a train ride in 1912 when Max Wertheimer observed two tourists watching alternately blinking lights in the distance. They decided that they were seeing one light moving back and forth very rapidly; they united separate experiences to make a meaningful whole.

"Gestalt" is the German word for organization or configuration. The members of the Gestalt school believe people experience the world in meaningful wholes, not as isolated stimuli. The movement toward meaning is important, because it implies perception of people, flowers, and cars, not lines, and dabs of colors. Similarly, people develop language in meaningful clusters, not in isolation but in contexts. The music of a symphony is more than the separate notes of each musician; the Mona Lisa is more than an eye, a nose, a chin, and a smile. The emergent quality of the human experience has wholeness, unity, meaningfulness and is the essence of the nature of closure.

After years of working with shapes and sizes, Wertheimer and others realized that if portions of shapes, for example of a circle, are seen for a fraction of a second, what is perceived is a complete circle.
Further, when the shapes, images, and pictures are not perceived, individuals have the tendency to remain involved and remember the stimulus longer than the items correctly solved. This interest in relating experiences so that they are holistic is the underlying benefit when using the principle of closure with learners. In the following pictures—what does one see?

Both the horse and rider and the cat show aspects of perception in which the mind demonstrates closure of the shapes by completing the incomplete pictures to make the stimuli as meaningful as possible.

More specifically, the principle of closure propounded
by Kohler and Koffka, colleagues of Wertheimer, stated that human beings have a tendency to complete incomplete experiences. From initial work with figures, shapes, sizes, and colors, Gestalt psychologists and later educators began using oral and written language.

Zeigarnik described how the mind tends to remain involved with the incomplete experience until a form of closure is reached. In fact, she demonstrated that it tends to stay involved with the incomplete experience much longer than with a completed one. The effect is one which creates a productive imbalance which stimulates thoughts centered in problem-solving strategies and inductive learning. Cloze procedures have been used since 1953 to determine the readability of passages and the reading comprehension of students. Cloze procedures have also been used as a tool for developing reading comprehension with poor overall results.

Statement of Purpose

The purpose of this study was to design, construct, validate, and use cloze materials to improve the reading comprehension of secondary school Title I students in the Honolulu, Kauai, and Hawaii Districts during the 1980-1981 school year.

Cloze is a diagnostic tool, a prescriptive instrument, and a teaching technique. The study was concerned with determining whether a model for deletions and scoring could be used to assess reading needs; and whether clozed instructional materials developed as a result of diagnosed learner
needs had an effect on the reading comprehension test scores as measured by the Metropolitan Achievement Test, the Title I standardized test used by the State of Hawaii, and as measured by student gains on the pre-post cloze measure and scores on program materials (See Appendix A).

Teachers in three self-selected treatment Title I schools implemented a program of twenty instructional cloze activities with their students during the 1980-1981 school year. Teachers in all the other Title I schools in Hawaii, Honolulu, and Kauai Districts received none of the prepared cloze passages nor were any of the other Title I programs using cloze to any appreciable extent during the course of the research.

Treatment group schools and control group schools were matched on two major variables, by virtue of their status as Title I eligible schools. To qualify for Title I supplementary instructional funds, school districts must have a certain ratio of low socio-economic households and the students receiving Title I services must score in the bottom 25 percent on standardized reading tests. Title I groups were matched on generally low socio-economic status and on serious need for improvement in reading. These qualifications made the Title I population ideal for research attempts in improving comprehension.

Each of the districts in the State of Hawaii Department of Education is free to select a pre-post standardized reading test which suits its needs. Title I mandates pre-post
testing be accomplished during the test norming dates, and all gain scores be transferred to equivalent units--normal curve equivalents (NCE)--to facilitate analyses and evaluations. NCE scores reflect gains made by participants in the programs that are in excess of what they would be expected to be, had no program of supplementary instruction in reading been present.

Statement of the Problem

This study investigated whether or not the reading comprehension test score changes for the Title I students instructed with cloze materials would be significantly different from test scores of other Title I students in the same district and other districts.

Null Hypothesis 1: Normal curve equivalent gain scores of treatment groups will be statistically equivalent to the NCE gain scores of control groups (H01). If the null hypothesis fails to be accepted, the alternate hypothesis that treatment gain scores will be significantly different from control gain scores may be accepted (HA1). An analysis of covariance, with the pre-test as covariate, investigated this hypothesis.

Previous field research had established that semantic cloze units were important to reading comprehension. This study also investigated whether development of contextual analysis skills, as featured by the cloze procedure, would be significantly related to gains in the treatment program's standardized comprehension test scores.
Null Hypothesis 2: Differences in semantic and syntactic scale scores of the treatment groups will be statistically unrelated to treatment school gain scores as measured in NCE's ($H_{02}$). If the null hypothesis fails to be accepted, the alternate hypothesis that differences in semantic or syntactic scale scores will be significantly different from treatment school gain scores may be accepted ($H_{A2}$). A multiple regression model investigated the relationships between treatment groups' scores on the cloze test and on the MAT. Correlation matrices investigated the interaction of the semantic, syntactic, and MAT gain scores.
CHAPTER TWO. REVIEW OF THE LITERATURE

Readability

Most definitions of readability include factors that reflect characteristics of the written symbols formed into a message. Some consider the difficulty of the ideas within the subject matter, whereas others take into account the characteristics of the reader. Hittleman has proposed that readability is a "moment" when the reader's cognitive, emotional, and linguistic experiences interact with each other, with the topic, with proposed purposes for doing the reading, and with the author's choice of semantic and syntactic structures within a particular setting. When pupils read, they bring understanding as well as experiences and expectations. When considering the concept of readability, it is important to keep the reader and the act of reading in mind.

Most formulas estimate the readability of texts and other written materials. They use factors to sample "those characteristics of reading materials which make for ease or difficulty in reading comprehension" (39:783). Readability formulas are guides or general indicators of a probable range of difficulty.

The Dale-Chall Reading Formula (DC) is based on two counts: average sentence length and percentage of unfamiliar words. Unfamiliar words are those outside the Dale list of three thousand words, which are known in reading by at least eighty per cent of the children in grade four. The authors felt that the percentage of words outside the list
was a good index of difficulty. The DC formula requires a sample of 100 words for every ten pages of a context and is complicated enough to have four pages of special rules for the word count alone.

The Spache Readability Formula also uses elements of sentence length and proportion of hard words. The major difference is that it uses Clarence R. Stone's Revision of the Dale list, and is slightly less time-consuming than the Dale-Chall formula. Spache noted that the reading level of a book given by a formula should mean that a child with that level of reading ability could read the book with "adequate comprehension" (70:196).

Clymer, in a study on the reliability of the Spache formula, concluded that three samples of 100 words each would provide an "estimate precise enough for most users" (25:245), whereas 12 to 15 samples for a book would give a very careful evaluation.

Klare found that 18 of 31 readability formulas he reviewed depended on word frequency counts. Measures of sentence length were the second most used criterion for determining readability. He showed the efficacy of two particular indices, syllable and sentence length, and summarized the implications by saying there is little to be gained by choosing a highly complex formula. A simple two-variable formula is a word or semantic variable and the other is a sentence or syntactic variable.

A study by Monteith verified Klare's contention that
two variables have consistently stood out as providing the best combination in the measurement of readability (53:604). The first is the difficulty of the vocabulary used, as measured by the percentage of words not on a list or by obtaining the average number of syllables per word. The second is average sentence length.

Fry developed and extended a graph (See Figure Three) estimating readability based on the average number of sentences per 100 words and the average number of syllables per one hundred words. The Fry Graph is used in this study, because it is practical, is probably the easiest for classroom teachers to apply, and has been correlated with other formulas often to verify its validity. Britton and Lumpkin compared the Fry formula and five other formulas plus a publisher's designation. The data in Table One show almost perfect agreement in ranking passages on grade level designations. Guidry and Knight also compared common readability formulas to determine areas of commonality and difference. Readability for all 53 Newbery Award books was determined according to all four formulas. A mean readability for each book was calculated, as were adjustment factors.

Standard formulas have major shortcomings in that a criterion of comprehensibility cannot be reliably determined, and word frequency and sentence length do not stand in a simple relationship to reading difficulty. Further, the formulas may be of little value when used with pupils or
Expanded Directions for Working Readability Graph

1. Randomly select three (3) sample passages and count out exactly 100 words each, beginning with the beginning of a sentence. Do count proper nouns, initializations, and numerals.
2. Count the number of sentences in the hundred words, estimating length of the fraction of the last sentence to the nearest one-tenth.
3. Count the total number of syllables in the 100-word passage. If you don't have a hand counter available, an easy way is to simply put a mark above every syllable over one in each word, then when you get to the end of the passage, count the number of marks and add 100. Small calculators can also be used as counters by pushing numeral 1, then push the + sign for each word or syllable when counting.
4. Enter graph with average sentence length and average number of syllables; plot dot where the two lines intersect. Area where dot is plotted will give you the approximate grade level.
5. If a great deal of variability is found in syllable count or sentence count, putting more samples into the average is desirable.
6. A word is defined as a group of symbols with a space on either side; thus, Joe, IRA, 1945, and & are each one word.
7. A syllable is defined as a phonetic syllable. Generally, there are as many syllables as vowel sounds. For example, stopped is one syllable and wanted is two syllables. When counting syllables for numerals and initializations, count one syllable for each symbol. For example, 1945 is four syllables, IRA is three syllables, and & is one syllable.

Note: This "extended graph" does not outmode or render the earlier (1968) version inept or inaccurate, it is an extension.
### TABLE ONE. A COMPARISON OF PUBLISHER'S DESIGNATIONS WITH SIX READABILITY FORMULAS FOR THE GINN READING 720 SERIES (1976)

<table>
<thead>
<tr>
<th>Publisher's Book Level</th>
<th>No. of 100 word samples</th>
<th>Fry(^a) (1-13)(^b)</th>
<th>Harris-Jacobson (PP-8+)(^b)</th>
<th>Spache (1-3)(^b)</th>
<th>Dale-Chall (4-16)(^b)</th>
<th>Flesch (5-17)(^b)</th>
<th>Farr-Jenkins Patterson (5-17)(^b)</th>
</tr>
</thead>
<tbody>
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<td>Pre-primer</td>
<td>8</td>
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<tr>
<td>Primer</td>
<td>8</td>
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<td>1.0</td>
<td>1.6</td>
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<tr>
<td>1</td>
<td>23</td>
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<td>1.2</td>
<td>1.7</td>
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<tr>
<td>2(_1)</td>
<td>26</td>
<td>2.2</td>
<td>1.8</td>
<td>1.9</td>
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<td>2(_2)</td>
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</tr>
</tbody>
</table>


**NOTES:**
- \(^{a}\)The Fry word and syllable count used proper nouns.
- \(^{b}\)Range of formula by grade level.
materials dissimilar to those used in computing the formulas originally; and they do not consider difficulty caused by factors such as concept load, format of the material, organization of the ideas, or the writing patterns. Thus, whereas standard formulas may have some limited appeal as predictors of readability, their usefulness does not extend to explaining why one piece of instructional material is more or less readable than another (40:117).

Readability formulas can help rank the difficulty of any material and can be used as guides for readability estimates. However, the ultimate test of readability lies within the individual student.

Cloze Procedure for Determining Readability

In 1953 Wilson Taylor made "cloze" for the first time (71:415). The term was deliberately spelled with a "z" to have the specific meaning of a reading passage with blank spaces replacing deleted words. Taylor showed that cloze could be used to assess the difficulty of several passages by ranking them in order of the cloze test scores of his subjects. The percentage correct was taken as an index of the reading difficulty of the passage in a manner related to the perceptions of the reader--rather than as a formula for predicting readability levels.

Readability formulas will rank order passages similarly to cloze but are not as sensitive to content because most formulas are based on mechanical counts of sentence and syllable lengths or word list appearances, whereas Taylor's
cloze consists of meaningful passages with uniform blank spaces.

When words in a passage of writing are removed selectively, or clozed, these deleted words can be guessed at, predicted, by the use of contextual analysis. Taylor found that cloze tests could be used as valid and reliable measures of readability. He deleted every fifth word in four passages of 175 words each, scored exact word fill-ins correct, and found that with all five forms used, cloze scores consistently ranked the passages in the same way as the Flesch and Dale-Chall readability formulas.

Taylor's research indicated that cloze procedures could be used reliably to determine readability levels of written materials. His work showed that responses to cloze units in passages of differing difficulties (as measured by formulas) measure whatever effects language elements have on readability. It does so at the same time that it is also taking into account the influences of many other factors readability formulas ignore, such as unfamiliar contexts, idiomatic uses of words, complex or awkward sentence structures, or author's intent. He also tried to define the construct, the aspect of the reading process that is operating, when using cloze procedures:

The cloze method seems to deal with more or less parallel sets of meaning-pattern relationships. Different persons may express the same meaning in somewhat differing ways, and the same language patterns may have differing meanings for different people. Cloze procedure takes a measure of the likeness between the patterns a writer
has used and the patterns the reader is anticipating while he is reading. (71:417)

Thus, cloze appears to be a measure of the aggregate influences of all features which interact to produce the degree of comprehension between the languages and thinking of the writer and reader.

When the literature refers to every "Nth" deletion system, it implies every fifth word or greater between cloze units. With more words in between the blanks, more context is available to the reader and more text is required to achieve any set number of deletions.

Taylor asked whether an every fifth word deletion system is more or less efficient than, for example, an every tenth word or every 15th word deletion strategy. The issue was discussed by MacGinitie who showed that when there are fewer than four words of context between items, a student's ability to answer them begins to depend heavily on whether he is able to answer the adjacent items correctly or not (50:120).

MacGinitie also showed that words were equally restorable when every 24th, every 12th, and every sixth word was omitted. He concluded that context more than about five words distant has relatively little effect on restoration scores. In terms of test construction, Bormuth (17:432) states, "while deletions may be less frequent than every fifth word," the practice of deleting every fifth word has been done because it is "simple and economical, providing
the greatest number of items possible for a given passage."

However, Rankin adds that:

> If the every "nth" procedure is used, there is no hard and fast rule for deciding what deletion rate to use--every fifth, every tenth, etc. Most studies have used an every 5th word deletion pattern. It does not follow, however, that this pattern is suitable for all materials, age groups, and purposes for which the cloze procedure may be used. More work is needed on this question. (58:143)

Hittleman has pointed out that cloze items depend on language and memory, and said, "Every fifth word deletion procedures may not be suitable for everyone" (40:120). Indeed, Smith and Dechant advocated that not more than one word in ten be deleted when the cloze readability procedure is used with children (32:102).

Bormuth summarized the use of cloze as a tool for measuring readability when he said that in general the studies of the validity of tests made by the cloze procedure seem to justify four assertions:

> First, cloze readability tests provide a valid measure of a student's reading comprehension ability. Second, the cloze readability procedure provides a valid method of measuring comprehension difficulties of passages. Third, the procedure itself seems to incorporate both the most valid and most economical of the possible alternatives for designing a readability procedure. Finally, cloze readability scores can be used to judge the suitability of materials. (17:433)

Gilliland summarized the use of cloze to determine readability by saying, "When the cloze test is applied, both reader and book are assessed simultaneously by the use of one measure" (32:106). He added that a battery of clozed passages
could provide quick yet accurate measures of reading progress and reading comprehension.

