To the Graduate Council:

I am submitting herewith a dissertation written by Marlyne Ellis Adams, entitled "The Value of An Individualized Instruction Approach for Teaching Business and Office Occupations." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Vocational-Technical Education.

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THE VALUE OF AN INDIVIDUALIZED INSTRUCTION APPROACH FOR TEACHING BUSINESS AND OFFICE OCCUPATIONS

A Dissertation

Presented for the

Doctor of Education

Degree

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Marlyne Ellis Adams

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ABSTRACT

The purpose of the study was to determine whether learning activity packages as a method of teaching obtains similar results when compared with the conventional textbook method for selected high school students in the Florida and Tennessee secondary schools.

The objectives were: (1) to determine if the low- or high-ability student performs best on learning activity packages, (2) to determine if the occupation of the parents of students has an influence on student achievement, (3) to determine if learning activity packages produce superior results for students learning the material, (4) to determine if the teacher perception of individualized instruction influences student achievement, and (5) to determine if in-service training of teachers helps promote student achievement.

The hypothesis was: There is no difference at the .05 level of significance in achievement for students who are taught by learning activity packages as compared with students who are taught by the conventional textbook method.

Five Florida and five Tennessee intact classes were compared in carrying out the study. The 108 students from Florida who had participated in instruction by use of learning activity packages in Duval County during the 1972-73 school year formulated the experimental group. The 124

nonlearning activity package students formed the control group. Both student groups had instruction in the subject of office practice covering the specific areas of (1) filing, (2) grooming, (3) computational skills, (4) processing forms, (5) mail handling, (6) record keeping, (7) telephone techniques, and (8) human relations, in the secondary schools where they were taught.

The pre- and post-test scores in addition to supplementary data from students' permanent records from each school comprised the data for this study. An information sheet was used to organize the data. By using the form, including the card column for each item, the coding and keypunching were accomplished. Three packaged programs at The University of Tennessee Computer Center, Knoxville were used in treating the data statistically: (1) The Statistical Package for Social Studies (SPSS) was used for Chi Square and Spearman's Rho computations. Chi Square was used to determine significant relationships between inservice training of teachers and the achievement by their students on the scores for the learning activity packages. Spearman's Rho was used to determine significant correlation between occupation of the parents of students and the achievement by their students on the scores for the learning activity packages. (2) The Statistical Analysis System (SAS) computer program provided an Analysis of Covariance. This statistical

treatment was needed to determine significant differences at the .05 level in achievement for students who were taught by learning activity packages as compared with students who were taught by the conventional textbook method. (3) The Biserial Correlation Coefficient computer program was used to determine the correlation between teacher perception of individualized instruction and student achievement on the scores for the learning activity packages.

The conclusions from the study were: (1) The learning activity packages is an effective method for learning office practice content, (2) High ability students performed better on learning activity packages than do low ability students, (3) The occupation of the father seems to have an effect on student achievement, but the occupation of the mother does not seem to have an effect, (4) Teacher perception of individualized instruction seems to have no influence on student achievement, and (5) Inservice training seems to have no overall effect on student achievement.

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CHAPTER I

THE PROBLEM OF THE STUDY

I. INTRODUCTION

Searching for better approaches to meet the individual needs of students has become a necessity for vocational education leaders since the passage of the Vocational Education Act of 1963 and the Amendments of 1968. The 1963 Act provided funds for ancillary services to enable teachers to do further study in an effort to improve the method of teaching. Concern about accountability in all education has added to this emphasis on improvement of instruction at all levels.

A four-year testing program (1966 to 1970) conducted by the Department of Health, Education and Welfare of a total of 6,768 youths found 4.8 percent of those tested were illiterate. Projected nationwide, this would mean about one million children aged 12 to 17 cannot read at a fourth-grade level. Dr. Ruth Holloway, Director of HEW's Right to Read Program, termed the results alarming and discouraging and suggested the schools obviously are not meeting the students' needs.

John W. Gardner in Self-Renewal realized the need for individualization of instruction when he wrote:

> Without some grasp of the meaning of his relationship to the whole, it is not easy for the individual to retain a vivid sense of his own capacity to act as an individual, a sure sense of his own dignity and an awareness of his own dignity and an awareness of his role and responsibilities. He tends to accept the spectator role and sink into passivity.

Herbert Spencer, an English philosopher, maintained that the aim of education was to prepare boys and girls for complete living. He believed in training for all duties of life.

Throughout the United States, some 60,000 business and office education teachers prepare students for office employment. One study reported that 44 percent of the graduating seniors who sought employment entered office jobs.[1] A U. S. Office of Education sponsored project, NOBELS,[2] developed an inventory of 375 educational specifications in behavior terms that represent basic tasks performed by 16 - 24 year old office workers. Based on empiric data collected by interview from 1,232 office employees and their supervisors from four areas of the United States, the educational specifications were drawn from 4,548 basic tasks and 32,447 steps of task performance.

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[1]Fred S. Cook and Frank W. Lanham, Opportunities and Requirements for Initial Employment of School Leavers with Emphasis on Office and Retail Jobs, United States Office of Education, Cooperative Research Project No. 2378, Detroit, Michigan: Wayne State University, 1966.

[2]Frank W. Lanham, Development of Performance Goals for a New Office and Business Education Learnings System, Final Project No. 8-0414, April, 1970.

As a result of this direction and priority given to methods of instruction by NOBELS, Duval County business and office education teachers initiated a 15-week workshop for selected teachers to develop learning activity packages for business and office students at the secondary school level in Florida. While these learning activity packages were expensive and time consuming to develop, it is one attempt to implement the systems approach to teaching into the area of office practice.

In order to effectively and efficiently plan and/or redirect vocational programs, a thorough, systematic, and continuous evaluation must be attempted to investigate these new methods of teaching.

Beginning with a thorough review of literature and then involving a panel of teacher educators, these developed learning activity packages were field tested in Florida during the Spring of 1972, and were revised where necessary. These packages were ready to place into the classroom for use during the 1972-73 school year, and this study reflects the results.

Since all secondary schools in the State of Florida were required by law (PL-748--1972) to use the systems approach to teaching, the control group for this study was selected from Knox County, Tennessee. Twelfth grade Vocational Office Education classes comprised this group as the

essential subjects were taught conventionally only at this grade in Knox County in preparation for student use in job-entry positions upon graduation.

II. THE PROBLEM

Statement of the Problem

The problem of this study was to find the answer to the question: Can student learning be improved when using learning activity packages as a teaching method? The topics investigated were: Filing, Grooming, Computational Skills, Processing Forms, Mail Handling, Record Keeping, Telephone Techniques, and Human Relations.

III. PURPOSE AND OBJECTIVES OF THE STUDY

The purpose of this study was to determine whether learning activity packages as a method of teaching obtains similar results when compared with the conventional textbook method for selected high school students.

In order to accomplish the purpose of this study, these objectives were set forth:

1. To determine if the low or high ability student performs best on learning activity packages.
2. To determine if the occupation of the parents of students has an influence on student achievement.

3. To determine if the teacher perception of individualized instruction influences student achievement.
4. To determine if inservice training of teachers helps promote student achievement.

Hypothesis

The hypothesis for this study stated in the null form was: There is no difference at the .05 level of significance in achievement for students who are taught by learning activity packages as compared with students who are taught by the conventional textbook method.

Assumptions

The following assumptions were made for this study. They are:

1. A learning activity package is an important educational procedure for preparing future office workers.
2. The pre- and post-tests used in this study which were built into the Duval County learning activity packages, did in fact measure specific indicators of instruction in vocational education.

3. All students in the control group have been exposed to each of the subjects under investigation during the conventional method of teaching through the teaching approach of lecture, discussion, demonstration, and activity.
4. All students in the experimental group had completed each of the learning activity packages being used in this study the results of which were reported accurately on the form used to collect the data.
5. The form used to collect and summarize the data was clearly and uniformly understood by the control and experimental groups.
6. The study population, although not randomly selected was randomly assigned and met the test for normality and homogeneity of variance.
7. The following variables equally affected the control and experimental groups: community and family influence, class interruptions due to school activities, face validity of packet design, and all teachers were considered equally effective.

Scope of the Problem

This study included the selected programs in Duval and Knox Counties which were using either the Duval County prepared learning activity packages or the textbook covering the eight areas being investigated during the 1972-73 school year. The study included the subjects taught in Filing, Grooming, Computational Skills, Processing Forms, Mail Handling, Record Keeping, Telephone Techniques, and Human Relations. The sample consisted of the schools in Duval and Knox Counties teaching these subject areas either by learning activity packages or through use of the Clerical Office Practice textbook during the school year 1972-73.

III. LIMITATIONS

This study concentrated only on the value of using learning activity packages as a means of preparing business and office education students for job-entry level office work in the selected secondary schools which included five classes in Florida and five classes in Tennessee. This study was further limited in the following ways: only the subjects of the prepared learning activity packages were investigated which included Filing, Grooming, Computational Skills, Processing Forms, Mail Handling, Record Keeping, Telephone Techniques, and Human Relations. The tests which were used in this study were those created by the individuals who wrote

the learning activity packages. The teachers in the experimental group received specific inservice training for the use of learning activity packages. The teachers in the control group did not receive specific inservice training for their method of teaching.

IV. IMPORTANCE OF THE STUDY

Current emphasis on individualization of instruction and accountability have required many school systems to plan, design, and implement innovative methods of teaching. These efforts are time consuming and require considerable human and financial resources. It is important that research effort be expended in order to investigate the effectiveness of these learning activity packages prior to extensive usage in the school systems.

An effective teacher education program to prepare high quality business and office education teachers is needed. The teacher education institution is the logical and responsible agent for providing leadership in individualization of instruction method through use of learning activity packages. The knowledge attained through this study should be helpful to teachers in preparing students for initial placement in the office occupations.

Although individualization of instruction through use of learning packets is an old concept of teaching, business and office education teachers have failed to include

this method of instruction in the preparation of their students. Conventional instruction in business and office has consisted mostly of lecture followed by student drill work and discussion, demonstration, and activity. The use of learning activity packages with the systems approach of preset goals provides motivation to instruction, and helps to meet the criteria of teacher accountability. So that learning activity packages approach to teaching may be of high quality, it was important to determine the effectiveness of these developed learning activity packages as a teaching technique.

So that the quality of the teaching may be improved it was important to find out, through this research effort, what business and office education teacher opinions were for individualization of instruction through use of learning activity packages.

Generally, learning activity packages had not been included in the secondary business and office education programs in Florida prior to 1971. In an effort to establish instructional materials, business and office education teachers from Duval County participated in a 15-week inservice workshop during the 1971-72 school year which was conducted by the Business and Office Education Supervisor. So that the teacher education instruction could be assessed and evaluated, it was important to follow up the use of these packets and to make alterations based upon the research findings.

Little or no research had been reported or completed which concentrated on the preparation of teacher-made learning activity packages in the area of business and office education at the job-entry level. Although the sample in this study dealt only with those packets developed by the Duval County, Florida teachers, the findings from this research effort may be important to other business and office teacher educators who plan teacher education inservice workshops dealing with the development of learning activity packages. By answering the question of whether or not student learning has been improved by use of learning activity packages, this study will provide a basis for other research in business education.

All of these findings will have implications for the professional preparation of business and office education teachers.

V. METHODOLOGY

Chapter III provides a detailed description of the methodology and procedures used in this study for selecting the participants, determining the procedures followed in constructing the information form for collecting and summarizing the data, selecting the pre- and post-tests used, managing the study, collecting the data, and computing the statistical analysis used. A capsule treatment of the methodology follows.

Nature of the Data

The nature of the data concentrated upon the systems approach to planning, developing, and implementing the learning activity packages in the secondary business and office education classes, which will have implications for business teacher education. The basic data for this study were provided from pre- and post-test results of students taking office practice.

Participants

The population for this study included 108 students of five randomly selected intact classes of Florida business and office education students who participated in the use of learning activity packages at the secondary level. This comprised the experimental group.

The 124 students in the control group was comprised of five randomly selected intact classes of Tennessee business and office education students who participated in the study, but had not used learning activity packages to learn their office practice material at the secondary VOE program level.

Both groups included a total of 232 business and office education students of 10 randomly selected intact classes.

Both the experimental and control groups had covered the eight subjects being investigated either through use of

learning activity packages (experimental) or textbook (control).

The primary purposes for selecting the two groups for this study were (1) to determine the value of learning activity packages on student achievement, and (2) to determine if there was any significant difference in achievement between the students receiving instruction on the same subject by use of a textbook. The unlike variable for the two groups was whether or not the business and office education teacher had used learning activity packages in the classroom prior to this study at the secondary level. By using these two groups, it was believed that these purposes could be achieved.

Information Form for Collecting and Organizing the Data

In designing the information form for collecting and organizing the data, a two-page sheet provided sufficient space. This form provided space for listing all students from each school with the scores made on each of the eight administered pre- and post-tests. This form was printed and delivered to the schools through the business and office education supervisors. (See Appendix F.) The information from these tests was summarized and organized on this information sheet to formulate the basic content for the research report. In addition, the review of the related literature helped to strengthen the information form by using other thoughts pertinent to the objectives of this study.

After the information form was drafted, a panel of judges made suggestions for improvement. These revisions were made in the form, and a simulation of data was used to check its effectiveness. It was printed in sufficient copies for distribution to the schools for use in recording the necessary information.

The information form, pre- and post-tests, and a cover letter stressing the importance of the study were delivered to the five classes in Knox County, and the five classes in Duval County. All these data were returned.

Data Treatment

The information form for collecting and organizing the data was designed so that the data could be transferred from the form onto a data card. Each column on the form had been assigned a card column on the data card. After all forms were returned, the data were coded and transferred to the University of Tennessee Computer Center Data Sheet.

The Statistical Package for Social Studies (SPSS), Statistical Analysis System (SAS), and Biserial Correlation were used to organize and treat the data. The procedures, "Codebook" and "Fastabs" provided data such as absolute frequencies, frequency percentages, mean scores, chi square, Spearman's Rho, Analysis of Covariance, and the level of significance.

The hypothesis and objectives of this study are supported by data organized into tables. The following statistical procedures were used for the treatment of the data: Analysis of Covariance, Biserial Correlation Coefficient, Chi Square, and Spearman's Rho.

VI. DEFINITION OF TERMS

For the purpose of this study, the following terms are defined.

Achievement refers to the student score on the post-tests taken from each learning activity package.

Business and Office Occupations. Those clusters of occupations defined under established USOE classifications as 14. 00 00. The occupational clusters include the following major grouping: 01 00, Occupations; 03 00, Filing, Office Machines, and General Office Clerical Occupations; 04 00, Information Communication Occupations; 05 00, Materials Support Occupations, Transportation, Storage, and Recording; 06 00, Personnel, Training, and Related Occupations; 07 00, Stenographic, Secretarial, and Related Occupations; 08 00, Supervisory and Administrative Management Occupations; 09 00, Typing and Related Occupations; 10 00, Miscellaneous Office Occupations; and 99 00, Other Office Occupations.

High Ability Students refer to students with an I.Q. score ranging from 102 - 125.

Individualized Instruction. An education program designed to guide business students through a planned learning activity package with built-in pre- and post-tests as well as detailed performance objectives.

Job-entry position skills. The abilities required by the human being for use in initial job placement, i.e., the skills required to operate a desk calculator or a computer.

LAPS. Learning Activity Packages designed using the systems approach by assessing where the learner should be at the END of study, and building in performance objectives, learning materials, and evaluation measurements (pre- and post-tests) for each packet.

NOBELS. This is an anachronism for "New Office and Business Education Learning System." The primary purpose of the NOBELS project was the development of an inventory of 375 educational specifications in behavioral terms that represent basic tasks performed by 16 - 24 year old office workers.

Occupation of Parent. The Dictionary of Occupational Titles classifies categories of jobs which will be used in this study to pinpoint and code the occupation of the parents of the students.

Systems Approach to Teaching. The systems approach is the method or process and begins by stating the terminal (end) objectives. The Corrigan Associates of California

designed the Systems Approach for Education (SAFE) which was used to produce the learning activity packages used in this study.

Teacher Perception of Individualized Instruction. The teachers in this study were asked to respond "Yes" or "No" to the question: "Is Individualized Instruction superior to normal classroom instruction by textbook?" The biserial correlation of this data will indicate the teacher perception.

Vocational Office Education (VOE). An educational program designated to guide business students through a planned and meaningful sequence of experiences leading to an office career objective and results in an occupational competence.

VII. ORGANIZATION OF THE STUDY

Chapter I presents the problem, purpose, objectives, and hypothesis of the study.

Chapter II presents a review of related literature.

Chapter III presents the procedures for the study.

Chapter IV presents the results of the study.

Chapter V presents the summary, conclusions, and recommendations of the study.

The bibliography contains a list of references used in the study.

The appendixes contain samples of materials used to collect and organize the data along with pre- and post-tests as well as correspondence which was necessary to complete this study.

CHAPTER II

REVIEW OF RELATED LITERATURE

The review of related literature is organized to highlight the events, happenings, and milestones which have implications for individualized instruction as it relates to the use of learning activity packages. The first group of studies reviewed present the early development of teaching methods. These early theories support the need for preparing instructional objectives for the individual student.

I. LEARNING THEORIES AND THEIR RELATIONSHIP TO BUSINESS AND OFFICE EDUCATION

Early Theories

Herbart introduced the term "apperception" (perception characterized by clearness and by the relating of what is now presented to previously acquired knowledge) and replaced the passiveness of Rousseaus' and Pestolozzi's linkages and associations, observing that dynamic ideas and not dynamic children prevailed.[3] Herbartian mechanized this theory in his five steps to teaching: (1) preparation, (2) presentation, (3) comparison and abstraction, (4) application,

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[3]Morris L. Bigge, Learning Theories for Teachers (New York: Harper and Row, 1964), p. 36.

and (5) evaluation. This theory also placed the student in secondary position without regard to his individual needs.

One of the theories studied by Thorndike and replicated by Wesman was mental discipline (faculty psychology). Wesman stated "there was no superior addition to intelligence for any one of the achievement areas measured."[4] In essence, there was no basis for asserting that one subject contributed more to a student's intelligence than another.

Dewey found that apperception takes everything educational into account.[5] The Herbartian influence subsided around 1920. Their attack on faculty psychology resulted in pointing out a need for sound methods of teaching based on the total knowledge of man and his mental functions.[6]

Mid-1900 Theories

Bigge found that structuralism, behaviorism and connectionism may have culminated with the Lewinian cognitive-field theory or a psychology of learning which had

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[4] Ibid., p. 31.

[5] John Dewey, Democracy and Education (New York: Macmillan, 1916), p. 10.

[6] Bigge, op. cit., p. 234.

deeper roots in Herbartian theory than one may suspect.[7] Skinner defined learning as a change in probability of response--a change brought about by operant conditioning. He stated, "An organism can be reinforced . . . can be made to 'choose' . . . almost any given state of affairs."[8] The current study emphasizes that operant conditioning in the form of individualized instruction can influence the student on the basis of teaching method used. The outgrowth of this form of operant behaviorism is programmed instruction and the teaching machine.

The cognitive-field theorist questioned the Skinnerian response-stimulus (R-S) concept as being without student thought or student originality. Effective thinking (verbal or nonverbal) originated and required immediate feedback. "To teach thinking we should analyze the behavior called 'thinking' and produce it according to specifications," Skinner related.[9] Bayles described this as the "goal-insight" theory of learning.[10] Other cognitive-field theorist implied behavior as thought movement and not necessarily physiological movement.

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[7]B. F. Skinner, Cumulative Record (New York: Appleton-Centory-Crofts, 1959), p. 20.

[8]Ibid.

[9]Ibid., p. 21.

[10]Ernest E. Bayles, Democratic Educational Theory, (Chicago: Harper and Row, 1960), p. 45.

Bigge reported that in our American classrooms the learning theories used were "inconsistent hodgepodges,"[11] and failed to give direction to educational leaders.

Gage feels that teachers need to know more than learning theory; they "must know how to manipulate the independent variables, especially their own behaviors, that determine learning."

For the purpose of this study the concept of Gage was used and applied to business and office education. These specifications were: (1) types of teacher activities; (2) types of educational objectives; (3) components of the learning process; and (4) families of the learning theory.[12] The teacher activity refers to instructing students through learning activity packages; educational objectives were given in the cognitive, affective, and psychomotor domains; and the learning process requires a knowledge of terminology and theories leading to problem solving using individualized instruction.

Findings from Business and Office Education Courses of Studies

In most comprehensive secondary schools, approximately one-third of all students are enrolled in one or more business

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[11] Bigge, op. cit., p. 235.

[12] N. L. Gage, et al., Theories of Learning (Chicago: The National Society for the Study of Education, 1964), p. 268.

and office education courses. One study reported that 44 percent of the graduating seniors who sought employment entered office jobs.[13] Other studies in Seattle, Washington, and elsewhere[14] reveal similar involvement and a similar proportion of graduates from secondary schools and community colleges who enter office employment. On the basis of these studies, one can conclude that the typical business and office education program from grades nine through fourteen prepares more students for entry into gainful employment upon leaving school than all other vocational programs combined.

Since the office is a major aspect of current social and economic life which permeates all institutions, industry, education, and government, the education of the prospective business and office worker should encompass a clear understanding of the business enterprise as well as the social system of which it is an integral part. According to Lanham, this understanding is essential to the maximal productive participation of the worker in an age of increased automation and specialization. In this context, business and office education programs must contribute toward the general

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[13]Fred S. Cook and Frank W. Lanham, Opportunities and Requirements for Initial Employment of School Leavers with Emphasis on Office and Retail Jobs, USOE, Cooperative Research Project No. 2378, Detroit, Michigan: Wayne State University, 1966.

[14]Ibid.

education of potential office workers as well as provide them with specific job education. Both general and specific preparation must be intertwined if these programs and their products are to keep up with the varied demands of modern society.

Prior to the Vocational Education Act of 1963, business and office education curriculum in the typical high school was characterized as an aggregate of courses rather than integrated programs of learning.[15] Courses were developed to meet the assumed needs of students in terms of a set of office skills and personal traits. Until the study conducted by NOBELS, there had been no national study in which the main concern was the total program of business and office education learnings as an entity.

The goal of the NOBELS project was to develop performance goals for office occupations. The learning packages used in this study resulted from the research findings of NOBELS and the implementation of these performance goals.

New Office and Business Education Learning Systems (NOBELS)

As a result of these concerns and others, a proposal was written by representative leadership of the business and

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[15] Frank W. Lanham and John M. Trytten, Review and Synthesis of Research in Business and Office Education, Columbus, Ohio: Center for Research in Vocational and Technical Education, 1966.

office education profession to focus on the total program of business and office education. The proposal was approved and funded by the United States Office of Education. As a result of the proposal, NOBELS produced the following products: (1) a set of 375 performance goals representing office operations; (2) the NOBELS Verbs and Synonyms, a list of 108 verbs used in classifying 32,447 steps of task performance; (3) a Taxonomy of Office Activities was another outcome of NOBELS. Knowledge of the tasks that office workers perform in their job is helpful in revision of school curriculums. (4) The Talent Inventory; (5) I-TIP (Individualized-Task Instruction Packets); (6) the development of the Critical Incidents was a break through for business and office education.

The ultimate objective of the NOBELS project was an office occupations curriculum congruent with the concepts in the organic curriculum theory.[16]

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[16]Robert M. Morgan and David S. Bushnell, "Designing an Organic Curriculum," National Business Education Quarterly, Spring, 1967, p. 5.

II. INDIVIDUALIZED INSTRUCTION IN BUSINESS AND OFFICE EDUCATION

Course Construction

Business and office education, by the varied nature of its course content, lends itself to individualized instruction, which by itself is not a new teaching method in business education.

Cardarelli suggests the following philosophy for constructing learning activity packages:

1. Each student is an individual who has a right to receive instruction geared to his needs, interests, and capabilities.
2. The teacher's role is that of diagnostician, prescriber, motivator and facilitator.
3. The student's role is that of an independent person capable of making decisions, accepting responsibility for his own education, and getting along with others.
4. The user of the learning activity program classroom or school must reflect an open structure where initiative, creativity, exploration, meaningful interaction and awareness of the needs of others can flourish.

The construction of learning activity packages should consist of (1) the topic; (2) subtopic; (3) rationale;

(4) behavioral objectives; (5) pretest; (6) activities and self-evaluation; (7) quizzes; (8) post-test.[17]

In the educational process a successful student is the end product and should be the most important consideration in developing learning activity packages.

The Student

Selvidge and Fryklund indicated concern for the role of the teacher when they suggested that he was to understand and be interested in his students. Interest was equated to individuals and each student was thought to become a separate study.[18]

Research directed towards characteristics of student learning ability included, but was not limited to, the work of Wrightstone who developed a series of generalizations regarding learning abilities of students dichotomized into low-ability and high-ability learners. His research indicated that low-ability students learned by a simple mental process on a single unit of the curriculum over a short time span under the climate of certainty and orderliness. High-ability students with superior powers of analysis and reasoning were able to be original, innovative and resourceful.

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[17]Sally M. Cardarelli, "The LAP--A Feasible Vehicle of Individualization." Education Technology, March, 1972, p. 23.

[18]R. W. Selvidge and Vern C. Fryklund, Principles of Trade and Industrial Teaching (Peoria: Charles A. Bennett Company, 1930), p. 326.

Also, these students recognized related material, related their thoughts to ongoing life situations, and had the power of self-criticism.[19] Wrightstone further suggested that the observant teacher realized that each student varied in his ability to learn a particular skill.

Main differences between students were reported by Cenci and Weaver. They were: (1) mechanical ability; (2) mental ability; (3) physical health, size, and development; (4) reading ability; (5) mathematical ability; (6) interests and goals; and (7) environmental and cultural.[20]

It became the challenge of the teacher and curriculum specialist to recognize these differences and design learning experiences around functioning units of individualized instruction which would permit all, in a given setting, to reflect a behavioral change. Without consideration of these individual differences, the effectiveness of the constructed learning packages would be diminished.

Theories of Individualized Instruction

Evans stated that "the greatest contribution of psychology has been its study of individual differences."[21]

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[19]Wayne J. Wrightstone, Class Organization for Instruction (New York: American Book Co., 1965), pp. 22-24.

[20]Louis Cenci and Gilbert G. Weaver, Teaching Occupational Skills (New York: Pitman, 1968), p. 68.

[21]Rupert N. Evans, Foundations of Vocational Education (Columbus: Charles E. Merrill, 1971), p. 149.

His concept of how individuals differ could be noted in a taxonomy which includes social standing, intelligence, motivation, maturation, and physical characteristics. Evans reported that "little is known how individual differences and learning affect each other."[22] He did suggest that the safest course is providing a wide variety of teacher-student activities hoping one or more will serve the purpose.

Leighbody and Kidd cited four main objectives of individualized instruction:

1. Each learner should be able to begin learning new skills when he is in a state of readiness to learn.
2. The instructor should deal with each learner individually.
3. The learner should receive assistance from the instructor as needed.
4. Each individual should progress at his own natural learning rate.[23]

Howes saw the business teacher as a consultant and manager. Both the teacher and student work in an environment of cooperative planning and evaluating.[24]

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[22] Ibid.

