A Study to Measure the Influence of Vocabulary Mastery on the Overall Achievement of Tenth Grade General Business Students at Princess Anne High School, Virginia Beach, Virginia

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A STUDY TO MEASURE THE INFLUENCE OF VOCABULARY MASTERY
ON THE OVERALL ACHIEVEMENT OF TENTH GRADE
GENERAL BUSINESS STUDENTS
AT
PRINCESS ANNE HIGH SCHOOL, VIRGINIA BEACH, VIRGINIA

A Research Paper
Presented to
the Faculty of the Graduate School
Old Dominion University

In Partial Fulfillment
of the Requirements for the Degree
Master of Science in Secondary Education
Business Emphasis

by
Josephine Lee Turner
April, 1980
This research paper was prepared by Josephine Lee Turner under the direction of Dr. H. Q. Webb in 636, Problems in Education. It was submitted to the Graduate Program Director as partial fulfillment of the requirements for the degree of Master of Science in Education.

APPROVED BY: Dr. H. Q. Webb

DATE

APPROVED BY: [Signature]

DATE

GRADUATE PROGRAM DIRECTOR

DATE
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CHAPTER I

Introduction

When the General Assembly of 1972 passed into law the Standards of Quality and Objectives, it was following the mandate given it by the people of Virginia who voted to revise the State Constitution in 1970 to insure quality public education in this State.¹ In accordance with these State standards of educational improvement, similar efforts were initiated in the Public Secondary School of Virginia Beach—to insure that the System's high schools would provide thorough preparation in those skills which would enable students to enter college or plan for successful employment in the world of work commensurate with the individual's abilities.

The Policies Commission for Business and Economic Education which has been in existence since 1959, endorses the following statement as an indication of the mission of Business Education:

Business and Office Education has three major purposes: General education, general (basic) business and economic education, and

¹Standard of Quality and Objectives for the Virginia Beach City Public School, Virginia: Standards of Quality Office, 1971
realistic business and office occupational preparation for students.

General (basic) business and economic education is designed to provide instruction in business and economic principles and concepts that are essential for all individuals. Occupational preparation is designed to provide students with employment skills for the Office and related occupations.\(^2\)

Robert Poland, President of the National Business Education Association, East Lansing, Michigan, has summed up the purpose of Business Education as education for all. Business education is

More than vocational education; it is the preparation of all individuals to participate in a free enterprise society. It is the development of skills and knowledge in order that an individual may obtain a position in business and also, whether in a business occupation or not, the ability to understand and participate in our society.

Mr. Polan indicated in his editorial, that no other educational area in our secondary school system has had more impact on the future of our current business system than has business education.

A careful examination of commonly adopted, general business textbooks will reveal several means of involving students in the learning process, and in the mastery and understanding


of subject content. Authorities in the study of general business agree that a mastery of the technical vocabulary terms, business principles, and concepts are essential. Improving a student's understanding of vocabulary terms aids the student in gaining a better comprehension of business principles, and an appreciation of business relationships. The ability to use effectively a broad business vocabulary also aids students in becoming more intelligent consumers of business services and goods. Ernest Crabbe has written that in order to acquire a basic mastery of different business and economic concepts, students should be required to obtain not only an understanding of the meaning of a word but also a mastery of its spelling.  

Rosetta F. Wingo also supports the development of vocabulary mastery in the following statement:

The mastery of special vocabularies is essential if the student is to grasp the principles and concepts of each of those subjects. Very often, an individual's success in obtaining, keeping, and advancing in a job is influenced by his or her ability to comprehend business terminology in oral communication. By learning the language of business, the student may establish a more direct relationship between what is learned in the classroom and what will take place on the job. Therefore, teachers of business subjects must insure that students entering business or professional offices understand the technical terms used in those offices.

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Recent research findings report substantial declines in secondary achievement test scores, evidence of grade inflation, and more appalling—high school graduates who cannot read and write at minimum competence levels. As the news media continues to report spiraling costs of secondary education, parents and other taxpayers become alarmed and disappointed with public education. The phrase "back-to-basics" is being heard more frequently as an outcry for teacher accountability and subsequently for that all important educational product—the high school graduate.

Statement of the Problem

The purpose of this study was to measure the influence of vocabulary mastery on the overall achievement of tenth grade general business students at Princess Anne High School in Virginia Beach, Virginia for the school year 1979-80.

Null Hypothesis

The hypothesis is that the two population means are equal or that there is no difference between the two means of an experimental Group X and a controlled Group Y after a treatment unit has been administered in vocabulary development. Student's mean scores on the vocabulary achievement test were calculated at the .01 and .05 levels of statistical significance as derived from a table of Values.

Definition Of Terms

For purposes of this study the term vocabulary will
have the following meaning as defined in the textbook by Joseph DeBrum, *et. al.*, *General Business For Economic Understanding*, Eleventh Edition, 1976: that of increasing word power by expecting students to indentify definitions of commonly used business and economic terms.

**General Business** is generally offered to ninth and tenth grade students. It is primarily designed to help every student to become a more skillful buyer and user of the goods and services of business.

**Basic Business** can be defined as that broad area of knowledge which deals with the American enterprise system. Additionally, basic business is a part of the general education of every individual because its content aids him in developing an understanding of business as a basic institution in the American social process. Basic business content aids the individual in understanding the ways in which business enterprise operates to satisfy needs and wants with limited economic resources.

**Economic Literacy** can be described as a term which denotes the possession of basic equipment in economic understandings and skills needed by every citizen for intelligent and responsible participation in the everyday activities of a modern economy.

**Applied economics** is a term which focuses on the problems of the individual as he attempts to manage and understand his personal affairs.
Summary

As a result of this study, it is hoped that general business teachers will recognize the need to place more emphasis on vocabulary development in order to increase student knowledge and understandings of economic principles.