**Testing Reading Comprehension**

Once cloze testing was found to be a valid and reliable measure of passage difficulty, the next use was as a measure of reading comprehension. Pearson, Goodman, and other psycholinguistic experts have seen reading comprehension as the product of the interaction of graphophonic, semantic, and syntactic cues. These cues are present in the printed materials to be read, and interact with the experiences, languages, and thinking abilities present in the reader. Cloze measures the reader's semantic and syntactic grasp of the text, the content and structure of the author's message. A certain graphophonic or letter-sound competence is needed to complete a clozed passage. Consequently, passage cloze is most often used with learners from the third grade and above. However, there are several commercial basal series that feature closure as components of decoding and word recognition strategies.

Rankin proved two types of meaning could be tapped by the cloze procedure (58:131). The first was lexical meaning, based on deletions of substantive content words such as nouns and verbs. The second was structural meaning, based on deletions of words related to the syntax and bound by it. Hafner developed a similar scoring system based on "content words" (nouns, verbs, adjectives, and adverbs) and "connective words" (conjunctions, prepositions, articles, and in-
It appears that cloze can assess a person's comprehension of virtually any text materials. Further substantiation of the value of cloze as a measure of general reading comprehension can be seen in the numerous correlational studies of cloze compared with Informal Reading Inventory (IRI) tests, multiple-choice tests, and standardized reading achievement tests.

The beginning of the concept of measurement of reading comprehension goes beyond Betts (1946) to the earlier works of Thorndike (1934) and Gray (1925), but Betts was the first to set up comprehension levels with corresponding percentages on word recognition and comprehension tests. Betts described these levels as the Independent, at which the reader can read satisfactorily, without help; the Instructional, at which the reader can read satisfactorily, with help; and the Frustrational, at which the reader is unable to read with comprehension.

Bormuth (16:291) and Rankin and Culhane (60:197) reported that cloze scores in the range of 38 per cent to 44 per cent showed comprehension skills at the instructional level. Bormuth developed passage criterion scores for a wide range of reading materials and these scores represented what he considered to be an optimal performance in terms of ability to gain information from materials. The scores showed instructional ranges that diminished with increases of grade level difficulty of the passages. A cloze score...
of 40 per cent is usually considered the cut-off point for comprehension at the instructional level (3:601). When using cloze to measure comprehension, the percentage of correct fill-ins is a function of the difficulty of the passage and the language and thinking abilities of the reader. Beil (1977) described the three levels in terms of performance on clozed materials.

**Independent Level:** Reached if 60% correct using exact word scoring, or 66% correct if meaningful synonyms are counted. It means that the student will probably be able to read and comprehend the material on his own.

**Instructional Level:** Reached if 40-60% correct using exact word, or 40-66% correct counting meaningful substitutions. It is suggested that the student will be able to read the material, provided assistance is available in vocabulary development and concept formation. The majority of seventh-graders doing a seventh-grade passage should have results in the instructional level.

**Frustrational Level:** Reached if fewer than 40% are correct using either system of measurement. It means that the children in the group are primary targets for individual diagnosis, and possibly for corrective or remedial strategies. They will not be able to read the rest of the book; they may be able to understand the materials but assigning them to be read will be unfair. Intervention is necessary.

The relationship among IRI scores, multiple-choice tests, and cloze are seen in Table Two. With these data as a base, Carver stated that: "Cloze tests can be developed to measure ability along the same scale as difficulty and it is now possible to estimate the probability of the occurrence of a high degree of understanding when an individual is given a passage of known difficulty" (23:33).
TABLE TWO. READING COMPREHENSION LEVELS AND CORRESPONDING PERCENTAGE SCORES ON IRI, MULTIPLE-CHOICE, AND CLOZE TESTS.

<table>
<thead>
<tr>
<th></th>
<th>IRI Word Rec.</th>
<th>IRI Comp.</th>
<th>Multiple Choice</th>
<th>Cloze</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDEPENDENT</td>
<td>99</td>
<td>90</td>
<td>90</td>
<td>60*</td>
</tr>
<tr>
<td>INSTRUCTIONAL</td>
<td>90</td>
<td>75</td>
<td>75</td>
<td>40-60</td>
</tr>
<tr>
<td>FRUSTRATIONAL</td>
<td>90</td>
<td>75</td>
<td>50</td>
<td>40</td>
</tr>
</tbody>
</table>

Bormuth (1968) established clear administrative procedures using deletions of every fifth word, in passages of at least 250 words. No cues were provided, and exact word scoring was used. The subjects were pairs matched on a pre-cloze test. They were given Gray Oral Paragraphs in the form of cloze tests and multiple-choice tests based on the silently read paragraphs of the same content. He found that reliability correlation coefficients of .70 to .80 can be expected. He stated:

"Cloze tests offer a valid, convenient and completely objective method of constructing tests. (18:195)"

He added in a later study (Bormuth, 1969) that:

"While the most valid and economical results are obtained by scoring only those responses exactly matching the deleted words, the semantic and syntactic attributes of responses can also be considered in forming sets of rules. (19:360)"

Thus, cloze has been used successfully in comprehension test making because the underlying construct of cloze is contextual analysis in order to develop comprehension. In cloze tests, the higher the restoration percentage, the
greater the comprehension of the reader.

A battery of cloze tests at various readability levels could be used to determine reading comprehension. The concept is seen in the first Gates-MacGinitie Reading Tests (GM) and the Stanford Achievement Test (SAT). Both of these instruments employ cloze procedures in their sections that measure reading comprehension. The Scholastic Aptitude Test also uses cloze in the sentence completion subtest of the verbal section.

Further, cloze tests have been correlated with a wide range of standardized reading tests. Table Three includes information on researcher, date, test correlated with cloze tests, and reliability coefficients.

Thus, in terms of measuring reading comprehension, it has been shown cloze restoration percentages correlate highly with the subject's reading levels as measured by standardized tests, IRI results, and multiple-choice tests. Cloze procedure appears to be a valid and reliable measure of specific reading comprehension centered in contextual analysis of semantic and syntactic cues present in the content and structure of the materials to be read.

Teaching Technique

The most interesting and enigmatic aspect of cloze has been the application as a teaching technique. In an ERIC report on the cloze procedure, Weaver (1979) summarized the current state of the art of using cloze in the classroom:

Whatever may ultimately be proved about the effectiveness of the cloze procedure as a teach-
<table>
<thead>
<tr>
<th>YEAR</th>
<th>RESEARCHER</th>
<th>GRADES TESTED</th>
<th>STANDARDIZED TEST</th>
<th>RELIABILITY COEFFICIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1957</td>
<td>Jenkinson</td>
<td>High school</td>
<td>Cooperative Reading Test</td>
<td>.78(v), .73(c)</td>
</tr>
<tr>
<td>1957</td>
<td>Rankin</td>
<td>College</td>
<td>Diagnostic Reading Test</td>
<td>.68(v), .60(pm)</td>
</tr>
<tr>
<td>1959</td>
<td>Fletcher</td>
<td>College</td>
<td>Cooperative Reading Test</td>
<td>.63(v), .55(c)</td>
</tr>
<tr>
<td>1963</td>
<td>Hafner</td>
<td>College</td>
<td>Michigan Vocabulary Profile Test</td>
<td>.56</td>
</tr>
<tr>
<td>1963</td>
<td>Ruddell</td>
<td>Elementary</td>
<td>Stanford Achievement Test</td>
<td>.61-.74 range (pm)</td>
</tr>
<tr>
<td>1964</td>
<td>Friedman</td>
<td>Elementary</td>
<td>Metropolitan Achievement Test</td>
<td>.63-.85(v), .71-.87(t)</td>
</tr>
<tr>
<td>1964</td>
<td>Greene</td>
<td>College</td>
<td>Diagnostic Reading Survey</td>
<td>.51(c)</td>
</tr>
<tr>
<td>1965</td>
<td>Gallant</td>
<td>Elementary</td>
<td>Metropolitan Achievement Test</td>
<td>.65-.85(t)</td>
</tr>
<tr>
<td>1965</td>
<td>Schneyer</td>
<td>Elementary</td>
<td>Gates Reading Survey</td>
<td>.63-.74(v), .60-.68(c)</td>
</tr>
<tr>
<td>1970</td>
<td>Rankin</td>
<td>College</td>
<td>Stanford Achievement Test</td>
<td>.73(pm)</td>
</tr>
</tbody>
</table>

NOTES: v = vocabulary subtest; c = comprehension subtest; pm = paragraph meaning subtest; and t = total.
ing technique, it is obvious that its popularity in the classroom is increasing. More and more teachers are discovering ways of using it with their students, finding it a valuable aid in their reading programs. Teachers should be aware, however, that to date there have been no research studies that have conclusively proved the effectiveness of the cloze procedure in improving students' reading skills.

Bloomer (1962) was one of the first to use cloze successfully as a teaching technique. He felt that "the cloze procedure does have a positive effect on comprehension and college grades." He used every tenth word deletion with remedial college students using basal, science, and social studies elementary content. Direct instruction was avoided, to reduce instructor variable, but Jongsma said Bloomer's conclusion was "overly enthusiastic." Selection, mortality, and lack of adequate controls all made Bloomer's study suspect (44:8).

Jongsma's (1971) study was the first important synthesis of the studies attempting to use cloze for instruction. Nine studies were reviewed in detail and for the most part:

Independent studies across a range of age levels have demonstrated 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. (44:18)

In Jongsma's (1980) most recent review of the research on cloze instruction, he concluded cloze can be effective, but no more or less effective than other widely used instructional materials. Cloze materials which were carefully coordinated as to difficulty, length, and purpose were more
effective than undifferentiated exercises. His research also showed no differences between exact replacement and synonym scoring. In fact, he added that "some form of semantically acceptable scoring should probably be encouraged for instructional purposes" (45:21).

Jongsma's second look at cloze instructional research included seven studies out of 27, or 26 per cent, which found strong differences in support of cloze instructional methods. Culhane (1972) found cloze procedures effective with low-ability students, and he employed synonym scoring and post-exercise discussions. Kennedy (1971) also worked with under-achieving readers and found visual cloze exercises benefited reading comprehension with her group of 80 third graders. Martinez (1978) worked with 102 sixth grade honors students. She provided cloze passages from social studies texts and deleted seven types of context clues. She concluded that instruction in the use of context clues through cloze passages improves students' ability to make syntactically acceptable, semantically meaningful responses. Pessah (1975) worked with 100 disadvantaged community college students and selectively deleted words with related context clues in the passages used. Each passage was between 68-114 words and had two deletions. Synonym scoring was used in this five-week treatment and reading achievement scores on the Nelson-Denny Reading Test showed that, of the three treatment groups, the two that used talking over the choices instructionally had significant gains whereas the
group that did not discuss the cloze exercises had no sign-
nificant gains.

The key elements that these and other studies (Bernath, 1977; Whitmer, 1975; Blackwell, 1972; Bloomer, 1962) yielded upon analysis were as follows:

- verbalizing reasons for choices instructionally;
- work with disadvantaged, under-achieving students;
- selective deletion systems featuring every fifth, tenth, and semantic words; and
- criterion-referenced scoring and selective use of additional cueing.

Some of these elements have been employed in developing this study. Title I students qualify as disadvantaged readers and cloze instructional passages were based on every tenth word deletion patterns. The criterion for success at the instructional level was set at 40 per cent (48:5) and students verbalized their reasons for choices as part of the instructional procedure. Diagnosis featured analysis of semantic and syntactic strengths and instruction featured verbal reasoning. Prescription consisted of supplying increasingly useful cues as reader's cloze passage percentages dropped below 40 per cent.

In both of the first reports providing specific teaching techniques, Bortnick and Lopardo said that the major instructional advantage of the cloze is that the materials draw on the language itself through context awareness (21: 296). Skills are not learned as isolated language struc-
tures; the wholeness of the experience is necessary. They felt, as have others, that cloze has merit as a teacher-directed activity, with the focus on choices and discussion of reasons for fill-ins.

Bortnick and Lopardo added that the cloze procedure lends itself to the instruction of context clues as a reading strategy. It is clear the context clue is a powerful word recognition strategy for both the beginning and advanced reader. In fact, it is a strategy that is often employed by the efficient adult reader. Instructional programs in reading at all levels could provide for systematic instruction in the word recognition method, and cloze materials can be used in a variety of ways to teach the use of context. For example, certain words in the immediate environment of the deletion cue the reader. The position of words in a sentence gives cues; first or last word deletions in a sentence impose grammatical constraints. Also, redundancy of language within a passage cues the reader; often a deletion in the beginning of a passage is clarified by later information. It is not necessary to discuss every cloze item in a passage. The teacher may pick and choose certain deletions for discussion that serve the learner needs.

Essentially, cloze zeroes in on the development of contextual awareness in aiding both word recognition and comprehension. Grant (1976) noted in a summary of cloze research that in the studies where positive results were found for cloze as an instructional technique, teachers worked ac-
tively with students, accepted synonyms of deleted words, and chose varying deletion patterns (not just every Nth) to meet learner needs. She also theorized that the cloze procedure "may be most effective when used in remedial instruction" (33:704).

In sum, it appears the use of cloze as an effective teaching tool depends on the difficulty of the material and the ability of the learner to progress through it, facilitated by instruction when possible. Clearly the types of words deleted, and the cueing and instructional alternatives are important considerations when planning cloze instructions; so are the needs of the learners.

Diagnostic Tool

Several studies have attempted to use cloze to diagnose instructional reading levels. Ransom used first through sixth graders (n=146) and correlated cloze test results to the levels determined by her Informal Reading Inventory diagnosis (61:97). Her cloze results correlated highly with the IRI results. The percentages she obtained corresponded to the criterion levels developed by Bormuth (19:360). He stated that although the art of criteria selection is "primitive," if students cannot get 25 per cent, they will gain almost no information from the passage. With 35 per cent scores, some information can be gained; until at approximately 45 per cent, the material is instructionally suitable. Ransom used the 20/30/50 percentages successfully in her study, with instructionally suitable material falling in
the 30-50% range for her diagnostic purposes.

Barry (2:71) and Pollack (56:18) also correlated cloze tests with IRI results. Barry found a .69 correlation to IRI-established instructional levels with a sample of fifth graders (n=100). Pollack found a .29 correlation with a group of sixth graders (n=217). Although lower, it is still a positive correlation, and the results from these four studies suggest that cloze can be used to diagnose instructional reading levels.

Rankin recommended the use of cloze as a diagnostic tool in the reading clinic and stated that:

The idea of having students explain orally... their reasons for making cloze responses should yield considerable diagnostic information which no test score could reveal by itself. (59:230)

Jenkinson has used the cloze procedure as a diagnostic instrument (43:7). She administered cloze tests to high school students and selected high and low scores for individual interviews. In the interviews she gave them another cloze test and asked each subject to verbalize his reasons for the insertion of words in each blank space. This procedure commends itself for diagnosis in the reading clinic, particularly in a small group instructional setting.