[23] Gerald B. Leighbody and Donald M. Kidd, Methods of Teaching Shop and Technical Subjects (Albany: Desmore, 1960), p. 161.

[24] Virgil M. Howes, Individualization of Instruction (New York: MacMillan, 1970), p. 12.

Frantz suggested that the teacher follow six procedures in preparing material for individualized instruction:

1. Select the instructional content for adaption to an individualized instruction need.
2. Specify course objectives in terms of what the learner must be able to do.
3. Develop the proper learning sequences that the student must travel.
4. Identify and select a variety of instructional media suitable for individualized instruction.
5. Develop instructional materials to supplement those materials readily available.
6. Prepare evaluation instruments that diagnose and monitor individual progress through the learning sequences.[25]

The Student and Individualized Learning

Bolvin and Glaser presented the following instructional guidelines which served as a framework for an Individual Prescribed Instruction model.

1. The goals of learning are specified in terms of observable student behavior and the conditions under which this behavior is to be exercised.

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[25]Nevin R. Frantz, "The Development of Individualized Instructional Systems," Journal of Industrial Teacher Education, (Spring, 1970), VII, p. 38.

2. Diagnosis is made of the initial capabilities with which the learner begins a particular course of instruction. The capabilities that are assessed are those relevant to the forthcoming instruction.
3. Education alternatives adaptive to the initial profile of the student are presented to him. The student selects or is assigned one of these alternatives.
4. Student performance is monitored and continuously assessed as the student proceeds to learn. Curriculum imbedded tests are used.
5. Instruction proceeds as a function of the relationship between measures of student performance, available instructional alternatives, and final criteria of competence.
6. As instruction proceeds, data are generated for monitoring and improving the instructional system. To some this was called feedback.[26]

Business and Office Applications

Boston and Monzo made the following comments regarding individulized instruction:

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[26]John O. Bolvin and Robert Glaser, "Developmental Aspects of Individually Prescribed Instruction," Audio-Visual Instruction (October, 1968), pp. 828-831.

> Traditionally, teachers have been asked merely to select a textbook and "teach" from it. They have been trained to impart only a very low-level type of cognitive skills, i.e., rote memory description, observation. Subject-matter content has been seen as the basis of curriculum construction.
>
> Our project is asking something more of teachers--we ask them to prepare behavioral objectives and to attain them through individualized instruction. Though this organic change is sometimes difficult to make, we have seen evidence of success.[27]

The Johnsons reported that individualized instruction, in addition to being a unique teaching medium, made the teacher a manager of the instructional process so he could do the following: (1) determine individual learner's problems, (2) work on a tutorial basis, (3) motivate students, and (4) identify and encourage creativity and self-direction.[28]

Individualized instruction in business and office education, based on current learning theories and designed with the systems approach to teaching, appeared to be the instructional variable needed. The design of this study was contingent upon the use of performance objectives and built-in evaluations. This was done to ascertain the students accomplishments through the successful completion of each of the eight learning packets.

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[27]Robert E. Boston and Roy Monzo, "Industrial Education for the Individual," School Shop, September, 1971, pp. 35-37.

[28]Stuart R. Johnson and Rita B. Johnson, Developing Individualized Instructional Material (Palo Alto: Westinghouse Learning Press, 1970), p. 40.

Learning Activity Packages

Ubben suggested that teachers become instructional managers, prescribers of learning experiences "on an individual basis, managing the learning process and evaluating the results."[29]

Based on research to date all packets should have several basic components which are uniform. Some of the suggested components are:

1. Each is a set of teaching-learning materials.
2. Each package focuses on a major learning idea, skill, or attitude.
3. Objectives are clearly stated in behavioral terms.
4. Performance emphasis is shifted from teacher to student.
5. Each package relies heavily on the use of learning resources which can be student operated.
6. Each package attempts to use a variety of media components.
7. Each package has student evaluative devices including pretests, student self-tests, and post-tests.[30]

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[29]Gerald C. Ubben, "The Role of the Learning Package in an Individualized Instructional Program," Journal of Secondary Education (May, 1971), p. 206.

[30]Frantz, loc. cit.

In addition, research indicated that learning packages should have within them "multiple resources and activities, each resource being directed toward the achievement of the objective stated."[31]

Learning Packages and Business and Office Education

Peterson reported on a learning packet project in career awareness. In the OCCUPAC project, the developers placed as much emphasis on the "senses" as possible; many manipulative, looking, and listening tasks were included in the 15 prototype OCCUPAC's. This project directed itself to working in the cognitive, affective, and psychomotor domain. Results of the evaluation phase of the project indicated:

1. Students preferred using OCCUPAC's on an individual and small group basis.
2. OCCUPAC's in career development needed support from field trips.
3. Teachers using OCCUPAC's needed much inservice training.
4. More OCCUPAC's should be developed.[32]

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[31]Ubben, op. cit., p. 208.

[32]Marla Peterson, The OCCUPAC Project, Final Report (Charleston: Eastern Illinois University, Center for Educational Studies, 1971), pp. 18-19, 41-43.

Additional research indicated that only a small number of individual learning packets in vocational education subjects were in actual use.

III. EDUCATIONAL OBJECTIVES AND THEIR CLASSIFICATIONS

For the purpose of this study the behavioral works of Bloom,[33] Krathwohl,[34] and Simpson[35] were researched. When the basic specifications were stated, the Systems Approach for Education (SAFE)[36] organizational structure was used as the guideline.

Institutional Dimension

The human variables in an educational setting were significant considerations. These variables were identified in the EPIC structure as follows:

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[33]Benjamin S. Bloom, et al., Taxonomy of Educational Objectives, Handbook I (New York: David McKay Company, Inc., 1956), p. 48.

[34]David R. Krathwohl, et al., Taxonomy of Educational Objectives, Handbook II (New York: David McKay Company, Inc., 1956), p. 16.

[35]Elizabeth Jane Simpson, The Classification of Educational Objectives, Psychomotor Domain (University of Illinois, Project Report, 1966), p. 50.

[36]R. E. Corrigan and Associates of California, The Systems Approach for Education, 1970.

1. The student variable can be described in terms of age, sex, achievement, level, etc.
2. The teacher variable can be described in terms of grade level taught, highest degree held, number of years experience, etc.
3. The administrator variable can be described as the person usually responsible for the educational program (i.e., superintendent, principal, director).
4. The specialist variable can be described as a person who performs a role unique only to a particular instructional setting (i.e., curriculum coordinator, remedial reading teacher, etc.).
5. The family variable can be described as parents or legal guardians of the child, and includes brothers and sisters.
6. The community variable can be described as the PTA, service clubs, religious organizations, and political groups.[37]

Within the institutional dimension the present study concerns itself with student variables only.

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[37] EPIC, A Guide for Writing Behavioral Objectives (Tucson: EPIC Press, 1970), p. 12.

Instructional Dimension

The second dimension concerns the instructional variable and is described by EPIC as:

1. The variable of organization refers to the manner in which students are organized for learning (i.e., Self-contained classroom).
2. The content variable is defined as a body of knowledge topically described (i.e., filing, etc.).
3. The method variable can be described as:
   (a) Teaching activities (i.e., lecture, inquiry, demonstration, programmed instruction).
   (b) Types of interaction (i.e., teacher-student, student-student, student-media, learning packets).
   (c) Learning principles or theories (i.e., operant conditioning, field, Gestalt).
4. The facilities variable described equipment, space, or expendables to support a given educational program (i.e., business education laboratory).
5. The cost variable is necessary to completely evaluate educational programs. Cost in terms of input and output should be considered

(i.e., money spent in the total educational operation).[38]

Within the instructional dimension the present study concerns itself with method variables only.

Behavioral Dimension

The behavioral dimension of education identifies the variables of student behavior. To describe the variables of cognitive and affective behavior, those of Bloom and Krathwohl are utilized. The variables for psychomotor behaviors are those described by Simpson.

These three variables were:

The six levels of cognitive behavioral variable were:

1. Knowledge
2. Comprehension
3. Application
4. Analysis
5. Synthesis
6. Evaluation[39]

The five levels of affective behavioral variable were:

1. Receive
2. Respond
3. Value
4. Organization
5. Characterization[40]

The five levels of the psychomotor behavioral variable were:

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[38] Ibid., p. 12.

[39] Bloom, op. cit., p. 48.

[40] Krathwohl, et al., op. cit., p. 16.

1. Perception
2. Set, Mental
3. Guided Response
4. Mechanism
5. Complex overt response.[41]

Within the behavioral dimension the variables are selected from each dimension and the objective is used where applicable for each of the eight packets.

IV. THE MODEL FOR LEARNING ACTIVITY PACKAGE DESIGN

Packet Components

As reported earlier, Frantz made the following suggestions as to packet basic components: (1) a set of teaching-learning materials, (2) each focuses on a major learning idea, (3) state objectives in measurable terms, (4) student centered, (5) student operated, (6) a variety of media, and (7) evaluative devices.[42]

The Approach Taken to Develop the Learning Packages

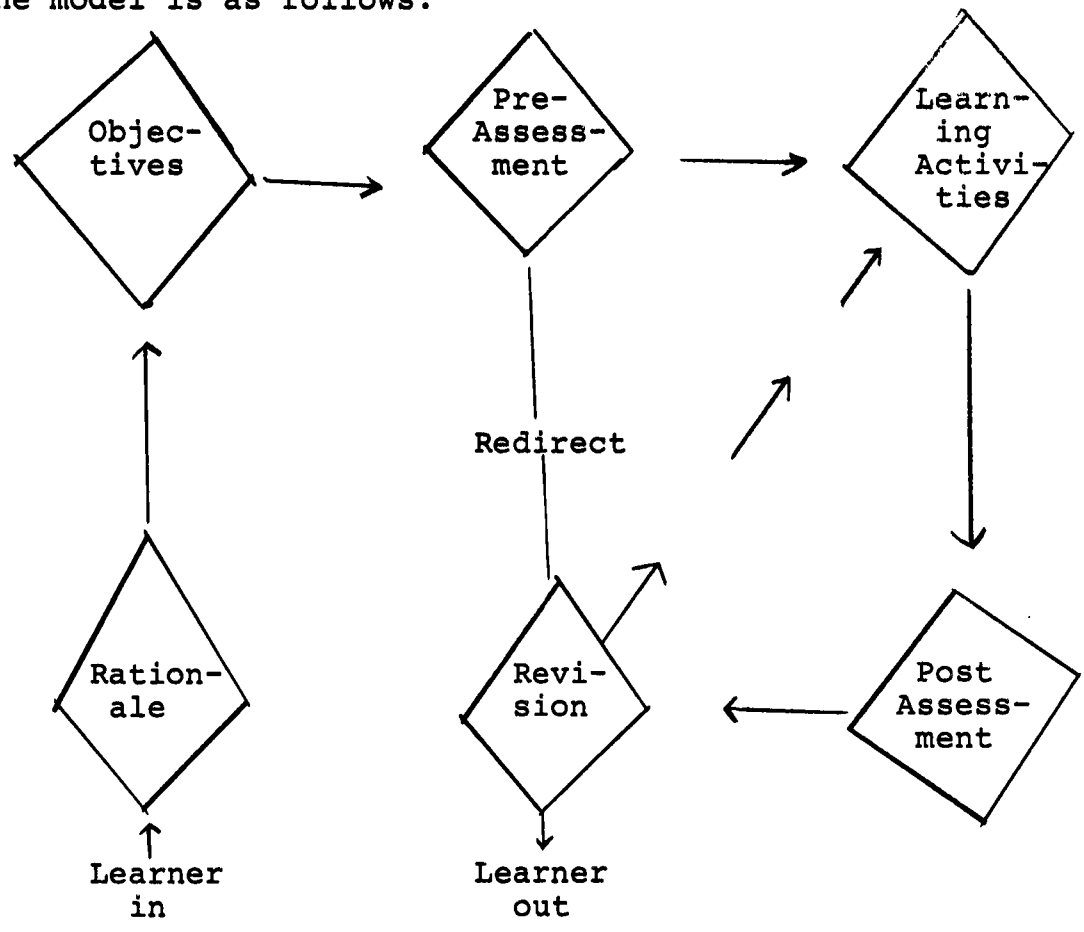
Herrscher recommended a systematic approach to instruction dealing with six basic steps: (1) rationale, (2) objectives, (3) preassessment, (4) revision, (5) learning activities, and (6) post assessment. His model is

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[41] Simpson, op. cit., p. 50.

[42] Frantz, loc. cit.

credited to the works of Popham, Tyler, Kemp, and Benathy. The model is as follows:[43]



The Herrscher model rationale deals with content relevance; objectives are the building blocks of each unit. Preassessment of learners knowledge precedes formal instructions. Learning activities (experiences) is that route the

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[43]Barton R. Herrscher, Implementing Individualized Instruction (Houston: Archem Company, 1971), pp. 4-7.

students take to achieve an objective. Post-assessment measures objective attainment; revision is change within the unit of instruction and is based on learner feedback.[44]

In this study the development of learning activity package material followed the above model with amplification by using the Systems Approach for Education organizational structure.

Evaluation of Learning When LAPS are the Instructional Method Variable

Briggs suggested that evaluation should monitor student progress and do more than evaluate overall effectiveness of an instructional technique.[45] Impellitteri and Finch reported that certain inferences could be drawn about the instructional technique by monitoring the degree to which a student meets the internal criterion objectives.[46] These same authors suggested certain essential features of instruction exists in business education; work performances as they related to "task end-product and task end-process."[47]

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[44] Ibid., p. 8.

[45] Leslie J. Briggs, Handbook of Procedures for the Design of Instruction, Monograph No. 4 (Pittsburgh: American Institute for Research in Behavioral Sciences, 1968), p. 106.

[46] Joseph T. Impellitteri and Curtis R. Finch, Review and Synthesis of Research on Individualized Instruction in Vocational and Technical Education, Information Series #43 (Columbus: ERIC Clearinghouse, 1971), p. 14.

[47] Ibid.

Evaluation of both were predicated on performance standards or criterion-reference measurements as suggested by Glaser and Cox.[48] Glaser, also, reported that criterion-referenced tests maximized discrimination between different treatment groups while minimizing the effect of individual differences in a given group.[49] Moxley reported that criterion-reference tests can be used to indicate which instructional process "succeeded" with a specific type of student.[50] Additional credibility for evaluation by behavioral objects was found in the works of Popham and Husek. These researchers recorded that a change in behavior or learning status should be measured in respect to a performance standard, either procedure (process) or product, and then group comparisons made.[51]

Using standards of criteria did not imply using norm-referenced tests. These were not appropriate for measuring student progress when instruction was individualized, because norm-referenced implied students being evaluated with

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[48]Glaser and Cox, loc. cit.

[49]Robert Glaser, "Instructional Technology and Measurement of Learning Outcomes: Some Questions." American Psychologist, 18: 1963, pp. 519-521.

[50]Roy A. Moxley, "A Source of Disorder in the Schools and a Way to Reduce it: Two Kinds of Tests." Educational Technology Review Series: Individualizing Instruction (Englewood Cliffs: Educational Technology Publications, h.d.).

[51]James W. Popham and T. R. Husek, "Implications of Criterion-Referenced Measurement," Journal of Educational Measurements, 6: Spring 1969, pp. 1-9.

students and not preselected criterion. Rosner suggested that process tests or process evaluation might well be directed to the use of imbedded criterion referenced test, pre- or post, which demonstrated a degree of cognitive mastery.[52]

Internal-External Evaluation of Learning

The EPIC structure provides a basis which describes how variables affecting a given program may be manipulated for tests of significance or associations. The evaluation of post-assessment activities follow guidelines established in the EPIC literature[53] and will take on the following dimensions:

1. Institutional dimensions. All institutional dimensions are known and become assumed or controlled.
2. Instructional dimensions. In the instructional dimensions the organization of the laboratory, the content of the course, the uniformity of equipment specifications and facilities, and the cost of the program are known and controlled variables. Within the instructional dimension

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[52]Jerome Rosner, "The Design of an Individualized Perceptual Skills Curriculum, Working Paper 53" (Pittsburgh: Center for the Study of Learning, December, 1969), p. 32.

[53]EPIC, op. cit., p. 12.

is the method variable (i.e., learning activities) which becomes the independent variable and is manipulated in the research design.

3. Behavioral dimensions. Using techniques of task analysis the behavioral dimensions are specified. They, too, become known and controlled variables when organized as part of the instructional method independent variable for external evaluation. However, it was appropriate to manipulate within the dimension to test levels of associations as they related to certain institutional dimensions;[54] age, sex, grade point average, intelligence, and standardized achievement were manipulated by Finch.[55] By controlling the institutional dimension, the behavioral dimension and all but the method variable in the instructional dimension, evaluation is directed toward the effectiveness of the independent variable--individualized instruction using Business and Office Learning Activity Packages; LAPS. Effectiveness is measured by various

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[54] Ibid.

[55] Finch, loc. cit.

associations in the learning domains,

demographic data and achievement.

The review of research literature indicated that the research strategy best suited for the study was the Post-test-only Control Group Design, with Groups randomized. Campbell and Stanley reacted to the lack of a pretest in this design by stating:

> While the pretest is a concept deeply embedded in the thinking of research workers in education and psychology, it is not actually essential to true experimental designs . . . the most adequate all purpose assurance of lack of initial biases between groups is randomization.[56]

The paradigm suggested by Campbell et al. taken on the following summative form in the study:

$$I_2 = R \; X \; O$$

$$I_1 = R \quad O$$ [57]

In the above paradigm the X (treatment) and O (post-test) could be "delivered to students or groups as a single natural package, and a pretest would be awkward," reported Campbell and Stanley.[58] Randomization by the class unit was suggested by Lindquist.[59] Campbell and Stanley cautioned

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[56] Finch, loc. cit.

[57] Donald T. Campbell and Julian C. Stanely, Experimental and Quasi-Experimental Designs for Research (Chicago: Rand McNally, 1963), p. 25.

[58] Ibid., p. 25.

[59] E. F. Lindquist, Statistical Analysis in Educational Research (Boston: Houghton Mifflin, 1940).

that "the appropriate test of significance is not 'pooling' students as thought . . . assigned at random."[60] Later studies by Glass et al.[61] and earlier studies by Lindquist suggested that an approach to class unit random assignment was to use class means as basic observations and "treatment effects are tested against variation in these means."[62]

Within each group (I_1 and I_2) Impellitteri et al. suggested that objectives at lower levels may form the basis for formative evaluation.[63] Impellitteri reported on Sullivan's study where it was found that "mere information that learners have acquired behaviors is useless unless the information can be used to make sound decisions about instructional treatment."[64] To reach the decision about instructional treatment evaluation Impellitteri et al. recommends these three factors:

1. Type or level of instructional objectives: types such as affective, cognitive or psychomotor; levels within cognitive (affective and psychomotor).

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[60] Campbell, op. cit., p. 22.

[61] Gene V. Glass, et al., "Misuse of ANOVA and ANCOVA," Review of Educational Research (Washington: AERA, 1972, Vol. 42, No. 3), p. 273.

[62] E. F. Lindquist, Design and Analysis of Experiments in Psychology and Education (Boston: Houghton Mifflin), 1953, pp. 172-189.

[63] Impellitteri, et al., op. cit., p. 16.

[64] Ibid., p. 17.

2. Student characteristics: aptitudes, prior achievement, interests, attitudes, other personal variables; . . . socio-economic status, family background, prior educational and occupation experience.

3. Instructional strategies: types of mediation, sequencing, pacing, and packaging of materials.[65]

The factor arrangement suggested by Impellitteri had been tested by the Bloom, Hastings, and Modaus[66] design where high-low measures of student achievement in Groups I_1 and I_2 are associated to certain pupil characteristics.

V. SUMMARY

The studies and literature reviewed pointed up that early theories of learning may not now be appropriate. It was suggested that today's educators might take a position between various theories and synthesize an eclectic compromise into a concept of individualized instruction which could include various forms of instructional techniques. In addition, the studies reviewed suggested that success in packet instruction and evaluation could be predicated on proper behavioral objective formulation and the control of variable sets within the instructional and behavioral dimensions. Studies, also, indicated that when designing the packets, preassessment and revision become viable patterns

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[65] Ibid., p. 19.

[66] Bloom, et al., loc. cit.

in construction, design, packaging, implementation, and evaluation of the packet approach.

This chapter, Review of Related Literature, has presented the rationale for using an eclectic theory of learning, a model for learning packet development which Duval County used, and a scheme for individualization and evaluation. Chapter III will relate to processes within the strategies and tactics and the procedures for the study.

CHAPTER III

PROCEDURES: LEARNING ACTIVITY PACKAGE FORMAT, DATA COLLECTION AND METHODOLOGY

I. INTRODUCTION

The literature search and introduction for this study address themselves to an experimental study in individualized instruction and use of learning packages. The methods used to (1) select content and instructional devices; (2) select and identify the participants, (3) determine procedures followed in constructing the information form, (4) select the pre- and post-test, (5) manage the study, (6) collect the data, (7) compute the statistical analysis used to determine effectiveness when teaching office practice using individualized instruction are described in this chapter. This chapter is divided into the following sections: (1) objectives used in the study for both the experimental and control groups, (2) the pre- and post-tests used, (3) management and teaching methods, (4) data collection, and (5) statistical methodology.

The design and development phase within the study was preceded by a review of literature. The contents of this review in Chapter II provided much information which assisted in developing the information form used in the study to

organize the data. The Cardarelli study provided the philosophy for the learning activity packages which were constructed by Duval County; the Wrightstone study on learning abilities indicated the curriculum construction for low and high ability learners. Moxley's study suggested criterion-reference tests can be used to indicate which instructional process "succeeded" with a specific type of student. The educational statistical coverage by Campbell, Gage, and Lindquist were used in the design and data treatment for the study. The factor arrangement suggested by Impellitteri which had been tested by the Bloom, Hastings, and Modaus design aided in studying pupil characteristics.

II. OFFICE PRACTICE MATERIAL COVERAGE

Objectives for Experimental Group (Learning Activity Packages)

The experimental group in the Duval County Schools used eight learning activity packages for coverage of filing, grooming, computational skills, processing forms, mail handling, record keeping, telephone techniques, and human relations. These were developed by teachers of business and office education with the cooperation of the business and office education supervisor. The objectives for these learning activity packages as stated in the Course Descriptions for Duval County were as follows:

1. To provide refresher training for improvement in basic skills to meet job-entry level requirements.
2. To aid in mastering certain office duties, such as handling the mail, filing, grooming, telephone, record keeping, work habits and attitudes, data processing, the job interview, and reception work.
3. To guide in the development of personal qualities so the student will be more likely to succeed on the job.
4. To use the old and the new skills by means of a series of realistic office assignments.[67]

During the study, the experimental group experienced a number of different activities using hardware and software as identified below:

1. Learning Activity Packages I - VIII: LAP I - Filing; Lap II - Grooming; LAP III - Computational Skills; LAP IV - Processing Forms; LAP V - Mail Handling; LAP VI - Record Keeping; LAP VII - Telephone Techniques; LAP VIII - Human Relations

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[67]Everett L. Groover, et al., Course Descriptions for Business, Distributive, and Diversified Education Department, Duval County Florida, 1972.

2. Practice Sets: These were correlated with the LAPS. Gregg Quick Filing Practice Set by Kahn, Stewart, and Yerian. Projects in Clerical Record Keeping by South-Western Publishing Company. Teletrainer Set from the Telephone Company. Career Guidance Kits by SRA "World of Work" and "Occupational Exploratory".

3. Equipment: Typewriting desks, adjustable posture chairs, tables and stands for small machines and tables that served as working surfaces, filing materials, typewriters, and office machines.

4. Learning media: Transparencies, films, filmstrips, bulletin board displays, charts, slides, speakers, field trips,

case studies, talks by local business people, and individual projects.

The course content selected to be used in these learning activity packages were those dealing specifically with the job-entry level skills shown in NOBELS to be essential to all office work, which include filing, grooming, computational skills, processing forms, mail handling, record keeping, telephone techniques, and human relations.

LAP I - Filing

When the student has completed Filing, he will be able to file individuals' correspondence alphabetically in an office. The student will be given instruction and practice in indexing and alphabetic filing of individual names. He will correctly arrange given sets in alphabetic order. He will also learn how to file business names alphabetically. He will explore in greater depth not only alphabetic filing but other systems as well.

LAP II - Grooming

This unit is devoted to improving the appearance of office trainees to meet employer expectations. Emphasis is placed on personal hygiene, posture, health habits, dress, makeup, hair care and styling, and job interview preparation. This unit forms a base to help the student advance in his chosen career.

LAP III - Computational Skills

The computational skills unit includes a variety of objective and subjective tests. It includes both speed (timed) and power (non-timed) types which are recorded on answer sheets that are to be machine scored and/or hand scored. After completion of this unit the student is more aware of the kinds of employment tests to which he may be subjected.

LAP IV - Processing Forms

The processing forms unit includes a variety of forms for completion in connection with getting ready for the job interview. Some of these are:

1. Personal data sheet. Instructions are given for completion of this form. In addition, a blank sheet is provided for the student to complete. Emphasis is placed on "selling" one's self.
2. Employment application. Instructions are given for completion of this form prior to having a blank form correctly completed by each student. Emphasis is placed on making a good first impression on the prospective employer.
3. Social security card form. Instructions are given for completion of this form prior to having a blank form correctly completed by each student.

4. Draft card form. Instruction is given in dealing with the Draft Board, and the necessity for showing one's draft status on the completed application blank.
5. Birth certificate form. The student is made aware of the reasons for giving correct age on application blank, and the fact that failure to do so may place an employee in a position of being dismissed for supplying the prospective employer with incorrect information.
6. Driver's license form. Instruction is given on the proper procedure for obtaining a driver's license, and the fact that some positions require the applicant to be able to drive in order to be employed.

LAP V - Mail Handling

In this unit for Mail, the following topics are covered: Pick-up and delivery of mail, sorting and classifying incoming and outgoing mail; opening, stamping, and routing incoming mail; processing outgoing mail. After completion of this unit, the student should be able to answer: What items make up the mail, the difference between incoming and outgoing mail, what a mail schedule is and why it is important, where and how mail is delivered and picked up, what an in box and out box are, and why letters should be placed face-down when delivered.

LAP VI - Record Keeping

This unit includes an introduction to Record Keeping with emphasis on checking names and numbers, verifying, proofreading, penmanship, and filing of records. The personal budget record information stresses the use of credit cards; using a checking account, writing checks, endorsing checks, monthly bank statements, and record of receipts and payments. It is suggested that the students go more in depth in record keeping by completing a practice set such as Family Financial Management by South-Western Publishing Company.