Furthermore, that a mastery of the technical business terms in general business subject content is essential for a good general understanding, regardless of grade level of student enrollees.
CHAPTER II

Review of the Literature

Selected literature and research studies in the area of Basic Business Education/General Business to improve economic literacy has been presented in the following categories: (1) Historical background information on general business and the overall basic business movement; (2) Some problems related to the general business/basic business area; (3) Some problems related to teacher effectiveness in general business instruction; and (4) A summary of research literature in vocabulary development.

Background

In earlier days many students dropped out of school and secured employment in business in "junior jobs" in offices and stores. Since this was the case, it was argued that schools should offer a type of vocational training in the grades immediately preceding the year in which various state compulsory attendance laws permitted students to withdraw from school.6

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Nichols also found in his survey many years ago that young workers were not employed in positions of such responsibility as secretaries and bookkeepers but as junior clerical workers or junior store workers. Thus he advocated the introduction of the course "Junior Clerical Training" at the ninth grade level in order to give these young people some elementary business and clerical training. This new course, first offered over a half century ago, seemed to fill a decided need. It was called "Junior Business Training," a very appropriate name since it was intended primarily to prepare dropouts for junior business jobs.

At the time of inception, this course incurred resentment from teachers who were prejudiced against any new subject which might make older established business subjects less popular. Distrust was incurred by nonbusiness teachers and administrators who felt that this subject would draw students away from traditional subjects. Many state departments refused to certify teachers for endorsement to teach the course. Later in the history of this subject, the passage of more stringent compulsory school attendance laws made it difficult for children to drop out of high school at the age of fourteen or fifteen.

Other problems related to its history were centered around selecting an appropriate name for the subject. For

7Ibid.
this reason the subject has been called by many names: (1) Introduction to Business; (2) Junior Business Training; (3) Elements of Business; (4) Social Business, (5) Basic Business; and (6) General Business.

The difficulty in identifying a title also caused confusion in the selection of subject matter content to be taught. Various educational movements in the United States have also contributed to the confusion surrounding general business instruction. For example, the economic education movement emphasized macroeconomic principles (content dealing with all the forces at work in an economy or with the interrelationship of large sectors of the economy) to the exclusion of necessary microeconomic principles (content dealing with specific factors such as the behavior of individual consumers). The economic education movement was largely an outgrowth of the academic education movement which emphasized the disciplines in the schools' curriculums. 8

In the 1960's and early 1970's, the pendulum swung away from economic theory and toward applied economics (a blending of economic concerns with consumer decision making). Thus, a consumer education movement was born. This movement closely paralleled the vocational education movement which also repre-

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sented a counter movement to the academic education movement. Today, the pendulum is swinging again. It is moving away from consumer education and toward free-enterprise education. Just as the career education movement represented a more neutral position and broke down the sharp dichotomy between academic education and vocational education, so has the free-enterprise education movement (an analysis of how an individual earns and uses income while functioning as a worker, a consumer, and a citizen) helped to neutralize the polar positions existing between economic education and consumer education.9

Additional problems related to the high school instructional programs in basic business and general business areas are:

(1) Many business education teachers are interested primarily in teaching the skill subjects of shorthand and typing. This interest results from the emphasis given to skill training in undergraduate degree preparations, Virginia's secondary certification patterns, and the stress given by our local high schools for preparing vocational graduates for entry-level employment in basic office occupations.

(2) The basic business subjects require more lesson planning and hard work on the part of the teacher.

(3) The result of one's teaching is not so readily evident in the basic business subjects.

(4) The problem of student interest and low enrollments. This problem is related directly to the lack of teacher interest.

9Ibid.
(5) Poor teaching methods—teachers are addicted to the textbook/workbook combination as to exclude other available resources when teaching the subject matter.

(6) The reading abilities of students presents a problem since many high school students do not like to read; while others cannot read. Numerous studies have highlighted the low-level reading ability of students. The question has been raised, do students refuse to read because they cannot, or cannot read because they do not?

(7) Additional studies show that students may fail because of low native ability; inadequate background of skills; poor health; vision and hearing; low-socioeconomic environmental backgrounds, unconcerned parents; frequent absences; overloading with extra-curricular activities; and the failure complex . . . whereas an historical trend develops within the child to fail, thus causing continual and resignedness to failure.

(8) Overlapping content is frequently a complaint of basic business education courses, often the same topics are represented throughout other consumer education courses.

(9) Evaluation of student learning is a problem for teachers. Other than the traditional pencil and paper test, teachers too often rely on subjective observation and judgments as to the extent of student achievement.

**Summary of Background Literature**

Ray Price concurs with Nanassy as he writes.
General Business has a poor heritage. It evolved through a series of objectives. Originally, its purpose was to prepare potential drop-outs for clerical-type jobs—mesengers, time-keepers, file clerk, cashiers, and the like.¹⁰

At various times general business has been an exploratory-prevocational course, a personal-use business course, and a consumer education course.

Presently general business is offered at the ninth or tenth grade. It attempts to give students an overview of the world of business, of the distribution of goods and services; it assists students in developing abilities necessary to use these goods and services wisely; how our economy functions; how business is organized to serve human needs and wants; the relationship between supply and demand; the effects of competition upon services and prices; it also deals with the roles of management, labor, capital, and government in the successful operation of business enterprise. It helps students to learn and use a business vocabulary; it helps students to become aware of careers and occupations which are provided by business.

Studies of professional literature related to basic business led to conclusions that there is a need to increase the economic literacy of today's youth. These studies also show that the need exists for more research which is

related to improving materials, content matter, teaching methods, and curriculum patterns. Further study is needed to determine the extent to which the concepts taught are understood and retained.

More tests should be used to indicate weaknesses in business and economic knowledge as a guide to program planning. Facts and some factual relationship can now be tested effectively; however, little progress is being made in the testing of understandings, concepts, and attitudes. Educational officials, as well as the general public, need to be informed as to the lack of dissemination of basic business and economic concepts in our public schools and encouraged to participate in curricular planning to alleviate this problem.11

Important Research Studies in Vocabulary Development

An examination of research conducted by James Silverthorn12 indicated no previous studies of vocabulary development in general business education.