Bloomer applied the idea of cloze miscue analysis: "The nature of the substituted error words will indicate something of the language patterns of the individual" (10:4). He found marked losses of comprehension occur where the meaning of prose is broken by deletion of the lexical words.
One international cloze study made use of cloze diagnostically. In Belgium, results from students in grades five through twelve (n=2700) yielded three factors contributing to cloze score variance. They were a content factor (text vs. reference vs. light), a syntactical complexity factor, and a redundancy factor. Henry found that semantic content words seem to pose the main difficulty for the young readers; older children are more able to use additional cues and are more sensitive to syntactic difficulties (37:8).

Summary of Research

Cloze procedures can be used to determine both the reading comprehension abilities of students and the readability levels of passages. It has proved to be a reliable and valid measure of comprehension with known reliability ranges. Only a few studies have demonstrated its effectiveness as a teaching technique; many more have not. Even fewer have attempted to use cloze as a diagnostic tool, beyond its apparent utility in determining instructional reading levels of students. When it has been shown to be an effective tool in developing reading comprehension, key elements of successful studies included use of criterion scores, systematic deletions, verbalizing choices during instruction, use of additional cueing as needed, and success with disadvantaged readers.
CHAPTER THREE. METHODOLOGY

Introduction

This chapter includes the design, a discussion of the threats to internal and external validity, field test studies, a description of the cloze treatment materials, and implementation procedures.

Design

The design used was a self-selected experimental design. The design employed a pretest-posttest format. The design was considered quasi-experimental as described by Campbell and Stanley (22:203):

There are many natural social settings in which the research person can introduce something like experimental design into his scheduling of data collecting procedures. (The when and to whom of measurement), even though he lacks the full control over the scheduling of experimental stimuli (when and to whom of exposures and ability to randomize) which makes a true experiment possible.

The nature of the design is depicted in Figure Four. The design used non-equivalent control groups. Although not randomly selected, treatment and control group schools were similar on two important variables. These two variables were need for supplementary reading instruction and presence of appropriate numbers of low socio-economic households in the school district. Self-selection by participating schools was the result of in-service programs conducted for the Title I staff members during the 1979-1980 school year.

The design lacked full control over scheduling of activities, but this feature was necessary to accommodate for
### Figure Four. Pre-Post Multiple Group Design

<table>
<thead>
<tr>
<th>Pretest</th>
<th>School Year 1980-1981</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>OH₁</td>
<td>X₁, Y₁</td>
<td>OH₂</td>
</tr>
<tr>
<td>OHNL₁</td>
<td>X₂, Y₂</td>
<td>OHNL₂</td>
</tr>
<tr>
<td>OK₁</td>
<td>X₃, Y₃</td>
<td>OK₂</td>
</tr>
</tbody>
</table>

OH₁-2 = Observations in Hawaii District Pretest and Posttest  
OHNL₁-2 = Observations in Honolulu District Pretest and Posttest  
OK₁-2 = Observations in Kauai District Pretest and Posttest  
X₁ = Treatment Group in Hawaii District  
X₂ = Treatment Group in Honolulu District  
X₃ = Treatment Group in Kauai District  
Y₁-3 = Control Groups in Hawaii, Honolulu, and Kauai Districts respectively
individual school needs and schedules. However, all treatments began after the standardized pretesting was completed, and completed before the standardized posttests were given at the end of the school year.

**Threats to Internal Validity**

The validation procedures that follow discuss the threats to both internal and external validity, and how they were dealt with in the design.

Selection was the major threat to internal validity. Although not selected randomly, the subjects in the present study were all secondary school Title I students in the public schools of Hawaii. Three districts participated in the study and one treatment group in each district was set up.

In Hawaii District, the treatment group was 31 ninth through twelfth graders at Hilo High School, an urban neighbor island school.

In Honolulu District, the treatment group was 49 ninth graders at Dole Intermediate, an urban, inner-city school.

In Kauai District, the treatment group was 34 seventh and eighth graders at Kapaa Intermediate/High, a rural, neighbor island school.

The use of three diverse yet similar samples improved the internal validity and provided a sample size that ensured the results would be representative of other secondary Title I populations in Hawaii.

Table Four lists the treatment districts, schools, Title I enrollment, number in treatment, district total and
TABLE FOUR. TREATMENT SCHOOLS, TITLE I ENROLLMENT, NUMBER IN TREATMENT, DISTRICT TOTAL AND TREATMENT SIZE AS A PERCENTAGE OF DISTRICT POPULATION

<table>
<thead>
<tr>
<th>TREATMENT SCHOOL AND ENROLLMENT</th>
<th>GRADE LEVELS</th>
<th>DISTRICT TOTAL</th>
<th>PER CENT OF TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hilo High (n=31)</td>
<td>9-11</td>
<td>Hawaii (n=1161)</td>
<td>3</td>
</tr>
<tr>
<td>Dole Intermediate (n=49)</td>
<td>9</td>
<td>Honolulu (n=3248)</td>
<td>1.5</td>
</tr>
<tr>
<td>Kapaa Intermediate (n=34)</td>
<td>7-8</td>
<td>Kauai (n=240)</td>
<td>14</td>
</tr>
<tr>
<td>TOTAL (n=114)</td>
<td>7-11</td>
<td>(n=4649)</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Hilo, Dole, and Kapaa schools were ranked fifth, 25th, and seventh in 15, 29, and ten schools respectively, in their districts' 1979-1980 results. (See Tables Five through Seven)

Hilo High had a gain of 8.3, higher than the district average of 5.3. Dole Intermediate had a gain of 1.8, lower than the district average of 5.1. Kapaa Intermediate/High had a gain of 3.3, lower than the district average of 5.1. Thus, two treatment schools had gains lower than average Title I programs in their districts. The other Title I programs in each district served as the control groups for the present study.

Thus, school selection included use of Title I programs with above and below district average gains in the 1979-1980
### TABLE FIVE. HAWAII DISTRICT ACHIEVEMENT TEST DATA (1979-1980)

<table>
<thead>
<tr>
<th>SCHOOL (Reading Projects)</th>
<th>Number Tested</th>
<th>PRETEST</th>
<th>POSTTEST</th>
<th>AVERAGE GAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>NCE</td>
<td>Percentile</td>
<td>NCE</td>
</tr>
<tr>
<td>Haalheo Elementary</td>
<td>62</td>
<td>27.4</td>
<td>14</td>
<td>30.7</td>
</tr>
<tr>
<td>Hilo High</td>
<td>52</td>
<td>11.5</td>
<td>3</td>
<td>19.8</td>
</tr>
<tr>
<td>Hilo Intermediate</td>
<td>51</td>
<td>29.4</td>
<td>16</td>
<td>30.0</td>
</tr>
<tr>
<td>Hilo Union Elementary</td>
<td>42</td>
<td>16.3</td>
<td>6</td>
<td>20.9</td>
</tr>
<tr>
<td>Holualoa Elementary/Intermediate</td>
<td>42</td>
<td>19.6</td>
<td>7</td>
<td>33.2</td>
</tr>
<tr>
<td>Honaunau Elementary/Intermediate</td>
<td>40</td>
<td>25.1</td>
<td>12</td>
<td>35.1</td>
</tr>
<tr>
<td>Hilo Elementary and Intermediate</td>
<td>33</td>
<td>22.8</td>
<td>10</td>
<td>37.8</td>
</tr>
<tr>
<td>Kapiolani Elementary</td>
<td>50</td>
<td>8.9</td>
<td>2</td>
<td>12.6</td>
</tr>
<tr>
<td>Ka'u High and Pahala Elementary</td>
<td>50</td>
<td>18.6</td>
<td>7</td>
<td>22.1</td>
</tr>
<tr>
<td>Kaumana Elementary</td>
<td>35</td>
<td>23.7</td>
<td>11</td>
<td>23.2</td>
</tr>
<tr>
<td>Keaukaha Elementary</td>
<td>47</td>
<td>17.4</td>
<td>6</td>
<td>28.4</td>
</tr>
<tr>
<td>Konawaena High/Intermediate</td>
<td>70</td>
<td>38.4</td>
<td>29</td>
<td>37.4</td>
</tr>
<tr>
<td>Konawaena Elementary</td>
<td>36</td>
<td>25.6</td>
<td>12</td>
<td>37.4</td>
</tr>
<tr>
<td>Mountain View Elementary/Intermediate</td>
<td>36</td>
<td>2.0</td>
<td>1</td>
<td>11.0</td>
</tr>
<tr>
<td>Naalehu Elementary/Intermediate</td>
<td>48</td>
<td>22.2</td>
<td>9</td>
<td>29.5</td>
</tr>
<tr>
<td>Pahoa High/Elementary</td>
<td>59</td>
<td>25.9</td>
<td>13</td>
<td>26.7</td>
</tr>
<tr>
<td><strong>READING TOTAL</strong></td>
<td>753</td>
<td>21.8</td>
<td>9</td>
<td>27.1</td>
</tr>
</tbody>
</table>

<p>| Konawaena Elementary (MATH PROJECT)        |               |         |          |               |            |     |            |
|                                           | 8             | 27.9    | 15       | 60.6          | 69         | 32.7| 100        |</p>
<table>
<thead>
<tr>
<th>SCHOOL (Reading Projects)</th>
<th>Number Tested</th>
<th>PRETEST NCE</th>
<th>NCE Percentile</th>
<th>POSTTEST NCE</th>
<th>NCE Percentile</th>
<th>AVERAGE GAIN NCE Percentage</th>
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</thead>
<tbody>
<tr>
<td>Alawai Elementary</td>
<td>116</td>
<td>20.4</td>
<td>8</td>
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<td>18</td>
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<td>8.0</td>
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<tr>
<td>Kaahumanu Elementary</td>
<td>66</td>
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<td>14</td>
<td>34.4</td>
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<td>7.4</td>
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<tr>
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<td>18.2</td>
<td>6</td>
<td>3.5</td>
</tr>
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<td>Kaiulani Elementary</td>
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<td>7</td>
<td>29.2</td>
<td>16</td>
<td>10.5</td>
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<td>Kalakaua Intermediate</td>
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<td>26.6</td>
<td>13</td>
<td>29.6</td>
<td>17</td>
<td>3.0</td>
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<tr>
<td>Kaliihi Elementary</td>
<td>116</td>
<td>22.9</td>
<td>10</td>
<td>28.4</td>
<td>15</td>
<td>5.5</td>
</tr>
<tr>
<td>Kaliihi-kai Elementary</td>
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<td>18.8</td>
<td>7</td>
<td>25.9</td>
<td>13</td>
<td>7.1</td>
</tr>
<tr>
<td>Lanakila Elementary</td>
<td>65</td>
<td>22.8</td>
<td>10</td>
<td>30.1</td>
<td>18</td>
<td>7.5</td>
</tr>
<tr>
<td>Linapuni Elementary</td>
<td>45</td>
<td>10.6</td>
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<td>26.0</td>
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<td>15.4</td>
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<td>8.2</td>
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<td>4.7</td>
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<td>Palolo Elementary</td>
<td>96</td>
<td>21.0</td>
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<td>12.8</td>
</tr>
<tr>
<td>Puhale Elementary</td>
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<td>29.2</td>
<td>16</td>
<td>38.0</td>
<td>28</td>
<td>8.8</td>
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<td>16.6</td>
<td>6</td>
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<td>11.4</td>
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<tr>
<td>Washington Intermediate</td>
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<td>11</td>
<td>30.5</td>
<td>18</td>
<td>6.3</td>
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<tr>
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<td>38.3</td>
<td>29</td>
<td>35.8</td>
<td>25</td>
<td>-2.5</td>
</tr>
<tr>
<td>St. Anthony (Puhale)</td>
<td>30</td>
<td>29.9</td>
<td>17</td>
<td>37.5</td>
<td>28</td>
<td>7.6</td>
</tr>
<tr>
<td>St. Augustine (Jefferson)</td>
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<td>28.8</td>
<td>16</td>
<td>43.5</td>
<td>38</td>
<td>14.7</td>
</tr>
<tr>
<td>St. Francis (Washington)</td>
<td>10</td>
<td>28.6</td>
<td>16</td>
<td>33.7</td>
<td>22</td>
<td>5.1</td>
</tr>
<tr>
<td>St. John (Fern)</td>
<td>12</td>
<td>36.8</td>
<td>26</td>
<td>40.2</td>
<td>32</td>
<td>3.4</td>
</tr>
<tr>
<td><strong>READING TOTAL</strong></td>
<td><strong>3,692</strong></td>
<td><strong>21.6</strong></td>
<td><strong>9</strong></td>
<td><strong>26.7</strong></td>
<td><strong>13</strong></td>
<td><strong>5.1</strong></td>
</tr>
</tbody>
</table>
## TABLE SEVEN. KAUAI DISTRICT ACHIEVEMENT TEST DATA (1979-1980)

<table>
<thead>
<tr>
<th>SCHOOL (Reading Projects)</th>
<th>Number Tested</th>
<th>PRETEST</th>
<th>POSTTEST</th>
<th>AVERAGE GAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>NCE</td>
<td>Percentile</td>
<td>NCE</td>
</tr>
<tr>
<td>Hanalei</td>
<td>17</td>
<td>20.1</td>
<td>8</td>
<td>22.0</td>
</tr>
<tr>
<td>Kalaheo</td>
<td>19</td>
<td>18.1</td>
<td>6</td>
<td>23.3</td>
</tr>
<tr>
<td>Kapaa Elementary</td>
<td>74</td>
<td>20.4</td>
<td>8</td>
<td>23.3</td>
</tr>
<tr>
<td>Kapaa High/Intermediate</td>
<td>38</td>
<td>24.1</td>
<td>11</td>
<td>27.4</td>
</tr>
<tr>
<td>Kaumakani</td>
<td>25</td>
<td>20.4</td>
<td>8</td>
<td>34.0</td>
</tr>
<tr>
<td>Kekaha</td>
<td>35</td>
<td>24.6</td>
<td>11</td>
<td>32.0</td>
</tr>
<tr>
<td>Kilauea</td>
<td>33</td>
<td>32.2</td>
<td>20</td>
<td>36.7</td>
</tr>
<tr>
<td>Waimea Canyon (Kaumakani)</td>
<td>9</td>
<td>10.8</td>
<td>3</td>
<td>21.1</td>
</tr>
<tr>
<td>Holy Cross (Kalaheo)</td>
<td>7</td>
<td>33.0</td>
<td>21</td>
<td>30.7</td>
</tr>
<tr>
<td>St. Theresa (Kekaha)</td>
<td>6</td>
<td>22.1</td>
<td>9</td>
<td>26.9</td>
</tr>
<tr>
<td><strong>READING TOTAL</strong></td>
<td><strong>263</strong></td>
<td><strong>22.8</strong></td>
<td><strong>10</strong></td>
<td><strong>27.9</strong></td>
</tr>
</tbody>
</table>
school year. Maturation was no problem since it was included as a factor in the external Title I evaluator's computation of gain scores in NCE's.

Testing effects were no threat, since in the external evaluation no additional measures were used, other than the mandated Title I pre-post tests. In the internal evaluation the cloze passage, "The Two Brothers," was used as the pre- and posttest.

Instrumentation was consistent since the same standardized tests were employed by the districts the previous year, and the same cloze treatment materials were used by each of the treatment groups.