LAP VII - Telephone Techniques

This unit places emphasis upon correct use of the telephone directory to find local numbers, to find numbers through the yellow pages, to make emergency calls, and to locate other pertinent information. The student receives practice in receiving calls correctly, taking messages, and passing on information accurately. The unit covers how to place local calls and secure the person desired; securing an outside line, and dialing the number by giving the switchboard operator the necessary information. When the student has mastered this unit, he will be able to place long distance calls and secure the person desired; he will be able to identify and know the uses of new telephone equipment, and he will have a knowledge of specialized services offered by the telephone company.

LAP VIII - Human Relations

In this unit, the skills, knowledges, and attitudes for work success are stressed. The student is provided additional instructional materials and media to help him more effectively prepare to live and work in a great variety of situations. When the student has completed this unit, he will have gained a better understanding of himself, learned to get along with his classmates, and learned to get along with his coworkers when he obtains a job.

Appendix C contains a sample of a typical format and table of contents for all eight learning activity packages.

To make sure that the content was the same for both groups, the researcher took the outline for the learning activity packages and matched the content of the textbook to those in LAPS. This is shown in Table I. Since there were adequate copies of the pre- and post-tests included with the LAPS units for use with the experimental group, the researcher produced sufficient copies of the pre- and post-tests to be used with the control group.

Objectives for Control Group (Textbook)

The control group in the Knox County Schools used the Clerical Office Practice textbook by Peter L. Agnew, James R. Meehan, and William R. Pasewark for coverage of the same subject matter as the experimental group. The objectives for this course as stated in the Manual for this textbook

TABLE I

TIME AND CONTENT SCHEDULE OF EXPERIMENTAL AND CONTROL GROUPS*

Content and Tests	Teaching Methods: Experimental Assignments	Teaching Methods: Control Assignments	Time: Number of Days
LAP I-Filing			
LAP I-Pretest			1
Assignment	I	pp. 65-79	17
Review			3
LAP I-Post-test			1
LAP II-Grooming			
LAP II-Pretest			1
Assignment	II	pp. 12-16	17
Review			3
LAP II-Post-test			1
LAP III-Computational Skills			
LAP III-Pretest			1
Assignment	III	pp. 110-124	17
Review			3
LAP III-Post-test			1
LAP IV-Processing Forms			
LAP IV-Pretest			1
Assignment	IV	pp. 33-44	17
Review			3
LAP IV-Post-test			1
LAP V-Mail Handling			
LAP V-Pretest			1
Assignment	V	pp. 46-52	17
Review			3
LAP V-Post-test			1
LAP VI-Record Keeping			
LAP VI-Pretest			1
Assignment	VI	pp. 109-124	17
Review			3
LAP VI-Post-test			1

TABLE I (Continued)

Content and Tests	Teaching Methods: Experimental Assignments	Teaching Methods: Control Assignments	Time: Number of Days
LAP VII-Telephone Techniques			
LAP VII-Pretest			1
Assignment	VII	pp. 54-59	17
Review			3
LAP VII-Post-test			1
LAP VIII-Human Relations			
LAP VIII-Pretest			1
Assignment	VIII	pp. 128-138	17
Review			3
LAP VIII-Post-test			1

*A one-year (36 weeks) schedule.

are essentially the same as those for the experimental group. They are as follows:

1. To aid in mastering certain office duties, such as handling the mail, filing, and reception work, that have not been included in other courses.
2. To provide refresher training in once-learned understandings and skills that are partially lost if not used constantly.
3. To integrate the old and the new understandings and skills by means of a series of realistic office assignments.
4. To guide in the proper development of personal qualities so that the student will be more likely to succeed on the job.[68]

The teaching schedule for both the experimental and control groups is also shown in Table I for the year 1972-73. This table contrasts the assignment of materials for the experimental and control groups.

The course content units selected to be used in this study were those units dealing specifically with the job-entry level skills enumerated in the NOBELS' Study to be essential to all office work, which are: Filing, Grooming, Computation Skills, Processing Forms, Mail Handling, Record

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[68]Peter L. Agnew, James R. Meehan, and William R. Pasewark, Clerical Office Practice Manual (Cincinnati: South-Western Publishing Company, 1967), p. 1.

Keeping, Telephone Techniques, and Human Relations. These same units were covered by the experimental group, and are individually discussed under "Objectives for Experimental Group (Learning Activity Packages)."

During the study, the control group experienced a number of different activities using hardware and software as identified below:

The students in the control group used the following office practice laboratory for completion of the assignments shown in Table I:

1. Textbook: Clerical Office Practice by Peter L. Agnew, et al., 4th edition.
2. Workbooks that were correlated to the textbook: Office Work Assignments giving business forms, letterheads, checklists, civil service tests, and employment tests.
3. Equipment: Typewriting desks, adjustable posture chairs, tables and stands for small machines and tables that served as working surfaces, filing materials, typewriters, and office machines.

3.	Other Learning Media:	Transparencies, films, filmstrips, bulletin board displays, charts, posters, printed material, and practice sets.

The pre- and post-tests that accompanied each of the eight learning activity packages were completed by each student in the control group. For each unit, the students in the control group took a pretest, studied the unit from the textbook, and then took the post-test on that unit. The tests were graded by each teacher and became a part of the student's overall grade.

III. PARTICIPANTS

In order to determine if there was any significant difference in achievement between students receiving instruction using the individualized approach of learning activity packets and instruction on the same subjects by using the conventional textbook approach, the experimental design was selected. The review of research literature indicated that the research strategy best suited for the study was the Post-Test-only Control Group Design, with Groups randomized. Campbell and Stanley explained the lack of a pretest in stating that ". . . it is not actually essential to true experimental designs . . . the most adequate all purpose assurance of lack of initial biases between groups is randomization." Any administered pretests in this design were

used in the Analysis of Covariance treatment as the covariant.

In September, 1972, the researcher learned from the supervisor of business and office education for Duval County, Jacksonville, Florida, that individualized learning activity packets had been developed. With the supervisor's permission, plans were made to conduct a research study using the eight packets developed. Students from five intact high school classes from Duval County were selected as the experimental group for this study.

The control group for this study was selected from Knox County, Tennessee, with the help of the supervisor of vocational education in Knox County. The control group consisted of five intact classes receiving instruction in the same subject covered by the learning activity packages (LAPS) but through the use of a textbook. The control group received instruction using the Clerical Office Practice, Fourth Edition by Agnew, Meehan, and Pasewark. This textbook covers filing, grooming, computational skills, processing forms, mail handling, record keeping, telephone techniques, and human relations--the same units of instruction covered in the eight learning activity packages.

Identification and Selection of Classes

The State of Florida has approximately 1,500 business and office education teachers, and the State of Tennessee

has approximately 1,500 business and office education teachers or a total of 3,000 teaching in the public schools at the secondary level during 1972-73 school year. With each of these 3,000 teachers teaching approximately 20 students each, this represents a total of 60,000 students. Included in this total were approximately 570 vocational office education teachers employed at the secondary level, or 20 percent.

The business and office education supervisor supplied the researcher with a listing of schools from Florida which used the learning activity packages during the 1972-73 school year.

From this 60,000 student population, 10 intact business and office education classes representing 232 students from Florida and Tennessee were randomly selected. A table of random digits was used to determine the sample.[69]

Experimental Group. The five intact classes randomly selected comprising the experimental group included a total of 108 business and office education students at the secondary level during the 1972-73 school year from Florida.

Control Group. The five intact classes randomly selected comprising the control group included a total of

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[69]Woodrow W. Wyatt and Charles M. Bridges, Jr., Statistics for the Behavioral Sciences (Atlanta: D. C. Heath and Company, 1966), pp. 7 and 352-353, Table XVII, Ten Thousand Randomly Assorted Digits.

124 business and office education students at the secondary level during 1972-73 school year from Tennessee. The students in this group had not used learning activity packages in their classes at the secondary VOE level for instruction in office practice; rather, the group used a conventional approach in the teaching of the eight units of instruction--filing, grooming, computational skills, processing forms, mail handling, record keeping, telephone techniques, and human relations.

Treatment Description

During the 1972-73 school year, both the control and experimental groups were taught eight subjects using the teaching schedule shown in Table I (pages 58 and 59). The experimental group used the learning activity packages and the control group used the conventional textbook approach.

The pre- and post-tests used for this study were those which had been developed for the eight learning activity packages. Each of the eight learning packages were field tested in Florida in the Spring of 1972, and necessary revisions were made. The content validity and reliability of both the packets and tests were established at that time.

Both groups included a total of 232 business and office education students of 10 intact randomly selected classes.

Both the experimental and control groups had covered the eight subjects being investigated either through use

of learning activity packages (experimental) or textbook (control).

The two groups were similar in the following ways:

1. The subjects covered during the school year were the same.
2. The two groups were in the business and office education departments.
3. The two groups of students had teachers who were full-time contract teachers for the 1972-73 school year.
4. Some classes in both groups met both in the morning and afternoons.
5. The teachers in both groups had very similar degrees, about the same number of years of teaching and business experience. (See Table II, page 78, Chapter IV.)
6. The students in both groups had very similar grade point averages and I.Q. scores. (See Table III, p. 80, Chapter IV.)

The two groups were different in the following ways:

1. The two groups were located in two different school systems in two different states.
2. Whether or not the business and office education teacher had used learning activity packages in the classroom prior to this study at the

secondary level was the primary difference for the two groups.

IV. INFORMATION FORM PROCEDURE

To conduct the experimental study, the researcher constructed several forms for use in the collection of the data. These forms were submitted to a panel of judges comprised of professors and a supervisor of business and office education for further revisions.

The final information form was a composite of all the suggestions received from the panel of judges. This information form was then simulated in a Surveys of Education class at The University of Tennessee to check the practicality of use. At this point, revisions were made prior to its use in the study. A copy of this information form is included in Appendix E. This form summarized the following information:

1. School name
2. County
3. Name of teacher
4. Degree of teacher
5. Number of years teacher had taught subject
6. Number of years of business experience of teacher
7. Whether or not teacher had received inservice training during 1970, 1971, and 1972.

8. Teacher's opinion on whether or not individualized instruction was superior to normal classroom instruction.
9. Student name, student English scores, student I. Q. scores; student grade-point average; occupation of both mother and father of student.

In addition, spaces were allowed for the recording of the scores for each of the pre- and post-tests. One sheet per class was used for the demographic data and the pre- and post-test scores.

The researcher wrote guidelines for conducting each of the classes for the experimental class so that there would be consistency in the manner in which the classes were conducted. Guidelines were also written for the control group classes so that the manner in which these classes were conducted were somewhat similar.

V. PRE- AND POST-TESTS

The pre- and post-tests used in this study consisted of a pretest and a post-test for each of the eight units of instruction which had been developed by the supervisor and teachers of business and office education in Duval County, Florida. The eight individual learning activity packages including the pre- and post-tests were field tested

in Florida during the Spring of 1972, and were revised where necessary. The content validity and reliability of both the pre- and post-tests were established at that time by the supervisor of business and office education.

Table I (pages 58 and 59) shows the schedule observed in administering each of these tests. The pretests and post-tests covered the subjects of (1) filing (2) grooming, (3) computational skills, (4) processing forms, (5) mail handling, (6) record keeping, (7) telephone techniques, and (8) human relations. Appendix F, Tables 50 and 51, shows these eight subjects as being high priority ones for preparation of office personnel. The administered pretests in this study were used in the Analysis of Covariance treatment as the covariant.

VI. MANAGEMENT OF THE EXPERIMENTAL AND CONTROL GROUPS

The techniques used in managing all students in this study was guided by the researcher who opted that unless one controlled the management variable teachers would tend to manage their students in a manner most suitable to their individual class and school needs. In general, the experimental group teachers might resort to management techniques typical to the conventional setting.

In an attempt to equalize the Hawthorne effect between groups, all students in the study were briefed on the reasons

for and concepts of the study. This was accomplished by the researcher asking each teacher to explain to his students the importance of the study. All students in both groups were advised on how important their attitudes of sincerity and industriousness were. Also, each student was encouraged to think of himself as the most important person in the study and to accomplish each learning task to the best of his ability.

Experimental Group (LAPS) Teaching Procedures

The teachers in the experimental group distributed each LAP upon student request and initially instructed the students on the proper method of completion of each task in going through the LAP. The pre- and post-tests for each LAP was taken by all students at the appropriate time. Efforts were made to eliminate cheating or using LAP materials when taking these tests. These tests were controlled and scored by the teacher. When finishing a pretest, and if the student scored 80 percent or better, he was allowed to take the post-test immediately. If his score was 80 percent or better, the student could elect to go on to the next LAP, which was obtained from the teacher, without completing the learning experiences. Many students elected not to skip a LAP even though they had satisfactorily completed the post-test during the first learning experience. In general, the process to proceed through a LAP was (1) read instructions, (2) read introduction, (3) take pretest, (4) start with the simple

learning experiences, (5) complete all following learning experiences, (6) record work on the progress chart, and (7) take post-test. If a student received a score of 80 percent or better, he proceeded on to the next LAP. In the event his score was less than 80 percent, the student located his errors, looked up the correct answer and was "quizzed" by the teacher and then issued the next LAP.

During the period that each student was progressing through the LAPS, the teacher circulated from student to student giving individual assistance; those who vocally requested or their actions indicated they needed assistance received assistance. All teachers in the experimental group were alert to anticipated daily equipment or supply needs necessary to carry out the individual learning experiences. It was not the responsibility of the student to "locate" supplies or equipment. However, the students were always held responsible for the condition of their LAPS. The LAPS were collected at the end of each period and controlled by the teacher until next used.

The students in the experimental group worked on the LAP material during class periods only. Each student entered dates started and completed on his LAP chart.

The completed pre- and post-tests and information sheets from each school were delivered to the researcher by the business and office education supervisor.

Control Group Teaching Procedures

For the control group, management of curriculum offerings and teaching procedures included the following:

1. Using lectures, discussion, and demonstrations for coverage of the material.
2. Using transparencies during class instruction.
3. Using practice sets where possible.
4. Using bulletin board displays, charts, posters, and printed material where possible.
5. Using written tests at the teachers' discretion.
6. Using pre- and post-tests at the appropriate time.

Table I (pages 57 and 58) shows the schedule observed in administering these.

The text, Clerical Office Practice by Agnew, Meehan and Pasewark, was standard in each control class. Various teacher-made and commercially purchased charts on office practices were used. There was no difference from school to school between equipment and supplies.

VII. STATISTICAL ANALYSIS OF DATA

The basic data for this study were provided from pre- and post-tests results of students taking office practice in Knox County, Tennessee, using a conventional textbook approach and students in Duval County, Florida, using learning activity packages during the 1972-73 school year. Supplementary data were provided from students' permanent records from each school for analysis purposes.

Processing of Data

Each item on the information form had been assigned an individual code number. The data from each sheet were then coded and transferred to The University of Tennessee Computer Center Data Sheet. By using this form including the card column for each item, it was possible to complete the coding and keypunching.

In the returns with missing values, a blank space was left in the column on the keypunched data card. The Fastabs procedure provided calculation adjustments for the missing values.

After the keypunching of the data cards was complete, the Statistical Package for Social Studies (SPSS), Statistical Analysis System (SAS), and Biserial Correlation computer programs were used to treat the data statistically. These programs provided the researcher with the data organized in several meaningful ways.

SAS Program

The SAS program provided an Analysis of Covariance. This statistical treatment was needed in order to test the hypothesis: "There is no difference at the .05 level in achievement for students who are taught by learning activity packages as compared with students who are taught by the conventional textbook method."

Analysis of Covariance Treatment of Data. This treatment made possible all of the precision of design without requiring that the students in each school be actually equated with reference to initial scores. This treatment demanded only that the initial measure be available for each student, but permitted random division of the students into experimental groups.

The application of the F-test told whether it was worthwhile to test the individual differences at all. If the F-test had not proved significant, it would have indicated that all observed differences in methods means could be due to chance alone.

In this treatment when the F-test is applied to the methods and within groups variances, it is essentially a way of applying the t-test to all differences in methods means simultaneously. Since there were only two methods groups, the F-test became the algebraic equivalent of the t-test; in this case $F = t^2$. [70]

SPSS Program

This program provided Chi Square and Spearman's Rho treatment of the data. Both these statistical treatments were needed in order to answer the objectives: (1) To determine if the occupation of the parents of students had an influence on student achievement, and (2) To determine if

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[70] Lindquist, op. cit., pp. 82-96.

inservice training of teachers helped to promote student achievement.

Spearman's Rho. This is frequently referred to as the rank-order-correlation coefficient. It measures the degree of association between two sets of ranked data. In this case, the occupation of the parent (mother and father) with the score student made on the post-tests.

Chi Square. The chi-square tests is the most flexible statistical technique for determining whether one's observations differ from what would be expected according to chance. Wherever expected observations can be determined or predicted, a X^2 value may be computed. In this study, the teacher's response to the question of inservice training with a "YES" as a plus (+) or "NO" as a minus (-) answer gave the information used for chi-square.[71]

Biserial Correlation Coefficient. This treatment of data is necessary to compute a coefficient of correlation between a continuous variable which can be considered as dichotomous, that is, one which can be classed in only two categories.[72] It was necessary to use this method in order

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[71] Dean J. Champion, Basic Statistics for Social Research (Scranton: Chandler Publishing Company, 1970), pp. 154 and 214.

[72] Ibid., p. 241.

to find the answer to the objective: To determine if the teacher perception of individualized instruction influences student achievement. The question asked of each teacher in the study was: "Is individualized instruction superior to normal classroom instruction? Yes ☐ No ☐." A comparison of the answer to this question was made with the student achievement of the students of each teacher on the post-test.

VIII. SUMMARY

In the chapter, the methods used to select content and instructional devices, procedures to select and identify the participants, procedures used to construct the information form, procedures to select the pre- and post-test, procedures to manage the study, procedures followed to collect the data, and procedures used to compute the statistical analysis were described. In addition, the population, the descriptive data gathering, the methods of randomization and the gathering and analysis of data were described.

Chapter IV gives the results of this study.

CHAPTER IV

RESULTS OF THE STUDY

I. INTRODUCTION

The problem of this study was to find the answer to the question: Can students learning be improved when using learning activity packages as a teaching method? To reveal the results of the study, the remaining portion of this chapter will present and analyze the data centered around the hypothesis and objectives.

To seek the solution to the problem, and to solve the hypothesis established, two groups of students from the States of Florida and Tennessee were used in an experimental study. These students (108 from Florida and 124 from Tennessee) were identified by the researcher with the help of the supervisors of business and office education.

The hypothesis for this study was: There is no significant differences at the .05 level in achievement for students who are taught by learning activity packages as compared with students who are taught by the conventional textbook method.

One of the groups was taught by learning activity packages (Florida) and one of the groups was taught by the conventional method (Tennessee).

Selected Characteristics of the Teachers of the Two Groups

Table II shows whether there were noticeable differences in the preparation of the teachers in this study, because this in itself might affect the extent of the learning. Each of the teachers in this study responded to questions on the information form giving selected information.

The most important characteristics shown in Table II which point out the similarities and differences between the teachers in the control group and the teachers in the experimental group are:

Similarities of the two groups are listed below:

1. All teachers in both groups had earned a bachelor's degree.
2. The number of teachers in both groups who had ten or more years of teaching experience were similar.
3. The number of teachers in both groups who had ten or more years of business experience were about the same.
4. A high percentage of the teachers in both groups had received inservice training during 1970, 1971, and 1972. All the teachers in the control group had received some type of inservice training, and 83 percent of the teachers in the experimental group had received inservice training.

TABLE II

SELECTED CHARACTERISTICS OF THE TEACHERS OF THE TWO GROUPS USED IN THE STUDY

Characteristic	Experimental Teachers (Percent) N = 108	Control Teachers (Percent) N = 124
Bachelor's Degree	100	100
Master's degree	33	67
Ten or more years of teaching experience	17	33
Ten or more years of business experience	20	17
Teachers having inservice training during 1970, 1971, and 1972	83	100
Teachers who feel individualized instruction is superior to normal classroom instruction	100	83

5. A high percentage of the teachers in both groups feel individualized instruction is superior to normal classroom instruction. All the teachers in the experimental group, and 83 percent of the teachers in the control group responded with a "Yes" answer to this question.

The two groups were different in the following ways:

1. A higher percentage of the teachers in the control group had master's degrees (67 percent) while only 33 percent of the experimental group had a master's degree.
2. While there was a difference in the total years of teaching experience, it was not appreciable (17 percent experimental and 33 percent control).
3. There was a difference in the total years of business experience, but it was not noticeable (20 percent experimental and 17 percent control).

From this background information, the teachers used in this study appeared to be enough alike so that the teacher factor would not influence teaching effectiveness in favor of the experimental or control group.

Selected Characteristics of the Students of the Two Groups

Since this study utilized intact classes from two different counties in two different states, Table III shows

TABLE III

SELECTED CHARACTERISTICS OF THE STUDENTS OF THE TWO GROUPS USED IN THE STUDY

Characteristic	Experimental (Percent) N = 108	Control (Percent) N = 124
Age 15 years - 19 years	47	53
Grade 10th - 12th	47	53
Class enrollment between 12 - 20 students	40	60
Student English score 40 or above	45	55
Student I.Q. score 101 or above	45	55
Grade Point Average - 3.0 - 4.0	65	74
Occupation of students' mother in service area	75	75
Occupation of students' father in structural work area	22	22
Occupation of students' mother is that of housewife	45	72

whether there were noticeable differences in the students in this study because this in itself might affect the extent of the learning.

As summarized in Table III, the following characteristics point out the similarities and differences of the students participating in this study.

Similarities of the stuents are listed below:

1. All students in both groups were about the same age and grade level.
2. All students in both groups had similar scores for English, I.Q., and grade point average.
3. The occupation of the parents of students in both groups had 75 percent of mothers employed in the service areas and 22 percent of fathers employed in the structural work areas.

Some differences of the students are listed below:

1. While 72 percent of the mothers of students in the control group had an occupation shown as "housewife," only 45 percent of the mothers of students in the experimental group were shown as "housewife."
2. While 60 percent of the students in the control group had class enrollment between 12 - 20 students, only 40 percent of the students in the experimental group were in classes showing an enrollment between 12 - 20 students.

From this background information, the students used in this study appeared to be enough alike so that the student factor would not influence learning effectiveness in favor of the experimental or control group.

II. STUDENT ACHIEVEMENT IN CONTROL AND EXPERIMENTAL GROUPS

The hypothesis for this study was: There is no significant difference at the .05 level in achievement for students who are taught by learning activity packages as compared with students who are taught by the conventional textbook method.

Overall Achievement of Experimental and Control Groups for Learning Activity Packages I - VIII. In comparing the overall post-test means of the experimental (3.22) and control (2.81) groups, an analysis of covariance with an F value of 15.95 indicated a significant difference in favor of the experimental group. (See Figure 1.)

As shown in Table IV, looking at the comparisons for the experimental and control groups, the learning activity packages for filing, mail handling, record keeping, telephone techniques, and human relations, student achievement showed significant differences at the .05 level or better when comparing means of the post-test for each learning activity package. While there was no significant difference

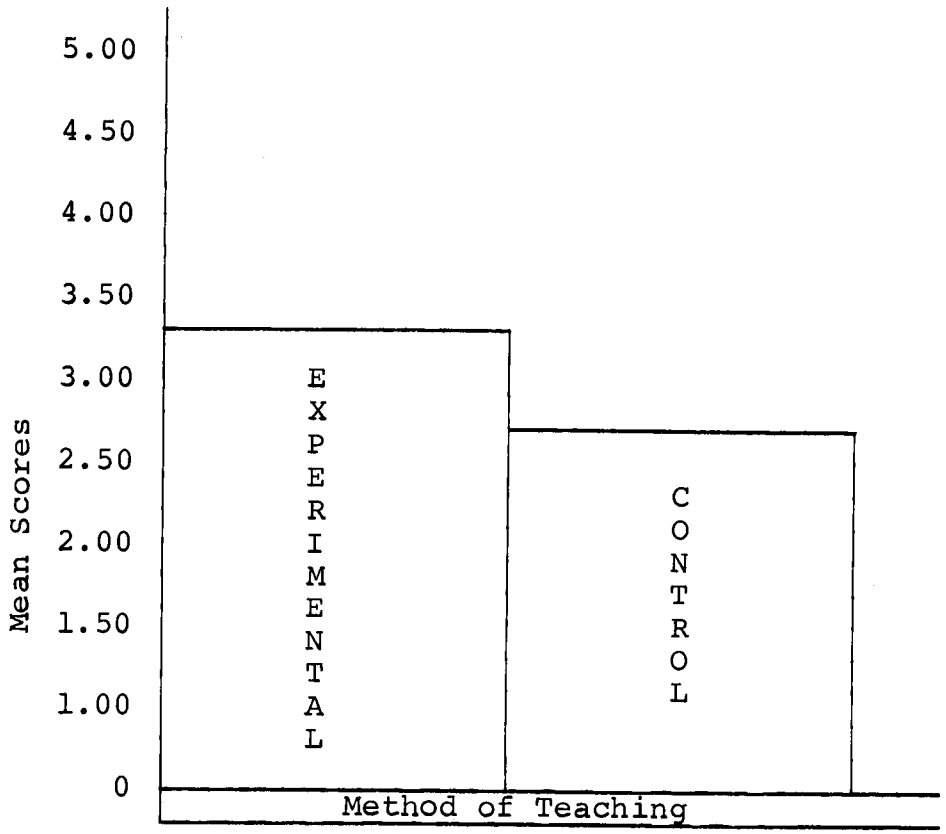


Figure 1. Mean achievement of experimental and control group on post-tests for LAPS I - VIII.

TABLE IV

OVERALL COMPARISON OF EXPERIMENTAL AND CONTROL GROUPS ON ACHIEVEMENT USING POST-TEST MEANS

		Analysis of Covariance		
Variable	Number	Mean	F Value	Prob >F
Filing				
Experimental	102	3.5127	17.0966	0.0001*
Control	124	2.8605		
Grooming				
Experimental	96	3.3174	3.3573	0.0683
Control	124	3.5002		
Computation Skills				
Experimental	94	2.6301	0.0044	0.9467
Control	124	2.6191		
Processing Forms				
Experimental	91	2.8469	0.5694	0.4513
Control	124	2.9591		
Mail Handling				
Experimental	96	3.2847	43.3871	0.0001*
Control	124	2.2140		
Record Keeping				
Experimental	97	3.3319	8.7572	0.0034*
Control	124	2.9380		
Telephone Techniques				
Experimental	97	3.5880	24.1192	0.0001*
Control	124	2.9674		
Human Relations				
Experimental	100	3.3249	30.3837	0.0001*
Control	124	2.4396		
LAPS I - VIII				
Experimental	97	3.2250	15.9593	0.0001*
Control	124	2.8124		

*Significant at the .05 level or better.

in student achievement for three learning packages--grooming, computational skills, and processing forms--either the conventional textbook method or learning package could be used by students learning this set of material.

The comparison of the experimental and control groups for each learning activity package follows.

Learning Activity Package I - Filing. In comparing the post-tests means of the experimental (3.51) and control (2.86) for the Filing LAP, an analysis of covariance with an F value of 17.09 indicated a significant difference in student achievement in favor of the experimental group. (See Figure 2.)