In 1943, Ernest Horn and Thelma Peterson researched widely used terms which were derived from words used in business letter communication. Although these lists were available in 1943, many of the words were taken from business letters written prior to 1926. This research problem was designed to determine a general overall vocabulary of


business writing, it was not a study of vocabulary of any specific categories in business communication. Basic to the study was a body of words used in general business writing and the relative frequency with which the most frequent words occur. The purpose of the study was to provide a source of reference to words used most frequently in currently written business communication.13

Procedures required collection of data comprised of words appearing in various kinds of communication from business firms in the United States. A sampling process was used to collect all data. The types of communication included several reports, telegrams, intercompany messages, and numerous types of business letters. The Occupation of Employed Persons in Each Industry for the United States, March 1940 was used to secure lists of the types of businesses. All words collected were punched on cards and were tabulated. The number of words tabulated was extended until tests for adequacy of the sample were considered adequate. Findings of the study revealed that 2,039 pieces of business communication were used which represented 1,012 writers and 15 categories of business in the 41 states surveyed produced 300,000 running words. The number of individual words encountered were 11,564. The 50 words used most frequently accounted for approximately 45% of occurrences of all words;

the first 100, slightly more than 50%; the first 500 accounted for 70%; the first 1,000 accounted for 80%; the first 5,000 accounted for 95%. The word "the" was number one in frequency.

Conclusions indicated that a relatively small number of words constituted a rather large percentage of the total running words occurring in written business communication.

Carl William Johnston\textsuperscript{14} conducted a study in 1974 entitled "An Experimental Study of Two Methods of Vocabulary Development" at Denver South High School which compared the effectiveness of a traditional and a mnemonic method of vocabulary development for average-ability tenth grade students. Some questions investigated were: (1) Can artificial memory aids be profitably learned and adapted for classroom vocabulary development? (2) How effective is the traditional approach of vocabulary development? (3) How would a control group which received only indirect vocabulary instruction through the regular English curriculum compare with those who were taught a specific word list? (4) After students learn a vocabulary list, do they forget the words six weeks after the treatment sessions? (5) How much transfer of training is effected through the study of vocabulary lists?

Three groups of 32 subjects each were included in the experiment. Group 1 was a traditional treatment group which received instruction in the use of synonyms, word analysis, and contextual clues. Group 2 became the mnemonic treatment group which received limited amounts of traditional instruction, but was also taught the use of an artificial memory aid similar to that recommended by popular mnemonists Bruno Furst and Harry Lorayne. Group 3 became the control group which received regular English lessons in writing, literature, and grammar, but were not given either a specific word list or special vocabulary instruction. Treatment groups studied a 450 word vocabulary list during the 45-minute session, two times per week for a period of eight weeks. On the alternate school days of each week treatment students attended their regular English classes.

The 96 students involved in the study were randomly selected from a pool of 673 and were taught by three teachers. By periodically alternating mnemonic and traditional sections, each of the three teachers taught both treatment groups approximately half of the allotted time.

For evaluative instruments, teachers administered four 60-item teacher made tests. Formats for all four tests consisted of 30 word definition items and 30 sentence usage items. Group means were relatively equal on test one, the pretest. Test two was a posttest, given two days after the last treatment session. Tests three and four were surprise
tests, administered approximately six weeks after the last treatment session. Like the first two tests, test three covered a random sampling of the 450-word vocabulary list. Test four, however, did not cover words on the specific vocabulary list, but instead tested students on cognates of these words.

In order to evaluate the results of a Finn multivariate F test, the investigator formed a traditional null hypothesis that there was no significant difference between the mean scores of groups being compared. He adopted the .05 level of significance as the point at which this hypothesis could be rejected. The omnibus F test showed that a significant difference between means existed on tests two and three. On test four (cognates), however, means were not significantly different. A subsequent Newman-Keuls multiple comparison showed that on tests two and three there was no significant difference between treatment groups, but that both treatment groups had scored significantly higher than the control group. From test results, therefore, the investigator concluded that neither the traditional nor the mnemonic groups were superior, and that on word cognates neither treatment was significantly more productive than the control group, which had studied only the regular English curriculum.

Eileen Aiken Cantalano\textsuperscript{15} of Brigham Young University

\textsuperscript{15}Eileen A. Catalano, "The Effect of a Spelling Program Using Words in Given Context on Reading Comprehension and Vocabulary Scores," PhD dissertation, Brigham Young University, 1976.
conducted a research study in 1976 entitled "The Effect of a Spelling Program Using Words in Given Context on Reading Comprehension and Vocabulary Scores" which was designed to determine whether a difference existed in reading comprehension and vocabulary scores of children who used their spelling words in given context and those who did not. Gains were measured by the Gates-MacGinities Reading Tests, Survey D. Students in six schools of the Alpine School District of Utah participated in the seven-week study. In each school one fourth, one fifth, and one sixth grade class learned spelling and meanings of the words, they placed them into context similar to cloze construction. Corresponding classes used a modified version of the program without context.

Gains were analyzed by analysis of convariance according to the variables of treatment, grade, school, and sex. Although some differences existed, they were not substantial to reject the null hypothesis. Based on the findings of this study, it was concluded that because teachers did not follow the experimental method as specified and because of the shortness of the experimental period, the differences in gains between experimental and control groups were not statistically significant.