Mortality was not a problem because inclusion in the treatment group was controlled within each treatment school by the project teachers. Students were included on the basis of participation in at least four-fifths of the treatment activities, availability of pre-post standardized test scores, and availability of pre-post cloze test scores. As a result of this method of inclusion, the total number of secondary Title I students in the study was 114 (See Table Eight).

History was a threat, dealt with by keeping the implementations as similar as possible, by providing the entire cloze treatment program, and by monitoring. Site visits were jointly planned with the help of the Title I district staffs, the participating principals, and Title I teachers.

Although some of the other teachers in the Title I con-
TABLE EIGHT. MORTALITY OF TREATMENT GROUPS AND REASONS STUDENTS WERE NOT INCLUDED IN THE STUDY

<table>
<thead>
<tr>
<th>SCHOOL</th>
<th>Treatment group size</th>
<th>Total number of Title I stud.</th>
<th>Students with non-project teachers at same school</th>
<th>Omitted for lack of test data</th>
<th>Omitted for lack of needed program expos.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hilo High</td>
<td>31</td>
<td>63</td>
<td>6</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>Dole Int.</td>
<td>49</td>
<td>343</td>
<td>291</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Kapaa Int.</td>
<td>34</td>
<td>47</td>
<td>Ø</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>114</td>
<td>453</td>
<td>297</td>
<td>29</td>
<td>13</td>
</tr>
</tbody>
</table>

trol groups may have heard of the cloze method, and may have used cloze materials on occasion instructionally, none received any of the prepared cloze activities, nor were any of the other Title I programs using cloze regularly to any appreciable extent during the course of the research.

Threats to External Validity

Sample generalizability was the first threat to external validity. The success with Title I students in different districts may enable other secondary Title I programs to employ a similar cloze program successfully.

Design arrangements posed no problem because the likelihood of a Hawthorne or John Henry effect was minimal due to the length of time of the treatment.

Field Testing

Research and development of the treatment materials began in 1977 with a correlational study designed to establish
the validity of cloze as a measure of reading comprehension with secondary students in the Hawaii public high schools.

The purpose of the correlational study was to see whether or not scores on two cloze tests had an observable relationship with the comprehension scores on the Gates-MacGinitie Reading Test (Form F-1) and with the sex of the subjects. Both the cloze and the comprehension scores depended upon the language, experience, and thinking of the subjects. The sex of the subjects was added as a control because there should be no outstanding differences between sex of subject and the other three measures.

Data on 29 seniors at Castle High School, Windward District Oahu, were analyzed using a Veldman program called CORREL. With the students listed alphabetically, the four variables recorded for each were sex, comprehension score, cloze score on an Oedipus passage of seventh-grade difficulty, and a cloze score on a Hamlet passage of 12th-grade difficulty. Actually, the Shakespeare passage was even more difficult because of the uncommon vocabulary words and the style of the language.

Based on 29 subjects, the r-value needed in the correlation matrix for significance at the alpha-level of .05 was .35916. The computed r-matrix is seen in Table Nine.

The intercorrelation matrix provided two significant relationships. The first was between the Shakespeare passage and the reading comprehension score, and the r-value was the highest at .6239. The second was between the Shake-
TABLE NINE. CORRELATION MATRIX BETWEEN STANDARDIZED READING COMPREHENSION TEST SCORES, TWO CLOZE PASSAGE TEST SCORES, AND SEX OF STUDENTS

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEX</td>
<td>.1511</td>
<td>.2490</td>
<td>.0211</td>
<td></td>
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<tr>
<td>R.C.</td>
<td></td>
<td>.2750</td>
<td>.6239</td>
<td></td>
</tr>
<tr>
<td>OEDIP.</td>
<td></td>
<td></td>
<td>.3668</td>
<td></td>
</tr>
<tr>
<td>SHAKE.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thus, the more difficult cloze passage correlated significantly with both the easier cloze passage and with the reading comprehension score as measured by a standardized test. The sex of the subjects had no significant relationship with any of the other three measures as was expected.

The matrix above demonstrated the applicability of cloze with students at the secondary grade level in Hawaii.

The initial diagnostic materials used to establish the suitability of cloze for Hawaii Title I students and to validate the use of semantic and syntactic scales were Micronesian myths transformed into original narratives at approximately mid-third and mid-seventh grade readability levels as measured by the Fry Graph. The content of the materials was chosen for several reasons. First, learner history or familiarity with the content would not be a factor affecting performance. The myths were certain to be unfamiliar to the subjects because they were recorded in print from oral leg-
ends for the first time in *Tales of Truk*, Truk Department of Education, 1979. Second, the content had relevance to the heritage of Hawaii's Pacific neighbors and had value in promoting intercultural awareness. Third, the treatment activities were based on world mythology. In this way, the field test instrument was consistent with the treatment materials.

Two 50-blank cloze passages were designed and administered to students in two Title I programs (in Kauai and Leeward Districts) in the spring of 1980. The deletion system was one used by Propst and Baldauf (57:683) for matching cloze tests. They obtained high reliability coefficients by separating the test passages into ten five-blank paragraphs. In each passage, one word between the sixth and 15th was selected at random to start the cloze pattern. Additional words were selected by going at least five words and choosing an available word that was dissimilar grammatically. Thus, five words were deleted in each paragraph and the same process was used to choose ten paragraphs, for a total of 50 blanks per passage.

Propst and Baldauf provided the correct words in a clustered word list to the right of each paragraph. Although it was a useful clue, especially for second language students, much of the language and thinking abilities was measured when students had to generate the restorations. Therefore, correct words were not provided on the diagnostic test, although they were used in prescriptive activities.
TABLE TEN. RELIABILITY COEFFICIENTS OF SEMANTIC AND SYNTACTIC SCALE SCORES

<table>
<thead>
<tr>
<th></th>
<th>Semantic Scale</th>
<th>Syntactic Scale</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Item N</td>
<td>73</td>
<td>27</td>
<td>100</td>
</tr>
<tr>
<td>Means</td>
<td>15.25</td>
<td>10.11</td>
<td>25.36</td>
</tr>
<tr>
<td>Sigmas</td>
<td>5.45</td>
<td>3.92</td>
<td>8.49</td>
</tr>
<tr>
<td>Alphas</td>
<td>.725</td>
<td>.719</td>
<td>.825</td>
</tr>
</tbody>
</table>

during the year, along with other forms of cueing.

Responses were scored as correct using exact word only criteria. Spelling was not counted against the student if the word could be understood. Cloze items were categorized as either semantic or syntactic. The scoring system provided a semantic score, a syntactic score, and a total score. The means for each scale and the Cronbach Alpha reliability coefficients were produced for students in grades three through eight (n=52), using the Veldman TESTAT program.

Table Ten summarizes these results. The overall reliability coefficient is .825, on the high side of the normal range cited by Bormuth. There were 73 semantic items and 27 syntactic items. The subscale reliability coefficients of .725 and .719 respectively were also within the normal range. The total mean score of approximately 25 per cent was similar to the Ransom and Bormuth percentages. Subjects had only 21 per cent of the semantic deletions but over 37 per cent of the syntactic deletions correct. Higher syntactic scores indicated that subjects could comprehend the
structure of the written language, up to and beyond seventh-grade reading levels. The test validated cloze for use with Title I students, and the treatment materials were developed incorporating these field test instruments.

**Cloze Treatment Materials**

Twenty passages form the core of the cloze treatment materials. The same basic format is followed in each passage. Every tenth word deletions are used. Deletions are coded as either semantic or syntactic, depending on the type of word. Based on Rankin's (1959) research, semantic words are nouns, verbs, adjectives, or adverbs. Syntactic words are prepositions, conjunctions, articles, pronouns, helping verbs, and infinitive markers.

The set features two clozed tales of amazingly parallel myths from the Greek and Hawaiian cultures. In addition, myths from China, Japan, Africa, and Micronesia are included. All myths are original retellings to ensure readability control. Readability ranges from second- through tenth-grade level difficulty.

Table Eleven lists the titles, places of origin, readability ranges, number of semantic, syntactic, and total deletions for each passage. Figure Five is a Fry Graph which is illustrated to depict the flow of the passages as their difficulty increases from elementary to secondary reading levels. The complete set of twenty passages is seen in Appendix A. The list of primary references consulted in the construction of the mythology passages is seen in Appen-
### TABLE ELEVEN. CLOZE PASSAGE DESCRIPTIONS

<table>
<thead>
<tr>
<th>TITLE</th>
<th>ORIGIN</th>
<th>READABILITY</th>
<th>SEMANTIC UNITS</th>
<th>SYNTACTIC UNITS</th>
<th>TOTAL CLOZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Lazy Man</td>
<td>China</td>
<td>2.5 - 3.5</td>
<td>16</td>
<td>10</td>
<td>26</td>
</tr>
<tr>
<td>The Wise Judge</td>
<td>China</td>
<td>3.0 - 4.0</td>
<td>12</td>
<td>11</td>
<td>23</td>
</tr>
<tr>
<td>Aisea the Undersea Hero+</td>
<td>Micronesia</td>
<td>3.5 - 4.5</td>
<td>29</td>
<td>21</td>
<td>50</td>
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<tr>
<td>The Storm God</td>
<td>Japan</td>
<td>3.7 - 4.7</td>
<td>16</td>
<td>9</td>
<td>25</td>
</tr>
<tr>
<td>The Child Must Die</td>
<td>Greece</td>
<td>4.0 - 5.0</td>
<td>14</td>
<td>10</td>
<td>24</td>
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<tr>
<td>The Lion and Mr. Hunger</td>
<td>Africa</td>
<td>4.5 - 5.5</td>
<td>17</td>
<td>5</td>
<td>22</td>
</tr>
<tr>
<td>The Way the World Began</td>
<td>General</td>
<td>5.5 - 6.5</td>
<td>7</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>The Gift of Fire</td>
<td>Greece</td>
<td>6.0 - 7.0</td>
<td>13</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>The Two Brothers++</td>
<td>Micronesia</td>
<td>7.0 - 8.0</td>
<td>33</td>
<td>17</td>
<td>50</td>
</tr>
<tr>
<td>The Road to Athens</td>
<td>Greece</td>
<td>7.0 - 8.0</td>
<td>8</td>
<td>13</td>
<td>21</td>
</tr>
<tr>
<td>The Trojan War 1</td>
<td>Greece</td>
<td>7.5 - 8.5</td>
<td>13</td>
<td>11</td>
<td>24</td>
</tr>
<tr>
<td>The Trojan War 2</td>
<td>Greece</td>
<td>7.5 - 8.5</td>
<td>12</td>
<td>11</td>
<td>23</td>
</tr>
<tr>
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<td>Greece</td>
<td>7.5 - 8.5</td>
<td>18</td>
<td>9</td>
<td>27</td>
</tr>
<tr>
<td>The Trojan War 4</td>
<td>Greece</td>
<td>7.5 - 8.5</td>
<td>18</td>
<td>15</td>
<td>33</td>
</tr>
<tr>
<td>Hina 1</td>
<td>Hawaii</td>
<td>8.0 - 9.0</td>
<td>10</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>Hina 2</td>
<td>Hawaii</td>
<td>8.0 - 9.0</td>
<td>6</td>
<td>16</td>
<td>22</td>
</tr>
<tr>
<td>Hina 3</td>
<td>Hawaii</td>
<td>7.5 - 8.5</td>
<td>12</td>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td>Hina 4</td>
<td>Hawaii</td>
<td>8.0 - 9.0</td>
<td>12</td>
<td>11</td>
<td>23</td>
</tr>
<tr>
<td>Hina 5</td>
<td>Hawaii</td>
<td>9.0 - 10.0</td>
<td>11</td>
<td>9</td>
<td>20</td>
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<td>Micronesia</td>
<td>9.5 - 10.5</td>
<td>35</td>
<td>15</td>
<td>50</td>
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</tbody>
</table>

**NOTES:**

- +Used in field testing
- *Used as pre-post

<table>
<thead>
<tr>
<th>TOTALS</th>
<th>311</th>
<th>235</th>
<th>546</th>
</tr>
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<tbody>
<tr>
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<td>57%</td>
<td>43%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Figure Five. Treatment Material Readability

Average Number of Syllables Per 100 Words

**SHORT WORDS**

<table>
<thead>
<tr>
<th>Average Number of Syllables</th>
<th>108</th>
<th>112</th>
<th>115</th>
<th>120</th>
<th>124</th>
<th>128</th>
<th>132</th>
<th>135</th>
<th>140</th>
<th>144</th>
<th>148</th>
<th>152</th>
<th>156</th>
<th>160</th>
<th>164</th>
<th>168</th>
<th>172</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Words</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**LONG WORDS**

Graph for Estimating Readability
by Edward Fry, Rutgers University Reading Center

NOTES: Blue area is first half of the treatment.
Red area is the Trojan War series.
Yellow area is Hina series and final.
Passage number nine is the cloze pre-post test.

44
The three components of the implementation were:

1. two demonstration classes in each treatment school, six weeks apart, to introduce the program materials to students and staff;
2. use of the scoring systems to diagnose reading levels, and prescribe additional levels of cueing as needed; and
3. two monitoring visits in each treatment school during the school year in which information on student progress and staff formative evaluations was gathered.

Students began with the easiest passage, "The Lazy Man," for the demonstration class. They experienced the sequence of twenty clozed passages during the course of the school year before the posttest. Students received a cloze passage approximately once every five to ten days. The exact timing and scheduling of cloze activities was left to the participating teachers to provide flexibility for individual school needs.

In the demonstration classes and during the program, the typical procedure for cloze instruction lasted a full class period. The students received their cloze exercise and had approximately 15 to 20 minutes to complete the passage. This provided plenty of time for almost all readers. It gave the readers the practice of working successfully within a given time limit. Also, it allowed ample time for
up to half-hour class discussions in an average period.

Students completed each cloze passage and got a chance to talk about their responses. The classroom discussions focused on whether students' responses were meaningful and caused meaning changes, or were meaningless in the context. These categories indicated levels of comprehension with respect to the process of contextual analysis. Talking about the choices made the students more aware of the semantic and syntactic components of the language, more aware of vocabulary and acceptable synonyms. Instructionally, when all papers were in, they were redistributed so that each student had a paper to correct that was not his or her own. The students put "cb. (name)" (for: corrected by (name)) at the bottom of the sheet they were correcting, and read through the selection together.

Learners justified restored words and interacted in the discussion that determined the appropriate levels of meaning for each cloze unit. In this way, students were allowed to try to improve their scores rationally. They were given the opportunity to prove their responses made sense. The class voted if there was any doubt whether or not a word made sense in the context. Through discussions, the class determined if words were meaningful, caused meaning change, or were meaningless in the context. The teacher acted as the reluctant final arbiter, rather than as a judge; it allowed for greater flexibility and placed the responsibility for agreeing on meaning on the members of the class.
Students tended to be stricter in interpreting correct responses than their instructors. However, when students corrected each other's papers, teachers reviewed the corrections to ensure that the final scores gave participants credit for their correct responses.

The diagnostic-prescriptive strategy had two elements: criterion scoring and increased levels of cueing. The criterion score was set at the instructional range; based on research it is from 40 to 60 per cent correct. As students' scores dropped below 40 per cent on increasingly more difficult cloze passages, four additional levels of cues were added. These cues came from research, from committee members' recommendations, and from project teachers' suggestions. Each level of cueing made the original cloze passage easier to complete but still a substantial reading task. More difficult passages became accessible to readers later in the program, and their contextual analysis skills developed on materials they normally would not have been able to read.

