The purpose of this practicum was to determine if the teaching of Latin root words would result in an increase in English vocabulary for college students. The subjects in this study were 86 junior college business education freshmen. The subjects were divided into three groups, each of which was assigned a different method of study: group A was instructed to study the meanings of the 40 pretest words, but no mention was made of root words within these words; group B was instructed to study the meanings of the pretest words and to locate the related root words in a dictionary or other sources; and group C was instructed to study the meanings of the 40 pretest words and to study the instructor-prepared audiovisual slides and tape which presented the related root words. Based on the results, it was concluded that the teaching of root words supported the identical elements theory of transfer and, for the student groups used in this study, was the most effective method of teaching vocabulary.
Development of an Audiovisual Program Based Upon the Acquisition of Perceptual Knowledge to Increase College Students' Vocabulary

Learning Theory and Applications

by

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ABSTRACT

Development of an Audiovisual Program Based Upon the Acquisition of Perceptual Knowledge to Increase College Students' Vocabulary

by

Pauline Godwin Einbecker

The purpose of this Learning Theory and Applications Practicum was to determine if the teaching of Latin root words would result in an increase in English vocabulary for college students. Instructor-prepared audiovisual materials were used in this investigation.

The subjects used in this study totaled 86 and consisted of Pensacola Junior College business education freshmen. The group population for this investigation included every student who is currently enrolled in one of the three separate sections of a vocabulary course that is taught in the Business Education Department. The 86 students were divided into three groups as they are currently enrolled, and the total study group in terms of number representation indicates a relatively balanced distribution. The student composites for the three groups in the study are as follows:

1. Group A - 31 students
2. Group B - 32 students
3. Group C - 23 students
This method of selection eliminated the necessity to re-group the students, made this investigation possible within the students' own classroom environment, and yielded a population with the following descriptive characteristics:

1. Each of the three groups was heterogeneous with respect to ability, sex, and age.
2. Each of the three groups was comparable to each other with respect to ability, sex, and age.

The following criteria were presumed relevant for this investigation and were chosen for observation: 1) Groups A, B, and C average and median pre-test scores based upon performance on a forty word multiple choice vocabulary examination, 2) Groups A, B, and C average and median post-test scores based upon performance on the same pre-test forty word multiple choice examination after the students were allotted one week to study the forty pre-test words, and 3) Groups A, B, and C average and median post-test scores based upon performance on a one hundred word multiple choice vocabulary examination that the students had not studied but which contained roots of the original forty words that they had studied.

Each of the three groups was assigned a different method of study which was implemented in the following manner:

1. Group A was instructed to study the meanings of the forty pre-test words, but no mention was made of root words within these forty words.
2. Group B was instructed to study the meanings of the forty pre-test words, and, further, to
locate the related root words in a dictionary or other source.

3. Group C was instructed to study the meanings of the forty pre-test words and to study the instructor-prepared audiovisual slides and tape which presented the related root words.

Computer graded test performance for each of the three Groups A, B, and C was as follows:

1. Groups A, B, and C achieved comparable low scores on the forty word multiple choice vocabulary pre-test.

2. Groups A, B, and C achieved comparable high scores on the same forty words administered as a post-test.

3. Group A scored lower than Groups B and C on the one hundred word multiple choice vocabulary examination presumably because the students had studied each of the original forty words as an isolated item within its own entity.

4. Group B scored slightly higher than Group A on the one hundred word multiple choice vocabulary examination presumably because the students had been exposed, through their own efforts, to an identical elements of theory of transfer when they were instructed to locate root words.

5. Group C scored considerably higher than Groups A and B on the one hundred word multiple choice vocabulary examination presumably because the
students had been systematically taught root words in an identical elements theory of transfer. Group C was able to decipher identical elements or roots from known to unknown words.

On the basis of the criteria used and the resultant findings, it was concluded that the teaching of root words supports the identical elements theory of transfer, and was, thus, for the student groups used in this study, the most effective method of teaching vocabulary.
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CHAPTER I
INTRODUCTION

The freshman year of college can be a time when the individual begins a life of fulfillment, but it can also be a time when the individual begins a life of disillusionment. Success in college may depend largely upon the individual's ability to understand vocabulary in his language; failure in college may result largely from the individual's inability to understand vocabulary in his language.

Vocabulary proficiency should be a progressive acquisition of perceptual knowledge. The consequences of vocabulary deficiencies for a junior college student are extremely serious. A gross deficiency in vocabulary on the junior college level prompts one to generalize about the chronic effect upon a student's academic performance. For some students with a history of vocabulary deficiency, this weakness becomes more markedly noticeable on the junior college level. On this level, where larger portions of information are attained through the individual's reading, these vocabulary deficiencies pose a greater, more painful problem than the student may have previously faced.