The final research project cited here was conducted by Ronald J. Hash at the State University of New York at

Buffalo, in 1974. The purpose of this study was to determine the effects of a treatment strategy including structured overviews, three level reading guides, and vocabulary extension exercises upon the social studies achievement, reading comprehension, critical thinking skills, and attitude toward social studies in junior high school classes. The effects of implementing these materials in seventh, eighth, and ninth grade classes was determined in a Solomon four-group research design utilizing fifty-six classrooms. The treatment was administered once a week for sixteen weeks. The measures and their respective reliabilities were: Stanford Achievement Test-Social Studies-Advanced, forms W and X (.91); Stanford Achievement Test-Advanced paragraph Meaning, forms W and X (.92); Cornell Critical Thinking Test, level X (.87) Junior High School Attitude Survey-Social Studies (.79). In addition teacher-constructed unit tests were used for supporting data. Class scores formed the unit of analysis. Tests conducted upon student data included a multivariate analysis of variance for the three standardized measures, a univariate analysis of variance on the non-cognitive measure of student attitudes, and t-tests of uncorrelated means for teacher-constructed tests of social studies content.

Findings indicated non-significant results were obtained for the treatment effect with the four dependent measures administered to the students. General conclusions drawn indicate that the treatment resulted in neither a positive nor negative effect upon students' social studies knowledge, reading comprehension, critical thinking skills of attitudes
toward social studies. Instead, it had the same result as the instructional strategies utilized in the control settings. The researcher also concluded that valid testing techniques must also be taught with a process-oriented instructional strategy.

**Summary**

Although the research literature in vocabulary development indicates little or no significant changes after treatment is administered, there is evidence to support the need to assist students in attaining success in mastering technical terminology and related subject matter content. Ellen L. Thomas and H. Alan Robinson have set forth several general principles which will aid in vocabulary development:

1. Direct and indirect experience: and trips, TV, films, film strips, models can enlarge the vocabularies of students and invest new words with meaning.

2. Wide reading accounts for much of a competent reader's growth in vocabulary. All teachers can encourage students to read widely and to approach their reading with a conscious effort to notice unfamiliar words and to make selected ones their own.

3. Direct attention to vocabulary should supplement vocabulary growth through reading. Major research studies indicate that consistent, systematic instruction results in considerably greater gains than would accrue in ordinary reading without this help; that planned instruction is definitely superior to a casual or incidental approach; and that wide reading alone, especially with less able readers, does not insure an adequate vocabulary.
4. Context clues can be a major self-help technique for students in learning the vocabularies of many of their subjects.

5. A knowledge of frequently recurring prefixes, suffixes, and roots, when used in conjunction with context revelation, can give students another important self-help technique to help them unlock the meanings of words.

6. Today's graduates are facing a new word explosion. Words not yet coined, emerging as a result of new societal, political, and scientific upheavals, will confront students after they leave our classrooms. Habitual procedures that will keep vocabulary growing after high school and college are therefore indispensable. 17

The rationale stated above in support of vocabulary development is further supported by comments made by Morton Winthrop's article which appeared in the October 30, 1960 issue of This Week magazine entitled "Do You Know How Words Can Make You Rich?" 18 The gist of this article parallels big vocabularies with big paychecks. Mr. Winthrop states that vocabularies contribute to on-the-job success because we do our thinking with words--words which in turn influence others.

A vocabulary program should help students become self-motivated, self-guided, and self-directed--knowing ways to

help themselves and assuming responsibility for their own progress. Otherwise they are left dependent, and their vocabulary growth will probably come to a standstill after high school and college.
CHAPTER III

Design of the Study

The following four areas are treated in this Chapter:
(1) a description of the groups involved in the study;
(2) a description of the treatment used; (3) a description of the vocabulary achievement test used in the study; and (4) limitations of the study.

Selection of the Sample

In order to determine whether intense instruction in vocabulary mastery would significantly influence the overall achievement of general business students, two classes of tenth grade senior high school students at Princess Anne High School, an urban school, were tested.

One class, Group X, was the experimental group; the other class, Group Y, was the controlled group. The two groups were matched by their first semester grades and the scores received on the general business vocabulary achievement test. The experimental Group X had a mean test score of 78.95. The controlled Group Y had a mean score of 75.45. The groups were again matched by their most recently reported IQ scores obtained from cumulative folders. These
IQ scores were used because they were deemed reliable and acceptable because comparative norms have been derived; their validity and reliability established; and they represent a large part of the population. Students' scores on the SRA (Science Research Associates, Incorporated) test were reported for year October, 1977.

The mean score for the experimental Group X was 80.45. The mean score for the controlled Group Y was 75.55.

The experimental unit lasted approximately six weeks in length. During this period the experimental Group X received specific word lists; identification of prefixes and suffixes, vocabulary word meanings, flash cards were used to assist students in recall of definitions; spelling drills were used frequently, and students were required to keep detailed notebooks of each new vocabulary word as presented in the content. The controlled Group Y received only incidental training of vocabulary words as these words were presented in curriculum materials.

The vocabulary achievement test administered to both groups was taken from General Business for Economic Understanding, by Joseph DeBrum, et. al., eleventh edition, South-Western Publishing Company; the current dateline of this textbook, 1976. Form G143, Parts 1 thru 18 were used. These achievement tests measure the extent to
which students have gained an understanding of the significant aspects of subject matter content of each unit as presented in the curriculum materials. Examples of the vocabulary achievement tests are included in the Appendix of this research paper.

Following the experimental treatment, the raw scores for each group were plotted. A t-test was used to derive statistical significance of the treatment at the .05 and .01 levels.

Limitations of the Study

The following limitations are inherent in this study:

(1) Only the researcher's general business classes were used in this study.

(2) Standardized vocabulary tests have limitations:
   a. They measure the student's mastery of a word in terms of a single meaning, and
   b. They test his word power in an artificial situation since the words are out of context.

(3) No provisions will be made for variations in student ability levels in the general business classes.

(4) Limited numbers in the sample.

(5) Limited amount of time in which to conduct the experiment.
Testable Hypothesis

The main concern of this study was that there was no significant difference in the two population means. The level of significance chosen was .05 and .01 within 19 degrees of freedom for this sample population.
CHAPTER IV

Analysis of Data

The purpose of the study was to determine whether intense instruction in vocabulary mastery would significantly influence the overall achievement of general business students.

Null Hypothesis

The hypothesis is that the two population means are equal or that there is no difference between the two means.