Since there was a significant difference when using the learning activity package to teach Filing, one can safely predict that teachers who use this procedure as the teachers in this study did would expect to get similar results in learning.

Learning Activity Package II - Grooming. In comparing the post-test means of the experimental (3.31) and control (3.50) for the Grooming LAP, an analysis of covariance indicated no significant difference in student achievement. (See Figure 3.)

This indicates that both approaches produced similar results.

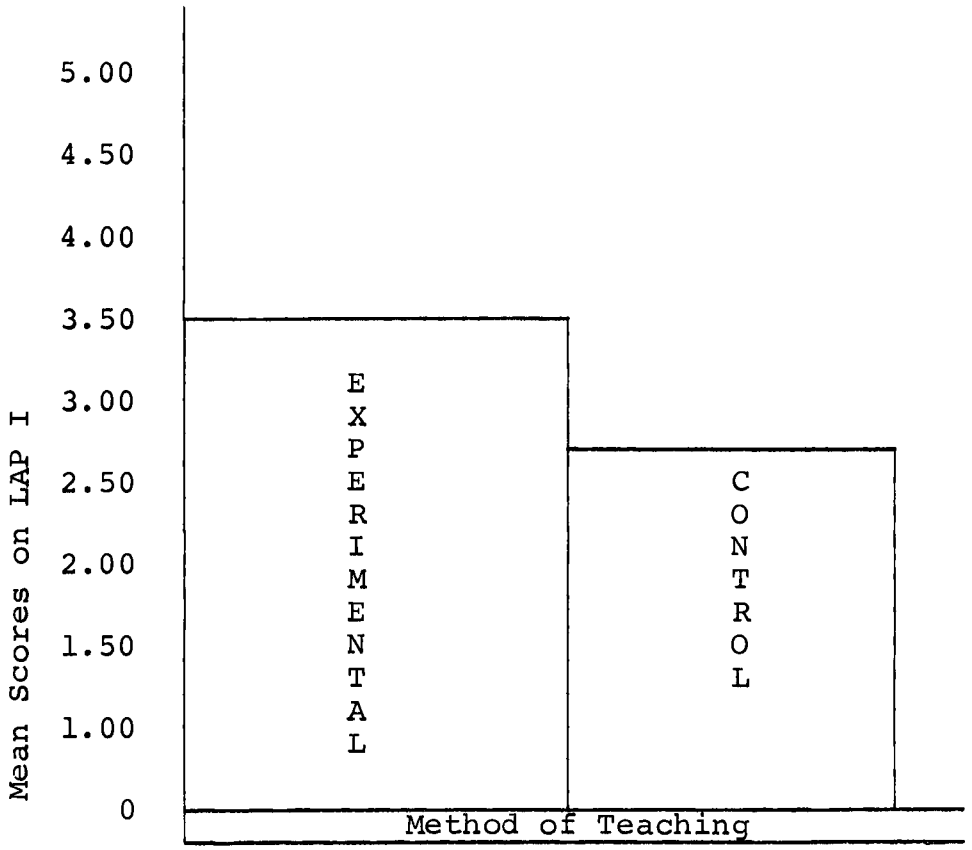


Figure 2. Mean achievement of experimental and control group on post-test for LAP I - Filing.

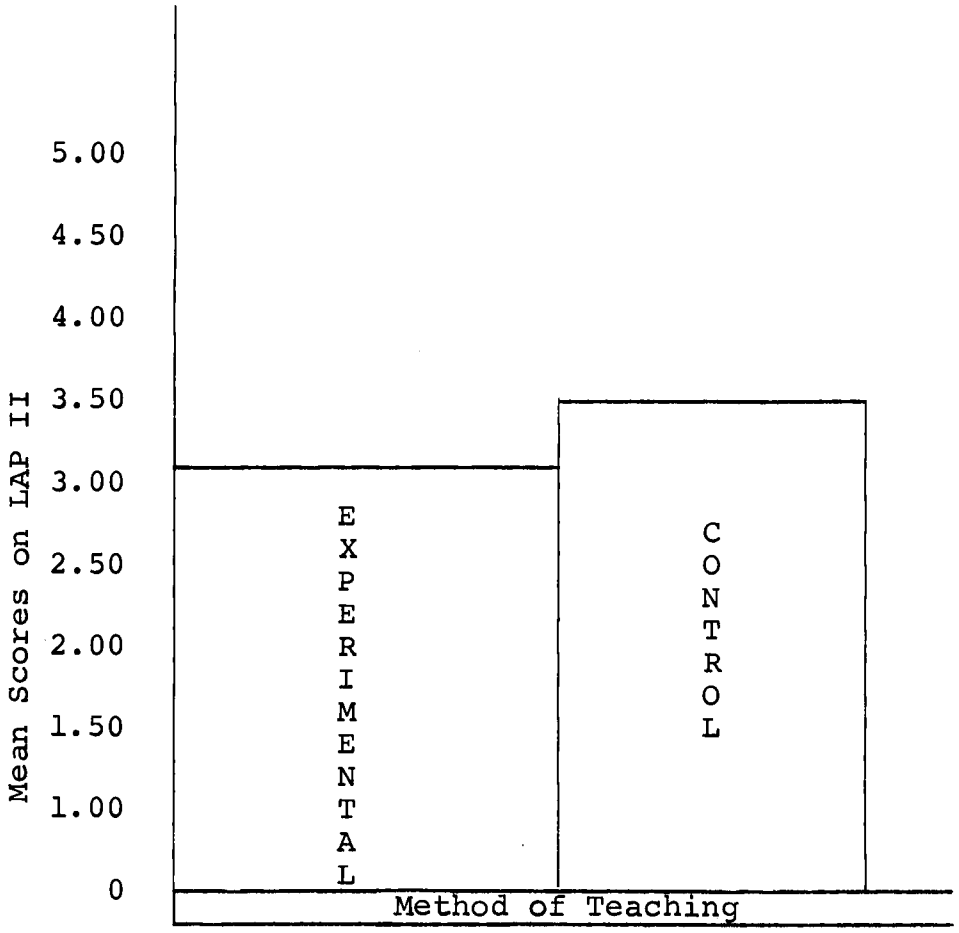


Figure 3. Mean achievement of experimental and control group on post-test for LAP II - Grooming.

Learning Activity Package III - Computational Skills. In comparing the post-test means of the experimental (2.63) and control (2.61) for the Computational Skills LAP, an analysis of covariance indicated no significant difference in student achievement. (See Figure 4.)

This indicates that both approaches produced similar results.

Learning Activity Package IV - Processing Forms. In comparing the post-test means of the experimental (2.84) and control (2.95) for the Processing Forms LAP, an analysis of covariance indicated no significant difference in student achievement. (See Figure 5.)

This indicated that both approaches produced similar results.

Learning Activity Package V - Mail Handling. In comparing the post-test means of the experimental (3.28) and control (2.21) for the Mail Handling LAP, an analysis of covariance with an F value of 43.38 indicated a significant difference in student achievement in favor of the experimental group. (See Figure 6.)

Since there was a significant difference when using the learning activity packages to teach Mail Handling, this means that one can safely predict that teachers who use this procedure as the teachers in this study did would expect to get similar results in learning.

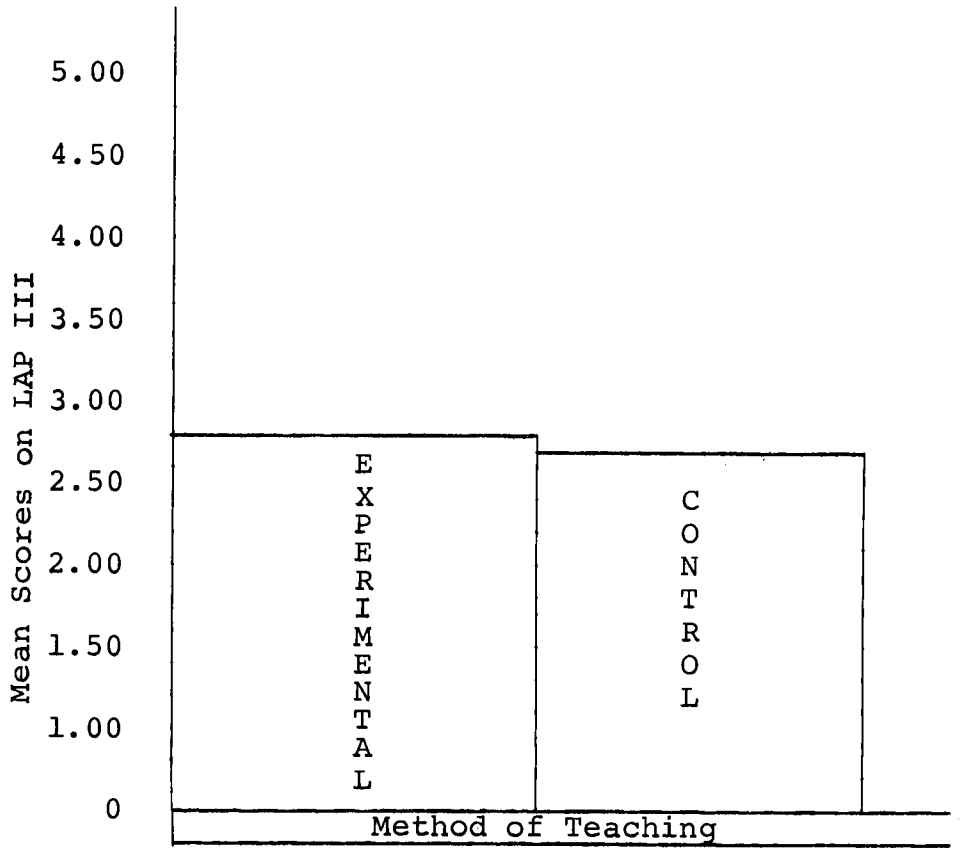


Figure 4. Mean achievement of experimental and control group on post-test for LAP III - Computational Skills.

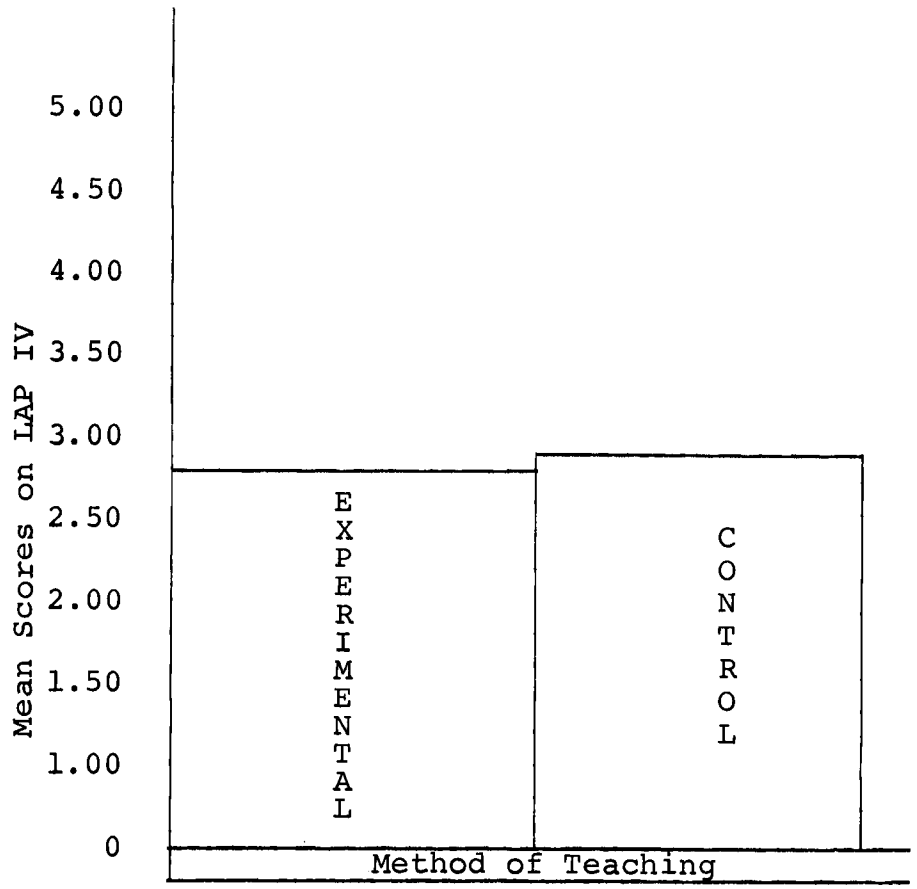


Figure 5. Mean achievement of experimental and control group on post-test for LAP IV - Processing Forms.

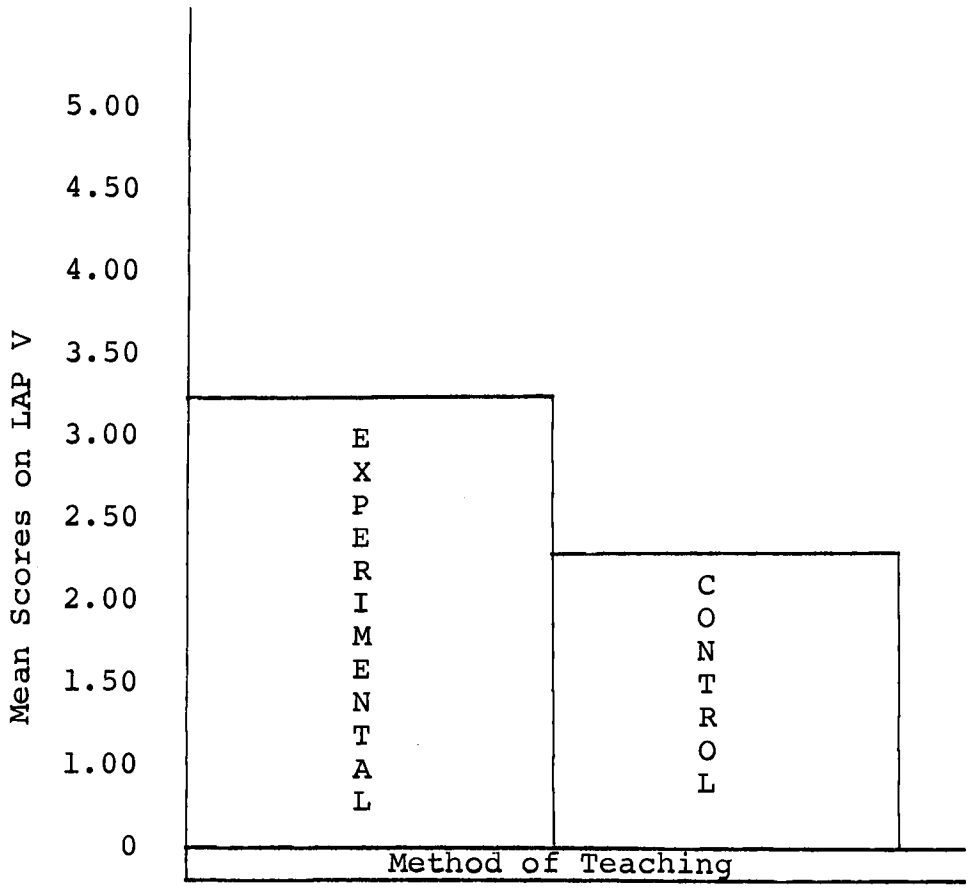


Figure 6. Mean achievement of experimental and control group on post-test for LAP V - Mail Handling.

Learning Activity Package VI - Record Keeping. In comparing the post-test means of the experimental (3.33) and control (2.93) for the Record Keeping LAP, an analysis of covariance with an F value of 8.75 indicated a significant difference in student achievement in favor of the experimental group. (See Figure 7.)

Since there was a significant difference when using the learning activity packages to teach Record Keeping, this means that one can safely predict that teachers who use this procedure as the teachers in this study did would expect to get similar results in learning.

Learning Activity Package VII - Telephone Techniques. In comparing the post-test means of the experimental (3.58) and control (2.96) for the Telephone Technique LAP, an analysis of covariance with an F value of 24.11 indicated a significant difference in student achievement in favor of the experimental group. (See Figure 8.)

Since there was a significant difference when using the learning activity packages to teach Telephone Techniques, this means that one can safely predict that teachers who use this procedure as the teachers in this study did would expect to get similar results in learning.

Learning Activity Package VIII - Human Relations. In comparing the post-test means of the experimental (3.32) and control (2.43) for the Human Relations LAP, an analysis

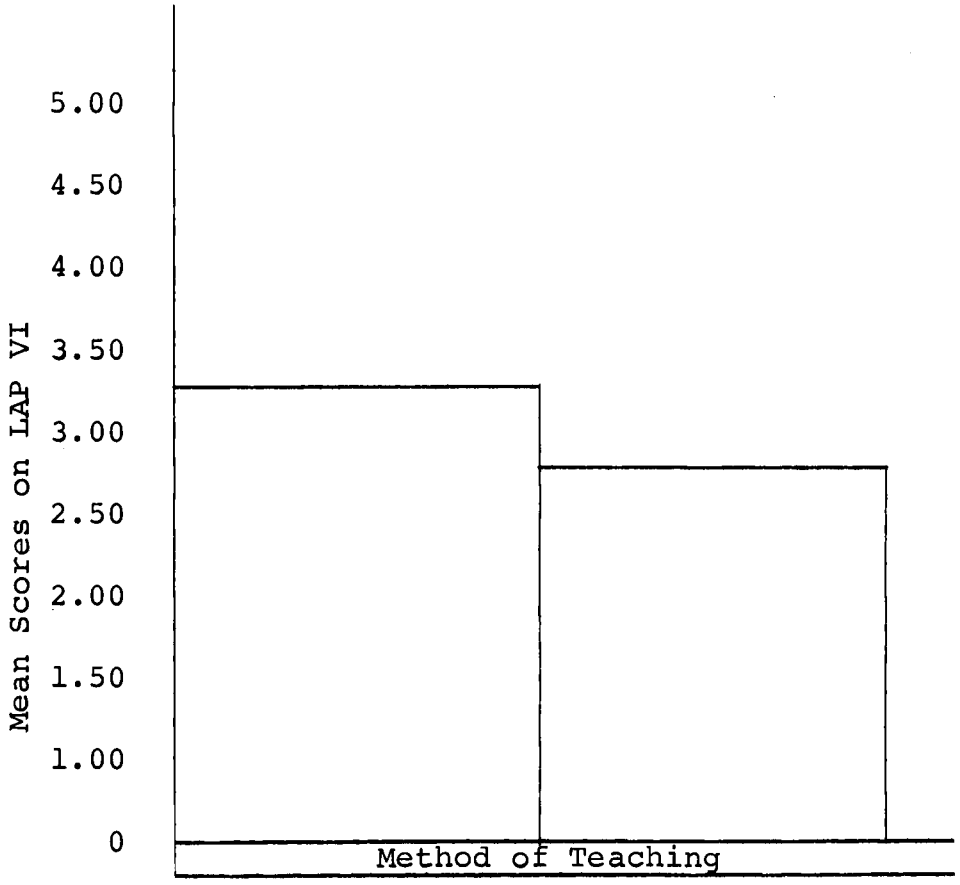


Figure 7. Mean achievement of experimental and control group on post-test for LAP VI - Record Keeping.

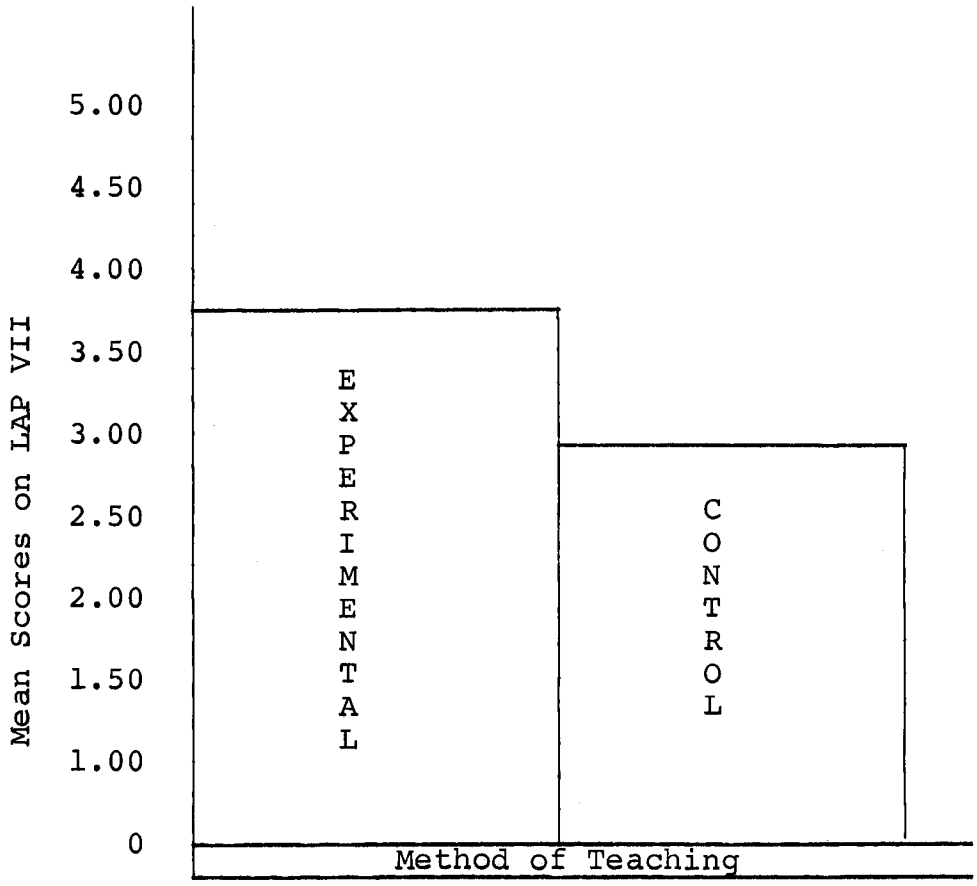


Figure 8. Mean achievement of experimental and control group on post-test for LAP VII - Telephone Techniques.

of covariance with an F value of 30.38 indicated a significant difference in student achievement in favor of the experimental group. (See Figure 9.)

Since there was a significant difference when using the learning activity packages to teach Human Relations, this means that one can safely predict that teachers who use this procedure as the teachers in this study did would expect to get similar results in learning.

III. THE PERFORMANCE OF HIGH AND LOW ABILITY STUDENTS WHEN USING LEARNING ACTIVITY PACKAGES

In order to determine the achievement of the low and high ability student on learning activity packages, the 123 students of the control group and the 80 students in the experimental group were grouped by ability using I.Q. scores by use of the Statistical Analysis System. The results showed that the 50 percent cut-off point was an I.Q. of 101. Therefore, the low ability students were considered in the I.Q. range of 40 - 101, the high ability group ranged from 101 - 125.

An analysis of covariance with regression coefficients and statistics for the post-test for each learning activity package showed that the high ability students attained a higher mean score (3.72) on learning activity packages than the control group (3.56) as shown in Figure 10.

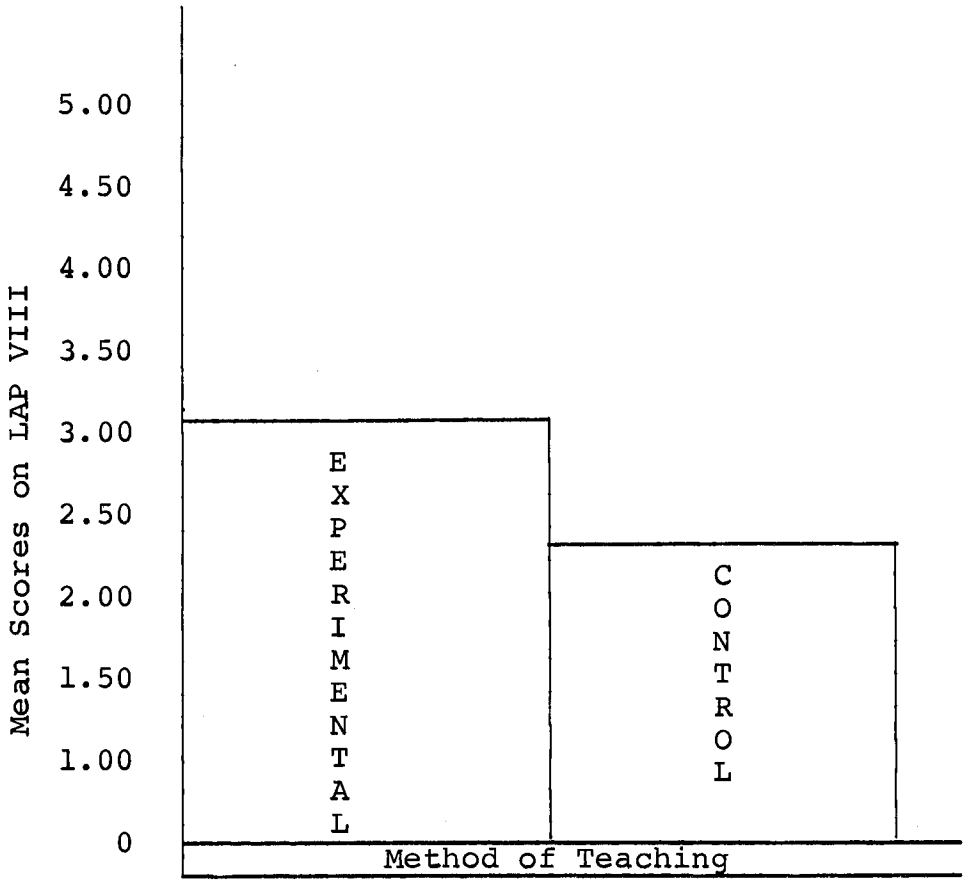


Figure 9. Mean achievement of experimental and control group on post-test for LAP VIII - Human Relations.