Many colleges provide vocabulary instruction as a part of their interim studies. Numerous studies indicate that a college student can significantly improve his vocabulary.
Nevertheless, the writer questions whether a student who is deficient in vocabulary can, at this period of academic pursuit, make progress sufficient to sustain collegiate requirements unless the most expedient method of transfer of learning is employed.

The writer has developed audiovisual materials to teach vocabulary which will hopefully meet two expectations: 1) The students will experience meaningful transfer of learning toward short-term goals. 2) The students will need minimal instructor assistance. Both of these expectations are addressed by Skinner\(^1\) for whom "Education is the establishing of behavior which will be of advantage to the individual . . . at some future time." Charles Judd\(^2\) reinforces the transfer of learning theory as he recognizes two possible kinds or levels of learning: "1) Rote memorization with little, if any meaning, and 2) generalized knowledge with many intellectual associations." Judd emphasized his generalization theory when discussing the teaching of basic skills, among which vocabulary building is eminent.

This study will employ the generalization and transfer of learning theories to observe the practicality of teaching root words as an effective method to increase college students' vocabulary.

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CHAPTER II
BACKGROUND OF THE STUDY

Historical evidence has proved that vocabulary achievement is crucial to scholastic performance. Joseph Tremonti\(^1\) comments that reading skills are the very heart of the junior college program and that word identification is prerequisite to reading proficiency. Word identification in the English language encompasses some 800,000 items. Kurt Lewin\(^2\) aptly describes gain in vocabulary control as a change in the cognitive structure through the development of perceptual knowledge. This perceptual knowledge or transfer of learning should be particularly meaningful in vocabulary building. Thorndike\(^3\) states, "Teaching specifically for transfer is the

\(^1\)Joseph B. Tremonti, "Improving the Junior College Reading Programs," *The Psychology of Reading Behavior*, Eighteenth Yearbook of the National Reading Conference, ed. by George B. Schick and Merrill A. Kay (Milwaukee Conference, 1969), pp. 246-252.


only teaching that is worth its salt." Morris Bigge draws from Thorndike and elaborates upon teaching for specific transfer as it relates to vocabulary: "The 'port' of Latin 'portare' (to carry) supposedly does transfer to the 'port' of English 'transport'. Consequently, in accordance with identical elements . . . the more economical method of learning English words is to emphasize the roots and segments of Latin which are identical in English words."

Bigge further states that transfer of learning occurs when a person's learning in one situation influences his learning and performance in other situations. If there were no transfer at all in vocabulary, students would need to be taught specifically every word in the English language. Unfortunately, if vocabulary is taught in the schools at all, it is often taught through the use of word lists in which each word ultimately becomes a specific item within its own entity.

For example: The student may learn the meaning of the word 'unanimous' and yet not know the meaning of the word 'equanimity' unless he knows that 'animus' means soul, mind, or spirit.

The student may learn the meaning of the word 'magnitude' and yet not know the meaning of the word 'magnanimous' unless he knows that 'magnus' means great and that 'animus' means soul, mind, or spirit.

The student may learn the meaning of the words 'atom' and 'epidermis' and


5 Ibid.
yet not know the meaning of the word 'epitome' unless he knows that 'epi' means upper and 'temenin (tom)' means to cut.

As a junior college teacher of reading and English, the writer has been concerned that large numbers of college freshmen not only exhibit marked vocabulary deficiencies but are understandably loath to be placed in interim studies. Lois Muehl concludes, "The blunt truth is that many of the academically ill at ease, college attending students need remedial help . . . Yet, if we say they do, they either avoid our labs thus designated, or else they enter burdened with a sense of self-negating shame."

CHAPTER III
THE NATURE OF THE STUDY

The Purpose

The purpose of this study was to compare a traditional method of teaching vocabulary word lists with a newer method of teaching root words.

The Significance

Observations regarding the teaching and learning of vocabulary as rote memorization versus transfer of learning could encourage educators on the pre-college level to renew their already conscientious efforts to improve the vocabulary skills of their students. This Learning Theory and Applications Practicum could also encourage the development and use of instructor-prepared audiovisual materials to meet specific group and individual learning needs on all educational levels.

Definitions, Assumptions, and Delimitations

Definition of Terms

The Study Groups. The group population for this investigation consisted of three sections of Pensacola Junior College business education freshmen who are currently enrolled in a vocabulary course. The students in each of the three sections took a multiple choice vocabulary pre-test of forty words.
After the pre-test, the students were instructed in the following manner:

**The Word List Method of Teaching Vocabulary.** The first section of freshmen were provided with a mimeographed list of the same forty pre-test words and asked to learn the meanings.

**The Root Word Method of Teaching Vocabulary.** The second section of freshmen were provided with the same mimeographed list of forty words and asked to learn the meanings and to investigate the root words. The third section of freshmen were provided with the same mimeographed list of forty words and asked to learn the meanings and to use instructor-prepared audiovisual materials to study the root words. (See audiovisual slides and tape)

**Assumptions and Delimitations**

The pre- and post-test scores will be assumed to be a reliable and valid measure of each student's level of knowledge of the particular words included in the test.