Assumptions

This is a random sample drawn from a normal population.

Level of Significance

The .05 and .01 levels of significance were chosen as determined by Table A.3, a Table of t Values (illustrated in the Appendix of this paper) within 19 degrees of freedom.

Critical Regions

The critical regions for .05 level is $t > 1.729$; the critical region for .01 level is $t > 2.539$. 

27
Computation of $t$

The $t$-test was used to determine whether the mean of the experimental Group X was equal to or the same as the mean of controlled Group Y when students were matched according to first semester grades received and their general business vocabulary achievement test score:

$$M_X = 78.95$$
$$M_Y = 75.45$$
$$N = 20$$
$$\sum D^2 = 10,322$$
$$\sum (D)^2 = 4900$$
$$N^2 = 400$$
$$N - 1 = 19$$

Level of significance

<table>
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<th>.01</th>
<th>.05</th>
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<td>1.729</td>
<td>2.539</td>
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$$t = \frac{M_X - M_Y}{\sqrt{\frac{N(\sum D^2) - (\sum D)^2}{N^2(N - 1)}}}$$

$$t = .67961$$
The t-test was used to determine whether the mean of the experimental Group X was equal to or the same as the mean of controlled Group Y when students were matched according to IQ scores obtained for each student and their general business vocabulary achievement test score:

\[
M_X = 80.45 \\
M_Y = 75.55 \\
N = 20 \\
\sum D^2 = 15,2400 \\
(\sum D)^2 = 9604 \\
N^2 = 400 \\
N - 1 = 19
\]

\[
.01 \quad t = \text{Level of significance} \quad 1.729 \\
.05 \quad t = \quad 2.539
\]

\[
t \quad = \quad \frac{M_X - M_Y}{\sqrt{\frac{\sum D^2}{N(N - 1)} - \frac{(\sum D)^2}{N^2}}} \\
\] \[
t \quad = \quad 1.1316
\]
Conclusions

When students were matched according to their first semester grade and general business vocabulary achievement test score, the determined t-value (.67961) was outside of the critical region of significance (.01 - 2.539 and .05 - 1.729) the null hypothesis was accepted.

When students were matched according to their IQ score and general business vocabulary achievement test score, the determined t-value (1.1316) was outside of the critical region of significance (.01 - 2.539 and .05 - 1.729) the null hypothesis was accepted.
CHAPTER V

Summary, Conclusions, Recommendations of Study

Chapter five contains a summary of the research study; conclusions drawn from the analysis of data collected; and recommendations for further study.

The purpose of this study was to measure the influence of vocabulary mastery on the overall achievement of tenth grade general business students at Princess Anne High School in Virginia Beach, Virginia for the school year 1979-80.

Findings in the related literature point to the need to assist students in gaining a better comprehension of business principles, and an appreciation of business relationships so that these students will become more intelligent consumers of business services and goods. By learning the language of business through vocabulary development, the student may establish a more direct relationship between what is learned in the classroom and what will take place on the job. Teachers of business subjects must insure that students entering business or professional offices understand the technical terms used in those offices.

The research problem dealt with an experimental unit designed to intensify vocabulary presentation to Group X
deemed the experimental group of 20 students, drawn from a normal population and randomly assigned to the researcher's general business class by computer selection; Group Y deemed the controlled group of 20 students, assigned in the same manner as Group X, received only incidental training in vocabulary development during the length of the unit (six weeks). At the end of the treatment, both groups were given the standardized General Business Vocabulary Achievement Test, Form GL43, Parts 1 through 18.

The mean of the students' first semester grades and the mean of the students' IQ scores were computed so that computations to determine the significance of the results of the General Business Vocabulary Achievement Test would be more indicative of probable success of the experimental unit.

Although both mean scores were outside of the critical region for significance at the .01 and .05 levels, in each pairing of groups, the experimental group mean was slightly higher.

Based upon the data presented in Chapter four, the null hypothesis was accepted--there was no significant difference in the two population means or that the two means are equal.

**Recommendations**

Given the limitations of this study as presented in
Chapter four, it is recommended that additional studies be made concerning the increased effort by general business teachers to intensify and expand the specific business terminology of general business students since many of these students will be enrolling in other related basic business classes which use similar terminology.

Research studies cited in Chapter two indicated that systematic instruction in vocabulary development is definitely superior to a casual or incidental approach.

A good vocabulary program would help students to become self-motivated, self-guided, and self-directed—knowing ways to help themselves and assuming responsibility for their own progress.

The authors of the General Business textbook used by the respective study groups included in this study places great stress on business terminology in text content, in the supplementary study resources, and in their achievement tests that are provided to users of their text. Therefore, each group automatically obtained an emphasis on the importance of vocabulary mastery in the understanding of general business.

The researcher holds the view that a research effort involving a greater number of students in each study group is needed in order to produce valid statistical evidence to support the hypothesis given in this study.

Finally, a research effort in which a test instrument with established predictive potential for determining achievement norms in the study of 10th grade general business is desirable. Such a study would produce more reliable results than was obtained in this study.
BIBLIOGRAPHY

Books


Dissertations

Dissertations


Government Publications


Periodicals


Periodicals


APPENDIX A

General Business Achievement Test
Section A Matching Test

Directions: In the Answers column, print the letter of the term in Column 1 that matches the statement in Column 2. The first item is given as a sample.