The levels of cues were arranged sequentially:

1. initial letter of each word added,
2. word list with two extra semantic words,
3. word list without distractors, and
4. clustered word lists for each paragraph with one extra semantic word in each cluster.

The total score percentage gave approximate reading levels based on materials of known difficulty. The total
score was also used as the criterion score for progress through the passages and for cueing needs. Scoring keys for each passage enabled teachers to determine independent, instructional, and frustrational reading levels on each passage. Correct restorations were defined as the exact word or an alternate word that was agreed to be meaningful by the class and the teacher during instruction.

A second diagnostic component examined the relationship between semantic and syntactic scale scores. Previous research with cloze and Title I students on Kauai and Oahu established a pattern of stronger syntactic scale scores than semantic scale scores. Fewer acceptable words are available for syntactic deletions, and patterns of changing strengths and weaknesses as the program progressed were charted.

During monitoring visits, participating staff members provided comments on the use of the cloze method, the quality of the myths included in the program, and the scoring and cueing procedures.

At the implementation meetings, a packet of materials was delivered to each treatment school. This packet contained the twenty cloze passages, scoring keys, texts of the complete myths, and a cloze monograph.

Participating staff members agreed to provide a code name or number, age, grade, sex, and other available test data on participating students. All confidentiality was guaranteed. They agreed to complete all twenty of the cloze activities with their students and to keep a file for each
student documenting the cloze activities. Instructionally, participating teachers agreed to discuss choices for cloze units and reasons for student choices, rather than to focus on right/wrong labels. This approach was the major method of instruction. Staff members also agreed to provide comments on the utility of the cloze method, the potential generalizability, and the implementation and monitoring procedures.

Summary

During the course of the 1980-1981 school year, three secondary Title I programs in the State of Hawaii used unique cloze instructional materials. Criterion scores in the instructional range enabled students to progress through the materials. Prescriptive cues, based on learner needs, were added as determined by teacher diagnosis and intervention.

Demonstration classes were similar in each school and two monitoring visits were made to each treatment school during the school year. Changes in treatment group reading comprehension gain scores were investigated to see whether they were significantly related to control group reading comprehension gain scores. Changes in treatment group gain scores were also investigated to see whether the MAT gains were related to changes in the semantic and syntactic scale scores as measured by the cloze pre- and posttest.
CHAPTER FOUR. FINDINGS

First Hypothesis

The first hypothesis investigated was that the treatment groups' gains in reading comprehension were no different than the gains made by non-treatment groups in the same districts and grade levels. Using the Statistical Package for the Social Sciences throughout this research, first t-tests were conducted to determine if the sample data supported the assumption of homogeneity of variance, a condition necessary for the analysis of covariance to be valid. As seen in Table 12, in all three districts the variances of the adjusted MAT pretest means between treatment and control groups were homogeneous. In no district was the F-value significant at the p < .01 level. The p < .01 level was chosen for rejection of the null hypothesis throughout the study. Thus the t-test results indicated that the treatment and control groups were statistically comparable.

As seen in Table 13, there were significant differences (p < .01) in the adjusted mean NCE gain scores between treatment and control groups in two districts. In Hawaii and Kauai, treatment group means were 5.2 and 6.9 respectively. In Honolulu the treatment group mean was 1.3. In both Hawaii and Kauai, control group means were negative; whereas in Honolulu, the control group mean was higher than the treatment group mean. Thus, gain scores for treatment and control groups in two of the three districts were not statistically equivalent. The Hilo and Kapaa treatment groups
TABLE TWELVE. TEST FOR HOMOGENEITY OF VARIANCE BETWEEN TREATMENT AND CONTROL GROUPS

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>GROUP</th>
<th>NUMBER OF CASES</th>
<th>MAT PRE-TEST MEAN</th>
<th>STANDARD DEVIATION</th>
<th>F-VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaii</td>
<td>Treatment</td>
<td>31</td>
<td>15.9</td>
<td>12.1</td>
<td>1.16</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>62</td>
<td>17.1</td>
<td>13.0</td>
<td></td>
</tr>
<tr>
<td>Honolulu</td>
<td>Treatment</td>
<td>49</td>
<td>21.4</td>
<td>11.5</td>
<td>1.20</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>410</td>
<td>23.8</td>
<td>12.6</td>
<td></td>
</tr>
<tr>
<td>Kauai</td>
<td>Treatment</td>
<td>34</td>
<td>21.1</td>
<td>12.8</td>
<td>2.06</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>13</td>
<td>23.6</td>
<td>8.9</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE THIRTEEN. F-VALUES AND ADJUSTED MEAN GAIN SCORES BETWEEN TREATMENT AND CONTROL GROUPS

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>GROUP</th>
<th>NUMBER OF CASES</th>
<th>MEAN NCE GAIN SCORE&lt;sup&gt;a&lt;/sup&gt;</th>
<th>STANDARD DEVIATION</th>
<th>df</th>
<th>F-VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaii</td>
<td>Treatment</td>
<td>31</td>
<td>5.2</td>
<td>9.6</td>
<td>91</td>
<td>1.09*</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>62</td>
<td>-1.4</td>
<td>9.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honolulu</td>
<td>Treatment</td>
<td>49</td>
<td>1.3</td>
<td>10.8</td>
<td>457</td>
<td>1.15</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>410</td>
<td>2.8</td>
<td>10.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kauai</td>
<td>Treatment</td>
<td>34</td>
<td>6.9</td>
<td>11.6</td>
<td>45</td>
<td>1.02*</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>13</td>
<td>-11.0</td>
<td>11.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**
- <sup>a</sup> = differences in means between the groups were adjusted for measurement variables
- * = significant at $p < .01$
had significantly greater ($p < .01$) gains than non-treatment students in the same districts and grade levels. The alternate hypothesis, that gain scores would be significantly different, was accepted for two districts, and the null hypothesis was accepted for one district.

The analysis of covariance was conducted to substantiate the acceptance of the alternate hypothesis in Hawaii and Kauai Districts, and the acceptance of the null hypothesis in Honolulu District. The analysis of covariance examined the effect of the MAT pretest on gain scores, the extent of the effect of the treatment on gain scores, and the amount of variance explained by the design model. As seen in Table Fourteen, a significant part of the change in adjusted mean MAT gain scores was the main effect of the treatment in Hawaii and Kauai Districts. The covariate, the MAT pretest, was not significantly related to the change in the gain scores. In the two districts where treatment group gains were significantly different, the gains were seen to be the results of the treatment and the amount of explained variance in the statistical model was also significant in both districts.

In contrast, in Honolulu District the treatment is less significantly related to the gain scores than the MAT pretest, and the total amount of variance accounted for did not explain the main effect. Clearly, in Dole an extra source of variance existed. Conceivably, one explanation was the high number of English as a Second Language (ESL) students
TABLE FOURTEEN. ANALYSIS OF COVARIANCE F-VALUES USING THE MAT PRETEST AS THE COVARIATE

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>SOURCES OF VARIATION</th>
<th>S.S.</th>
<th>df</th>
<th>F-VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaii</td>
<td>MAT pretest</td>
<td>27,770</td>
<td>1</td>
<td>2.91</td>
</tr>
<tr>
<td></td>
<td>Treatment</td>
<td>85,088</td>
<td>1</td>
<td>8.91*</td>
</tr>
<tr>
<td></td>
<td>Explained</td>
<td>112,858</td>
<td>2</td>
<td>5.91*</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>858,798</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>971,656</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>Honolulu</td>
<td>MAT pretest</td>
<td>45,854</td>
<td>1</td>
<td>4.45</td>
</tr>
<tr>
<td></td>
<td>Treatment</td>
<td>12,333</td>
<td>1</td>
<td>1.20</td>
</tr>
<tr>
<td></td>
<td>Explained</td>
<td>58,188</td>
<td>2</td>
<td>2.82</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>4,700,650</td>
<td>456</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>4,758,838</td>
<td>458</td>
<td></td>
</tr>
<tr>
<td>Kauai</td>
<td>MAT pretest</td>
<td>65,543</td>
<td>1</td>
<td>5.16</td>
</tr>
<tr>
<td></td>
<td>Treatment</td>
<td>278,225</td>
<td>1</td>
<td>21.90**</td>
</tr>
<tr>
<td></td>
<td>Explained</td>
<td>343,768</td>
<td>2</td>
<td>13.52**</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>558,880</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>902,648</td>
<td>46</td>
<td></td>
</tr>
</tbody>
</table>

NOTES:  * = p < .01
        ** = p < .001

present in the Dole treatment population. The project teacher reported that over 90 per cent of the Title I students in her program spoke a language other than English in the home. Many were recent immigrants, and it is not inconceivable that the language barrier was one source of additional variance in Honolulu District. In the other two districts it was reported that fewer than ten per cent of the treatment group had native languages other than English. The possibility of other sources of variation cannot be discounted, but it was clear that the model did not explain the
main effect in Honolulu District. However, the analysis of covariance did explain the main effect, significantly, in the other two districts as the treatment and substantiated the acceptance of the alternate hypothesis in two of the three districts.

Second Hypothesis

The second hypothesis investigated was that the cloze test scale score gains were related to MAT NCE gains. Since there was a significant difference between the adjusted gain score means in two districts, this hypothesis was investigating whether a regression model could attribute the gains to the improvements in semantic and/or syntactic scores on the cloze pre-post instrument.

The table of cloze test means and standard deviations for each district (See Table 15) includes the semantic pretest, semantic posttest, semantic gain, syntactic pretest, syntactic posttest, and syntactic gain scores, in units of per cent. The semantic gains were 17.2, 8.4, and 2.9 in Hawaii, Honolulu, and Kauai respectively. The syntactic gains were 6.9, 10.7, and 10.6 for the three districts. In Hawaii District the mean semantic gain was more than double the mean syntactic gain. In Kauai District the mean syntactic gain was more than triple the mean semantic gain, and the eighth graders in Kapaa decreased their semantic scale scores. In the two districts where treatment groups experienced significantly better gains in comprehension, one had larger semantic gains and one had larger syntactic gains.
## TABLE FIFTEEN. CLOZE PRETEST AND POSTTEST SCORES, BY DISTRICT AND GRADE LEVEL

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>GRADE LEVEL ( (n=) )</th>
<th>SEMANTIC PRETEST</th>
<th>SEMANTIC POSTTEST</th>
<th>SEMANTIC GAIN</th>
<th>SYNTACTIC PRETEST</th>
<th>SYNTACTIC POSTTEST</th>
<th>SYNTACTIC GAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>Hawaii</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>42.5</td>
<td>14.6</td>
<td>59.7</td>
<td>19.1</td>
<td>17.2</td>
<td>18.4</td>
<td>56.5</td>
</tr>
<tr>
<td>9th</td>
<td>45.0</td>
<td>14.0</td>
<td>65.4</td>
<td>16.9</td>
<td>20.4</td>
<td>19.5</td>
<td>57.7</td>
</tr>
<tr>
<td>10th</td>
<td>39.3</td>
<td>16.2</td>
<td>52.1</td>
<td>22.5</td>
<td>12.8</td>
<td>17.8</td>
<td>52.3</td>
</tr>
<tr>
<td>11th</td>
<td>41.1</td>
<td>14.9</td>
<td>57.2</td>
<td>17.8</td>
<td>16.1</td>
<td>18.4</td>
<td>59.1</td>
</tr>
<tr>
<td>Honolulu</td>
<td>9th</td>
<td>32.9</td>
<td>18.2</td>
<td>41.3</td>
<td>17.6</td>
<td>8.4</td>
<td>10.6</td>
</tr>
<tr>
<td>Kauai</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>61.8</td>
<td>16.1</td>
<td>64.7</td>
<td>19.4</td>
<td>2.9</td>
<td>14.7</td>
<td>64.6</td>
</tr>
<tr>
<td>7th</td>
<td>58.1</td>
<td>14.0</td>
<td>64.1</td>
<td>16.4</td>
<td>6.0</td>
<td>15.5</td>
<td>60.1</td>
</tr>
<tr>
<td>8th</td>
<td>67.1</td>
<td>17.8</td>
<td>65.3</td>
<td>23.7</td>
<td>-1.8</td>
<td>12.7</td>
<td>71.0</td>
</tr>
</tbody>
</table>

**NOTE:** Cloze pretest and posttest scores are reported in units of per cent.
In Honolulu District the syntactic gain was larger than the semantic gain, and the difference between the two was the smallest of any district. Within the treatment groups the differences between the cloze test means were investigated with t-tests and the results can be seen in Table 16. The t-tests compared the differences of the means of semantic and syntactic scale scores, and determined that there were significant differences in performance on the cloze sub-scales in all three districts. In Hawaii the semantic scale scores improved significantly \( p < .01 \), but the syntactic scale scores did not. In Honolulu both semantic and syntactic scale scores showed significant \( p < .01 \) improvement. In Kauai the syntactic scale score was significantly \( p < .01 \) better, but the semantic scale scores were not. The lack of a pattern in semantic and syntactic scale scores indicated the acceptance of the null hypothesis.

In the next step of the analysis, four predictor variables were used to develop regression equations for each district. The adjusted mean NCE gain scores acted as the dependent variable, and the grade level, MAT pretest scores, cloze semantic gain scores, and cloze syntactic gain scores were employed in the regression model. There was one beta weight for each predictor variable. The beta weights could be considered the regression coefficients that were obtained when the various predictor variables were made equal in terms of means and standard deviations. The regression coefficients with the largest beta weights, disregarding
### TABLE SIXTEEN. CLOZE TEST SCALE SCORE RESULTS

<table>
<thead>
<tr>
<th>DISTRICT (n= )</th>
<th>MEAN SEMANTIC SCORE DIFFERENCE</th>
<th>S.D.</th>
<th>t-VALUE</th>
<th>MEAN SYNTACTIC SCORE DIFFERENCE</th>
<th>S.D.</th>
<th>t-VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaii (31)</td>
<td>17.2</td>
<td>18.1</td>
<td>-5.35*</td>
<td>6.9</td>
<td>15.7</td>
<td>-2.48</td>
</tr>
<tr>
<td>Honolulu (49)</td>
<td>8.4</td>
<td>10.6</td>
<td>-5.58*</td>
<td>10.7</td>
<td>11.9</td>
<td>-6.37*</td>
</tr>
<tr>
<td>Kauai (34)</td>
<td>2.9</td>
<td>14.7</td>
<td>-1.14</td>
<td>10.6</td>
<td>12.9</td>
<td>-4.79*</td>
</tr>
</tbody>
</table>

**NOTES:** * = p < .01
TABLE SEVENTEEN. MULTIPLE REGRESSION SUMMARY  
(Independent Variable = NCE Gain Score)

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>VARIABLES</th>
<th>BETA</th>
<th>r-SQUARED</th>
<th>F-VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaii</td>
<td>MAT pretest</td>
<td>.19</td>
<td>.033</td>
<td>.91</td>
</tr>
<tr>
<td></td>
<td>Semantic gain</td>
<td>.10</td>
<td>.002</td>
<td>.16</td>
</tr>
<tr>
<td></td>
<td>Syntactic gain</td>
<td>-.09</td>
<td>.005</td>
<td>.14</td>
</tr>
<tr>
<td></td>
<td>Grade level</td>
<td>-.03</td>
<td>.001</td>
<td>.03</td>
</tr>
<tr>
<td>Honolulu</td>
<td>Syntactic gain</td>
<td>-.15</td>
<td>.019</td>
<td>.90</td>
</tr>
<tr>
<td></td>
<td>Semantic gain</td>
<td>.14</td>
<td>.009</td>
<td>.87</td>
</tr>
<tr>
<td></td>
<td>MAT pretest</td>
<td>-.14</td>
<td>.027</td>
<td>.93</td>
</tr>
<tr>
<td>Kauai</td>
<td>MAT pretest</td>
<td>-.33</td>
<td>.066</td>
<td>3.73</td>
</tr>
<tr>
<td></td>
<td>Semantic gain</td>
<td>.27</td>
<td>.085</td>
<td>2.44</td>
</tr>
<tr>
<td></td>
<td>Syntactic gain</td>
<td>.21</td>
<td>.043</td>
<td>1.54</td>
</tr>
<tr>
<td></td>
<td>Grade level</td>
<td>.02</td>
<td>.001</td>
<td>.01</td>
</tr>
</tbody>
</table>

signs, were the best predictors of the dependent variable, the MAT comprehension gain score.