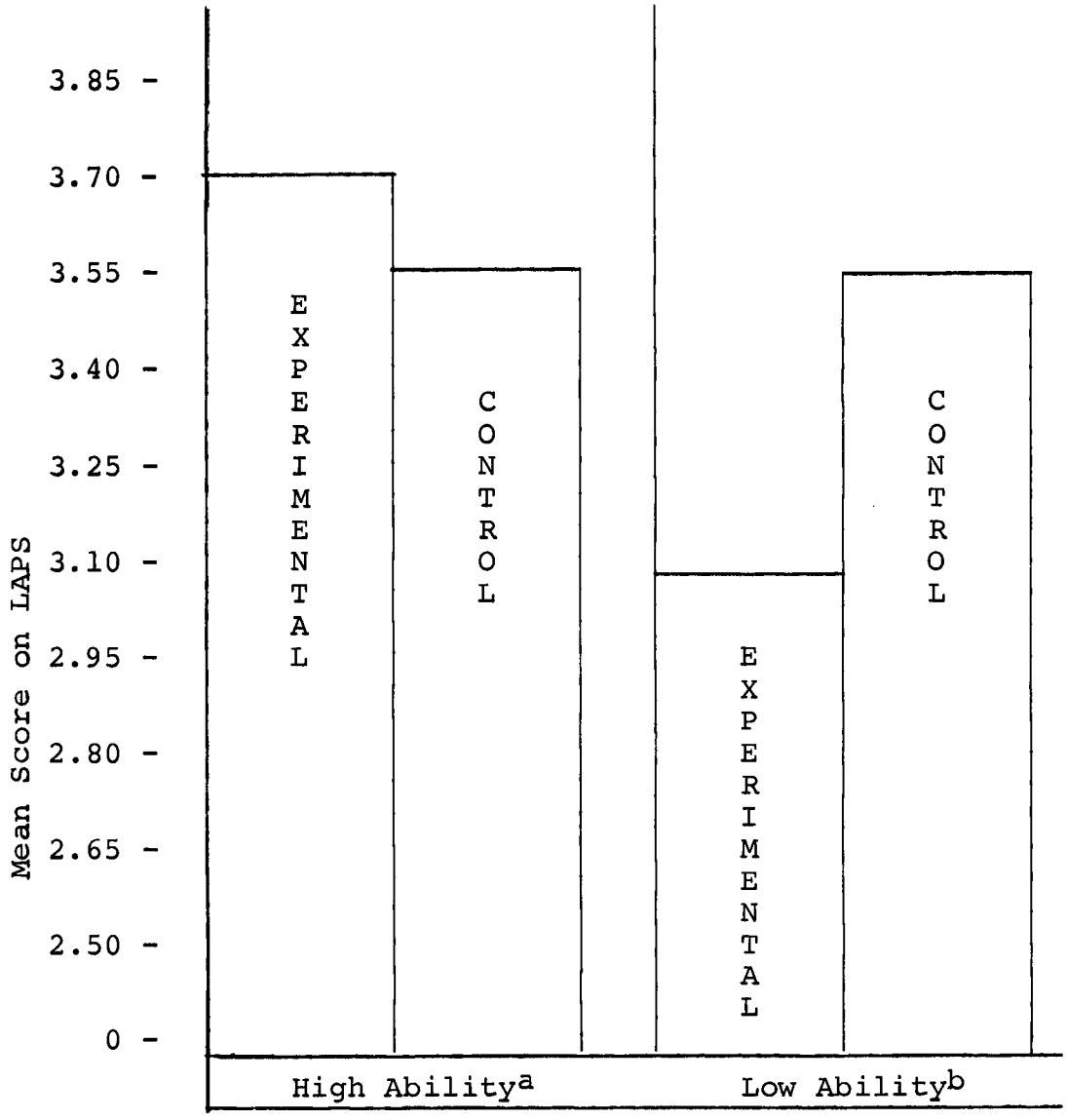


Figure 10. A comparison of performance of high and low ability students of the experimental and control group on LAPS I - VIII.

[a]I.Q. range from 101 - 125.

[b]I.Q. range from 40 - 101.

Since there was a higher mean achievement score by high ability students for those using learning activity packets, this would indicate that students in this study in the I.Q. range from 101 to 125 performed better when using learning activity packages than students in the control group. It could also mean that a wider variety of activities were provided in the LAP material which served as a motivator for the high ability student. Also, since the student had more independence of study when using packets, he was able to progress at his own rate of learning.

On the other hand, the low ability student performed better when the conventional textbook approach was used. (See Figure 10.) The low ability student in the control group attained a higher mean score (3.56) than the experimental group (3.10).

Since there was a higher score attained in mean achievement by low ability students for those using the textbook approach, this would indicate that students in this study in the I.Q. range from 40 to 101 performed better when using the textbook approach than the students using learning activity packages. It could also mean that the low ability student learns better when more structure is provided.

This means the continued use of learning activity packages is a very important method of teaching, especially with high ability students. However, with the low ability student, the continued use of the textbook is important.

IV. THE RELATIONSHIP OF PARENTS' OCCUPATION TO STUDENT ACHIEVEMENT

In order to determine if the occupation of the parents of students has an influence on student achievement, a Spearman Correlation Coefficient was computed for the parent of each student used in the study.

It was necessary to use the Dictionary of Occupational Titles and code the occupation of the parent of each respondent before computing a Spearman Correlation Coefficient for the parent of each student used in the study. The pairing of the two variables (parent occupation and mean score on each post-test in the learning activity package) gave a significant relationship at the .05 level in some instances for the occupation of the father--in seven of the eight learning activity packages. On the other hand, the mother's occupation did not show a significant relationship when compared with student achievement.

In considering the relationship of parent occupation to student achievement on learning activity packages, Table V shows a negative relationship between student achievement and father's occupation in all instances. Since 22 percent of the father's occupation in this study was that involved in the construction skills work area, the results would indicate that the student achievement on the eight subjects investigated in this study correlates negatively with fathers in this occupational category.

TABLE V

RELATIONSHIP OF PARENT OCCUPATION TO STUDENT ACHIEVEMENT ON LAPS I - VIII

Variable Pair	Spearman Correlation Coefficient					
	N	Mother	Sign.	N	Father	Sign.
Filing	96	-0.07	0.220	80	-0.39	0.001*
Grooming	91	0.03	0.387	76	-0.15	0.101
Computation Skills	90	0.06	0.283	74	-0.25	0.015*
Processing Forms	88	0.01	0.445	89	-0.11	0.054*
Mail Handling	91	0.03	0.373	76	-0.32	0.002*
Record Keeping	92	-0.01	0.429	74	-0.24	0.018*
Telephone Techniques	92	0.03	0.185	75	-0.35	0.365
Human Relations	94	-0.10	0.157	79	-0.18	0.048*

*Significant at .05 level.

Studies conducted in the area of how home environment affects school achievement by Morrow and Wilson[73] show that high achievers are characterized by more emotionally supportive home environment, greater family sharing in recreation, decision-making, and exchange of confidences and ideas; greater mutual parent-child affection, acceptance, trust, and approval; less parental domination, severity, and restrictiveness; more sympathetic parental encouragement of achievement, but less over-insistence on achievement; greater harmony between parents and more regularity of home routines. Knowing this, it would seem that perhaps this might be a reason that fathers involved in the structural work areas would have less time and less inclination to fulfill the father role of the high ability child.

The correlation of father's occupation to student achievement in this study offers the teacher an opportunity to use school records in order to determine the occupation of the students' fathers so that a more effective approach may be taken to the learning process.

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[73]John R. Medinnus, Readings in the Psychology of Parent-Child Relations, The Morrow and Wilson Study 22, (San Jose State College: John Wiley & Sons, Inc., 1967), pp. 245-283.

V. RELATIONSHIP OF STUDENT ACHIEVEMENT AND TEACHER PERCEPTION OF INDIVIDUALIZED INSTRUCTION

In order to determine if the teacher perception of individualized instruction influences student achievement, each teacher was asked to answer "yes" or "no" to the question: "Is individualized instruction superior to normal classroom instruction?"

Because one of the variables was expressed as a dichotomy, it was necessary to use the Biserial Correlation Coefficient program. The Biserial coefficient may be interpreted in the same way as the product-moment r; it is a method developed specifically for estimating the extent of correlation when one variable is in the form of a dichotomy (a yes or no answer).

The results as shown in Table VI show a significant correlation in teacher perception and student achievement for LAP III and V at the .05 level of confidence. There did not appear to be any difference in the teacher's perception of individualized instruction (LAPS) and student achievement for LAPS II, IV, VI, VII, and VIII. Although there was no significant difference in LAPS I and II in teacher perception, the teacher perception correlated negatively for student achievement for both these LAPS. The attitude toward LAPS is an important aspect, because the learning activity packages in

TABLE VI

RELATIONSHIP BETWEEN STUDENT ACHIEVEMENT AND TEACHER PERCEPTION OF INDIVIDUALIZED INSTRUCTION

Number	d.f.	Biserial Correlation Coefficient Learning Activity Packages							
		I	II	III	IV	V	VI	VII	VIII
		-0.17	-0.14	0.38	0.07	0.34	0.05	0.19	0.29
227	225								
		-0.56	-.51	1.99*	0.34	1.71*	.21	0.75	1.31
T =									

A T Value showing a significant relationship with 225 degrees of freedom, would need to show 1.66 or better.

*Significant relationship at .05 or better.

this study were developed by teachers. Since teachers are not accustomed to developing wholesale instructional materials for classroom usage, their attitude toward doing so is a necessary consideration on the part of administrators.

However, since there was not a significant correlation between teacher perception of individualized instruction (LAPS) and student achievement, this would certainly help the administrator in his decision to implement learning activity packages into the school system. In states like Florida and Tennessee, the student achievement would not be adversely influenced by what his teacher thought about individualized instruction.

VI. RELATIONSHIP BETWEEN STUDENT ACHIEVEMENT AND INSERVICE TRAINING OF TEACHERS

In order to determine if inservice training of teachers in individualized instruction helps promote student achievement, teachers were asked the question: "Have you had inservice training during 1970, 1971, and 1972?" The respondents were given a choice between (1) Yes, or (2) No.

Table II (page 79) indicated a majority of these teachers in the study received some type of inservice training during this period of time.

An SPSS program using Chi Square treatment was computed for each post-test results using the variable of inservice

training to test the significance of the relationship. As shown in Table VII, no significant relationship existed between inservice training of teachers and overall student achievement.

This means that for this study the student achievement overall reflected no difference for the teacher to have participated in an inservice training program. An implication from these data may be that the teacher attitude toward inservice training at the time the decision is made to use learning activity packages will not be a key factor in the success of the students using the LAPS.

TABLE VII

RELATIONSHIP BETWEEN STUDENT ACHIEVEMENT AND INSERVICE TRAINING OF TEACHERS

Variable	Inservice Training			
	N	Chi Square	d/f	Significance
Filing	225	1.7215	2	0.4229
Grooming	220	1.0605	2	0.5884
Computational Skills	217	6.1914	2	0.1027
Processing Forms	215	5.0459	2	0.0802
Mail Handling	219	18.6052	2	0.0001**
Record Keeping	220	3.2676	2	0.1952
Telephone Techniques	220	0.9050	2	0.6360
Human Relations	223	20.6578	2	0.0000**

**Significant relationship at .01 or better.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

Chapter V contains a summary of the problem, review of literature, methods and procedures, and analysis and interpretation of the data relating to this study. Conclusions and recommendations are also reported.

This study addressed itself to the problem of finding the asnwer to the question: Can student learning be improved when using learning activity packages as a method of teaching?

The Vocational Education Act of 1963 provided funds for ancillary services to enable teachers to do further study in an effort to improve the method of teaching. Concern about accountability in all education has added emphasis on improvement of instruction at all levels.

The State of Florida initiated an inservice program to develop individualized instructional packets designed to meet the needs of students based on a national study completed by NOBELS (New Office and Business Education Learnings System).

Most learning activity packages developed had been placed in use without a study to test their effectiveness after usage.

The Problem, Objectives and Hypothesis

The problem of this study was to determine whether students in business and office education improved their learning through the use of learning activity packages as a teaching method.

The purpose of the study was to determine whether learning activity packages as a method of teaching obtains similar results when compared with the conventional textbook method for selected high school students.

Objectives. In order to accomplish the purpose of the study four objectives were set forth:

1. To determine if the low or high ability student performs best on learning activity packages.
2. To determine if the occupation of the parents of students has an influence on student achievement.
3. To determine if the teacher perception of individualized instruction influences student achievement.
4. To determine if inservice training of teachers in individualized instruction helps promote student achievement.

Hypothesis. The hypothesis for this study stated in the null form was: There is no difference at the .05 level

in achievement for students who are taught by learning activity packages as compared with students who are taught by the conventional textbook method.

Review of Literature

A review of the related literature was made in order to provide the researcher with a background in learning theories, evaluation of learning using performance objectives, concepts of organizing individual instruction, and procedures for researching the LAP concept. The review was presented in five major categories: (1) Learning Theories and their relationship to Business and Office Education; (2) Individualized instruction in Business and Office Education; (3) The Learning Activity Packages; (4) Educational objectives and their classification; and (5) The Model for Learning Activity Package Design.

The studies and literature reviewed pointed up that early theories of learning may not now be appropriate. It was suggested that today's educators might take a position between various theories and synthesize an eclectic compromise into a concept of individualized instruction which could include various forms of instructional techniques. In addition, the studies suggested that success in packet instruction and evaluation could be predicated on proper behavioral objective formulation and the control of variable sets within the instructional and behavioral dimensions.

Studies, also, indicated that when designing the packets, preassessment and revision become viable patterns in construction, design, packaging, implementation, and evaluation of the packet approach.

Procedures and Methods

The procedures used in this study were organized in the following manner: learning activity package format, objectives for office practice, identification and selection of participants in the study, development of information form, pre- and post-tests, management of the groups, and data collection and analysis.

After identifying course content, the eight learning activity packages being investigated were developed by the supervisor of business and office education, Duval County, Florida, with the help of his teachers. Prior to using the learning activity packages, they were field tested; revision followed before the packets were finally reproduced for use. Pretests and post-tests were included in each learning activity package.

The study was implemented after a careful review with teachers and students of the importance of the study.

The pretest was administered prior to each student covering the material, the results of which served as a covariant in the analysis of variance treatment. The post-tests were administered only after the completion of the instructional treatments which were outlined in a time and

content schedule for each teacher. The control group was taught in a conventional textbook manner, and the experimental group was involved in individual instruction and learning activity packages (LAPS).

The population used in this study was 232 business and office education students in office practice from five intact high school classes randomly selected from Duval County, Florida, and five intact high school classes randomly selected from Knox County, Tennessee.

Data for the study came from student permanent records, teacher and student information forms, and scores from the pre- and post-tests.

The limitations imposed upon the study were as follows:

1. Study concentrated only on the value of using learning activity packages as a means of preparing business and office education students for job-entry level office work in the selected secondary schools which included five classes in Florida and five classes in Tennessee.
2. Only the subjects of the prepared learning activity packages were investigated which included filing, grooming, computational skills, processing forms, mail handling, record keeping, telephone techniques, and human relations.

3. The tests which were used in this study were those created by the individuals who wrote the learning activity packages.
4. The teachers in the experimental group received specific inservice training for the use of learning activity packages. The teachers in the control group did not receive specific in-service training for their method of teaching.

The pre- and post-tests used in this study were tested for reliability and validity during the Spring of 1972 by the supervisor of business and office education, Duval County. The research strategy used was the Post test-only Control Group Design, with Groups randomized. Any administered pre-tests in this study were used in the Analysis of Covariance treatment as the covariant.

The analysis of data consisted of variable assignment, converting various raw scores to F values, and testing for differences and associations between and within groups. For these functions the analysis of covariance treatment for significant differences, the Spearman's Rho rank-order correlation coefficient for associations, the Chi Square for observed differences, and the Biserial Correlation Coefficient for relationships. Tables and figures were used to aid in data interpretation.

III. SUMMARY OF FINDINGS

The comments which follow relate to 232 business and office education students studying office practice from Duval County, Florida, and Knox County, Tennessee representing ten intact classes. The major findings of this study were as follows.

Major Findings

1. The students in the experimental and control group seemed to be similar (Table III, page 80).
2. The background for the teachers in this study for both the experimental and control group were quite similar which showed consistency in teaching effectiveness (Table II, page 78).
3. An F value of 15.95 indicated a significant difference at the .05 level between the student achievement and method of teaching for the learning activity packages of the units of filing, mail handling, record keeping, telephone techniques, and human relations. When the mean for the experimental group (3.22) was compared with the mean for the control group (2.81), overall achievement was in favor of the experimental group. Part of this difference could be attributable to the fact that the teachers in the

experimental group had been involved with the test preparation, and other uncontrollable factors.

4. The high ability students attained a higher mean achievement (3.72) on learning activity packages than did the low ability students. The learning packets are designed to offer more independence of study which may have served as a motivator for the high ability student. The low ability student attained a higher mean achievement (3.56) on the conventional method than did the high ability students. The low ability student may be provided more structure with the use of a textbook.

5. There was a significant negative relationship at the .05 level between father's occupation and student achievement in seven instances on LAPS I (Filing), III (Computational Skills), IV (Processing Forms), V (Mail Handling), VI (Record Keeping), and VIII (Human Relations). The mother's occupation indicated no significant relationship with student achievement. In this study, 22 percent of the fathers were in a category which the Dictionary of Occupational Titles refers to as "structural work occupations" which includes the construction trades, such as welding,

masonry, carpentry, and similar vocations. Therefore, the fathers in this occupational category may be less inclined to fulfill the father role of the student.

6. There was a significant correlation between student achievement and teacher perception of individualized instruction at the .05 level on LAPS III (Computational Skills) and V (Mail Handling). The learning activity packages used in this study were developed by teachers. Since teachers are not used in developing wholesale instructional materials for classroom usage, their attitude toward doing so could be adversely affected. There didn't appear to be any difference in the teachers' perception of individualized instruction (LAPS) and student achievement for LAPS II (Grooming), IV (Processing Forms), VI (Record Keeping), VII (Telephone Techniques), and VIII (Human Relations).
7. No significant relationship at the .05 level existed between inservice training of teachers and overall student achievement.

IV. CONCLUSIONS

Based on the findings of this study, the following conclusions can be drawn about the use of learning activity packages as a teaching method.

1. The learning activity package is an effective method for learning office practice content. This conclusion is based upon the finding that there was a significant difference in student achievement in favor of the experimental group. (Major finding 3.)
2. High ability students performed better on learning activity packages than do low ability students. (Major finding 4.)
3. The occupation of the father seems to have an effect on student achievement, but the occupation of the mother does not seem to have an effect. (Major finding 5.)
4. Teacher perception of individualized instruction seems to have no influence on student achievement. (Major finding 6.)
5. Inservice training seems to have no overall effect on student achievement. (Major finding 7.)

V. RECOMMENDATIONS

Based upon the findings and conclusions of this study, as well as the researcher's experience, the following recommendations are made.

1. A concerted effort should be made on the part of curriculum specialists to investigate development of packets in other vocational

subject areas in terms of their feasibility, in addition to business and office occupations. The factors affecting the interpretation of an individualized program are: costs dealing with personnel, materials, administration, physical plant maintenance, and equipment.

2. Learning activity packages should be developed for use with high ability students in other vocational subject areas.
3. Further study should be done relating parents' occupation to student achievement.
4. Further research should be done concerning the effects of inservice training and student achievement.
5. Further study should be done on the effect of teacher perception toward individualized instruction and student achievement.
6. Studies should be completed indicating the relationship between learning activity packages in various types of institutions and their effect on the behavioral dimensions.
7. This study should be repeated in other disciplines of vocational education; especially in those areas involving more psychomotor skills.
8. Further studies should be made including:
   A. Comparative cost effectiveness for the

use of learning activity packages as compared to conventional textbook methods.

B. Whether learning activity packages will work as well in other areas of vocational education as they do in business and office occupations.

C. Whether learning activity packages will work as well in cooperative programs as they do in school programs.

D. Determine what type of inservice is most effective in preparing teachers to use learning activity packages.

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APPENDICES

APPENDIX A

BEHAVIORAL OBJECTIVES FOR EIGHT LEARNING ACTIVITY PACKAGES (LAPS)

LAP OBJECTIVES

The following are the objectives as appeared at the beginning of each LAP.

LAP I - FILING

1. You will be able to file individuals' correspondence alphabetically in an office.
2. You will be given instruction and practice material in indexing and alphabetic filing of individual names.
3. You will correctly arrange given sets of names in alphabetic order.
4. You will be able to file alphabetically with at least 80 percent accuracy.
5. You will learn how to file business names alphabetically.
6. You will be able to explore in greater depth not only alphabetic filing but other systems as well.

LAP II - GROOMING

1. You will be able to practice good grooming and personal hygiene.
2. You will know proper health habits.
3. You will exhibit good posture--sitting, standing, walking.
4. You will display appropriate dress, hairstyling, and use of makeup.
5. You will demonstrate proper appearance and technique for job interview by role playing.

LAP III - COMPUTATIONAL SKILLS

1. You will be able to complete an application for Social Security number.
2. You will prepare a personal data sheet.
3. You will be able to list five places where you can find information about jobs that are available.
4. You will be able to explain the difference between private and public employment agencies.
5. You will be able to write a letter of application.
6. You will be able to complete an application form legibly and accurately.
7. You will complete a W-4 form.
8. You will be able to take an employment test.

LAP IV - PROCESSING FORMS

1. You will be able to follow the steps in preparing for an interview.
2. You will be able to prepare a personal data sheet and fill in job application.
3. You will be able to dress appropriately for the job interview.
4. You will be able to write a follow-up letter.

LAP V - MAIL HANDLING

1. You will be able to tell what items make up the "mail."
2. You will be able to tell the difference between <u>incoming</u> and <u>outgoing</u> mail.
3. You will be able to tell what a <u>mail schedule</u> is and why it is important.

4. You will be able to tell where and how mail is delivered and picked up on the mail or messenger route.

5. You will be able to tell what an In box and an Out box are.

6. You will be able to tell why letters should be placed face-down when delivered.

LAP VI - RECORD KEEPING

1. You will be able to work in a business occupation, such as messenger, stock clerk, payroll clerk, file clerk, or mail clerk. These jobs will require that you have the ability to write legibly, keep basic records, make simple reports, file and follow instructions.

2. You will be able to handle your personal finances. This will include budgeting your income, using credit cards and using bank accounts.

3. You will be able to demonstrate your skills by completing a practice set.

LAP VII - TELEPHONE TECHNIQUES

1. You will be able to make correct use of the telephone directory to find local numbers, to find numbers through the yellow pages, to make emergency calls, and to locate other pertinent information.

2. You will be able to receive calls correctly, take messages, and pass on information accurately.

3. You will be able to place local calls and secure the person desired by securing an outside line, and dialing the number, and by giving the switchboard operator the necessary information.

4. You will be able to place long distance calls and secure the person desired by direct distance dialing, and through the telephone company's operator.

5. You will be able to identify, and know the uses of new telephone equipment, i.e., multiple- number (interoffice, "hold" buttons), speakerphone, and intercom calls.

6. You will have a knowledge of specialized services offered by the telephone company: credit cards and how to use them, conference calls, WATS, answering service, tie line service, and foreign exchange service.

LAP VIII - HUMAN RELATIONS

1. You will be able to gain a better understanding of yourself.

2. You will learn to get along with your classmates.

3. You will learn to get along with your coworkers when you obtain a job.

APPENDIX B

LETTERS OF APPROVAL TO USE LAPS AND SECURE NEEDED STUDENT INFORMATION

THE DUVAL COUNTY SCHOOL BOARD

ADMINISTRATION BUILDING

1325 SAN MARCO BOULEVARD, JACKSONVILLE, FLORIDA 32207

JOHN T. GUNNING

SUPERINTENDENT OF SCHOOLS

BOARD MEMBERS

William E. Carter, Chairman
Wendell P. Holmes, Jr., Vice-Chairman
Hugh Schulman
Mrs. Gene Miller
James S. Hornsby
William S. Mathias, Jr.
Joseph L. Cullen

May 22, 1974

Mrs. Marlyne E. Adams
806 Redsail Drive, N.W.
Knoxville, Tennessee 37919

Dear Mrs. Adams:

You may use any of the forms or any other information which I sent you as you see fit. As you know, I was only sharing with you what teachers in Duval County and the State have developed. We hope that you will find this information both interesting and helpful.

I know that you deserve your Ph. D. degree and wish you the best of luck in the future.

Sincerely,

Everett L. Groover

Everett L. Groover, Supervisor
Program Planning & Evaluation
Business, Distributive, &
Diversified Education

ELG/vl

D E P A R T M E N T O F P U B L I C I N S T R U C T I O N

KNOX COUNTY

MILDRED E. DOYLE, SUPERINTENDENT

400 W. Hill Avenue

Knoxville, Tennessee 37902

September 18, 1973

TO: High School Principals and Guidance Counselors

FROM: Mildred E. Doyle, Superintendent

This letter is to give you permission to give information to Mrs. Marlyne Adams on the 1973 VOE students which she will use in her research for her dissertation at U.T. She will be interested in the English grades and intelligence scores of these students as well as the occupation of their parents.

Thank you in advance for your cooperation in working out a mutually convenient schedule with Mrs. Adams for obtaining this information.

Mildred E. Doyle, Superintendent

MED:rwy

APPENDIX C

FORMAT AND CONTENT OF EIGHT LEARNING ACTIVITY PACKAGES (LAPS)

LAP I - FILING

TABLE OF CONTENTS

	PAGE
Your Objectives	1
Content of LAP I	2
The Introduction	3
Learning Experiences	
1. Pretest	5
2. Assignments--LAP Material	8
3. Filing Individual Names	11
4. Filing Business Names	15
5. Filing Practice Materials	20
6. Learning About Other Filing Systems	25
7. Post-test	30

LAP II - GROOMING

TABLE OF CONTENTS

	PAGE
Your Objectives	1
Content of LAP II	2
The Introduction	3
Learning Experiences	
1. Pretest	5
2. Assignments--LAP Material on Grooming	8
3. Good Grooming	11
4. Cleanliness and Grooming Habits	15
5. Health Habits	17
6. Posture	20
7. Clothes	25
8. Hair Care	30
9. Makeup	35
10. How Do I Look "The Job Interview"	40
11. Post-test	45

LAP III - COMPUTATIONAL SKILLS

TABLE OF CONTENTS

	PAGE
Your Objectives	1
Content of LAP III	2
The Introduction	3
Learning Experiences	
1. Pretest	5
2. Assignments--LAP Material	8
3. Employment Applications and Related Forms	11
4. What Is Social Security?	15
5. Collecting Personal Information	17
6. Completing the Job Application Form	20
7. Taking Employment Tests	25
8. Post-test	30

LAP IV - PROCESSING FORMS

TABLE OF CONTENTS

PAGE

Your Objectives 1

Content of LAP IV 2

The Introduction 3

Learning Experiences

1. Pretest 5
2. Assignments--LAP Material 8
3. Preparing for the Interview 11
4. Completing Data Sheet 15
5. Reasons for Failure at the Interview . . . 20
6. The Job Interview 25
7. Related Activities 30
8. Post-test 35

LAP V - MAIL HANDLING

TABLE OF CONTENTS

PAGE

Your Objectives 1

Content of LAP V 2

The Introduction 3

Learning Experiences

1. Pretest 5
2. Assignments--LAP Material 8
3. What Makes Up Mail 11
4. Incoming and Outgoing Mail 15
5. A Mail Schedule 20
6. The Mailroute 25
7. Sorting the Mail--In and Out Boxes 30
8. Related Activities 35
9. Post-test 40

LAP VI - RECORD KEEPING

TABLE OF CONTENTS

	PAGE
Your Obejctives	1
Content of LAP VI	2
The Introduction	3
Learning Experiences	
1. Pretest	5
2. Assignments--LAP Material	8
3. Checking Names and Numbers	11
4. Penmanship	15
5. Verifying and Proofreading	20
6. Filing Checks	25
7. Personal Budget Records	30
8. Opening a Checking Account	35
9. Related Activities	40
10. Post-test	45

LAP VII - TELEPHONE TECHNIQUES

TABLE OF CONTENTS

	PAGE
Your Objectives	1
Content of LAP VII	2
The Introduction	3
Learning Experiences	
1. Pretest	5
2. Assignments--LAP Material	8
3. The Telephone Directory	11
4. Government Units	15
5. Using the Yellow Pages	20
6. Answering the Telephone	25
7. Get All the Information	30
8. Placing Local Calls	35
9. Specialized Services	40
10. Post-test	45

LAP VIII - HUMAN RELATIONS

TABLE OF CONTENTS

	PAGE
Your Objectives	1
Content of LAP VIII	2
The Introduction	3
Learning Experiences	
1. Pretest	5
2. Assignments--LAP Material	8
3. How Well Do You Know Yourself	11
4. The Art of Getting Along With People	15
5. Everyone Has Human Relations--Good or Bad	20
6. Are You Interested in Others?	25
7. Overcoming Harmful Personality Traits	30
8. Every Person Is An Individual	35
9. Keep Your Personal Problems at Home	40
10. Know When to Talk and When to Listen	45
11. Post-test	50

APPENDIX D

COMPLETE LEARNING ACTIVITY PACKAGE LAP I,

ONE OF EIGHT IN SERIES

Learning Activity Package

LAP I

FILING

by

Everett L. Groover

BUSINESS, DISTRIBUTIVE, AND DIVERSIFIED

EDUCATION DEPARTMENT

Duval County

Florida

Student _____

High School _____

Teacher _____

Grading Scale

90-100 = A or 4.0
85- 90 = B+ or 3.5
80- 84 = B or 3.0
75- 79 = C+ or 2.5
70- 74 = C or 2.0
65- 69 = D+ or 1.5
60- 64 = D or 1.0
59- = F or 0.0

Instructions: Turn to Page 1 and start by reading your objectives for this LAP I. Continue to Page 2 and follow instructions by taking the pretest, and then complete all the material following the instructions until you are ready to take the post-test, which is your instructor's indication you have completed all the material in this package.