<table>
<thead>
<tr>
<th>COLUMN 1</th>
<th>COLUMN 2</th>
<th>Answers</th>
<th>For Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. Sample: The amount left over from sales after the costs of running a business have been paid</td>
<td>I</td>
<td>0. ( \checkmark )</td>
<td></td>
</tr>
<tr>
<td>A. business</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. competition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. consumer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. economics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. goods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. gross national product</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. needs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. private enterprise</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. profit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K. wants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. The tangible things we use in our everyday lives</td>
<td>E</td>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2. The total value of all goods and services produced in a country during a year</td>
<td>F</td>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3. Those things which we can live without, but which can add pleasure and comfort to living</td>
<td>K</td>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4. One who buys and uses goods and services</td>
<td>C</td>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>5. The rivalry among businesses to sell their goods and services to buyers</td>
<td>B</td>
<td>5.</td>
<td></td>
</tr>
<tr>
<td>6. The study of producing and distributing goods and services to help satisfy our needs and wants</td>
<td>D</td>
<td>6.</td>
<td></td>
</tr>
<tr>
<td>7. An establishment that supplies us with goods and services for a payment of some form</td>
<td>A</td>
<td>7.</td>
<td></td>
</tr>
<tr>
<td>8. Those things we must have to stay alive, such as food, clothing, and housing</td>
<td>G</td>
<td>8.</td>
<td></td>
</tr>
<tr>
<td>9. The right of individuals to start or invest in any legal business with the hope of earning fair profits</td>
<td>H</td>
<td>9.</td>
<td></td>
</tr>
<tr>
<td>10. Those things that we pay others to do for us</td>
<td>J</td>
<td>10.</td>
<td></td>
</tr>
</tbody>
</table>
Section C Multiple-Choice Test

Directions: In the Answers column, print the letter that represents the word or words that correctly complete the statement. The first item is given as a sample.

0. Sample: Consumers are
   (A) only the individuals who buy goods and services for personal use
   (B) only businesses or other organizations
   (C) any person, business, or other organization that uses goods and services . . . . . . . . . . . . . . . . . . . . . . . . . . . C 0. √

1. The three factors of production are
   (A) natural resources, capital resources, and money
   (B) natural resources, capital resources, and human resources
   (C) capital resources, human resources, and labor .......................... B 1. 

2. A good example of raw materials is
   (A) a paved road from a city to a forest
   (B) the forest itself
   (C) a truck that hauls timber from the forest to the city .................... B 2. 

3. All nations are alike in that
   (A) each has the same amount of economic resources
   (B) all have more economic resources than they need
   (C) all have a shortage of economic resources .............................. C 3. 

4. In our economic system capital resources are owned
   (A) chiefly by individuals and businesses
   (B) chiefly by the government
   (C) entirely by the government ............................................ A 4. 

5. The word that best describes our economic system is
   (A) capitalism
   (B) socialism
   (C) communism .................................................. A 5. 

6. Your right to decide what business to enter and what goods and services to produce is called
   (A) the right of private property
   (B) the right of private enterprise
   (C) freedom of choice .................................... B 6. 

7. Under socialism
   (A) the people do not have the right to vote
   (B) there are no privately owned businesses
   (C) the government owns more businesses than it would under capitalism ...... C 7. 

8. Under communism
   (A) most people do not have the freedom to decide what job they will have
   (B) most businesses are privately owned
   (C) the government interferes as little as possible .......................... A 8. 

9. The gross national product of our country for a year is
   (A) the value of the products of our factories
   (B) the value of all goods produced
   (C) the value of all goods and services produced .......................... C 9. 

10. If productivity increases, it is likely that the average family will have
    (A) a better style of living
    (B) the same style of living
    (C) a poorer style of living .......................... A 10. 

Section C Score [ ]
GENERAL BUSINESS
For Economic Understanding
Eleventh Edition

ACHIEVEMENT
TEST NO. 2
UNIT 2
PARTS 4-5-6-7

Student ________________________
School _______________________ 
Date ________________________ Teacher __________________

General Directions
Fill in the blank spaces above. Directions are given at the beginning of each section telling what you are to do. The first question, marked "0," in each section is given as a sample. Read the directions for each section carefully. Work rapidly but accurately.

Section A Matching Test

Directions: In the Answers column, print the letter of the term in Column 1 that matches the statement in Column 2. The first item is given as a sample.

<table>
<thead>
<tr>
<th>COLUMN 1</th>
<th>COLUMN 2</th>
<th>Answers</th>
<th>For Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. Sample: Processing data by using automatic machines that require little human attention</td>
<td>A. articles of partnership</td>
<td>B</td>
<td>0. ✓</td>
</tr>
<tr>
<td>1. The various activities that are involved in moving goods from producers to consumers</td>
<td>B. automated data processing</td>
<td>H</td>
<td>1.</td>
</tr>
<tr>
<td>3. A written agreement by partners in forming their business</td>
<td>D. board of directors</td>
<td>A</td>
<td>3.</td>
</tr>
<tr>
<td>4. A group of people elected by stockholders to manage a corporation</td>
<td>E. cooperative</td>
<td>D</td>
<td>4.</td>
</tr>
<tr>
<td>5. A person who owns stock in a corporation</td>
<td>F. corporation</td>
<td>K</td>
<td>5.</td>
</tr>
<tr>
<td>6. A business that is owned by the members it serves and is managed in their interest</td>
<td>G. division of labor</td>
<td>E</td>
<td>6.</td>
</tr>
<tr>
<td>8. The process of using electronic and mechanical equipment to perform a series of operations with a minimum of human effort</td>
<td>I. program</td>
<td>C</td>
<td>8.</td>
</tr>
<tr>
<td>9. A business made up of a number of owners but authorized by law to act as a single person</td>
<td>J. stock</td>
<td>F</td>
<td>9.</td>
</tr>
<tr>
<td>10. Specialization by workers in performing certain portions of a total job</td>
<td>K. stockholder</td>
<td>G</td>
<td>10.</td>
</tr>
</tbody>
</table>

Section A Score

Total Score 65
Section C Multiple-Choice Test

Directions: In the Answers column, print the letter that represents the word or words that correctly complete the statement. The first item is given as a sample.

0. Sample: Each of the following is a service business except:
   (A) laundromat
   (B) bicycle repair shop
   (C) hamburger stand ...................................................... C   0. √

1. Iron ore is mined by a business classified as
   (A) extractor
   (B) manufacturer
   (C) service business ....................................................... A   1.