Table 17 shows the multiple regression variables for each district with obtained beta weights and r-squared values for each predictor. In Hawaii District the MAT pretest was the best predictor and had the largest beta weight of .19, followed by semantic gain at .10, by syntactic gain at -.09, and by grade level at -.03. The total for the r-squared values, the measure of the extent of the explained variance, indicated that four per cent of the variance was accounted for in the regression model for this district. In Honolulu District the syntactic gain was the best predictor and had the largest beta weight at -.15, followed by semantic gain at .14 and by the MAT pretest at -.14. The total for the r-squared values indicated that the model explained
approximately five per cent of the variance in this dis-
trict. In Honolulu District there was only one grade level
and the beta weight for grade level was not computed as a
predictor variable.

In Kauai District the MAT pretest was the best predic-
tor, just as in Hawaii District. The rest of the Kauai beta
weights were in the same order as the Hawaii District beta
weights. The MAT pretest was followed by the semantic gain,
syntactic gain, and, lastly, by the grade level. The total
for the r-squared values indicated that the model accounted
for 19 per cent of the variance in this district, the most
in any of the three districts.

The regression equations in Figure Six show the order
of best predictors and include the amount of explained vari-
ance. The semantic gain was the only predictor variable to
have a positive beta weight in all three districts, and it
was the second most powerful predictor of comprehension gain
in all three districts. An analysis of the variance ex-
plained by the multiple regression model in each district
(See Table 17) shows that none of the predictor variables
had a significant F-value. Although all the semantic gain
beta weights were positive, and were the second best predic-
tor of comprehension gain in each district, the substantial
amount of variance unaccounted for in the regression model
and the lack of any significant F-values for the semantic
gain scores indicated that for the second hypothesis, the
null hypothesis was accepted. The comprehension gain scores
FIGURE SIX. MULTIPLE REGRESSION EQUATIONS

<table>
<thead>
<tr>
<th>CRITERION VARIABLE, PREDICTORS, AND BETA WEIGHTS</th>
<th>r-SQUARED TOTAL %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HAWAII</strong></td>
<td></td>
</tr>
<tr>
<td>MATgain(^a) = .19 MATpre(^b) + .10 semgain(^c) - .09 syngain(^d) - .03 grade(^e)</td>
<td>4</td>
</tr>
<tr>
<td><strong>HONOLULU</strong></td>
<td></td>
</tr>
<tr>
<td>MATgain = -.15 syngain + .14 semgain - .14 MATpre</td>
<td>5</td>
</tr>
<tr>
<td><strong>KAUAI</strong></td>
<td></td>
</tr>
<tr>
<td>MATgain = -.33 MATpre + .27 semgain + .21 syngain + .02 grade</td>
<td>19</td>
</tr>
</tbody>
</table>

NOTES:  
\(^a\) = Metropolitan Achievement Test NCE gain score  
\(^b\) = Metropolitan Achievement Test pretest score  
\(^c\) = Cloze posttest-pretest semantic gain score  
\(^d\) = Cloze posttest-pretest syntactic gain score  
\(^e\) = Grade level
were not significantly related to the semantic or syntactic cloze test gain scores.

To substantiate the acceptance of the null hypothesis in all three districts, a correlation matrix was developed. The MAT NCE gain scores were correlated with the MAT pre-test, with the semantic gain scores, with the syntactic gain scores, and with grade levels. As seen in Table 18, in Hawaii District the largest correlation was .581 between semantic and syntactic gains. This was the only significant correlation in the matrices, but it does not substantiate a relationship between MAT gain and either scale score. There was a .003 correlation between NCE gain and semantic gain, and a negative correlation, -.068, between NCE gain and syntactic gain.

In Honolulu District the largest correlation was .342 between semantic and syntactic gain scores. There was a .104 correlation between NCE gain scores and semantic gain and a negative correlation, -.110, between NCE gain and syntactic gain. In Kauai District, the district with the greatest amount of explained variance in the multiple regression analysis, the largest correlation, .258, was between semantic gain and NCE gain score. This was the largest correlation between semantic gain and NCE gain in the three districts. The correlation between semantic gain and syntactic gain was .136 in Kauai, lowest in the three districts.
Despite the finding in Kauai District of a large, but not significant correlation between semantic scale score improvement and NCE gain score, the null hypothesis was still accepted for the second hypothesis.
Project Reports

The last section of the findings includes the informal reports from project teachers on (1) students' performance on the cloze treatment materials, (2) usefulness of the materials, and (3) other comments.

Comments on the program from Hilo High focused on the students who could not understand why they were told to make as much sense as possible in the cloze activities, but then were marked right and wrong. Discussing the context clues did not always clear up their misconception of the importance of "making sense." Some students felt the need to look at other papers because they were so concerned about being right on the cloze activities.

In terms of the usefulness of the materials, Hilo High reported that the orientation lesson was adequate. The cloze selections became hard quickly for the students and before the first half of the program was completed, the entire class was using the word list with distractors. This cueing level enabled students to achieve cloze scores in and above the instructional level throughout the rest of the program. The use of synonym scoring and peer scoring made some of the discussions rushed and some answers were inadvertently skipped. Students reported that "The Wise Judge" and the "Hina" series of myths were the ones they enjoyed the most.

Finally, Hilo High reported some problems with new students entering the Title I program during the treatment im-
plementation. The project teacher felt compelled to catch up the new arrivals. This necessitated doing two or more lessons at a sitting with some students and discussions were rushed or not conducted some of the time. Hilo High also reported that the monitoring, which consisted of two visits during the implementation, was sufficient to provide support as needed.

Comments on the program from Dole Intermediate focused on the need for more detailed introductions to each of the cloze myths. Also, more follow-up activities were desired, especially for "The Trojan War" and "Hina" series of activities. Students got involved making maps and battleground scenes, and comparison/contrast, cause/effect, and main idea activities evolved from the interest expressed by the students.

For the first half of the treatment materials, the students were able to discuss the cloze activities and handle correcting the passages without additional cues. Cues were added, in the form of the word list with two distractors, to all "The Trojan War" and later cloze passages.

Dole Intermediate reported that the implementation was adequate, and the two monitoring visits were sufficient. The biggest problem noted was that during the instructional discussions in which papers were corrected, the students would talk and talk, and they were hard to control at times. They liked the idea that they could talk about being right and wrong, meaningful and meaningless, and that they were trus-
ted to mark each other's papers.

Comments on the program from Kapaa Intermediate focused on the quality of the myths at the lower readability levels. The students enjoyed them most and felt quite a bit of success in filling them out. Several of the more difficult Greek myth cloze activities were too difficult, but the epic stories of "The Trojan War" and "Hina" series helped students to do better because they could follow a story line with some substance. The teachers reported spending a great deal of time explaining the backgrounds of the more difficult stories, introducing key vocabulary words, and cueing with exact word lists which were provided from the cloze passage, "The Gift of Fire," and from then on in the subsequent passages.

Teachers reported that the implementation was well done and the two monitoring visits were sufficient to provide support as needed. The students looked forward to having their cloze activities during the earlier myths, grew restless as the difficulty increased, and seemed most receptive to the "Hina" legends. The rest of the myths made a lasting impression on some of the students and exposed them to places and ideas they had never been acquainted with before. The informal project teacher reports conclude the presentation of the findings of this study.
Summary

The purpose of this study was to design, construct, validate, and employ cloze instructional materials in order to improve the reading comprehension of Title I students. A total of 114 students in three secondary schools in the Department of Education, State of Hawaii, participated in the study.

Materials consisted of twenty cloze passages of 200-500 words with every tenth word deleted. Each passage was an excerpt from an accompanying world myth. Instruction included having students complete the cloze passages and conducting discussions on whether answers were meaningful, meaning changed, or meaningless. The passages increased in difficulty from second through tenth grade level as measured by the Fry Graph. Implementations in all three treatment schools occurred after the Metropolitan Achievement Test (MAT), the dependent variable, was administered as a pretest for the Title I program statewide. After an initial demonstration class, project teachers did one cloze activity every five to ten days with their students. The cloze treatment materials were completed before the MAT posttests and a cloze pre-post instrument was administered. Differences in the MAT gain scores, reported in normal curve equivalent units (NCE) by the external evaluator for the State of Hawaii Title I programs, were compared between treatment and non-treatment Title I students in the same grade levels.
and districts.

The first hypothesis investigated was that there would be no significant \( p < .01 \) differences between the mean adjusted NCE gain scores of treatment students and those of non-treatment students. An analysis of covariance demonstrated that the treatment group gains were significantly greater in two of the three districts. Where gains were seen, they were proven to be affected by the cloze treatment and the amount of explained variance in the covariance model was significant. In one district, treatment group gain scores were not significantly different from the control group gain scores. In addition, the total amount of explained variance in the district was not significant, indicating an extra source of variation existed. However, two of the three treatment schools did experience significantly greater gains in reading comprehension as a result of the cloze instructional program.

The second hypothesis investigated was that the NCE gains would be unrelated to gains in cloze semantic and syntactic scale scores. No statistically significant relationships between gains in semantic or syntactic scales and reading comprehension gains could be determined. Thus, the treatment produced significant results in two of the three districts, but the main cause of the cloze treatment's effect was not determined.

Project teachers reported that students enjoyed the first half of the cloze materials and also liked the "Hina"
series. The major form of cueing used was the word list, with and without distractors. All of the treatment groups employed the word list cues by the beginning of the second half of the cloze materials. The major instructional technique was discussion after the students had completed their cloze passage. These instructional talks featured the difference between making sense and not making sense in the context. It provided the students with opportunities to talk about different choices and to make decisions about meaning. Teachers guided the discussions and developed contextual analysis skills as they went over the cloze passages with the students.

The implementation and monitoring schedules set up for each participating school were found to be adequate. In general, the project teachers had no major difficulties in using the cloze treatment materials with their students.

Conclusions

The following conclusions were drawn from the tests of the hypotheses:

1. On the question of whether Title I students instructed with cloze materials did significantly better than their Title I counterparts on standardized tests of reading comprehension, the answer was yes in two of the three districts. In the analysis of covariance, the MAT pretest, the covariate, was not found to be significantly related to gains in reading comprehension in any of the three districts. In the district where no significant differences
in comprehension gains were found, the amount of explained variance was not significant, which indicated that an extra source of variation existed in that district. The findings of this study suggest that instructional use of cloze materials was an important factor in developing the reading comprehension abilities of secondary Title I students in two of the three treatment programs.

2. On the question of whether the significant gains reported were the main effect of the treatment, the answer was yes. In both districts, the analysis of covariance demonstrated that the comprehension gains were effected by the treatment and that a significant amount of the variance in the scores was accounted for in the covariance model, substantiating this conclusion.

3. On the question of whether gains in cloze semantic or syntactic scale scores produced gains in reading comprehension as measured by the MAT, the answer was unclear. First, successful districts had virtually inverse relationships in semantic and syntactic gains. Second, there was no statistically significant evidence that supported the conclusion that students' semantic or syntactic development contributed to their comprehension gain scores. The lack of a clear pattern of cloze scale scores with the districts that showed significant gains, plus the lack of significant values in the multiple regression analysis, indicated that although two of the treatment programs were successful, it was not possible to state definitively whether semantic or
syntactic growth was responsible for the growth in comprehension.

4. On the question of the utility of the treatment materials, the cloze passages and accompanying myths were found to be suitable to the needs and interests of a range of secondary Title I students in the State of Hawaii. The increasingly harder cloze passages were accessible to the readers without cues from second through sixth grade readability. Cues were needed in all three schools for the later cloze passages. These passages were harder than sixth grade difficulty, but use of word lists with and without distracters had a positive effect on students' abilities to grasp contextual meaning and facilitated progress through the program materials.

5. The last conclusion concerned the external generalizability of the cloze instructional design model. The fact that specific gains produced by the treatment could not be significantly attributed to the variables included in the design indicated that there were unaccounted for influences and underscored the quasi-experimental nature of this research. More control was needed to isolate the effects of the growth in semantic and syntactic understanding of the language, especially when these effects produced significant improvements in reading comprehension gain scores. Nevertheless, although it was not clear as to what caused the gains, the gains in two of the treatment schools indicated it was not inconceivable that other secondary school Title I
students could benefit from this treatment or possibly from other types of cloze instruction to develop reading comprehension. This benefit is particularly likely if it can be shown that students need improvement of contextual analysis skills.

Implications

The first implication of this study was that further investigation of the cloze instructional approach is warranted with other secondary Title I students. The instructional approach features a series of cloze passages with increasingly difficult readability levels, every tenth word deletion patterns, discussions of choices with synonym scoring, and additional cueing as needed. If significant gains could be produced in two of the three treatment schools, it is conceivable that other schools could take advantage of the cloze instructional approach developed in this study.

The second implication was that the design model which investigated the first hypothesis was thorough, effective, and could be used again. Once the t-tests indicated homogeneity of variance in treatment and control groups, the analysis of covariance, with the pretest as the covariate, determined the gains to be the main effect of the treatment. Further, the design accounted for a significant amount of the explained variance in the treatment program's results, and this made it ideal for this research study.

The next implication was that the design model which investigated the second hypothesis was not adequate and
could be improved. Somehow, more control is needed in order to identify why the cloze treatment was capable of producing significantly positive effects. It is possible that other predictor variables could be added to account for more of the explained variance in the multiple regression model. Perhaps a language factor, a vocabulary measure, or other tests could be added as predictors. Clearly, given the findings, there were other factors in operation during the cloze instructional treatment which were unaccounted for, and which implied an improvement was needed to determine what components of the cloze treatment were most responsible for developing gains in reading comprehension.

Finally, the lack of significant differences between the treatment and non-treatment groups in one district, despite being the only district with substantial gains in both semantic and syntactic scores, implied that cloze test gains were not always translated into gains on standardized tests of reading comprehension.
APPENDIX A

- Twenty cloze passages
- Answer keys in parentheses
"THE LAZY MAN"

In a small country south of China, there once lived a man who was very lazy. He was so lazy that he never stood up when he could sit when he could lie down. He never sat down and when he lay down, it was all he could do to roll over.