The students used in this study will be assumed to represent the population of Pensacola Junior College students. There is no known reason for believing that these students are not typical of a much larger population of college freshmen. Strictly considered, however, the conclusions can only be generalized to the particular population studied.

**Organization of the Study**

The remainder of this study will consist of chapters covering: 1) design and procedure of the study, 2) the analysis and findings, and 3) some conclusions and recommendations regarding the results of this study.
CHAPTER IV
DESIGN AND PROCEDURE

The Problem

The problem: To what degree will knowledge of root words in familiar words be transferred to unfamiliar words.

The familiar words consisted of a list of forty words presented in the following sequence: 1) first, administered in a multiple choice pre-test, 2) second, distributed for study, and 3) third, administered in a multiple choice post-test. (See Appendix A)

The unfamiliar words, administered in a multiple choice test, consisted of one hundred words that the students had not studied but which contained the same root words as the original forty words that they had studied. (See Appendix B)

The performance criterion to measure the degree of transfer of root word knowledge from familiar to unfamiliar words will be the group test scores on the one hundred word multiple choice test.

The Study Groups

The group population for this investigation consisted of 86 Pensacola Junior College business education freshmen who are currently enrolled in three separate sections of a vocabulary course, and are identified as Group A, Group B,
and Group C. Each of the three groups consists of students who range from high to low ability level. Groups A, B, and C are, therefore, similar to each other with respect to the students' ability to handle the materials used in this experiment. This similarity is reflected in the frequency distribution of pre-test scores for each group. (See Appendix C)

Because of this similarity in the range of pre-test scores, this investigation of learning theory and application was conducted by section as the students are currently enrolled.

This method of group selection, thus, yielded a population with the following descriptive characteristics:

1. Each of the three groups was heterogeneous with respect to ability, sex, and age.
2. Each of the three groups was comparable to each other with respect to ability, sex, and age.

This method of selection eliminated the necessity to re-group the students and made this investigation possible within the students' own classroom environment. The total study group in terms of number representation indicates a relatively balanced distribution. The student composites for the three groups in the study are as follows:

1. Group A - 31 students
2. Group B - 32 students
3. Group C - 23 students

Basic Data

After the three groups were selected, the data collected for each group were classified in the following manner:
1. Groups A, B, and C post-test scores based upon performance on the same pre-test forty word multiple choice vocabulary examination after the students were allotted one week to study the forty pre-test words.

2. Groups A, B, and C post-test scores based upon performance on one hundred words that the students had not studied but which contained roots of the original forty words that they had studied. This one hundred word multiple choice vocabulary examination was administered at the same time as the post-test of the original forty word examination, one week after each group had been assigned a different method of study.

Each of the three methods of study eliminated the teacher variable and was implemented in the following manner:

1. Group A was instructed to study a mimeographed list of the same forty pre-test words, but no mention was made of root words within these forty words.

2. Group B was instructed to study a mimeographed list of the same forty pre-test words, and, further, to locate the related root words in a dictionary or other source.

3. Group C was instructed to study audiovisual instructor-prepared slides and tape which present the same forty pre-test words and their related root words.
Treatment of Data

The results of the multiple choice pre-test and post-test examination of the original forty words and the multiple choice one hundred word examination for each of the three groups was computer graded to yield an average score and a median score, based upon percent scores and raw scores for each group.

Expectations

Groups A, B, and C will each achieve comparable low scores on the forty word pre-test, each of the three groups will achieve comparable high scores on the same forty words administered as a post-test (See Appendix D). On the one hundred word multiple choice vocabulary examination to test ability to unlock the meaning of words that employ the related root words of the original forty words, the expectations were as follows:

1. Group A will score as comparably low on the one hundred word multiple choice examination as the score on the original forty word pre-test because the students studied each of the forty words as an isolated item within its own entity.

2. Group B will score higher than Group A on the one hundred word multiple choice vocabulary examination because the students were exposed through their own efforts to root words in an identical elements theory of transfer.
3. Group C will score higher than both Groups A and B on the one hundred word multiple choice vocabulary examination because the students were systematically taught root words in an identical elements theory of transfer. Group C will be able to decipher identical elements from known to unknown words.

This practicum will perhaps support Thorndike's Theory¹ "The identical elements theory of transfer means that learning is facilitated in a second situation to the extent that it contains identical factors or elements which occurred in an earlier learning situation." This practicum will perhaps also offer oversimplification of Bugelski's² "The Problem of Understanding," in which he states, "The perennial concern of teachers has been with getting students to 'understand' so that general principles, learned in the past, can be applied to novel situations."


CHAPTER V
ANALYSIS AND FINDINGS

The basic element in the design of this investigation was to make observations regarding the teaching and learning of vocabulary as rote memorization of specific word items versus the teaching and learning of vocabulary with emphasis upon identical elements or root words.