F I L I N G LAP I

Objective:

When you have completed Filing LAP I, you will be able to file individuals' correspondence alphabetically in an office.

In LAP I you will be given instruction and practice material in indexing and alphabetic filing of individual names. You will correctly arrange given sets of names in alphabetic order.

When you complete Filing Lap I, you will be able to file alphabetically with at least 80 percent accuracy.

Upon the successful completion of Filing Lap I, you may want to file business names alphabetically. When you have completed the two Filing Laps, you may want to explore in greater depth not only alphabetic filing but other systems as well. Ask your teacher for a filing practice set.

Filing Learning Activity Package A - Alphabetic

(Individual Names)

Filing Learning Activity Package B - Alphabetic

(Business Names)

Filing Practice Set - Gregg Quick Filing Practice Set

by Kahn, Stewart, and Yerian

DO'S AND DON'TS OF FILING

When you work with files, it would be well for you to follow the "Do's and Don'ts of Filing" compiled by Remington Rand, manufacturers of filing equipment.

1. DO file material every day.
   DON'T allow the material to be filed to pile up day after day.

2. DO prearrange or sort papers in exact order according to the filing system you are using.
   DON'T start to file with papers in haphazard arrangement.

3. DO staple papers together in the upper left corner.
   DON'T use pins, wire clips, or rubber bands on file papers.

4. DO file in the order of date, keeping the latest date on top.
   DON'T allow papers to be out of chronological order.

5. DO lift the folder out to insert papers in the proper place.
   DON'T jam papers down into the folders.

6. DO make an individual folder when you have six to eight pieces of material on a subject or a customer.
   DON'T allow your miscellaneous folders to become cluttered and overcrowded.

7. DO see that no folder contains more than the capacity for which it is designed, generally one-half to one inch of material.
   DON'T allow the folders to become so full that they bulge or become unwieldy.

8. DO type all labels on the folders.
   DON'T write captions on the folders by hand.

9. DO file in back of the guides.
   DON'T file in front of the guides.

10. DO close each drawer as you finish with it.
    DON'T pull out more than one file drawer at a time.

FILING

Huge amounts of paper--letters, telegrams, orders, bills, checks, reports--flow through business offices every day. To keep track of these important papers, every business depends on filing. Filing is a way of arranging and storing papers so that they can be found when they are needed. In a store, for example, customers' orders are filed. If a customer calls to ask about his order, it can be found in the files and his questions can be answered.

Most papers are filed in alphabetic order--that is, in the same order that words are listed in the dictionary.

How well do you know the alphabet? You may think you know it very well, but can you tell quickly which letter comes before and which comes after each letter of the alphabet? Write the letter that comes before and the one that comes after each of these letters.

(A)

K L M	___ J ___	___ O ___	___ S ___
___ P ___	___ R ___	___ F ___	___ H ___
___ V ___	___ Y ___	___ D ___	___ Q ___

(B)

Arrange each set of letters in alphabetic order.

c a l a c l	m n g _____	p b k _____
g f m _____	j y f _____	s f t _____
l t d _____	a r h _____	w t m _____
r j m _____	j l e _____	y f x _____

(C)

In alphabetic filing, an order from a man named Brown would be placed before an order from a man named Collins. This is because the letter "b" comes before the letter "c" in our alphabet.

Six names are listed in Column 1 below. Write these names in alphabetic order in Column 2. The first name in Column 2 has been completed for you.

COLUMN 1	COLUMN 2
Carson	Baron
Samuels	_____
Macci	_____
Baron	_____
Wing	_____
Richardson	_____

NOW TURN THE PAGE AND CHECK YOUR ANSWERS!

It is easy to put names and words in alphabetic order when each of them begins with a different letter. But what if some begin with the same letter? When this happens, the names must be arranged by the second letters. Look at the following list of names that are arranged in alphabetic order.

J<u>a</u>ne J<u>e</u>rry J<u>o</u>rdon

Since all these names start with the letter "J," they are arranged alphabetically by the second letters. The "a" in Jane, the "e" in Jerry, and the "o" in Jordon determined the order of the words.

If the first two letters of some names are the same, the alphabetic order is determined by the third letter of the names. The following names are alphabetized correctly--that is, they have been arranged in correct alphabetic order. The letters that determine the order are underlined.

And<u>y</u> Ann Anr<u>e</u>a

Sometimes the correct alphabetic order is determined by the third, the fourth, or even the fifth letter of a word.

Now you try putting the following set of names in the proper alphabetic order. The first set has been completed for you.

Freeman	*Freeberg*	Smith	_____
Freeberg	*Freeman*	Small	_____
Freestone	*Freestone*	Smelling	_____
		Sherring	_____

Did you list the names in this order: Sheering, Small, Smelling, Smith? Good!!

Quite often a business receives correspondence from its customers. Correspondence is another name for letters. Correspondence is usually filed alphabetically by each customer's last name (surname). For example, if a letter is received from Thomas Mason, the letter is filed by the name <u>Mason</u>.

By what name would correspondence from each of these people be filed?

Edward Calhoun _____ Mary Beech _____

Ralph Keener _____ Helen Zimmerman _____

William Miller _____ Glen Milton _____

Dolores Landon _____ Sarah Sommers _____

Did you select the last name (surname) for each person? (Calhoun, Keener, Miller, Landon, Beech, Zimmerman, Milton, and Sommers).

NOW GO ON TO THE NEXT PAGE AND COMPLETE PROBLEM 1.

PROBLEM 1

By what name would correspondence from each of these people be filed? Write the names, and then use numbers to arrange each set of names in correct alphabetic order.

	Ellen Lassiter	Lassiter ①
	John Mason	Mason ③
	Harry Miller	Miller ④
	Paul Layton	Layton ②
(1)	Diane Riley	
	Susan Nelson	
	Joseph Stilman	
	Glenn Grady	
(2)	Carl Evans	
	Betty King	
	James Foster	
	Robert Elton	
(3)	Ralph Cory	
	Michael Carry	
	Gladys Edwards	
	Carol Dalton	
(4)	Robert Smith	
	Rachel Smithson	
	Shelly Jeffers	
	Martha James	

CHECK YOUR ANSWERS WITH THE KEY ON THE NEXT PAGE.

Correspondence is usually filed in alphabetic order by a person's last name or surname. But sometimes correspondence is received from several people who have the same last name.

Brown, John Brown, Karen Brown, Paul

The names above are arranged in alphabetic order. Since the last names are the same, the alphabetic order is determined by the first letter of each first name (given name).

Rewrite each of these names with the last name first. Then use numbers to show the correct alphabetic arrangement for each set of names.

David Evans	Evans, David	1
Paul Evans	Evans, Paul	3
Edward Evans	Evans, Edward	2
Jean Carson	_____	
William Carson	_____	
Grace Carson	_____	
Rose Mathews	_____	
Marie Mathews	_____	
Karen Mathews	_____	
Ray Harris	_____	
Bill Harris	_____	
Mark Harris	_____	
Lois Holt	_____	
Alice Holt	_____	
Carolyn Holt	_____	

NOW TURN THE PAGE AND CHECK YOUR ANSWERS!

PROBLEM 2

In many companies a file folder is prepared for each new employee. The folder, labeled with the employee's name, holds his job application form and a health report. While the employee works for the company, reports of his job progress and promotions are added to the folder. Employee file folders are filed in alphabetic order according to the employees' names.

The McDuff Appliance Company just hired several new employees. Their file folders must be added to those already in the file. Column 1 contains the names of the new employees. Column 2 contains the names of the employees whose folders are already in the file. The first name has already been "filed" by writing the name in Column 2. Follow this example to show where each new employee's folder should be placed in the file.

Column 1	Column 2
✓Crawford, James	Cole, Anne
Morton, Alice	Crammer, Jake
Prince, George	Crawford, James
Adams, Betty	Engles, John
Martin, Robert	Henderson, Edward
Hill, Carlton	Hines, Mary
Reston, Larry	Jefferson, David
	Layton, Donald
	Markey, Larry
	Melton, Jane
	Mestion, Eileen
	Price, Robert
	Quinn, Walter
	Rowland, George

CHECK YOUR ANSWERS WITH THE KEY ON THE NEXT PAGE

PROJECT 1

Now let's pretend . . . .

You are employed by McDuff Appliance Company as a clerk-typist. You are asked to prepare file folder labels for those 7 new employees in Problem 2. Get a roll of labels from your teacher, or the supplies cabinet, and type the name of each new employee on a label. Type the employee's last name first in capital letters as shown in the example below. When you have completed this assignment, give your teacher the folder labels you typed and return the unused roll of labels to the proper place.

CRAWFORD, James

MORE ABOUT FILING . . . .

Perhaps by now you have decided that filing is easy--and fun! Would you like to be a file clerk? Then read on and find out a little more about this job.

File clerks do three main tasks. They collect papers to be filed, file each paper in its proper place, and take papers out of the files when they are needed. Each of these tasks can be done in different ways. The filing system used by a business depends on the size of the business, the kind of business, the total number of papers kept in the files, and the number of file clerks employed.

In a large business, mail clerks may go to many departments to pick up papers to be filed. They deliver these papers to file clerks in a central filing room. In a small business, a file clerk usually works in the same office as other office workers. The file clerk picks up all the papers to be put in the office files.

Papers may already be marked so that the file clerk can tell where to put them. If papers are not marked, the file clerk must decide where to file each paper.

The actual filing is usually done in two steps. First, the papers are sorted and put into piles in the proper order for filing. Then, each paper is put in its correct place in the files. The file clerk may carry small piles of papers to the files, or she may put a lot of papers in a file cart, which can be pushed to the file drawers.

File clerks may keep various kinds of files: card files, files of newpaper clippings, files of insurance policies, and files of correspondence, records, films, and tapes.

In some offices a worker can telephone or stop by to ask the file clerk for something from the files. But often the file clerk must get a signed note for any item that is taken out of the files. With these notes, the file clerk can keep track of the borrowed papers and she can quickly locate them if they are needed by other workers.

Most businesses use standing file cabinets with four or five long drawers. The file clerk labels the outside of each drawer so that she can easily tell what types of papers are filed in the drawers. She also makes sure that the folders there are properly labeled, and she puts in new folders when they are needed.

Most people who hire file clerks want high school graduates. A file clerk must be a neat accurate workers who can work at a steady pace. She/he should have a knowledge of filing and be able to spell correctly and to write clearly. For some jobs, she should also have skill in typing.

No work experience is needed for most filing jobs. New clerks are usually trained by the head file clerk or by another worker. Although most file clerks are women, men are also hired--particularly for filing heavy materials.

File clerks are needed in large and small offices throughout the country. More and more people are needed each year to file the huge amounts of paper that flow through offices. Machines have also created many new filing jobs, such as filing tapes and cards for computers.

A filing job is a good place to get a start in office work. File clerks have a chance to see the many types of papers and reports prepared in the business office. This gives them an idea of the kinds of jobs available in the company. Those who decide to stay in filing work may become head file clerks. Other file clerks may transfer to jobs as typists or receptionists. With additional training, some file clerks move on to jobs as secretaries or bookkeepers.

Many file clerks start at about $325 or more a month. Head file clerks usually make more than $400 a month.

A file clerk sounds like an interesting job, doesn't it? Well, let's go ahead and learn more about filing.

When a name is written on a card to be filed, it is written in filing--or indexing--order. When a person's name is written in indexing order, the person's last name (surname) is written first. This is done because the person's last name is the first part--or unit--considered in filing.

Write these names in indexing order.

	Unit 1	Unit 2	Unit 3
John Paul Jones	Jones	John	Paul
Pauline J. Martin			
George Harris Pratt			
William E. Wilkins			
Margaret Ann Wilson			

Did you put the person's last name under Unit 1, the first name under Unit 2, and the middle name or initial under Unit 3?

Names are arranged in alphabetic order by comparing the first indexing units in the names. The second units are considered only when the first units are the same. The third units are considered only when both the first and second units are the same. Notice how the names below are arranged in correct alphabetic order.

	Indexing Order		
Name	Unit 1	Unit 2	Unit 3
John Edward Carter	Carter	John	Edward
Mary Ann Carter	Carter	Mary	Ann
Miles Carter	Carter	Miles	
William Lee Carter	Carter	William	Lee

PROBLEM 3

For each set of names below, follow the two steps shown in the example. First, write the names in indexing order. Then use numbers to show the correct alphabetic order for the names.

Name		Unit 1	Unit 2	Unit 3
Hazel A. Horne	③	Horne	Hazel	A.
Susan Horne	⑤	Horne	Susan	
Debby Horne	②	Horne	Debby	
Sue Ellen Horne	④	Horne	Sue	Ellen
Thomas Allen Hall	①	Hall	Thomas	Allen
Martin A. Taylor				
Jesse K. Thomas				
Jerry Ann Thomas				
Martha Louise Taylor				
Tina Thomas				
Paul O. Wilson				
Jeannie Wilson				
Sara Jane Victor				
Harry T. Wilson				
Samuel Victor				
Annie Ruth Long				
Linda Long				
Roy Paul Long				
John T. Logan				
James Arthur				
Michael L. Maxwell				
Ronald Maxwell				
Ruth Ann Maxwell				
Matt May				
Kathleen S. Maxwell				

CHECK YOUR ANSWERS WITH THE KEY ON THE NEXT PAGE.

PROBLEM 4

Suppose that you work for National Airlines. The following people have made reservations for flight No. 808 from Jacksonville to New York. You must prepare an alphabetic list of the passengers' names for the airline files. Arrange the names in alphabetic order. Start by looking for names beginning with "A," then "B," then "C," and so on. Check off each name as you add it to your list.

Passengers	Alphabetic List
Strickland, Melba	Arnold, Earl T.
Minton, Howard J.	
Donaldson, Ralph S.	
Williams, Alice	
Sadler, V. F.	
Pickett, Alex H.	
Lee, Barbara Ann	
Green, C. Robert	
Carter, Thomas A.	
Williams, Pauline C.	
Collins, W. H.	
Beckman, Harold K.	
Stroud, Dorothy L.	
Arnold, Earl T.	
Shore, Harvey	
Long, Eva M.	
Johnson, Ralph T.	
Harris, Dan E.	
Lang, James O.	
Baggett, Mabel	

CHECK YOUR LIST WITH THE KEY ON THE NEXT PAGE WHEN YOU HAVE COMPLETED THIS PROBLEM.

When names are arranged in alphabetic order, a last name that is used alone is put before the same last name with a first name or initial. For example, "Green," would be filed before "Green, Jane." An initial is put before a name that begins with that initial. For example, "Green, J." would be filed before "Green, Jane." To remember this, think "NOTHING COMES BEFORE SOMETHING."

Study the following example and you will see how this works:

	Indexing Order		
	Unit 1	Unit 2	Unit 3
Green	Green		
Green, J.	Green	J.	
Green, Jane	Green	Jane	
Green, Joseph C.	Green	Joseph	C.
Green, Joseph Carl	Green	Joseph	Carl

(A)
Now you try it! Write each of these names in indexing order:

	Unit 1	Unit 2	Unit 3
Jean Adams			
Adams			
Robert C. Adams			
R. C. Adams			

Now arrange the above names in correct alphabetic order.

_____

_____

_____

_____

(B) More practice! Write each of these names in indexing order.

	Unit 1	Unit 2	Unit 3
Susan J. Harrison			
Henry L. Harrison			
S. O. Harrison			
Sue Harrison			
Henry Harrison			

Now arrange the above names in correct alphabetic order.

1_____ 4_____

2_____ 5_____

3_____

SECTION 1 FILING TEST

The following names in Column A are to be added to the alphabetic list of names shown below in Column B. (1) Write each name in the proper indexing order. (2) Then write each name from Column A in the correct place in the alphabetic list in Column B.

(A)

Name	Unit 1	Unit 2	Unit 3
Herbert A. Adams	Adams	Herbert	A.
H. A. Adams			
H. Adams			
Arthur Green			
Sarah J. Green			
Alice Diamond			
Ellean A. Foster			
S. E. Green			
Harry Harrison			
A. L. Gilbert			

(B)

Adams, Harry	Gilbert, Paul
Adams, Herbert A.	Green, Sarah
Carver, Frank	Harrison, B. J.
Diamond, Anthony	Harrison, H.
Foster, Beverly L.	Harrison, James T.

AS SOON AS YOU COMPLETE THIS TEST, ASK YOUR TEACHER TO CHECK IT. IF YOU HAVE MET THE OBJECTIVE FOR SECTION 1, YOU MAY GO ON TO SECTION 2 OF THE FILING LEARNING ACTIVITY PACKAGE 1. IF YOU HAD MORE THAN ONE INCORRECT ANSWER ON THIS TEST, STOP HERE AND ASK YOUR TEACHER FOR ADDITIONAL HELP.

FILING LAP 1 - SECTION 2

Many last names begin with prefixes such as: d', D', da, De, Del, Della, Des, Du, Fitz, La, Le, Mac, Mc, O', St., Van, Van der, Von, and Von der. Sometimes the first letter of a prefix is not capitalized.

In filing, such a prefix is considered part of a person's last name. It is not considered as a separate indexing unit. Since our population consists of so many nationalities, a file clerk may not always be able to tell prefixes in the last name. Many of our names that originated in foreign countries have been Anglicized (to make or become English), so that the prefix is not always noticeable, such as in the name of Vanderbilt.

Notice how the names below are indexed and arranged in alphabetic order.

Name	Unit 1	Unit 2	Unit 3
A. B. Degraw	Degraw	A.	B.
Paul DiNapoli	DiNapoli	Paul	
Samuel F. DuPont	Dupont	Samuel	F.
T. R. LaPern	LaPern	T.	R.
Helen Larson	Larson	Helen	
Ernest LePaige	LePaige	Ernest	
R. L. MacAlphern	MacAlphern	R.	L.
James McDonald	McDonald	James	
Thomas St. Clair*	Saint Clair	Thomas	
Betty Ann Sanders	Sanders	Betty	Ann
Kathy Van Ness	Van Ness	Kathy	
Ronald Varn	Varn	Ronald	
Willaim von der Haar	von der Haar	William	
Hans Voshell	Voshell	Hans	

*The prefix St. is treated as though it were spelled out--Saint. Notice that in the list above Saint Clair is placed before Sanders.

PRACTICE EXERCISES

(A) Write each of these names in correct indexing order.

Joseph D'Alba	_____	_____	_____
Marie O'Connell	_____	_____	_____
Barry K. Jacobs	_____	_____	_____
Alma Louise Sample	_____	_____	_____
M. J. DeLoach	_____	_____	_____
F. P. Mayer	_____	_____	_____
Irwin K. St. John	_____	_____	_____
Walter O'Neal	_____	_____	_____
Paul A. FitzGerald	_____	_____	_____
J. J. Odom	_____	_____	_____
Claude von Katz	_____	_____	_____
Ellen O'Neill	_____	_____	_____
Jack LeBaron	_____	_____	_____
Lydia Ann Olsen	_____	_____	_____
P. W. Vogel	_____	_____	_____
Sara McKinney	_____	_____	_____
Harvey MacDonald	_____	_____	_____
Marie LaBelle	_____	_____	_____
M. S. McRae	_____	_____	_____
H. J. Fleming	_____	_____	_____

(B) Now arrange the names on page 21 in alphabetic order.

WHEN YOU HAVE COMPLETED EXERCISES A & B, CHECK YOUR ANSWERS WITH THE KEY ON THE NEXT PAGE.

The main purpose of filing is to be able to find what you want when you want it.

The finding process calls for the complete mastery of indexing rules; and just to make things a little more tricky, you may have to visualize the item in your mind as you pinpoint its location in the files. For example, suppose you are asked to locate the McGee file. Here is what you do:

(1) Ask for, or otherwise determine, the complete name if possible. Let us suppose that it turns out to be Scott L. McGee.
(2) Transpose the name, and visualize it as McGee, Scott L.
(3) Locate the M section of the file or list.
(4) Remember that a last name with a prefix, like McGee, is considered as one unit in filing.
(5) Look for McGee among the first indexing units having the spelling Mc.
(6) If more than one McGee item is found, compare the second indexing units to locate Scott McGee.
(7) If more than one Scott McGee is found, compare the third indexing units to locate Scott L. McGee.

McGiffin, John A.

McGee, Thomas

McGee, Scott L.

McGee, Scott B.

McGee, Leek

McGee, Allen

McGeachy, C. M.

McGarry, Ray J.

Did you find Scott L. McGee's file folder? You will have more practice in "finding" folders and items in folders later on in this lap. So be ALERT!

In a telephone book, names are listed in alphabetic order. Can you quickly locate information that is arranged in alphabetic order? The telephone company uses abbreviations--or short forms--for some first names. Even though abbreviations are used, these names are arranged in alphabetic order as though they were completely spelled out. Check your telephone book when you get home today and see how many names are abbreviated on one page. Some abbreviations you might find are:

Geo.	for	George
Jos.		Joseph
Robt.		Robert
Richd.		Richard
Saml.		Samuel
Jas.		James
Thos.		Thomas
Wm.		William

Did you find others?

(A) Write each of the following names in the correct indexing order, spelling out the abbreviated names.

Name	Unit 1	Unit 2	Unit 3
Jas. R. DeVaughn	DeVaughn	James	R.
Robt. B. Andrews			
L. E. O'Grady			
Janice A. LaNorte			
Jos. Anderson			
Arthur North			
Geo. Ogilvie			
Wm. McCord			
K. G. DiStefano			
Max A. von Balsen			

(B) Now arrange the above names in correct alphabetic order.

CHECK YOUR ANSWERS WITH THE KEY ON THE FOLLOWING PAGE.

Sometimes names, like words, are pronounced alike even though they are spelled differently. Take, for example, the last name Louis and Lewis.

If you want to find someone's telephone number, but you don't know how his last name is spelled, the telephone book gives some helpful information. It shows several spellings for last names that are pronounced alike.

Note the telephone listing for the name Meyer.

MEYER - See also MEIER, MYER		
Meyer, Allen	6238 Ash Ln	384-3848
Meyer, Andrew	504 Oliver	786-1170
Meyer, B. K.	422 Post	388-9786

It is estimated that over 100,000 last names can be spelled from 2 to 36 different ways. For example, the last name (surname) Burke can be spelled as Berc, Berck, Berke, Birk, Birke, Borque, Bork, Bourke, Burk, and Burque. Unless you knew which spelling was to be used, this would create problems in filing. To help overcome the problem of finding names that sound alike but are spelled differently, Remington Rand developed Soundex, a card system. This system eliminates such problems because it is a "group name" system of indexing. It brings all names that sound alike, but may be spelled differently, into one place in the file. The names are then filed in strict alphabetic order according to the second indexing units in the name. This method of filing is especially helpful in hospitals, banks, insurance companies, and government offices. The Social Security Department of the Federal Government uses this system, and it is said that any card can be located from the millions filed there within a minute.

Soundex is a highly specialized system. Before a file clerk is assigned to the operation of such a system, he is given careful inservice training. Therefore, this system will not be covered in this LAP. If you are interested in learning more about the Soundex system, refer to the books listed below or ask your teacher for reference material.

Suggested Reading: Clerical Office Practice, Agnew, Meehan, Unit 7, Part 6.

Business Filing and Records Control, Bassett, Agnew, Goodman, Chapter 9.

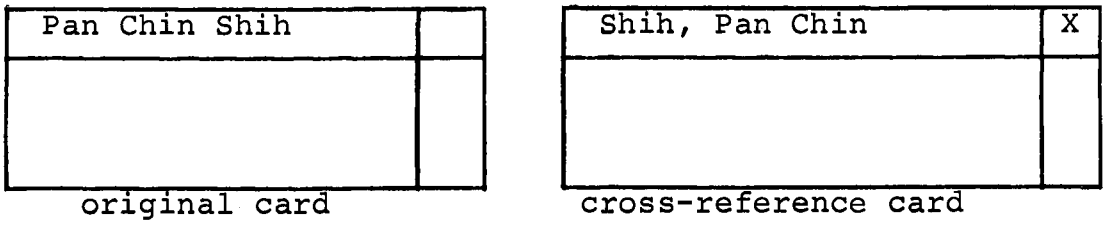
Progressive Filing, Kahn, Yerian, Stewart, Chapter 11.

Sometimes it is difficult to decide which part of a person's name is the last name. Foreign names are often examples of this type of name. American names consisting of two names frequently used as first names are another example. When you have names like these, the name is indexed as it is written. It is then cross referenced. A cross-reference card is a file card that is made in addition to the regular card for a name that may be filed under one name but thought of by more than one name. For example:

	Unit 1	Unit 2	Unit 3
Pan Chin Shih	Pan	Chin	Shih
Albert George	Albert	George	

Then you would cross reference the names as follows:

Pan Chin Shih	Shih	Pan	Chin
Albert George	George	Albert	



Now let's have a "check-up" on the two indexing principles you have just studied.

(A) Write these names in the correct indexing order.

	Unit 1	Unit 2	Unit 3
Johnny O'Neill			
Sharda Ptai			
Kodo Won Saike			
Kenneth M. O'Neal			
Kim Foo Chang			
Carolyn Ann O'Neil			

(B) Write these names in correct alphabetic order.