Of course, the lazy man never found a wife. No woman would have him. He lived by himself in a one-room shack. Rain dripped through the holes in the roof. Wind blew through the wide cracks in the walls and the floor.

"Work is for fools," the lazy man often reminded himself. He kept away from work as though it were a sickness. He called himself a pig farmer. This meant that some thin pigs lived under his house. The pigs were always hungry, and they never seemed to grow at all. In order to survive, once in a while the lazy man had to get a job. He never worked more than a few days at a time. And he never worked for money. He always asked to be paid in food. This saved
19 (him) a trip to the store.

One fall, the lazy 20 (man) worked for a whole week in a neighbor's rice 21 (field). He was a little ashamed of himself for having 22 (worked) so many days at a time. But he was 23 (proud) of the large jar of rice he received at 24 (the) end of the week. He carried the jar home 25 (and) put it on the foot of his bed. Then, 26 (he) lay down to think about his good fortune.
"THE WISE JUDGE"

The judge was surprised to see a farmer from 1 (the) hills standing before him. He looked down from his 2 (high) bench and asked Chang why he was there. "Because, 3 (your) honor, my garlic has been stolen," Chang replied.

"Then 4 (why) did you not catch the thief?"

"Because, your honor, 5 (I) was not there when he came."

"Then why did 6 (you) not bring someone to tell me what the robber 7 (looked) like?"

"Because, your honor, nobody saw the thief."

"Then 8 (why) did you not bring some clue, something the thief 9 (had) left behind?"

"Because, your honor, the thief left nothing 10 (behind). I found not even a footprint. There was nothing 11 (in) the field but my little shack, and it had 12 (been) there before."

"I see," said the judge. He sat 13 (there) a while with the tips of his fingers pressed 14 (together). Then he spoke. "Chang Fu-Yen, you have told me 15 (little). But I think I
can help you find the thief."

Chang could not see how. He had told the judge almost nothing. What good was the judge's mind with no facts to think about? How could the judge sit in Peking and find a thief who had disappeared into the hills at night?

"The facts in this case are clear," went on the judge. "Your garlic was stolen. A shack was the only thing in the field at the time. So the shack must have stolen the garlic!"
CLOZE ACTIVITY THREE

Name__________________________

Grade_____ Age_____ School__________________________

DIRECTIONS: Please read through the passage, and then fill in one word in each blank that you think makes the most sense. Thank you.

"AISEA THE UNDERSEA HERO"

The great swimmer and diver Aisea 1 (lived) on Lukunor Island. He was a 2 (skillful) fisherman. No one could ever beat 3 (his) catch of fish. He could stay 4 (under) water for more than five minutes 5 (at) a time.

In fact, he could 6 (catch) more than ten fish 7 (with) each dive. He and 8 (his) wife Natis always had plenty of 9 (fish) for themselves and to share with 10 (relatives) and friends.

One day Aisea went out 11 (on) his boat with his 12 (wife). They rowed out to a 13 (big) island, near a pass on 14 (the) other side of Lukunor. Keeping their 15 (canoe) on the shore, they went out to fish.

Natis walked on the reef while 16 (Aisea) was diving. He dove down 17 (to) get clams out of their 18 (shells) for their meat. Natis 19 (looked) for fish and shells 20 (she) could catch at the low tide.

When her husband dove, she 21 (watched) where he went down. Then 22 (she) would watch until she saw 23 (him) come up again. On one 24 (dive), Natis watched and waited,
but Aisea didn't 25 (surface).

After more than five minutes she still 26 (saw) nothing. She looked and looked 27 (but) still couldn't find him. At 28 (that) moment, beneath the sea, her husband 29 (was) fighting a huge devil fish. The 30 (monster) found him at the bottom pulling clams from coral.

One large clam was hard to 31 (get), but Aisea didn't want 32 (to) leave it behind. All of a sudden, 33 (he) felt he was under the 34 (shadow) of a giant. He found that 35 (all) around him seemed to be dark.

He looked up to check what 36 (it) was, but too late. He 37 (was) caught as the devil fish 38 (bit) into his back. It tried to swim 39 (away) with Aisea, but he held on 40 (tightly) to the corals.

The monster used all of its 41 (power) to pry him loose. But Aisea was as strong as 42 (he) was brave. He held on and 43 (moved) along the rough coral 44 (up) to the surface with the devil 45 (fish) on his back.

Natis thought Aisea was caught by a 46 (shark) or was trapped below. She went close to where the 47 (waves) crashed on the reef. At first, 48 (she) saw nothing. Then, she finally saw Aisea 49 (coming) up with a huge black thing on his 50 (back). She ran to him and helped pull down the monster. They both took big rocks and smashed the evil creature. They took the devil fish with them back to their village. Everybody came and listened to the story of Aisea the great undersea hero and his wife Natis, the great helper.
"THE STORM GOD"

One day Susano decided to take a stroll along 1 (the) bank of a river. He had not gone far, 2 (when) he came upon a father, a mother, and a 3 (young) daughter. They were sitting beneath a willow tree. And 4 (all) three were weeping bitterly.

"Why do you cry?" Susano 5 (asked).

The parents were so overcome with grief that they 6 (could) not answer. The young girl, however, rose and bowed 7 (and) then said in a soft voice, "It is for 8 (me) they weep, my lord."

"But why?" Susano repeated.

"My 9 (parents) had eight daughters," the young girl went on, "of 10 (whom) I was the youngest."

"Had?" Susano asked.

The girl 11 (replied). "Each year a snake with eight heads has come 12 (to) this place and demanded one of my sisters as a 13 (sacrifice). Seven have already been eaten. Only I am 14 (left)," the young girl cried. "And now the time is 15 (at) hand for the return of the eight-headed snake."
"Do 16 (not) fear the snake," Susano comforted them. "With my help, 17 (we) will overcome and destroy him."

"That is not possible," 18 (the) father exclaimed. "The serpent is so huge that his 19 (body) extends for miles. It has eight tails so enormous 20 (that) the earth trembles when it thrashes them about. Each 21 (head) has eyes that flash fire. Only the gods could 22 (defeat) such a monster," the father concluded in despair.

"I 23 (am) the god of thunder, the god of rain -- the storm 24 (god)," Susano replied. "My sister is the sun goddess. Do 25 (as) I say, and your daughter will be safe."
"THE CHILD MUST DIE"

"The child must die," the old woman cackled. Queen 1 (Hecuba) stared at the old woman, and then held the baby 2 (closely).

"You have heard her prediction," King Priam said in 3 (a)____ low voice. "Our son will bring death and ruin 4 (to)____ his family, to all of Troy. He must die 5 (that)____ others may live out their lives in peace."

"No," Hecuba 6 (said)____ stubbornly. "It was only a dream. I have had 7 (dreams) before."

"Not one such as this, my lady," the 8 (old)____ woman insisted. Hecuba had dreamed that the baby Paris, 9 (who)____ lay so quietly in her arms at this moment, 10 (had)____ turned into a burning torch that set all Troy 11 (aflame). The old woman, a dream prophet, had then said 12 (that)____ a terrible end would come to Troy if the 13 (baby)____ were allowed to live. Priam went to Hecuba and 14 (took)____ the baby from her. "I shall do what is necessary," 15 (he)____ said.

Hecuba wept as Priam left the room. She 16 (noticed), even as the tears rolled down her cheeks, that 17 (the)____
King's eyes filled, too. Much later, when Priam returned, she gave him a searching glance.

"I had not the heart," Priam answered the look. "I gave the boy to a shepherd. He will leave the child on the top of Mount Ida. He will not live," Priam added sadly.

But instead, the shepherd raised Priam's son as his own. The boy lived the life of a shepherd and did not know that his father was a king.
A rabbit once listened to a lion boast about 1 (how) strong and brave he was. The rabbit smiled and 2 (nodded) as the lion talked on and on. But in 3 (truth), being neither strong nor brave, the rabbit was not 4 (interested). The small animal was bored to death.

Suddenly the 5 (rabbit) had a bright idea. He waited until the lion 6 (stopped) for breath. "Yes, the lion is a mighty beast," spoke 7 (up) the rabbit. Next to Mr. Hunger, the lion 8 (is) the mightiest of all."

"Mr. Hunger?" said the lion. "I've 9 (never) met Mr. Hunger."

"Then you surely are a lucky 10 (lion)," said the rabbit, shaking his head. "If you had 11 (met) Mr. Hunger, you might not be here today."

The 12 (lion) laughed. Since he had never really been hungry, he 13 (had) no idea what the rabbit meant by the words 14 (Mr.) Hunger. "Tell me," he said, "is this Mr. Hunger 15 (as) large as an elephant?"

"Oh, far larger," replied the 16 (rabbit). "Mr. Hunger
is so large, he can be in all 17 (places) at once."

"And is he as strong as a 18 (rhino)?" asked the lion.

"Mr. Hunger has killed many a 19 (rhino)," replied the rabbit, "but no rhino has ever 20 (killed) Mr. Hunger."

The lion refused to be frightened. 21 (He) roared a mighty roar and shook his head in anger. "Take 22 (me) to Mr. Hunger and I will show him who 23 (is) King of the Beasts."
CLOZE ACTIVITY SEVEN

THE WAY THE WORLD BEGAN

The people of long ago lived 1 (in) ____ a world full of strange sights, smells, and sounds. 2 (They) ____ walked upon an earth about which they knew very 3 (little). They looked about themselves in fear and wonder. What 4 (made) ____ the oceans roar with anger, or the sky darken 5 (with) ____ clouds?

But before any other question, these people must 6 (have) ____ asked themselves how the world started in the first 7 (place). Just what was this earth that fed them, clothed 8 (them) ____, and gave them shelter? How had the world first 9 (come) ____ into being?

The Greek poet Orpheus (OR fee us) had one answer. 10 (He) ____ said that in the beginning there had been nothing 11 (except) Time. After millions of years, Time brought forth Chaos (KAY os), 12 (or) ____ confusion. Chaos was a huge dark space filled up 13 (with) ____ rain. Then Time told Chaos to spin around, and 14 (for) ____ more millions of years the space was a spinning, 15 (swirling) rainstorm. As the rain spun faster, it changed into 16 (an) ____ enormous egg. Suddenly, the shell of the egg cracked. 17 (The) ____ egg broke in two. One of the
halves became 18 (the) earth, and the other became the heavens. The yolk 19 (of) the egg became Love, connecting the earth and the 20 (heavens).

Other ancient peoples had different stories about the beginning of 21 (the) earth.
At first men were frightened by the gift. It **was** so hot, so quick; it bit sharply when you **touched** it, and for pure spite, made the shadows dance. **They** thanked Prometheus and asked him to take it away. But **he** took the haunch of a newly killed deer **and** held it over the fire. When the meat **began** to sear and sputter, filling the cave with its **delicious** smells, the people felt themselves melting with hunger and **flung** themselves on that meat and ate it greedily, burning **their** tongues.

"What I have brought you is called **fire**," Prometheus said. "It is an ill-natured spirit, a little **brother** of the sun, but if you handle it carefully, **it** can change your whole life. It is very greedy; **you** must feed it twigs, but only until it becomes proper size. Then you must stop, or it will devour everything in sight -- and you too! If it escapes, **use** this magic: water. It fears the water spirit, and **when** you touch it with water, it will fly away **until** you need it again."
He left the fire burning in the first cave, with children staring at it wide-eyed, and then went to every cave in the land.

Then one day, Zeus looked down from the mountain and was amazed. Everything had changed! Man had come out of his cave.
"THE TWO BROTHERS"

In the old days on Peliliu Island 1 (there) was a huge cave. 2 (Living) inside the cave was a fierce 3 (giant) named Meluadelchur. She had a 4 (great) hunger and was never satisfied, 5 (no) matter how much she ate.

She often would set traps for the 6 (people) in the nearby town 7 (of) Ngesias, and would eat 8 (the) ones she caught. The men 9 (and) women of Ngesias lived in 10 (constant) fear and tried to kill the giant many times.

The bravest warriors would go off to attack her, 11 (never) to return. Eventually, the village 12 (elders) gave up hope and 13 (decided) to leave their homes, 14 (to) abandon the sacred groves and 15 (sail) to Koror to make new lives.

As they prepared to 16 (leave) from the dock, all the 17 (villagers) piled into canoes with 18 (few) possessions and their loved ones. But many 19 (hours) after the outriggers had 20 (sailed), the last person left in town, an old and unmarried woman, came down to the dock.

She was hoping to 21 (find) space on a canoe and
22 (was) terrified to find everyone 23 (gone). She had no peace 24 (in) the days and months that 25 (followed). Fear of the giant was with her always, and she prayed for help.

One day, the old woman's 26 (prayers) for companionship were answered. In 27 (some) miraculous way she became 28 (pregnant) and soon gave birth to a 29 (baby) boy she named Rusbedengel. Months 30 (later), the same miracle occurred and, to her joy, her second son she named Erealebtil.

As the boys grew, 31 (she) noticed each had strange 32 (powers). When Rusbedengel got mad, 33 (his) hair stood out like 34 (sharp) sting ray spines. The 35 (younger) brother had scales as sharp as an ax on his body that stood out when he was angry also.

The boys were approaching 36 (manhood) rapidly, and one day 37 (they) decided to seek out 38 (the) devilish giant to try 39 (to) kill her. Their mother's 40 (stories) of defeated warriors only drove them on, determined to fight bravely rather than live in fear.

They told their mother to have courage and they 41 (set) sail for the bay 42 (near) the huge cave. While 43 (pretending) to fish for uloi, they 44 (sang) loudly and made noises to 45 (attract) Meluadelchur. The human voices were a joy to the ears of the ever hungry giant.

She came out of her 46 (cave) to capture and eat 47 (these) welcome visitors. She waded 48 (into) the water and walked closer and closer to the boys. Her 49 (great)
hunger was driving her on. She laughed as she grabbed Rusbedengel and bent to swallow him. But her laughter changed to cries of pain as she was stung by thousands of needles in her face, neck and hands. As she screamed from pain she had never known, Erealebtil charged. The battle was short, the victory was soon theirs, and their mother rejoiced to see her brave sons return home again.
"THE ROAD TO ATHENS"

The overland road from Troezen to Athens was the
1 (most) dangerous in the world. It was infested not only
2 (with) bandits but also giants, ogres and sorcerers who
wait 3 (for) travelers and killed them for their money or
their 4 (weapons), or just for sport. Those who had to make
5 (the) trip usually went by boat, preferring the risk of
6 (shipwreck) and pirates to the terrible mountain brigands.
If the 7 (trip) overland had to be made, travelers banded
together, went 8 (heavily) armed, and kept watch as though on
a military 9 (march).

Theseus knew all this, but he did not give 10 (it) a
second thought. He was so happy to be 11 (on) his way,
leaving his little village and his ordinary 12 (life). He
was off to the great world and adventure. 13 (He) welcomed
the dangers that lay in wait. "The more, 14 (the) better,"
he thought. "Where there's danger, there's glory. Why,
15 (I) shall be disappointed if I am not attacked!"