These observations were determined from computer analysis of pre- and post-test scores that were administered to the population studied.

The Findings

The observations of the data are presented in Tables 1, 2, and 3:

Table 1 reports the data based upon percent scores of the pre- and post-test forty word multiple choice examination and of the post-test one hundred word multiple choice examination.
TABLE I
TEST RESULTS BASED ON PERCENT SCORES

<table>
<thead>
<tr>
<th></th>
<th>Group A</th>
<th>Group B</th>
<th>Group C</th>
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<tbody>
<tr>
<td>Pre-Test Scores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(40 word examination)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>30.0</td>
<td>31.3</td>
<td>32.6</td>
</tr>
<tr>
<td>Median</td>
<td>28.0</td>
<td>30.0</td>
<td>30.0</td>
</tr>
<tr>
<td>Post-Test Scores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(40 word examination)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>92.8</td>
<td>88.8</td>
<td>93.3</td>
</tr>
<tr>
<td>Median</td>
<td>98.0</td>
<td>100.0</td>
<td>95.0</td>
</tr>
<tr>
<td>Post-Test Scores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(100 word examination)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>37.3</td>
<td>46.0</td>
<td>82.1</td>
</tr>
<tr>
<td>Median</td>
<td>30.0</td>
<td>40.0</td>
<td>88.0</td>
</tr>
</tbody>
</table>

Performance for each of the three Groups A, B, and C was as follows:

1. Groups A, B, and C achieved comparable low scores on the forty word multiple choice vocabulary pre-test. The average percent score for Group A was 30.0, Group B was 31.3, and Group C was 32.6. Frequency Distribution is reported in Appendix C.

2. Groups A, B, and C achieved comparable high scores on the same forty words administered as a post-test. The percent score for Group A was 92.8, Group B was 88.8, and Group C was 93.3. Frequency Distribution is reported in Appendix D.
3. Group A scored as comparably low on the one hundred word multiple choice vocabulary examination as the score on the original forty word pre-test. The forty word pre-test average percent score was 30.0; the one hundred word post-test average percent score was 37.3.

4. Group B scored higher than Group A on the one hundred word multiple choice vocabulary examination. Group A average percent score was 37.3; Group B average percent score was 46.0.

5. Group C scored higher than both Groups A and B on the one hundred word multiple choice vocabulary examination. Group A average percent score was 37.3, Group B average percent score was 46.0, and Group C average percent score was 82.1. Frequency Distribution is reported in Appendix E.

Table 2 reports the same data based upon raw scores.
### TABLE 2

**TEST RESULTS BASED ON RAW SCORES**

<table>
<thead>
<tr>
<th></th>
<th>Group A</th>
<th>Group B</th>
<th>Group C</th>
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<tbody>
<tr>
<td><strong>Pre-Test Scores</strong></td>
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<td></td>
</tr>
<tr>
<td>(40 word examination)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>11.9</td>
<td>12.4</td>
<td>12.9</td>
</tr>
<tr>
<td>Median</td>
<td>11.0</td>
<td>12.0</td>
<td>12.0</td>
</tr>
<tr>
<td><strong>Post-Test Scores</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(40 word examination)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>37.0</td>
<td>35.5</td>
<td>37.3</td>
</tr>
<tr>
<td>Median</td>
<td>39.0</td>
<td>40.0</td>
<td>38.0</td>
</tr>
<tr>
<td><strong>Post-Test Scores</strong></td>
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<td></td>
</tr>
<tr>
<td>(100 word examination)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>37.3</td>
<td>46.0</td>
<td>82.1</td>
</tr>
<tr>
<td>Median</td>
<td>30.0</td>
<td>40.0</td>
<td>88.1</td>
</tr>
</tbody>
</table>

Table 3 reports the data of the percent of students in each Group A, B, and C who scored above a passing grade of 70 on each of the three examinations administered.

### TABLE 3

**PERCENT OF STUDENTS SCORING 70 OR ABOVE IN GROUPS A, B, AND C**

<table>
<thead>
<tr>
<th></th>
<th>Group A</th>
<th>Group B</th>
<th>Group C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Test Score</strong></td>
<td>6.5</td>
<td>6.3</td>
<td>4.3</td>
</tr>
<tr>
<td>(40 word examination)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post-Test Score</strong></td>
<td>96.7</td>
<td>84.4</td>
<td>91.3</td>
</tr>
<tr>
<td>(40 word examination)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post-Test Score</strong></td>
<td>12.9</td>
<td>21.9</td>
<td>65.2</td>
</tr>
<tr>
<td>(100 word examination)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. On the forty word multiple choice vocabulary pre-test of unfamiliar words:

- 6.5 percent of the students in Group A scored above 70
- 6.3 percent of the students in Group B scored above 70
- 4.3 percent of the students in Group C scored above 70

This data supports expectations of comparable ability of the groups on unfamiliar words.