2. The average profit as a percent of sales, after taxes, of all U.S. industries in recent years has been about:
   (A) 4-5 percent
   (B) 10-15 percent
   (C) 25-30 percent ..................................................... A   2.

3. Processing data means:
   (A) changing the form of the data in some way
   (B) repackaging food into small units for sale
   (C) advertising a new product ............................................. A   3.

4. A new business benefits the community by doing all of the following except:
   (A) creates new jobs
   (B) attracts other businesses
   (C) decreases income in the community
   (D) pays taxes ..................................................... C   4.

5. A city is most likely to be organized as a
   (A) sole proprietorship
   (B) partnership
   (C) corporation ........................................................... C   5.

6. A flowchart is
   (A) a recipe for making a pizza
   (B) a diagram showing the order in which steps of a computer program need to be completed
   (C) a computer program .................................................. B   6.

7. The term division of labor refers to
   (A) dividing available work among all workers so that everyone has a job
   (B) the plan by which one worker does only a part of a total job
   (C) the use of machines to decrease the amount of work required ........... B   7.

8. Mass production is
   (A) production by using a large number of laborers
   (B) production by machines of a great number of the same kind of article
   (C) a large quantity of goods produced by any method ...................... B   8.

9. Automation is used to the greatest extent in
   (A) a retail store
   (B) a factory
   (C) a library ......................................................................... B   9.

10. In electronic data processing a program is
    (A) the number of hours of the computer's time that is allotted to each type of work
    (B) the detailed information provided by a computer
    (C) a plan given to a computer that guides it in its work .................. C   10.

Section C Score
Section D Metric Yes or No Test

Directions: After each of the questions below, indicate your answer by drawing a line under yes or no at the right.

0. Sample: Is the metric system a decimal system? .............................................................. yes no 0. ✓
1. Will the changeover from the U. S. system to the metric system of measurement be immediate and complete? ............................................................ yes no 1. □
2. Is K the abbreviation for kiloliter? ............................................................. yes no 2. □
3. In the metric system, does water freeze at 32°? ......................................................... yes no 3. □
4. Is the liter the metric unit that would be used to measure gasoline being put into a car? .............................................................. yes no 4. □
5. Is a kilometer more than a mile? ........................................................................... yes no 5. □
6. If the temperature on a given day is 34° Celsius, is it a hot day? ........................................ yes no 6. □
7. Does a paper clip weigh about one gram? .............................................................. yes no 7. □
8. Is the pint the single unit of measure in the U. S. customary system closest to the metric liter? .............................................................. yes no 8. □
9. Is a kilogram more than a pound? ........................................................................ yes no 9. □
10. Is 100° Celsius the temperature point at which water boils? ........................................ yes no 10. □

Section D Score □□□□

Section E Metric Matching Test

Directions: In the Answers column, print the letter of the term in Column 1 that matches the item in Column 2.

<table>
<thead>
<tr>
<th>COLUMN 1</th>
<th>COLUMN 2</th>
<th>Answers</th>
<th>For Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. centi</td>
<td>0. Sample: 0.001 meter</td>
<td>H</td>
<td>0. ✓</td>
</tr>
<tr>
<td>B. degree Celsius</td>
<td>1. 1000</td>
<td>C</td>
<td>1.</td>
</tr>
<tr>
<td>C. kilo</td>
<td>2. 1/1000</td>
<td>G</td>
<td>2.</td>
</tr>
<tr>
<td>D. kilogram</td>
<td>3. 1/100</td>
<td>A</td>
<td>3.</td>
</tr>
<tr>
<td>E. liter</td>
<td>4. a measure of volume</td>
<td>E</td>
<td>4.</td>
</tr>
<tr>
<td>F. meter</td>
<td>5. a measure of distance</td>
<td>F</td>
<td>5.</td>
</tr>
<tr>
<td>G. milli</td>
<td>6. a measure of weight</td>
<td>D</td>
<td>7.</td>
</tr>
<tr>
<td>H. millimeter</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section E Score □□□□

Section F Metric Completion Test

Directions: In the space provided below, write out the metric unit of measure which replaces the U. S. customary unit given at the left.

0. Sample: inch .................................................. CENTIMETER 0. ✓
1. pound ......................................................... KILOGRAM 1. □
2. foot ......................................................... METER 2. □
3. mile ......................................................... KILOMETER 3. □
4. gallon ...................................................... LITER 4. □
5. ounce ...................................................... GRAM 5. □
6. yard ......................................................... METER 6. □
7. quart ....................................................... LITER 7. □
8. degree Fahrenheit ...................................... DEGREE CELSIUS 8. □

Section F Score □□□□
General Directions

Fill in the blank spaces above. Directions are given at the beginning of each section telling what you are to do. The first question, marked "0," in each section is given as a sample. Read the directions for each section carefully. Work rapidly but accurately.

Section A Matching Test

Directions: In the Answers column, print the letter of the term in Column 1 that matches the statement in Column 2. The first item is given as a sample.

COLUMNS 1

0. Sample: Investigating the opportunities you have to obtain the life-style you want ...
A. blue-collar workers
B. career planning
C. clerical workers
D. clusters
E. exploring careers
F. local labor market
G. mobility
H. Occupational Outlook Handbook
I. personal services
J. values
K. white-collar workers

COLUMNS 2

E
F
G
A
I
J
C
K
H
D

Answers

For Scoring

0. ✓
1.
2.
3. ___
4.
5.
6.
7. ___
8. ___
9. ___
10. ___

Section A Score
Section A Matching Test

Directions: In the Answers column, print the letter of the corresponding term in Column 1. The first item is given as a sample.