_____
_____
_____
_____
_____
_____

(C) For which of these names would you most likely make cross-reference cards?

_____

CHECK YOUR ANSWERS WITH THE KEY ON THE FOLLOWING PAGE.

People in certain professions are commonly addressed by their titles: for example, Dr. Richard L. Buckley, Reverend John B. Lang, and Senator Lee Jackson. Names may be written with degrees following them, as in Ronald A. Truman, M.D. or James L. Carr, Ph.D.

A personal or professional title or degree is disregarded in filing, but is enclosed in parentheses at the end of the name. For example:

Names	Unit 1	Unit 2	
Dr. Alfred Jones	Jones	Alfred	(Dr.)
Mayor James Ryan	Ryan	James	(Mayor)
Senator George Smathers	Smatters	George	(Senator)
Lloyd Victor, M.D.	Victor	Lloyd	(M.D.)

When a religious or foreign title is followed by only a first name or a first and a middle name, the title is considered to be the first indexing unit. In this case, the title helps to identify the person.

Names	Unit 1	Unit 2	Unit 3
Father Joseph	Father	Joseph	
Princess Margaret	Princess	Margaret	
Sister Mary Martha	Sister	Mary	Martha

A word showing seniority, such as "Junior" or "Senior," "II (Second)" or "III (Third)," is spelled out and considered as an indexing unit at the end of the name. Note the following names.

Names	Unit 1	Unit 2	Unit 3
Henry Young	Young	Henry	
Henry Young, Jr.	Young	Henry	Junior
Henry Young, Sr.	Young	Henry	Senior
Henry Young, III	Young	Henry	Third

Be sure you understand these principles of indexing before you go ahead.

Complete the following exercises:

(A) Write these names in the correct indexing order:

Names	Unit 1	Unit 2	Unit 3	Unit 4
Lieut. Ralph Ellis				
Sister Mary				
Richard R. Brogan, M.D.				
Stephen A. Southwell, Jr.				
Queen Elizabeth				
Stephen A. Southwell, II				
Father John				
Dr. J. M. Crane				
Leonard A. Grossman, D.D.S.				
Prince Charles				

(B) Write these names in the correct alphabetic order:

_____

_____

_____

_____

_____

_____

_____

_____

_____

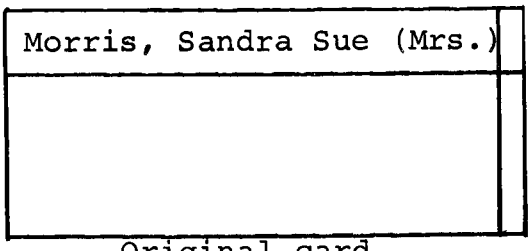
_____

CHECK YOUR ANSWERS WITH THE KEY ON THE FOLLOWING PAGE.

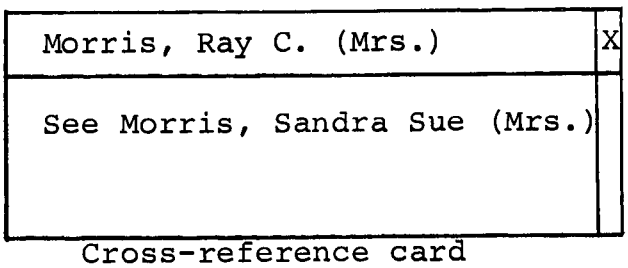
Papers relating to a married woman should be indexed according to her legal name (her first name, her maiden name, her husband's last name; or her first name and middle name, with her husband's last name.) For indexing purposes, the name of Mrs. Henry Davis may be Mrs. Mary Arnold Davis or Mrs. Mary Ann Davis. The title "Mrs." is put in parentheses at the end of the name and disregarded in filing. When this is done, it is impossible to tell the husband's file from that of his wife, unless the wife's individual name is used. The husband's first and middle names are enclosed in parentheses and placed below the woman's legal name. Study the examples given below:

Name	Unit 1	Unit 2	Unit 3	
Mrs. Robert F. Walker (Helen Marie)	Walker (Robert F.)	Helen	Marie	(Mrs.)
Mrs. Lewis Morton (Betty Jane)	Morton (Lewis)	Betty	Jane	(Mrs.)
Mrs. Frank L. Cole (Karen Olsen)	Cole (Frank L.)	Karen	Olsen	(Mrs.)
Mrs. Ross O. Hill (Janet Smith)	Hill (Ross O.)	Janet	Smith	(Mrs.)

A cross-reference card is also prepared for a married woman. The original card for a married woman is filed under her legal name, that is, her first name, maiden name, and her husband's last name, or her first name and middle name and her husband's last name. Her husband's given name should be used on the cross-reference card. See the example below:



Original card



Cross-reference card

When the full names of two or more people are exactly the same, addresses are used to determine the alphabetic filing order. This is the way it works: Suppose you have correspondence from four people by the name of John Arthur Brown. In this situation the following filing facts are considered in this order: (1) town or city name, (2) state name, (3) street name, and (4) house number (arranged numerically--starting with lowest number first).

Study the examples below.

John Arthur Brown
907 Peachtree Avenue
Atlanta, Georgia

John Arthur Brown
7376 Lane Road
Jacksonville, Florida

John Arthur Brown
2380 McDuff Street
Jacksonville, Florida

John Arthur Brown
711 Andrews Avenue
Tampa, Florida

Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Brown	John	Arthur	Atlanta		
Brown	John	Arthur	Jacksonville	Florida	Lane
Brown	John	Arthur	Jacksonville	Florida	McDuff
Brown	John	Arthur	Tampa		

Notice that the four names are exactly alike--Units 1, 2, and 3 are the same. Then we go to the city name--Unit 4--in the indexing order. In Unit 4 we find that two of the Mr. Browns live in Jacksonville, so Unit 4 is the same. Next we go to the state--Florida--which is Unit 5. The state is the same, so now we have to go to the street names. Finally, we have discovered something that is different--one is on Lane Road and the other is on McDuff Street; thus Unit 6 will be the deciding factor. However, suppose both men had lived on Lane Road. If that had been the case, then we would have to compare house numbers. The Mr. Brown with the lowest house number would be filed first.

Now a "check up" on the last two indexing principles!

Suppose that you work in the office of Martin Office Equipment Company. The company keeps a card file containing the names of all customers. Cards for the new customers listed below must be added to the file. Follow the example to show where each new customer's card would be placed in the file. Be sure to write each name in the correct indexing order.

New Customers

Ronald L. Grady

Mrs. Thomas (Jenny R.) Graff

Andrew Grahame, Lakeland, Florida

Mrs. J. R. (Doris Ann) Gray

D. C. Grayson, Madison, Florida

Mrs. Arthur (Janet Jones) Grayly

Note that in the file drawer shown the alphabetic order is from the front to the back--J. W. Grady is the first name in the drawer and James E. Green is the last name.

CHECK ON THE NEXT PAGE TO SEE IF YOU PLACED THE FIVE NEW CUSTOMERS' CARD IN THE CORRECT PLACE IN THE CARD FILE.

John O. Lane has been a customer of Commercial Printing Company for three years. During this time, Mr. Lane has written the company several times. In the company's correspondence file, there is an individual folder for Mr. Lane. All correspondence from Mr. Lane is kept in this folder. Carbon copies of letters sent to Mr. Lane are also kept in this folder.

When correspondence is placed in Mr. Lane's folder, it is arranged according to the dates on the correspondence. The most recent letter is always placed in the front of the folder. Look at the illustration below.

Following the example below, use numbers to show how the letters would be arranged in Carl J. Anderson's file folder.

Doe, John file folder		Anderson, Carl J. file folder	
Letter dated May 10, 1970	3	Letter dated Sept. 16, 1970	___
Letter dated Jan. 25, 1969	5	Letter dated Dec. 10, 1969	___
Letter dated Aug. 15, 1970	2	Letter dated June 27, 1971	___
Letter dated March 27, 1971	1	Letter dated March 20, 1970	___
Letter dated Sept. 4, 1969	4	Letter dated June 3, 1969	___
		Letter dated April 22, 1970	___
		Letter dated Jan. 8, 1971	___
		Letter dated July 15, 1971	___

Sometimes there is not enough correspondence from one person to open a special folder just for that one person. Let's suppose you have received five letters today from different people who do not have individual folders in your files. These five letters would be put in a miscellaneous folder and filed in alphabetic order according to the names of the correspondents (the people who wrote the letters). When more than five pieces of correspondence have been received for one person, the material should be put in an individual file folder. Note how the letters are arranged in the miscellaneous "B" folder shown below.

Following the example below, show how the letters would be arranged in the following miscellaneous folders.

Miscellaneous "J" folder

Letter from Lee A. Johns	1.	Jackson, C. E.
Letter from Anne C. Jones	2.	Johns, Lee A.
Letter from Corinne Judson	3.	Johnson, Matt
Letter from Matt Johnson	4.	Jones, Anne C.
Letter from C. E. Jackson	5.	Judson, Corinne

Miscellaneous "M" folder

Letter from T. C. Myers	1.	_____
Letter from Marvin Mason	2.	_____
Letter from Jeff Mears	3.	_____
Letter from Lynn S. Mitchell	4.	_____
Letter from Arnold J. Meade	5.	_____

Miscellaneous "Y" folder

Letter from Edward K. Young	1.	_____
Letter from Thomas R. Yates	2.	_____
Letter from L. A. Yarborough	3.	_____
Letter from Kay Yale	4.	_____
Letter from Wayne Yancy	5.	_____

CHECK YOUR ANSWERS WITH THE KEY ON THE NEXT PAGE

There are seven basic steps in a typical filing routine. These steps are necessary for filing efficiency and should be followed in small offices as well as in large offices.

(1) Collection
Naturally, you must pick up the papers to be filed before any "putting away" steps can begin.

(2) Checking (Inspecting)
All papers must have a mark (usually initials) on them to show that they have been released and are not presently needed and may be filed.

(3) Indexing
Next, someone will read each paper and decide how it should be filed (under what name).

(4) Coding
Once the name has been determined as a basis for filing, the indexing units are marked by underscoring the name/names.

(5) Cross Referencing
Refer to page 28 of this LAP.

(6) Sorting
Papers are arranged in groups or small (A - C, D - G, H - K). This makes for faster filing when you get ready to put the papers in the files.

(7) Filing (Storing)
When you put papers away in the typical alphabetic file cabinet or drawer, there are three basic steps that you should observe:

(a) Locate the main guide or index letter.

(b) Find the individual folder and put the material with the latest date on top, turning the top of the paper to the left.

(c) If there is no individual folder, place the item alphabetically in the miscellaneous folder for that letter of the alphabet.

The indexing principles that you have learned in this Learning Activity Package represent a complete, yet simplified, system for indexing all kinds of names alphabetically. If you understand these principles, you should have no trouble in your beginning job when you first real filing assignment comes along. You can arrange papers or letters by the writer's name; sort checks, cards, or forms by name of the individual involved; and prepare and maintain staff rosters and lists of all kind.

Let's review your reading in this LAP. Write a brief answer to the following questions.

(1) How do you determine a married woman's legal name for indexing purpose?

(2) Explain the four-step procedure for obtaining additional indexing distinctions when individual names are identical.

(3) What basic indexing principle is involved in the expression "nothing before something?" Explain.

(4) Why does every business require an efficient system of filing?

(5) Explain why every clerical worker needs to master the principles of alphabetic filing?

(6) What is the purpose of having rules in filing operations?

(7) Why are names of individuals transposed for indexing purposes?

(8) Explain step by step what you would do if you were asked to locate the John C. Harrison file.

WHEN YOU HAVE ANSWERED THE 8 QUESTIONS, GIVE THESE TWO PAGES TO YOUR TEACHER TO BE CHECKED.

THEN YOU GO AHEAD WITH THE FILING-TYPING EXERCISES ON THE NEXT PAGE . . . . . .

FILING - TYPING EXERCISES

EXERCISE I

(1) Get 10 5- by 3-inch index cards or slips or paper. Type each of the following names in correct indexing form on a separate card. The number before the name is to be typed in the upper right corner of the card. Study the illustration and the "Typing Tips" given below before you start.

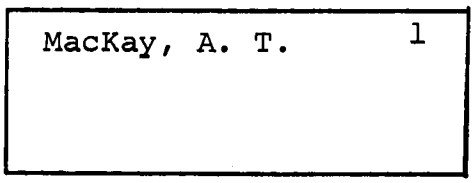
NAMES

1. MacKay, A. T.
2. Olsen, Kenneth C.
3. Lee, Ralph K.
4. Maugire, Ruth
5. Paulsen, Lennie
6. McKay, Jenny
7. Perkins, Mary Lou
8. Reeves, Karen
9. Paulson, Karl O.
10. Kelley, R. M.

(2) Alphabetize the ten cards.

(3) On the Answer Sheet No. 1 on the next page, list the number in the upper right corner on the cards in the order in which you have arranged them. (See illustration on next page). Hand in the answer sheet to the teacher for checking.

(4) Save the index cards for use in Exercise 2.



a name typed in correct position on an unruled card

"TYPING TIPS FOR FILE CARDS"

1. Type the parts of the name in indexing order.
2. The typed name starts three spaces from the left edge of the card on the second line space from the top.
3. In some offices, the entire name is capitalized. The preferred style, however, is to capitalize only the first letter of each important word.
4. In some offices, punctuation, including the period after abbreviations, is omitted. Instead two spaces are left where the punctuation would have been. Other offices use normal punctuation, and this style is generally preferred.
5. To save time, some companies abbreviate the common firm endings Co. and Inc. on their file cards and labels.

Illustration of a partially completed answer sheet.

Name _____ Exercise No. _____

1. 5	6.
2. 8	7.
3. 2	8.
4. 7	9.
5.	10.

ANSWER SHEET No. 1

Name _____ Exercise No. _____

1.	6.
2.	7.
3.	8.
4.	9.
5.	10.

ANSWER SHEET No. 2 (see page 44)

Name _____ Exercise No. _____

11.	16.
12.	17.
13.	18.
14.	19.
15.	20.

EXERCISE NO. 2

(1) Get 10 more 3 by 5 index cards or slips of paper. Type each of the following names in correct indexing form on a separate card. Follow the same procedure that you did on Exercise 1, p. 43 (a). Note that you will have to transpose the names this time.

NAMES

11. Harry L. Mann
12. Arthur LeBaron
13. Martha J. Lewis
14. Ellen Mahon
15. Paul A. Phillips
16. Darien J. Reams
17. Jean Marie MacLeod
18. Sandra Leland
19. Earl P. Kiser
20. Rose Marie Marc

(2) Alphabetize the ten cards

(3) On Answer Sheet No. 2, page 43 (b), list the number in the upper right corner on the card in the order in which you have arranged them. Hand in this answer sheet to the teacher for checking.

(4) Save the cards for use in Exercise 3.

EXERCISE 3

(1) Combine cards 11 to 20 with cards 1 to 10 (Exercises 1 and 2) and then arrange cards 1 - 20 in correct alphabetic order.

(2) Write the numbers of the cards on Answer Sheet No. 3.

(3) Hand in the answer sheet and your 20 index cards to your teacher for checking.

WHILE YOU ARE WAITING FOR YOUR TEACHER TO CHECK YOUR ANSWER SHEET AND CARDS, GO AHEAD TO THE NEXT EXERCISE, WHICH IS PROBLEM SOLVING.

ANSWER SHEET NO. 3

Name _____ Exercise No. _____

1.	11.
2.	12.
3.	13.
4.	14.
5.	15.
6.	16.
7.	17.
8.	18.
9.	19.
10.	20.

PROBLEM SOLVING EXERCISES

Success in business is based not only on your abilities and how you work, but also on your attitude toward your work. Read Cases A and B below, then write your comments in the space provided.

Case A

Suppose on your first day at work in the Credit Department of May-Cohen's you were told by the office manager: "Filing is a beginner's job in this office. Naturally, I don't expect file clerks to know all the details about this company's system, but we can't waste time teaching them the ABC's of filing, either."

What filing skills do you think the employer has a reasonable right to expect from you--the new file clerk? How can you, as a beginner, become a fully productive employee in the shortest possible time?

Case B

On your second day at work as a filing clerk, Mr. Jones (the office manager) asks Doris Andrews (another file clerk) a second time for a customer's credit report, which Doris has not been able to find in the files.

Doris says, "Why does the boss have to be so unreasonable? I handle hundreds of papers every day. When I can't find just one single item that he wants, he acts as if I'd committed a crime. Does he think I'm perfect?"

Explain why the file clerk is held to an unusually high standard of accuracy.

In your comments on Case A and B, page 46, did you think about these things:

Case A — At the very least, the beginner should have some useful skill in alphabetic filing. He should also be acquainted with the basic purposes and procedures involved in other filing systems. The beginning office worker can become fully productive faster if he will listen to instructions, study company manuals, and ask plenty of questions. These techniques will help him to apply what he knows and to fill the gaps in his background.

Case B — Filing is not a hit or miss process in a business. If an important paper cannot be found quickly, the loss of time and information might cause a loss of business that could be very costly. Some papers cannot be replaced. It is the file clerk's job to file all papers accurately and find them promptly. You never know what paper will be asked for at a moment's notice.

NOW LET'S SEE IF YOU KNOW YOUR ABC'S OF FILING INDIVIDUAL NAMES. BEFORE YOU TAKE THE FINAL TEST ON LAP 1, WHICH IS ON PAGE 49, YOU MAY WANT TO SPEND A FEW MINUTES GOING OVER THIS ENTIRE LAP AND REVIEWING ALL THE PRINCIPLES YOU HAVE COVERED SO FAR. ON PAGE 48 YOU WILL FIND SOME HELPFUL TIPS ON FILING

GOOD LUCK!! HAPPY FILING!

APPENDIX E

EVALUATION INSTRUMENTS-- PRE- AND POST-TESTS

INSTRUCTIONAL MEMOS FOR THE

ADMINISTERING OF PRE- AND

POST-TESTS, AND STUDENT

INFORMATION SHEET

Filing Pretest

How well can you arrange names in alphabetic order? Examine each set of names listed below. Then decide which name would come first if the names were arranged in alphabetic order. Write <u>that</u> name on the line provided.

George E. Clifton
Barbara Allison
Alan G. Adair _____

Henry R. Crawford
Paula C. Crane
Thomas Cranson _____

J. E. Ames
A. Mitchell
B. C. Bronstein _____

G. C. Gray
Thomas L. Scott
Lynne Abbott _____

James T. Santos
Martin Scott
James Santos _____

Phyllis Allen
David N. Allen
Theo Allan _____

Harry Miles
Ann Mills
Karen Miles _____

B. B. Sikes
B. A. Sikes
Barbara Sykes _____

Carl Meyer
Charlotte Myer
Kurt Meyers _____

Edward Elliott
E. D. Elliott
Edwin Elliott _____

POST-TEST

FINAL EXAMINATION FOR FILING LAP 1 _ INDIVIDUAL NAMES

Directions: After each series of names, indicate the order in which the names should be arranged in an alphabetic file by placing the letters in the Answers blank. See example below.

		ANSWERS
0.	(a) Grace Hauser; (b) George Houser; (c) Gerry Hausser	a c b
1.	(a) Amy Murphy; (b) Alice Murfree; (c) Bert Murphree	_____
2.	(a) John F. Jefferson; (b) G. C. Jeffers; (c) Ben Jeffords	_____
3.	(a) Troy A. Ellison; (b) Fred W. Egan; (c) Robin Elson	_____
4.	(a) Beth A. Redding; (b) W. C. Rhodes; (c) Dan K. Reddish	_____
5.	(a) M. K. Devier; (b) Faye DeVaughn; (c) Hugh L. Vaughn	_____
6.	(a) Mary A. McNeal; (b) Paul E. Minton; (c) David L. MacDonald	_____
7.	(a) John W. O'Quinn; (b) J. C. O'Quinn; (c) James O'Quinn	_____
8.	(a) Andrew Owen; (b) S. J. Owensby; (c) Thomas Owens	_____
9.	(a) Father Joseph; (b) Evelyn Fagan; (c) Caroline Joyner	_____
10.	(a) L. A. von der Heyde; (b) Henry Vonhofen; (c) Sarah J. Heyman	_____
11.	(a) Jean Powell; (b) Jane Powell; (c) J. O. Powell	_____
12.	(a) Harold J. Miller, Sr.;(b) Harold J. Miller, Jr.; (c) H. J. Miller, II	_____
13.	(a) M. A. Vanderberg; (b) Alicia van den Berg; (c) Ellis Bergstron	_____
14.	(a) Joyce McQueen; (b) Queen Elizabeth; (c) George Quigg	_____

ANWERS

15. (a) Robert A. Storm; (b) R. A. Storm;
(c) Randolph Storm _____

16. (a) Wm. F. Brown; (b) W. F. Browne;
(c) Wilbur Brown _____

17. (a) Howard B. Gray; (b) Peggy N. Gray;
(c) H. B. Grey _____

18. (a) Gary LeMay; (b) Arthur Lange;
(c) Tony LaCosta _____

19. (a) Lee T. Reilly; (b) John Pitman;
(c) Dr. J. H. Saunders _____

20. (a) Kate MacArthur; (b) C. L. McNair;
(c) Vera MacDowell _____

POST-TEST
Final Exam on Filing LAP II - Business Names

In each of the following problems, there is a name in a box at the left and three other names in alphabetic order at the right. Find the correct space for the boxed name so that it will be in alphabetic order with the others. Write the letter of that space as your answer. See example below:

			Answer Column
0.	Hawkins Supply Company	(A) HHH Bicycle Shop (B) Home Gas Company (C) Hunts Food Company	0. B
1.	Harman, Grace, Hat Co.	(A) Glover Trucking Co. (B) Gray, W.R., Company (C) Harris Machine Shop	1. ___
2.	The Record Shop	(A) Rayoner Tires (B) Terry's Togs (C) Town & Country Store	2. ___
3.	New York Times (The)	(A) New Jersey News Center (B) Newton Paint Company (C) North East Van Lines	3. ___
4.	4th Street Market	(A) Fantastic Shop (B) Fire Protection Center (C) Friendly Store (The)	4. ___
5.	St. Mark's Church	(A) St. Matthew's Theater (B) Salmo, Vera, Dress Shop (C) Street, H.D. (and) Sons	5. ___

6. Drury Hills Farm, Inc.
   (A) → Des Moines Metal Co.
   (B) → Drayton Shoe Shop
   (C) → Drury Lumber Co.
   6. ___

7. 90th Street Apartments
   (A) → Nina's Nice Things, Inc.
   (B) → Nine Hundred Club
   (C) → Nixon's Garage
   7. ___

8. Joe's Market
   (A) → Joe (and Jerry's Book Store
   (B) → Joe's Laundry
   (C) → Joseph, G.M. (and) Co.
   8. ___

9. Meyers (and) Gray, Inc.
   (A) → Meyer Auto Supply Co.
   (B) → Meyer's Metal Shop
   (C) → Meyers, Macy (and) Stein
   9. ___

10. ABC Company
    (A) → Abbott Paper Company
    (B) → Action Trucking Co.
    (C) → Ammons Finance Co.
    10. ___

11. Hess Hat Company
    (A) → Hess, Amy, Dress Shop
    (B) → Hess, H.A., (and) Co.
    (C) → Hess, Hattie, (&) Hinkle
    11. ___

12. Irwin Shoe Mart
    (A) → Irwin Shoe Distributors
    (B) → Irwin Shoes, Inc.
    (C) → Irwin Shoe Shoppe
    12. ___

13. Jack and Jill Shop

(A) → Jack (and) Jerry's Shop
(B) → Jack's Music Store
(C) → Jack's Toy Company

13. ___

14. GM Corporation

(A) → General Foods, Inc.
(B) → General Mtrs. Inc. Co.
(C) → General Tire Company

14. ___

15. 3 Oaks Restaurant

(A) → Three Hunters Club
(B) → Three M Corporation
(C) → Three Products, Inc.

15. ___

16. Los Angeles Paper Co.

(A) → La Salle Bicycle Shop
(B) → Los Alamos Trucking Co.
(C) → Lossen Radio Repairs

16. ___

17. North Seed Co.

(A) → Northe Clothing Co.
(B) → Northern Products, Inc.
(C) → Northern Supplies Co.

17. ___

18. Green, A. M., and Co.

(A) → Green the Baker
(B) → Green's Company, Inc.
(C) → Green of the Plaza

18. ___

19. T & T Bakery

(A) → T and R Auto Repair
(B) → Thayer Restaurant
(C) → Trents Shoes

19. ___

20. Rands Laundry

(A) → Rand & Radd, Inc.
(B) → Random Furniture Co.
(C) → Raymond's Stationery Shop

20. ___

Research for The University of Tennessee

PRETEST - GROOMING

GOOD GROOMING CHART

Score yourself on these important factors, as follows:

Always - 3 points Most of the time - 2 points

Occasionally - 1 point Seldom or never - 0 point

	Always	Most of the Time	Occasionally	Seldom or Never
Personal Cleanliness				
1. Do you have a clean, well-scrubbed look?	____	____	____	____
2. Do you wash your hands before meals?	____	____	____	____
3. Do you use an effective deodorant or antiperspirant daily?	____	____	____	____
4. Are your undergarments kept fresh and clean?	____	____	____	____
5. Do you keep your outer garments free from dandruff, lint, and so on?	____	____	____	____
6. Do you have a dental checkup at least yearly?	____	____	____	____
7. Do you brush your teeth at least twice a day?	____	____	____	____
8. Do you protect yourself against offensive breath?	____	____	____	____
9. Is your hair washed at least once a week?	____	____	____	____

	Always	Most of the Time	Occasionally	Seldom or Never
10. Do you have clothes dry cleaned as needed?	____	____	____	____
11. Are your fingernails manicured and filed to a moderate length?	____	____	____	____
Health				
12. Do you eat three well-balanced meals daily?	____	____	____	____
13. Do you drink plenty of milk and water daily?	____	____	____	____
14. Do you watch your weight carefully and try to keep it at the recommended weight for you?	____	____	____	____
15. Do you get sufficient physical activity?	____	____	____	____
16. Do you have physical checkups regularly?	____	____	____	____
17. Do you get enough sleep each night?	____	____	____	____
Posture				
18. Do you sit properly, without slouching?	____	____	____	____
19. Do you stand properly, with back erect, shoulders straight, stomach in?	____	____	____	____

	Always	Most of the Time	Occasionally	Seldom or Never
20. Do you walk confidently, with good posture?	____	____	____	____
Good Grooming Details				
21. Do you keep your hair in a becoming style that is not extreme?	____	____	____	____
22. Do you keep your hair neat?	____	____	____	____
23. Do you refrain from biting your fingernails?	____	____	____	____
24. Do you remove or repair chipped nail polish?	____	____	____	____
25. Is your makeup applied in moderation?	____	____	____	____
26. Do you avoid applying makeup in public?	____	____	____	____
27. Do you avoid combing your hair in public?	____	____	____	____
28. Do you use a light perfume or cologne in a small amount?	____	____	____	____
Clothing and Accessories				
29. Do you choose clothes that are becoming to your figure?	____	____	____	____
30. Do you wear colors that look good on you?	____	____	____	____

	Always	Most of the Time	Occasionally	Seldom or Never
31. Do you avoid extremes in fashion?	____	____	____	____
32. Do you wear clothes appropriate to the occasion?	____	____	____	____
33. Do your clothes look neat and clean?	____	____	____	____
34. Do you keep your shoes brushed or polished, and in good repair?	____	____	____	____
35. Do you wear suitable foundation garments?	____	____	____	____
36. Are your stockings free from runs?	____	____	____	____
37. Are your accessories always appropriate for your outfit?	____	____	____	____
38. Do accessories harmonize with your outfit?	____	____	____	____
39. Do you refrain from wearing too much jewelry?	____	____	____	____
40. Do you keep your handbag neat and free from unnecessary items and bulk?	____	____	____	____

HOW DO YOU RATE? If your score is over 100 You look sharp! You meet business standards! If your score is 80 - 100 Employers may grudgingly tolerate you. If your score is below 80 Beware! Maybe your best friends should tell you.