2. On the original forty word multiple choice vocabulary post-test of familiar words:

- 96.7 percent of the students in Group A scored above 70
- 84.4 percent of the students in Group B scored above 70
- 91.3 percent of the students in Group C scored above 70

This data supports expectations of comparable ability of the groups on familiar words.

3. On the one hundred word multiple choice vocabulary test administered to determine the difference in results yielded from: 1) studying vocabulary as words in isolation (Group A), 2) studying vocabulary with exposure to root words (Group B), and 3) studying vocabulary with systematic presentation of root words (Group C):
12.9 percent of the students in Group A scored above 70
21.9 percent of the students in Group B scored above 70
65.2 percent of the students in Group C scored above 70

This data supports expectations that identical elements theory of transfer, identified in this study as a structured presentation of root words, facilitates vocabulary proficiency (Group C performance).
CHAPTER VI
SUMMARY AND CONCLUSIONS

The purpose of this investigation was to determine if the teaching of root words would result in an increase in vocabulary. The subjects used in this investigation consisted of three student groups of comparable ability composed of Pensacola Junior College freshmen currently enrolled in three sections of a course in vocabulary. Group A was not taught root words, Group B was instructed to investigate root words on their own, and Group C was formally taught root words. Pre- and post-computer graded vocabulary tests reporting the average and median scores of each group's performance were used as the criteria to determine if the teaching of root words would facilitate an increase in vocabulary.

If the students in Group C who were formally taught root words could transfer these root word meanings to unfamiliar words and, thus, score higher on the post-test than the students in Groups A and B who were not taught root words, then the value of teaching root words might be supported. These findings might be of more than casual interest to students, instructors, counselors, and administrators on all levels of education.

Specifically the problem may be formulated as a search for the best of three methods employed to teach vocabulary.
Observations of the data revealed that exposure to root words is meaningful to increasing vocabulary. More importantly the data revealed that formal teaching of roots was the most effective method of teaching vocabulary.

Groups A, B, and C scored comparably low on the first forty word vocabulary pre-test which indicated their lack of knowledge of these particular words. Groups A, B, and C scored comparably high on the same forty words administered in a post-test which indicated their gain in knowledge of these particular words.

Students in Group A who had not been taught root words scored lower than Groups B and C on a one hundred word vocabulary test that employed the root words in the original forty words. Students in Group B who had been exposed to root words through their own efforts scored higher than Group A on the one hundred word vocabulary test. Students in Group C who had been formally taught root words scored considerably higher than both Groups A and B on the one hundred word vocabulary test.

The findings of this investigation have proved that the teaching of root words supports the identical elements theory of transfer, and was, thus, for the student groups used in this study, the most effective method of teaching vocabulary.

To fulfill the purpose of this Learning Theory and Applications Practicum, the investigation and the findings have been reported in terms of group gains. This pilot study, which substantiates considerable gains in vocabulary for the group of students who were structurally taught root words,
might logically lend itself to several follow-up studies which would report results in terms of individuals.

In the broadest possible terms, this investigation has suggested the need for further research which might lead to curriculum development that would implement the teaching of root words to increase college students' vocabulary. This investigation has also suggested the need to develop comprehensive audiovisual materials which would structurally present root words. This pilot investigation which utilized root words and audiovisual presentation might be expanded and developed into a programmed unit of vocabulary study. Such a programmed vocabulary curriculum would require effort in the following areas:

1. Instructors, particularly those involved with the teaching of English and reading, would need orientation in methods and materials for teaching root words.

2. The Audiovisual Department would need to offer in-service workshop experience to instructors who would be developing slides and tapes.

3. A Special Project Development request would need to be approved to provide funding and time for curriculum development.
This study supports Morris Bigge who, in accordance with identical elements, states that the more economical method of learning English words is to emphasize the Latin roots and segments which are identical in English words. Perhaps this statement and the supportive findings of this Practicum offer sufficient impetus for the suggested curriculum development for the teaching of vocabulary to Pensacola Junior College students.

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APPENDIX A

FORTY WORD VOCABULARY MULTIPLE CHOICE EXAMINATION

Administered as Pre-Test November 7, 1973
Administered as Post-Test November 15, 1973
Choose the letter that you consider the most nearly correct meaning for each of the forty words in this exam. Then mark the appropriate space on the answer sheet.

1. PEJURY
   A. poverty
   B. quietness
   C. gaiety

2. VICARIOUS
   A. new
   B. progressive
   C. secondhand

3. EPHEMERAL
   A. uppermost
   B. impermanent
   C. eternal

4. EUPHEMISM
   A. sympathy
   B. circumlocution
   C. delight

5. BADINAGE
   A. ugliness
   B. sincerity
   C. teasing

6. BOVINE
   A. relentless
   B. fat
   C. placid

7. NOSTALGIA
   A. perfumed
   B. superiority
   C. homesickness

8. CACOPHONY
   A. noise
   B. pain
   C. jokingly

9. CARNIVOROUS
   A. vegetable
   B. dieting
   C. meat-eating

10. CLAUSTROPHOBIA
    A. well-lighted
    B. secretive
    C. darkened
APPENDIX A

FORTY WORD VOCABULARY MULTIPLE
CHOICE EXAMINATION (cont.)