<table>
<thead>
<tr>
<th>COLUMN 1</th>
<th>COLUMN 2</th>
<th>Answers</th>
<th>For Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. Sample: A user of goods and services</td>
<td>C</td>
<td>0. ✓</td>
<td></td>
</tr>
<tr>
<td>1. How much one is willing to pay for a good or a service</td>
<td>J</td>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2. The amount actually paid for an article or service purchased</td>
<td>I</td>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3. A firm which buys from producers and resells to retailers</td>
<td>K</td>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4. Legal action brought against a business by a group of consumers with a like complaint about deceptive or dishonest practices</td>
<td>B</td>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>5. The purchase of goods that a consumer had not planned to buy but was prompted to buy because the goods were attractively displayed</td>
<td>G</td>
<td>5.</td>
<td></td>
</tr>
<tr>
<td>6. The producer’s trade name put on an article</td>
<td>A</td>
<td>6.</td>
<td></td>
</tr>
<tr>
<td>7. A code for the quality or size of a product</td>
<td>E</td>
<td>7.</td>
<td></td>
</tr>
<tr>
<td>8. A promise that parts of a machine will be replaced if they are found to be defective</td>
<td>F</td>
<td>8.</td>
<td></td>
</tr>
<tr>
<td>9. A firm which has control of the market for a product or service</td>
<td>H</td>
<td>9.</td>
<td></td>
</tr>
<tr>
<td>10. The act of deceiving or misrepresenting</td>
<td>D</td>
<td>10.</td>
<td></td>
</tr>
</tbody>
</table>

Scoring Record

<table>
<thead>
<tr>
<th>Section</th>
<th>Perfect Score</th>
<th>Student’s Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section A Matching Test</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Section B Yes or No Test</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Section C Multiple-Choice Test</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Section D True-False</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Section E Figuring Unit Cost</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td>65</td>
<td></td>
</tr>
</tbody>
</table>
Section C Multiple-Choice Test

Directions: In the Answers column, print the letter that represents the word or words that correctly complete the statement. The first item is given as a sample.

0. Sample: A middleman is also called (A) a consumer, (B) a distributor, (C) an extractor, (D) a farmer .................................................... .

1. The path a product takes on its way from producer to consumer is called (A) marketing, (B) retailing, (C) wholesaling, (D) channel of distribution .................................................... .

2. To most people, the most familiar part of the marketing system is (A) extractor, (B) shipper, (C) retailer, (D) producer .................................................... .

3. Buying decisions of a consumer include all but which of these: (A) choosing among several brands of the same product, (B) choosing among different products, (C) choosing quality, (D) choosing a channel of distribution .................................................... .

4. An example of goods that are most likely to be obtained directly from producers is (A) vegetables, (B) coffee, (C) fountain pens, (D) television sets .................................................... .

5. Trade associations are (A) federal government agencies, (B) state government agencies, (C) private agencies, (D) local government agencies .................................................... .

6. In addition to the dollar price, another cost of a product or service is (A) another wanted item given up in order to make the purchase, (B) your credit rating, (C) your checking account cost, (D) your value system .................................................... .

7. Sales that are used to promote the sale of a merchant’s regular stock by making a temporary price reduction are known as (A) clearance sales, (B) impulse sales, (C) institutional sales, (D) promotional sales .................................................... .

8. As an indication of freshness, many products are (A) graded, (B) weighed, (C) reduced in price, (D) dated .................................................... .

9. A stamp or emblem showing that a product has been tested and has met the standards of the testing agency is known as (A) seal of approval, (B) label, (C) government approval, (D) grade .................................................... .

10. One who buys carelessly and without any plan is called (A) an impulse spender, (B) a discretionary spender, (C) a miserly spender, (D) a careful spender .................................................... .

11. Rights of the consumer include all but which of these: (A) to be informed, (B) to safety, (C) to choose, (D) to get a low price .................................................... .

12. Of the following statements appearing in advertisements, the one that gives the most information about the product is (A) "the best on the market," (B) "50 percent new wool," (C) "your money back if not satisfied," (D) "a free gift with every purchase" .................................................... .

13. Sales that are used to dispose of merchandise that a retailer no longer wants are known as (A) clearance sales, (B) impulse sales, (C) institutional sales, (D) promotional sales .................................................... .

14. All but which one of the following are guidelines for the sharp shopper: (A) buy at the right time, (B) look for genuine sales, (C) always buy the top quality, (D) know brands .................................................... .

15. A federal government agency that protects consumers and businesses against unfair business practices and unfair competition is the (A) Better Business Bureau, (B) Consumers’ Union, (C) Federal Trade Commission, (D) National Board of Fire Underwriters .................................................... .

Section C Score
GENERAL BUSINESS  ACHIEVEMENT TEST NO. 5
For Economic Understanding UNIT 5
Eleventh Edition PARTS 15•16•17•18

Section A Matching Test

Directions: In the Answers column, print the letter of the term in Column 1 that matches the statement in Column 2. The first item is given as a sample.

COLUMN 1
A. allowance  
B. assets  
C. budget  
D. consumer price index  
E. deflation  
F. expenditure  
G. inflation  
H. liabilities  
I. money income  
J. net worth  
K. real income

COLUMN 2
0. Sample: A price index that shows the changes in the average prices of goods and services bought by the consumers.
1. A plan for saving and spending of income.
2. Everything of value that a person, family, or business owns.
3. An increase in the general price level.
4. The amount of money that a person earns.
5. An amount actually spent for food, clothing, or other items.
6. A decrease in the general price level.
7. Debts that a person, family, or business owes.
8. The amount of goods and services a person can buy with the amount of money earned.
9. The difference between the assets and the liabilities of a person, family, or business.
10. An amount of money budgeted for saving or expenses.

Answers
D  G  C  B  I  F  E  H  K  A

For Scoring
0. ✓  1.  2.  3.  4.  5.  6.  7.  8.  9.  10.
APPENDIX B

TABLE A. 3 TABLE OF T VALUES
### Table A.3 Table of \( t \) Values

<table>
<thead>
<tr>
<th>Degrees of freedom</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.01</td>
</tr>
<tr>
<td>1</td>
<td>6.314</td>
</tr>
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Ary, Donald, et. al., *Introduction to Research in Education*