He 16 (was) not to be disappointed. He had not gone
far 17 (when) he met a huge man in a bear skin carrying
enormous brass club. This was Corynetes, the cudgeler, terror of travelers. He reached out a hairy hand, seized Theseus by the throat and lifted his club, which glittered in the hot sunlight.

"Pardon me," said Theseus, "but what are you planning to do?"
THE TROJAN WAR
"THE KIDNAPPING OF HELEN"

Helen was the loveliest woman of her time. The 1 (most) famous heroes in Greece had sought the honor of 2 (her) hand in marriage. She was finally wed to Prince Menelaus, 2 (a) warrior who enjoyed martial arts and hunting. Eventually, Menelaus 3 (became) King of Sparta and ruled happily with his beautiful 4 (queen).

One day, some special guests arrived from the distant 6 (city) of Troy. They sought hospitality at the royal palace 7 (and) were received kindly by Menelaus and Helen. At the 8 (banquet) given in their honor, a Trojan prince named Paris 9 (charmed) both host and hostess by his graceful manner and 10 (varied) accomplishments. He especially pleased Helen when he presented her 11 (with) a gift of many rare and valuable jewels 12 (from) Asia.

Soon after, Menelaus received an invitation from 13 (his) old friend, the King of Crete, to attend a hunting party. 14 (Menelaus) accepted the invitation and soon left for Crete. While away, 15 (he) asked Helen to look after his guests. This was 16 (a) terrible mistake.
Paris was captured by Helen's beauty. Forgetting sense of honor and duty, he called together his men. They stormed the royal castle and stole as many of the treasures as they could. Paris succeeded in carrying off the beautiful, and not altogether unwilling, queen.

The Trojans made for the harbor, and they set sail at once. They were far out to sea on their way to Troy by the time Menelaus found out what had happened in his absence.
Menelaus raised the war-cry when he heard his wife
1 (was)___ kidnapped and his castle sacked. Chiefs and
warriors responded 2 (from)___ all over Greece. Ten thousand
warriors, the largest army 3 (in)___ Greece history, were
assembled at Aulis. A thousand ships 4 (waited)___ in the bay of
Aulis, ready to convey them 5 (to)___ the Trojan coast. The
brother of Menelaus, Agamemnon, King 6 (of)___ Argos, was
made commander-in-chief.

Before the fleet 7 (set)___ sail, solemn sacrifices were
offered to the gods for 8 (a)___ sign. A soothsayer
interpreted the sacrifices to mean that 9 (the)___ war with
Troy would last for nine years; and 10 (in)___ the tenth, the
city would be taken.

At the 11 (approach) of the Greek fleet, the Trojans
appeared on the 12 (coastline)___ in order to prevent their
landing. In the battle 13 (that)___ followed, the Trojans were
defeated and driven to seek 14 (safety)___ behind the massive
walls of their city.

During a 15 (battle)___ the next day, Menelaus and Paris
found themselves opposite each other. All the other fighting stopped as these two squared off to settle the dispute in a man-to-man combat. Paris struck first, but Menelaus caught his swift spear on his shield. He hurled his own spear, and it tore through Paris' armor, but didn't wound him. Menelaus charged and leaped upon Paris, but Paris escaped and fled back to Troy. The Trojans refused to give back Helen, and the fighting raged on for years and years.
CLOZE ACTIVITY THIRTEEN

Name__________________________

Grade_____ Age_____ School__________________________

DIRECTIONS: Please read through this passage, and then fill in one word in each blank that you think makes the most sense. Thank you.

THE TROJAN WAR 3
"THE STRUGGLE CONTINUES"

The Greeks were led in battle by Achilles. He 1 (was) the most powerful of all warriors. In various contests, 2 (he) defeated Memnon, the huge Ethiopian and Penthesilea, the Queen 3 (of) the Amazons. Achilles was almost invulnerable because at birth, 4 (his) mother dipped him in a sacred stream. He 5 (wore) a suit of armor forged by the god Hephaestus, 6 (which) far surpassed the armor of any other hero.

The 7 (Trojans) were led by Hector. He was the son of Priam, the 8 (King) of Troy, and the most valiant of all the Trojans. In 9 (battle) after battle, Hector had proven himself to be a 10 (fierce) fighter, and the protector of Troy.

One day, for the 11 (first) time in the course of the war, Achilles and 12 (Hector) met each other in battle. For the first time 13 (in) life, Hector felt fear. He tried to run, 14 (to) get inside the safe gates of Troy, but to 15 (no) avail. Achilles was chasing him too closely.

Finally, Hector 16 (made) a stand. A desperate encounter took place between the 17 (two) champions. Hector tried to
fight, but Achilles was much too strong. Achilles pierced Hector with a spear, finally getting revenge for the death of his best friend at the hands of Hector. Achilles tied Hector's body to his chariot and dragged the fallen hero's body around the city of Troy three times. But the triumph of Achilles lasted only a few days.

In a subsequent battle, Paris aimed a poisoned arrow at the heel of Achilles, his only vulnerable spot, and Achilles fell to the ground, fatally wounded. Thus, both the Greeks and the Trojans lost their best warriors, but the war was still raging and victory remained uncertain for nine years.
CLOZE ACTIVITY FOURTEEN

THE TROJAN WAR 4
"THE TROJAN HORSE"

In the tenth year of the Trojan War, a prophecy 1 (told) the Greek general Odysseus that three things were 2 (needed) to insure a victory. First, the son of Achilles must 3 (join) the fight. He was quickly brought to Troy. Second, 4 (the) arrows of Hercules must be employed. They were obtained 5 (from) an archer who also joined the Greek cause. 6 (Third), the Palladium, an image to the goddess Athena, which 7 (had) protected Troy, was stolen by the Greeks. With all 8 (three) conditions of the prophecy satisfied, Odysseus told of his plan 9 (to) end the war.

A giant wooden horse was constructed. 10 (It) was large enough to contain a number of able 11 (and) distinguished warriors. On its completion, a band of Greeks 12 (hid) inside. Then, the rest of the Greek army broke 13 (camp), got in their ships, and sailed away. Actually, the 14 (fleet) sailed behind a nearby island in waiting.

When 15 (the) Trojans saw the enemy depart, they believed themselves safe 16 (at) last. They poured out of Troy to wander 17 (through) the abandoned Greek camp and to
marvel at the **huge** wooden horse. After some debate, the Trojans all agreed to **bring** the horse into the city. As an offering **to** Athena, it would compensate for the loss of the **Palladium**. After the day's excitement, and the parties that followed, **the** Trojans retired to rest.

All was hushed and silent **when** the Greeks descended from the belly of the **horse**. They set the city on fire and opened the **gates** for the waiting army that had returned in the **darkness**.

The Trojans made a gallant defense, but were easily **overcome**. All of Troy's remaining warriors were killed, along **with** King Priam and Hector's baby son. Menelaus sought Helen in the **royal** chambers, and she was taken back to Sparta in **a** joyful homeward voyage. The treasures of Troy went back **to** Greece, although not all the Greeks returned home **so** easily. The Trojan War was finally ended and **Helen**, the face that launched a thousand ships, was returned to her rightful husband after a long and costly war.
"HINA, THE HELEN OF HAWAII"

The story of Hina, the Hawaiian Helen, and Kaupeepee, takes us back to the Paris of the legend, takes us back to the second and final era of migration from Tahiti, Samoa, and perhaps other islands of Polynesia. This period added to the population of the islands, and gave to it many new chiefs, a number of new customs, and a few new gods. At this time, the islands were ruled by independent district chiefs. They recognized a supreme head, or aliʻi-nui, were absolute lords of their territories. Wars between chiefs were frequent. But, they were usually wars of plunder rather than wars of conquest. They sometimes continued until both parties impoverished. Then their chiefs and priests met and arranged terms of peace.

Kamaauaua was the powerful chief of Molokai. He proudly traced his family back to the first migration in the 6th century. He was angry and alarmed at the newcomers. These warlike and aggressive chiefs
were steadily 17 (taking) the fairest portions of the islands. The eldest of 18 (the) sons of Kamauaua was Kaupeepee. He was a warlike 19 (youth), well-skilled in arms and mighty in strength and 20 (courage). So strong was his anger at these new chiefs, 21 (that) he resolved to devote his life to making war 22 (on) them.
Kaupeepee was inspired by a motive higher than mere 1 (plunder). He hated the new chiefs, and his attacks were 2 (confined) to the territories over which they ruled. His major 3 (aim) was to inflict injury upon them. The spoils of 4 (his) expeditions were given to his followers. Brave, generous 5 (and) wise, he was almost worshipped by his people.

Kaupeepee, 6 (the) chief of Haupu, had heard of Hina, the most 7 (beautiful) maiden in all Hawaii. Hina, whose eyes were like 8 (stars), and whose hair fell in waves below the fringes 9 (of) her pau; Hina, whose name has come down to 10 (us) through centuries of songs.

For years she lived happily 11 (with) Hakalanileo, who loved her above all others. She lived 12 (with) him until she became the mother of two sons, 13 (named) Kana and Niheu. Then the winds snatched her away 14 (from) her husband and family.

One evening, after sunset, when 15 (the) moon was shining, Hina went to the beach with 16 (her) maidens, to
bathe. A signal was given. Not long 17 (after), a light canoe dashed through the waters and shot 18 (in) among the bathers. The women screamed and started for 19 (the) shore. Suddenly, a man leaped from the canoe into 20 (the) water. There was a brief struggle, a stifled scream, 21 (and) a moment later Kaupeepee was again in the canoe 22 (with) the beautiful Hina in his arms.
Kaupeepee expected a storm of tears and anger as 1 (he) entered the room where Hina was being kept. Instead, 2 (she) rose, bowed, and waited for him to speak.

"What 3 (can) I do for you?" inquired Kaupeepee.

"Liberate me!" replied 4 (Hina) promptly.

"You are free to go anywhere within the walls 5 (of) Haupu," he said, moving his arms around.

"Then return 6 (me) to my children," said Hina.

"Impossible," was his firm 7 (reply).

"Then kill me!" exclaimed Hina.

"Hina would think little 8 (of) the man who would risk his life to possess 9 (such) a woman, but would then kill her or cast 10 (her) off as not worth the keeping. You are like 11 (no) other woman. I am like no other man. Such 12 (companionship) has the approval of the gods. You will leave 13 (Haupu) only when its walls have been battered down and 14 (Kaupeepee) lies dead among the ruins!"

The sudden disappearance of 15 (Hina) created a profound excitement among the people. The women 16 (who) had been
permitted to escape ran screaming to the 17 (house) of Hakalanileo with their tale of woe. But when 18 (questioned), all they could tell was that a canoe filled 19 (with) armed men suddenly dashed through the surf, and their 20 (mistress) was seized and borne out to sea. That was 21 (all) they knew.
After searching for years, it was finally discovered that 1 (Hina) was in the fortress of Haupu and could be 2 (rescued) only by force. She had long been the wife 3 (of) Kaupeepee and would not be surrendered peacefully.

At the 4 (appointed) time, a Hawaiian army set sail for Molokai. The fleet 5 (was) over 1200 canoes, many double, and all carrying vast 6 (supplies) of food and weapons. The omens had been favorable.

7 (On) the following day, a number of expeditions left the coasts 8 (of) Oahu and Maui. None of them approached the Hawaiian 9 (fleet) in size, but together added another 900 canoes and 4000 10 (warriors). All of them reached the appointed land spot on 11 (Molokai), and Niheu found himself in command of over ten 12 (thousand) warriors. Everything was ready for an advance on the 13 (fortress) of Kaupeepee. A war council of the assembled chiefs 14 (was) called.

Halting his army on the mountains overlooking Haupu, 15 (Niheu) sent a messenger to the fortress with a sign
16 (of) peace. He went to determine whether Hina was really 17 (there); and, if so, to demand the surrender of the 18 (captive). The messenger returned in safety. He brought a message 19 (from) Kaupeepee: "Hina is within the walls of Haupu. Come 20 (with) arms in your hands and take her if you 21 (can)."

The alarm was given within. Warriors from all sides prepared.
CLOZE ACTIVITY NINETEEN  

**Name______________________________**

**Grade_____  Age_____  School______________________________**

**DIRECTIONS:** Please read through this passage, and then fill in one word in each blank that you think makes the most sense. Thank you.

"HINA, THE HELEN OF HAWAII" (Part 5)

Niheu tried to hold his warriors back. He knew 1 (the) main body of the fortress force was still before 2 (them). But the voices of the leaders were drowned in 3 (battle) shouts. The surging throng of warriors struck Kaupeepee's wall 4 (of) defenders' spears and battle-axes. It rolled back like a 5 (broken) wave. But the check was only for a moment. Right 6 (behind) the shattered column was another forest of advancing spears. With 7 (a) wild tumult of shouts and clashing weapons, the entire force 8 (was) pressed against the thin lines of defense. The slaughter was 9 (frightful), but the unequal conflict could have only one result.

Kaupeepee and the last 10 (of) his devoted followers charged at their enemies and were 11 (struck) down with their javelins in the air. A spear 12 (penetrated) the breast of Kaupeepee. He dropped his weapon and 13 (fell) to the earth.

Not one of the defenders of 14 (Haupu) escaped, but more than one-half of Niheu's army perished 15 (in) the various fights and battles. Hina was found unharmed, 16 (and) while
there was great joy to her in 17 (the) embrace of her long
lost sons, she wept over 18 (the) death of Kaupeepee, who
with his love, had made light 19 (her) long imprisonment.
This brings to a close the 20 (most) romantic of early
Hawaiian legends.
"HOW THE WORLD BEGAN"

In Micronesia, explanations of the origin of the world are described by six known myths that all have the same basic plot. First, a rock is given as the center of the universe; it is often associated with an endless expanse of water.

This rock produces the first gods who later construct the world. For example, in the Central Carolines' myth, the god Solal plants the first tree on the huge rock and proceeds to climb it. Halfway up, Solal pauses at a surface.

It is on this level that he creates the earth; he continues up to the top of the tree to put the sky in place. The sky becomes the kingdom of Solal's brother, Aluelop, while Solal becomes master of the lower world.

This lower level is an underwater domain with the original rock at its center. The earth becomes a land between the heavenly world and the lower regions.
of clashes or cooperation between the gods above and below the earth.

Whether they are helping each other or fighting outside forces, the gods have significant roles; the dualism this myth typifies, of upper and lower realms, clearly defines man's place in the scheme of things.

People receive, from the gods, rules of conduct and a system of values that they must respect. These values provide an order and a harmony in life that is present in all the Micronesian cultures.

Another interesting thing is the way all six myths expand vertically. Each time we see the development of the universe as it starts in the lower world and rises up later. Thus the beginnings and outer reaches are identical.

It doesn't matter whether the human race was the offspring of water and plants, as a Ponapean myth describes; or whether they were created as offspring of gods and fishes, as a Palauan myth describes.

In every case, the origin of mankind is very similar and is traced to the upward movement of gods. Although Micronesia consists of thousands of islands scattered across thousands of miles, these early stories are amazingly alike.

Although the backgrounds and histories of the
roughly 100,000 Micronesians vary, of the major myths suggest an important kinship these islanders. This common bond be seen in social and aspects also, as well as in the ancient tales of how the world began.
APPENDIX B: BIBLIOGRAPHY OF ADAPTED SOURCES

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