11. ENERVATION
   A. charged
   B. exhaustion
   C. lacking

12. CASTICATION
   A. censure
   B. superficiality
   C. plotting

13. SELF-ABNEGATION
   A. ego inflation
   B. ego denial
   C. ego advancement

14. RECAPITULATION
   A. summary
   B. anger
   C. delight

15. VEGETATING
   A. germinating
   B. stagnating
   C. progressing

16. SIMULATION
   A. differentiation
   B. gathering
   C. pretense

17. INTIMATION
   A. insult
   B. suggestion
   C. closely related

18. ALLEVIATION
   A. lessening
   B. relieving
   C. denying

19. COMMISERATION
   A. profit
   B. sympathy
   C. misery

20. VACILLATION
   A. wavering
   B. caution
   C. commemorating

21. OBSEQUIOUS
   A. happy
   B. secret
   C. fawning

22. QUERULOUS
   A. complaining
   B. happenings
   C. humbling
23. SUPERcilious  
   A. strong  
   B. intelligent  
   C. snobbish

24. OBSTRePHEROUS  
   A. unmanageable  
   B. docile  
   C. rude

25. IMPECuRIOUS  
   A. wealthy  
   B. penniless  
   C. rotten

26. CHIVALROUS  
   A. ill  
   B. courteous  
   C. cold

27. INNOCUOUS  
   A. dangerous  
   B. frightened  
   C. harmless

28. BIBULOUS  
   A. loving  
   B. dizzy  
   C. absorbent

29. CADAVEROUS  
   A. healthy  
   B. gaunt  
   C. hungry

30. DOLOROUS  
   A. smart  
   B. dumb  
   C. sorrowful

31. ANOMALOUS  
   A. irregular  
   B. punctual  
   C. humble

32. OMINOUS  
   A. drunk  
   B. threatening  
   C. excited

33. HOMOGENEOUS  
   A. opposite  
   B. similar  
   C. finished

34. POSTHUMOUS  
   A. agriculture  
   B. before birth  
   C. after death
APPENDIX A

FORTY WORD VOCABULARY MULTIPLE CHOICE EXAMINATION (cont.)

35. SCURRILOUS
   A. virtue
   B. angry
   C. indecent

36. TENUOUS
   A. strong
   B. insubstantial
   C. metallic

37. GRATUITOUS
   A. unprovoked
   B. ungrateful
   C. miserable

38. DELETERIOUS
   A. harmful
   B. helpful
   C. indifferent

39. IGNOMINIOUS
   A. helpful
   B. enormous
   C. disgraceful

40. INSIDIOUS
   A. acceptable
   B. deceitful
   C. truthful
APPENDIX B

ONE HUNDRED WORD VOCABULARY MULTIPLE CHOICE EXAMINATION

Administered as Post-Test November 15, 1973
# Appendix B

## One Hundred Word Vocabulary Multiple Choice Examination

Choose the letter that you consider the most nearly correct meaning for each of the one hundred words in this exam. Then mark the appropriate space on the answer sheet.

<table>
<thead>
<tr>
<th>1. Viable</th>
<th>A. livable</th>
<th>B. bendable</th>
<th>C. capable</th>
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<td>2. Vivace</td>
<td>A. lethargic</td>
<td>B. humorous</td>
<td>C. lively</td>
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<td>3. Eudaemonics</td>
<td>A. science of demons</td>
<td>B. science of phobias</td>
<td>C. science of happiness</td>
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<td>A. nudity</td>
<td>B. shorthand</td>
<td>C. lewdness</td>
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<td>5. Simile</td>
<td>A. comparative figure of speech</td>
<td>B. different tempo</td>
<td>C. sunny day</td>
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<td>6. Levity</td>
<td>A. firm</td>
<td>B. miserable</td>
<td>C. instability</td>
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<td>7. Intimacy</td>
<td>A. outside appearance</td>
<td>B. closely personal</td>
<td>C. fearful</td>
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<td>8. Carnality</td>
<td>A. eventuality</td>
<td>B. modality</td>
<td>C. sensuality</td>
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<td>9. Clandestinity</td>
<td>A. destiny</td>
<td>B. privacy</td>
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### APPENDIX B

**ONE HUNDRED WORD VOCABULARY MULTIPLE CHOICE EXAMINATION (cont.)**

10. **VORACIOUS**
   - A. greedy eater
   - B. heavy sleeper
   - C. fast walker

11. **SIMULCAST**
   - A. cast for a broken neck
   - B. program transmitted on radio and TV at the same time
   - C. dark cloud

12. **CACOEPY**
   - A. epitaph
   - B. tent covering
   - C. bad pronunciation

13. **MISERICORDIA**
   - A. sincerity
   - B. hate
   - C. sympathy

14. **PECUNIARY**
   - A. strange
   - B. relating to money
   - C. relating to illness

15. **BINOMINAL**
   - A. consisting of two names
   - B. occurring twice monthly
   - C. a minimum of two

16. **POST PRANDIAL**
   - A. the first race
   - B. after dinner
   - C. one of a kind

17. **TENUITY**
   - A. increments of ten
   - B. beyond hope
   - C. of flimsy quality

18. **NEGLIGIBLE**
   - A. can be disregarded
   - B. sleepwear
   - C. with much concern

19. **IGNOMINY**
   - A. non-existence
   - B. to ignore
   - C. loss of ones good name

20. **POSTULATE**
   - A. to begin corrective measures
   - B. to assume the truth based on prior facts
   - C. to spit in public
21. PECULIUM
A. a police order
B. a hanging ornament
C. a private possession

22. OBSEQUIES
A. obvious statement
B. funeral procession
C. clothing decorations

23. POSTLUDE
A. organ solo played after church
B. sorrowful attitude
C. first ground breaking for a new building

24. VIVIFIER
A. maître d'
B. giver of life
C. art curator

25. EUPHORIA
A. feeling of nausea
B. cloud formations
C. feeling of well being

26. HOMOLOGOUS
A. happening in sequence
B. unnecessary
C. having the same position

27. PATRONYMIC
A. patriotic
B. named after father
C. very helpful

28. PECUNOSITY
A. supplied with money
B. acting peculiar
C. dishonesty

29. CILIA
A. bone
B. teeth
C. eyelashes

30. SEQUITUR
A. one who seeks
B. conclusion that follows
C. a decorator

31. VIVIPARITY
A. giving birth to live young
B. coping with adversity
C. assuaging fear

32. NEURALGIA
A. nerve pain
B. pond stagnation
C. vegetable growth
APPENDIX B

ONE HUNDRED WORD VOCABULARY MULTIPLE CHOICE EXAMINATION (cont.)

33. CACOGENESIS
A. earth formation
B. low vitality
C. volcanic dust

34. VIVAT
A. a wine vat
B. a wish for long life
C. a jester

35. NOSTOMANIA
A. an ugly nose
B. sinus trouble
C. obsessive homesickness

36. EUGENIC
A. transferring genes
B. coming from good stock
C. proper exercise

37. CADUCOUS
A. unenduring
B. happy
C. remarkable

38. DOLCE VITA
A. modern dance
B. creativity
C. casual way of life

39. CACODYL
A. song bird
B. bad smell
C. preservative

40. INGRATIATE
A. to prepare for war
B. to come unglued
C. to make acceptable

41. VIVIFICATION
A. accepting victory
B. validating
C. giving life

42. EUTHROPY
A. rusticating
B. thriving
C. militating

43. CACODOXY
A. paradox
B. wrong opinion
C. funny joke

44. ANTICLINAL
A. in opposite directions
B. wholesome attitude
C. good weather
45. DOLORoso  A. a celebration  
B. uncooked food  
C. sorrowful music

46. ANTENATAL  A. underneath  
B. before birth  
C. frequently

47. CADDISH  A. a kind of fish  
B. tasty  
C. ungentlemanly

48. CARNAGE  A. museum display  
B. wholesale killing  
C. a forestry plot

49. DISSIMILITUDE  A. a difference  
B. a multitude  
C. a sameness

50. LEVITATE  A. falsify  
B. rise or float  
C. anchor in cement

51. SIMILITUDE  A. an indefinite attitude  
B. lack of organization  
C. a person or thing resembling another

52. ENERVATIVE  A. tiring  
B. helping  
C. urging

53. DECADENT  A. up-to-date  
B. undecided  
C. declining

54. ANTSBELLUM  A. a bad mood  
B. before the war  
C. without love

55. IGNoble  A. dishonorable  
B. kingly  
C. grand

56. NONSEQUITUR  A. one who avows religion  
B. comment that changes the subject  
C. costume that is unadorned
57. ATTENUATE
A. to care for
B. to make thin
C. to pursue

58. PUTRESCENT
A. brightly colored
B. lucid
C. beginning to rot

59. BELLICOSO
A. warlike
B. friendly
C. swollen

60. INBIBE
A. to repel
B. to drink
C. to disagree

61. NOCIOUS
A. ignorant
B. healthy
C. poisonous

62. VICAR
A. one who represents another
B. the leftover portion
C. used merchandise

63. PECULATE
A. to brew coffee
B. to embezzle
C. to confuse

64. HOMOPHONY
A. sameness of sound
B. a funny story
C. boredom

65. EUPNEA
A. hibernation
B. easy respiration
C. unknown

66. ANTERIOR
A. earlier
B. inside
C. over

67. VITATIVENESS
A. love of life
B. agnosticism
C. love of drama

68. EULOGIZE
A. to disparage
B. to equivocate
C. to praise
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<th>ONE HUNDRED WORD VOCABULARY MULTIPLE CHOICE EXAMINATION (cont.)</th>
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</table>
| 69. | **EXTENUATE** | A. to avoid  
B. to lessen  
C. to hate  |
| 70. | **EUPEPSIA** | A. soda bicarbonate  
B. lively dance  
C. good digestion  |
| 71. | **DOLDRUMS** | A. multitudes  
B. low spirits  
C. wholesale  |
| 72. | **SIMULANT** | A. a pep pill  
B. an unrelated story  
C. like something else  |
| 73. | **CARNASSIAL** | A. pre-historic animal  
B. teeth adapted to  
C. baby hippopotamus  |
| 74. | **PSEUDONYM** | A. an ugly rumor  
B. a sad story  
C. a fictitious name  |
| 75. | **STREPITOUS** | A. sore throat  
B. noisy  
C. angry  |
| 76. | **SIMIAN** | A. complete opposite  
B. like an ape  
C. quick smile  |
| 77. | **CARNOSE** | A. a nightmare  
B. sourd cream  
C. resembling flesh  |
| 78. | **NOM DE PLUME** | A. feathers on a hat  
B. author's assumed pen name  
C. French pastry  |
| 79. | **QUERIMONY** | A. lie  
B. strange ceremony  
C. complaint  |
| 80. | **PENURIA** | A. dirty  
B. mentally ill  
C. no money  |
**APPENDIX B**

**ONE HUNDRED WORD VOCABULARY MULTIPLE CHOICE EXAMINATION (cont.)**

81. POST MERIDIEM  
A. in the middle  
B. afternoon  
C. underneath

82. GRATIS  
A. without charge  
B. bountiful  
C. noisy

83. DELE  
A. organize  
B. commence  
C. erase

84. ASSIMILATIONISM  
A. running defense  
B. absorbing minority groups into main cultural groups  
C. keeping abreast of the times

85. EURHYTHMIC  
A. leftover  
B. computation  
C. well proportioned

86. CADUCITY  
A. perishable  
B. vividness  
C. unusual

87. SIMULACRUM  
A. mutilation  
B. at opposite poles  
C. an image

88. EUTHANASIA  
A. of Asian ancestry  
B. painless death  
C. melodrama

89. CADENT  
A. falling  
B. joyful  
C. slow

90. ANTEVERT  
A. overlook  
B. forget  
C. turn forward

91. CACOASTRIC  
A. stomach disorder  
B. health foods  
C. rich chocolate

92. ANTIPATHY  
A. disillusion  
B. a winding path  
C. strong dislike
APPENDIX B

ONE HUNDRED WORD VOCABULARY MULTIPLE CHOICE EXAMINATION (cont.)

93. NOCENT  A. causing an odor
             B. causing harm
             C. uninformed

94. CACOGRAPHER  A. a prognosticator
                  B. a dance director
                  C. a bad speller

95. INCARNADINE  A. flesh colored
                  B. unclean
                  C. untrustworthy

96. BELLIGERENT  A. secretive
                  B. helpful
                  C. ready to fight

97. CARNEOUS  A. suspicious
               B. fleshy
               C. doleful

98. ANTEDILUVIAN  A. innovative
                  B. supportive
                  C. ancient

99. EUPATRID  A. eight legged insect
               B. hereditary aristocrat
               C. bad dream

100. CACONYM  A. cactus flower
              B. lilting rhythm
              C. undesirable name
Appendix C

Frequency distribution for groups A, B, and C
Based on percent scores of the forty word pre-test examination
APPENDIX C

FREQUENCY DISTRIBUTION FOR GROUPS A, B, AND C

BASED ON PERCENT SCORES OF THE FORTY WORD
PRE-TEST EXAMINATION

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APPENDIX D

FREQUENCY DISTRIBUTION FOR GROUPS A, B, AND C
BASED ON PERCENT SCORES OF THE FORTY WORD
POST-TEST EXAMINATION
APPENDIX D

FREQUENCY DISTRIBUTION FOR GROUPS A, B, AND C

BASED ON PERCENT SCORES OF THE FORTY WORD

POST-TEST EXAMINATION

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APPENDIX E

FREQUENCY DISTRIBUTION FOR GROUPS A, B, AND C
BASED ON PERCENT SCORES OF THE ONE HUNDRED
WORD POST-TEST EXAMINATION
APPENDIX E

FREQUENCY DISTRIBUTION FOR GROUPS A, B, AND C

BASED ON PERCENT SCORES OF THE ONE HUNDRED
WORD POST-TEST EXAMINATION

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