Save this chart for use in checking up on your improvement after you complete this unit.

Research for The University of Tennessee

POST-TEST - GROOMING

To be sure that you understand the important points to be considered in good grooming, write a brief answer to the following questions:

Test A

1. How might posture influence the impression a person makes on an employer?

2. How do I rate my posture? What can I do to improve it?

3. Why do employers hesitate to hire an overweight person?

4. Why is exercise necessary for everyone, regardless of weight, shape, or age?

5. Do you have pimples only occasionally? About how often?

6. Can you pinpoint any reason for the pimples? (Any nutritional, physical, or emotional reason?)

7. What are some of the foods that are likely to cause blemishes?

8. What is the first step in planning a wardrobe?

9. When you go to apply for a job or when you go to work, you should appear at your best. What does this mean?

10. Why may good grooming attract people to you?

POST-TEST - GROOMING

Test B

Read each statement carefully. If a statement if true, circle the letter "T". If it is false, circle the letter "F."

1. Most of the lasting damage that is done to young skin results from insufficient cleansing. . T F
2. Soap-and-water cleansing does a good job of removing makeup. . . . . T F
3. Normal hair should be shampooed once a week. . . T F
4. Oily hair should be shampooed more than once a week. . . . . T F
5. A career girl's nails should be long and pointed. . . . . T F
6. A deodorant should be used in winter as well as summer. . . . . T F
7. A daily bath is enough to ensure day-long freshness. . . . . T F
8. Good taste in fashion can be developed by carefully studying fashion articles, clothing advertisements, and the merchandise displays in quality stores. . . . . T F
9. Long rope necklaces and dangling earrings are the in-thing for the well-dressed business girl. . . . . T F
10. Open-toed sandals, bell-bottom trousers, beads and medallions, and facial spinach make the well-dressed businessman. . . . . T F

PRETEST - COMPUTATIONAL SKILLS

EMPLOYMENT TEST

PART A - ARITHMETIC

Directions: In the answer space at the right, fill in the space between the two parallel lines under the letter that represents the correct answer. Use a separate sheet of paper for your calculations.

Answers

1. A man has 15 typist-clerks working in his office. They can complete 210 units of work in one day. If he adds 7 typist-clerks, how many units of work will his staff complete in a day? (a) 150 units, (b) 98 units, (c) 308 units, (d) 280 units . . . . . a b c d

2. A camp has rations for 504 men for 98 days. The number of men is increased to 1,176. How long will the rations last? (a) 44 days, (b) 3 months, (c) 60 days, (d) 42 days. . . . a b c d

3. What is the interest on $1,224 at 5% for 90 days, figured on the basis of 360 days to the year? (a) $10.30, (b) $15.30, (c) $12.60, (d) $14.20. . . . . a b c d

4. An institution spends $2,143.05 for coal for a period of 28 days. If the coal cost $7.85 a ton, how many pounds were used in one day? (a) 19,500, (b)9.75, (c) 17,023.94, (d) 21,005 . . . . . a b c d

5. A space 9 feet by 15 feet is set with tiles that are 3 inches by 4 inches. How many tiles will be required? (a) 1,350, (b) 1,620, (c) 1,120, (d) 2,505 . . . . . a b c d

6. Service truck A starts 20 minutes before service Truck B. Truck A has an average speed of 18 miles per hour. Truck B has an average speed of 30 miles per hour. How far must Truck B go to catch Truck A? (a) 20 miles, (b) 15 miles, (c) 30 miles, (d) 12 miles . . . . . a b c d

7. What single discount rate is the equivalent of a chain of discounts of 20%, 10%, and 5%? (a) 25.8%, (b) 31.6%, (c) 35%, (d) 45% . . . a b c d

Answers

8. Two fifths of a number is 14. What is 5/7 of the number? (a) 25, (b) 7/35, (c) 16, (d) 24 . . . . . a b c d

9. What is the fractional equivalent of 2/3%? (a) 2/3, (b) 66 2/3, (c) 200/300, (d) 2/300 . . . . . a b c d

10. What is the decimal equivalent of 116 2/3%? (a) 11.66 2/3, (b) .116 2/3, (c) 116.66 2/3, (d) 1.16 2/3 . . . . . a b c d

PART B - SPELLING

Directions: In the answers column write the letter representing the word that is correctly spelled. Answers

1. The writing on the old paper was almost (a) eligible, (b) illegible, (c) illegable, (d) elibile . . . . . 1. ____

2. There was apparent evidence in the swindle of (a) collission, (b) coalition, (c) collusion, (d) coalusion . . . . . 2. ____

3. The danger of complete collapse was (a) emminent, (b) eminent, (c) emanate, (d) immiment . . . . . 3. ____

4. The Government can mint a million silver dollars from its present supply of (a) bouillion, (b) bullion, (c) bulion, (d) boullion . . . . . 4. ____

5. Students learn to drive in--(a) dual, (b) duel, (c) duol, (d) daul-- control automobiles . . . . . 5. ____

6. In fighting fires the new ranger proved to be very (a) eficient, (b) efficeint, (c) efficient, (d) effecient . . . . . 6. ____

7. The country of India is very (a) populace, (b) populus, (c) peopleous, (d) populous . . 7. ____

Answers

8. His friends were amused when he told a funny (a) insident, (b) insidence, (c) incident, (d) inscident . . . . . 8. ____

9. The tax blank listed all of the (a) egsemsions, (b) exemptions, (c) exemtions, (d) excemptions . . . . . 9. ____

10. The commentator has been sued many times for (a) libel, (b) liable, (c) lible, (d) liabel . . . . . 10. ____

PRETEST - COMPUTATIONAL SKILLS

Directions: In each of the following analogies the first two words compared are related to each other in some way. The same kind of relationship should exist between the second pair of words. You are given the first word of the second pair; select one of the lettered words to complete the pair. Indicate your selection by writing the letter in the blank at the end of the line.

Answers

1. THROW is to CATCH as SEEK is to (A) HIDE, (B) PEEK, (C) FIND, (D) SEARCH . . . . . _____

2. ADD is to SUBTRACT as RAISE is to (A) SALARY, (B) EXPENSE, (C) LOWER, (D) RETRACT . . . . . _____

3. TEN is to HUNDRED as EIGHT is to (A) SIXTEEN, (B) EIGHTEEN, (C) SIXTY-FOUR, (D) ONE HUNDRED EIGHTY . . . . . _____

4. CLERK is to OFFICE as COOK is to (A) KITCHEN, (B) SEW, (C) STOVE, (D) WAITRESS . . . . . _____

5. TELEPHONE is to HANDWRITING as DICTOGRAPH is to (A) TELETYPEWRITER, (B) TELAUTOGRAPH, (C) DICTAPHONE, (D) TYPEWRITER . . . . . _____

6. COOPERATION is to HELPFULNESS as ARBITRATE is to (A) RETIRE, (B) INTERCEDE, (C) CONTROVERSY, (D) DISCUSSION . . . . . _____

7. TWENTY-ONE is to THREE as FORTY-NINE is to (A) SEVEN, (B) NINETEEN, (C) NINE, (D) THIRTY-SIX . . . . . _____

8. A SQUARE is to an OCTAGON as FOUR is to (A) THIRTY-SIX, (B) SIXTEEN, (C) FORTY-EIGHT, (D) EIGHT . . . . . _____

9. COTTON is to WOOL as FLAX is to (A) SILK, (B) LINEN, (C) HEMP, (D) NYLON . . . . . _____

10. A CENTURY is to a DECADE as a MILLENIUM is to (A) AN ERA, (B) A CENTURY, (C) AN ORBIT, (D) A DECLINE . . . . . _____

11. A MONARCH is to an ATTENDANT as a FOREMAN is to (A) A MANAGER, (B) A BOSS, (C) A SUBORDINATE, (D) AN EMPLOYER . . . . . _____

Answers

12. ONE FOOT is to TWELVE INCHES as ONE SQUARE FOOT is to (A) TWELVE SQUARE INCHES, (B) TWELVE SQUARE FEET, (C) FORTY-EIGHT INCHES, (D) ONE HUNDRED FORTY-FOUR SQUARE INCHES . . . . . _____

13. SIX is to THREE as 2/4 is to (A) 2/8, (B) 4/8, (C) 8/16, (D) 1/8 . . . . . _____

14. ELEPHANT is to LARGE as THUNDER is to (A) LIGHTNING, (B) INJURE, (C) RAIN, (D) LOUD . . . . . _____

15. BANK is to CHECK as POST OFFICE is to (A) CLERK, (B) POSTAL SAVINGS, (C) STAMPS, (D) MONEY ORDER . . . . . _____

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

Directions: Try this analogy exercise using the words in the Word Bank to complete the sentences. If necessary, use your dictionary. If the first pair of words in the analogy are synonyms, find a synonym in the Word Bank below to complete the second pair; or, if the first set are antonyms then find an antonym to complete the second pair in the sentence. Write the words in the blanks carefully to help remember the spelling.

1. Circulate is to spread as fleeting is to _____

2. Coalition is to schism as alleviate is to _____

3. Vertex is to zenith as nadir is to _____

4. Authentic is to spurious as aversion is to _____

5. Dogmatic is to authoritative as salient is to _____

6. Judge is to arbiter as assay is to _____

Word Bank

a. transitory
b. attempt
c. sedentary
d. prominent
e. ridiculous
f. aggravate
g. lowest
h. uncouth
i. disgrace

Word Bank

7. Persist is to persevere as crude is to _____

8. Diligent is to industrious as inactive is to _____

9. Intrepid is to dauntless as infamy is to _____

10. Surfeit is to subdue as ludicious is to _____

j. rhythm

k. attractive

POST-TEST

FINAL EXAM

on

COMPUTATIONAL SKILLS LAP

1. List eight places where you can find job information.

_____	_____
_____	_____
_____	_____
_____	_____

2. What is Social Security?

3. List the tips to remember when you are taking an employment test.

_____

_____

_____

_____

_____

4. Select one of the advertisements listed on the next page and complete a
   (1) letter of application for the job
   (2) personal data sheet

5. Complete the application form attached.

POST-TEST

HELP WANTED

FEMALE HELP WANTED	MALE HELP WANTED
STENOGRAPHER-SECRETARY Downtown Law Office, young attractive, some switchboard (will teach) 9:30-6, 5 days, 3 weeks vacation. Box 672 Jacksonville, Journal	YOUNG MAN Take charge of mail room position with large established automobile manufacturer. Must be young, aggressive, desire advancement. Typing necessary. Good salary, excellent opportunity. Write full details. Box 432 FLORIDA TIMES UNION
DICTAPHONE OPERATOR General Office work, small sales office and showroom. Downtown Jacksonville, 5-day week. Box 2310 Florida Times Union	YOUNG MAN, TRAINEE Excellent opportunity to learn business, typing necessary, 5 day week. $85-90 start. Reply Gateway Employment Agency, 19 Adams Street, Jacksonville, Florida
SECRETARY Opportunity for one interested in advertising or publishing. Small firm. Write age, experience, education to Box 99, Florida Times Union.	YOUNG MAN Bright beginner, act as messanger and make self generally sueful in exceptionally attractice office. Good opportunity, 5-day week. RULY P.O. Box 92 Jacksonville Journal
DR.'S OFFICE Needs experienced young lady in medical insurance and billing. Busy secretary's office. Reply TIMES-UNION & JOURNAL Box 34687	BOOKKEEPER To assist comptroller, prepare financial statements and operate NCR machine. Reply to Times-Union & Journal Box No. j-37.

POST-TEST

PERSONAL DATA SHEET

NAME _____ AGE _____

ADDRESS _____ HEIGHT _____

TELEPHONE _____ WEIGHT _____

EDUCATION _____ MARITAL STATUS _____

_____

SUBJECTS STUDIED

_____ _____

_____ _____

_____ _____

_____ _____

STUDENT ACTIVITIES

_____ _____

_____ _____

_____ _____

SPECIAL SKILLS

_____ _____

_____ _____

_____ _____

BUSINESS EXPERIENCE

_____ _____

_____ _____

_____ _____

REFERENCES Name Address Telephone

_____

_____

_____

_____

APPLICATION FOR EMPLOYMENT

Date _____

Name (Last Name First) _____ Age _____ Born: Mo. _____ Day _____ Year _____

Address _____ Telephone _____ Soc. Sec. No. _____

How long have you lived at this address? _____ Citizen? _____

Male _____ Female _____ Weight _____ Height _____ Any serious illness? _____

Single _____ Married _____ Other _____ No. Children _____ Ages _____

Other Dependents _____ Explain _____

What kind of work are you applying for? _____

What special qualifications do you have? _____

What office machines can you operate? _____

Who referred you to us? _____

Do you have any relatives working for this company? _____

MILITARY SERVICE RECORD

Have you served in the Armed Forces? _____ From _____ To _____

Branch of Service _____ Duties _____

Rank or rating at the time of enlistment _____ Rating at time of discharge _____

Type of discharge _____ Any disability? _____

EDUCATION

SCHOOL	DATE		NAME AND ADDRESS OF SCHOOL	COURSE	DID YOU GRADUATE
	TO	FROM			
GRAMMAR					
HIGH					
COLLEGE					
OTHER					

EXPERIENCE (ENTER LAST JOB FIRST)

NAME AND ADDRESS OF COMPANY	DATE		LIST YOUR DUTIES	STARTING SALARY	FINAL SALARY	REASON FOR LEAVING
	FROM	TO				

REFERENCES (NOT RELATED)

NAME	ADDRESS	OCCUPATION

PRETEST-PROCESSING FORMS

GENERAL APTITUDE TEST

Test 1: Mental Alertness

Write the letter of the correct answer (or, where necessary, the answer itself) in the blank at the right. You may use scratch paper to figure any of the problems.

1. A word meaning the same as dispute is:
(a) discussion, (b) lawsuit,
(c) controversy, (d) debate 1. _____

2. Which of the four words below is the most unlike the other three?
(a) extravagant, (b) wasteful,
(c) wealthy, (d) profuse 2. _____

3. The opposite of lenient is:
(a) stringent, (b) easy, (c) mild,
(d) relaxing 3. _____

4. Which word does not belong in the group? (a) proceed, (b) receed,
(c) supersede (d) procede 4. _____

5. If a boy can run 3 feet in 1/10 of a second, how many feet can he run in ten seconds? 5. _____

6. Which word does not belong in the group? (a) ostentatious, (b) delicate,
(c) gaudy, (d) pretentious 6. _____

7. What number is wrong in the following series? 1 3 9 27 81 93 7. _____

8. If a car traveling at 60 miles per hour and it increases its speed by 15 percent, what is the new speed? 8. _____

9. Which of the following pairs are exactly alike? Write the letters of the matching pairs in the blank at the right. 9. _____

(a)	392013273648	392018273848
(b)	820	802
(c)	572937273	572937373
(d)	8178821	8178821
(e)	4828394486	4828394486

10. If pencils are 15 cents a dozen, how much would 3 pencils cost? 10. _____

11. Which word does not belong in the group? (a) accommodate, (b) personnel, (c) committment, (d) criticize 11. _____

12. 458 Multiplied by 38 is: (a) 16405, (b) 15244, (c) 17304, (d) 17404 12. _____

13. What is the opposite of economical? (a) thrifty, (b) wasteful, (c) frugal, (d) sparing 13. _____

14. The word dominate means to: (a) destroy, (b) deny, (c) control, (d) contradict 14. _____

15. 10.001 subtracted from 11.01 is: (a) 1.01, (b) 1.001, (c) 1.009, (d) 1.010 15. _____

16. The total of 1/2, 1/8, 1/6, and 2/3 is: (a) 1 2/3, (b) 1 11/24, (c) 1 3/16, (d) 1 1/8 16. _____

17. The opposite of detrimental is: (a) harmful, (b) pernicious, (c) vindictive, (d) beneficial 17. _____

18. Fifty is 1/2 of 100. What fractional part of 100 is 40? 18. _____

19. Divide 250.25 by 6 7/8. 19. _____

20. What fractional part of 100 is 12 1/2? 20. _____

POST-TEST - PROCESSING FORMS

UNIT TEST

A. Explain each of the following terms:

guardian

dependents

creditor

spouse

marital status

self-supporting

B. Put a circle around the number of each situation below in which you feel the person acts properly during his interview.

1. Upon entering Mr. Jones' office, John remained standing until the interviewer asked him to be seated.
2. He was not ashamed to say "Yes sir," "No sir," and "Thank you for your consideration, Mr. Jones." He was modest, yet confident, about his qualifications.
3. John's voice was loud; he interrupted the employer a few times; and he used many slang expressions.
4. Upon leaving, John concluded with "Glad to metcha; let me know as soon as you can, if you'll give me a job."

C. List five (personal) points to keep in mind when you report for an interview.

1.

2.

3.

4.

5.

D. List the steps in preparing for the job interview.

GOOD LUCK!

THE END

Research for The University of Tennessee

PRETEST

MAIL-TEST I

1. "Mail" consists of what things? _____

_____

2. The differences between incoming and outgoing mail is:

   Incoming Mail is delivered to _____

   Outgoing Mail is delivered to _____

3. A mail schedule is _____

_____

4. A mail schedule is very important because _____

_____

_____

5. Mail delivered to each station is placed face-down in the _____ box. Letters are kept _____ this way.

6. Mail is picked up from the _____ box at the same time that mail is delivered to an office.

7. The messenger returns all the mail he has collected from the OUT boxes to the _____.

POST-TEST

MAIL-TEST II

If I can answer all of the following questions correctly, I will proceed to Section III in the Mailing LAP, or to another unit of work. If I have answered any of the following questions incorrectly, I will read Section II again to find the correct answer.

1. What is the mail clerk's first job in handling the incoming mail?

   _____

2. How does a clerk begin the job of sorting or classifying incoming mail?

   _____

3. When the clerk sorts incoming mail, sometimes special attention is required. Name three times this could happen.

   1._____ 2._____ 3._____

4. What are three kinds of files which are used to sort mail?

   1._____ 2._____ 3._____

5. All letters and other written items that are sealed are called _____ Class mail. What are three more included in this kind of mail?

   1. _____ 2. _____ 3. _____

RECORD KEEPING - PRETEST

TEST 1

CHECKING NAMES AND NUMBERS

Check the names and numbers in columns A and B. If they are alike, put a check mark in the column headed "alike." If they are different, put a check mark in the column headed "Different."

			Alike	Different
1.	Gerald Hayes	Gerald Haynes	_____	_____
2.	Jenson Co., Inc.	Jenson Co., Inc.	_____	_____
3.	Bob Mannheimer	Rob Mannheimer	_____	_____
4.	Ronald Ray	Ronald Raye	_____	_____
5.	Eugene S. Griffin	Eugene S. Griffin	_____	_____
6.	Potter & Johnson	Potter & Jonson	_____	_____
7.	Jack Printz	Jack Prince	_____	_____
8.	Peter Harris	Peter Harris	_____	_____
9.	Paul R. Brown	Paul B. Brown	_____	_____
10.	Apex Market 231 Newton Street	Apex Market 213 Newton Street	_____	_____
11.	Joe's Seafood 983 Jackson Rd.	Joe's Seafood 983 Jackson Rd.	_____	_____
12.	Kramer & Sons 4923 Maryville	Kramer & Son 4923 Maryville		
13.	Lane & Company	Lane & Company	_____	_____
14.	Jack R. Reiss	Jack R. Reiss	_____	_____
15.	12,198	12,198	_____	_____
	984,763	984,663	_____	_____
	1,827	1,872	_____	_____
	10,986	11,986	_____	_____
	109,742	109,742	_____	_____

Research for The University of Tennessee

RECORD KEEPING - PRETEST

TEST 2

VERIFYING - PROOFREADING

A. Compare each of the items in the following columns. If the words or numbers in each item differ in any way, check the "different" beside the number. If the words or numbers in each item are exactly alike, check the "alike" beside the number.

			Alike	Different
1.	already	allready	____	____
2.	their	there	____	____
3.	14,762	14,762	____	____
4.	365,598	365,589	____	____
5.	Nov. 21, 1968	Nov. 21, 1966	____	____
6.	413 Moon Road	413 Moon Street	____	____
7.	Miss Helen Field	Mrs. Helen Field	____	____
8.	Very truly yours,	Very Truly Yours,	____	____
9.	receivable	recievable	____	____
10.	license	license	____	____

B. Deposit Slip #1 was made out correctly. Deposit Slip #2 is a copy of #1; however, #2 contains several errors. Proofread and circle the errors made on Deposit Slip #2.

Deposit Slip #1

D E P O S I T

Passbook No. 34-017-20
Date October 5, 1970
Name James C. Clerk

	Dollars	Cents
Cash	152	75
Check	25	00
	17	40
	169	25
TOTAL	364	40

Deposit Slip #2

D E P O S I T

Passbook No. 34-170-20
Date October 3, 1970
Name James C. Clark

	Dollars	Cents
Cash	152	00
Check	25	75
	17	40
	169	25
TOTAL	360	40

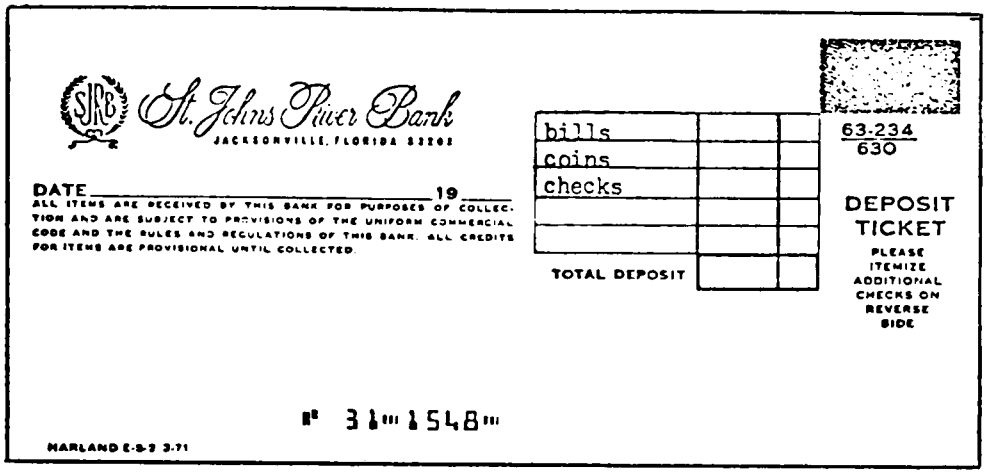
Number of errors ____

POST-TEST

FINAL EXAM ON RECORD KEEPING LAP II

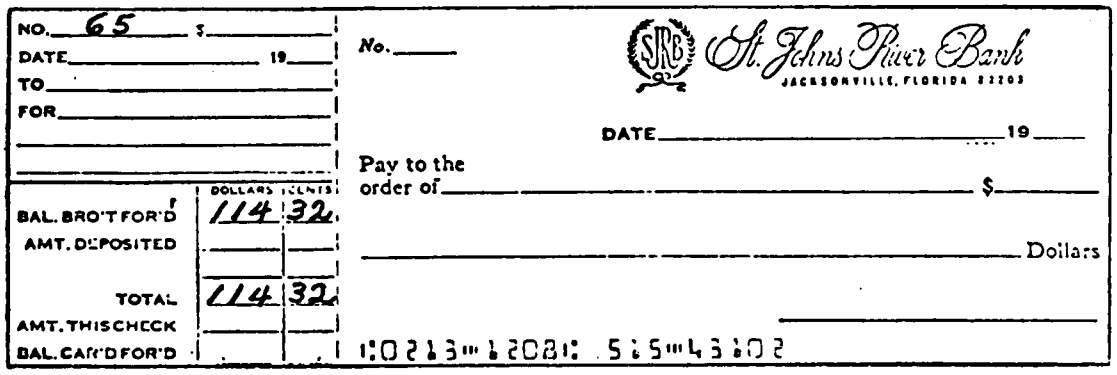
(1) As treasurer of the Jacksonville High School F.B.L.A. Club, you are to deposit the following items on November 3 or the current year: cash consisting of $12.00 in bills and $8.30 in coins, and a check for $14.72.

Prepare the deposit slip, using the blank form provided below.



(2) On November 24 you, as treasurer of the F.B.L.A. Club, will issue a check for $13.50 to the Jax Printing Company for payment of tickets printed for your club's carwash.

You are to complete the checkbook stub record and write the check using the blank forms provided below.



POST-TEST - RECORD KEEPING

(3) Find the new balance in each of the following:

	Previous Balance	Deposits	Checks Issued	New Balance
a	$243.60	$61.75	$7.15; $28.09; $20.40	_____
b	$647.92	$95.00; $48.50	$52.40; $312.68; $12.90	_____
c	$534.60	$14.32; $38.75	$106.35; $9.75	_____
d	$297.90	$457.00; $86.95	$4.75; $12.66; $73.04	_____
e	$975.50	$182.06	$35.66; $17.98; $64.65	_____

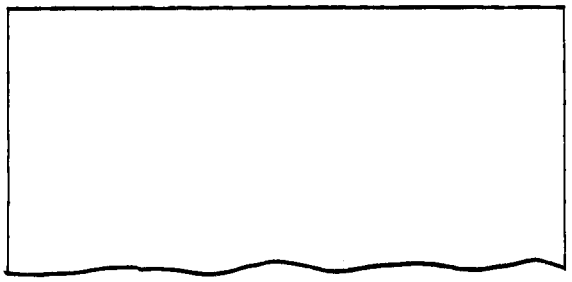
Use this space for figuring:

POST-TEST - RECORD KEEPING

(4) Karl Kent's checkbook showed a balance of $193.72 on Monday, November 1. Later in the week he deposited $99.80, $15.85, and $44.50. He wrote checks for $64.00, $14.75, and $3.49. Find his checkbook balance at the end of the week.

Balance $_____

(5) The check Karl Kent wrote for $64.00 was payable to Lester Warren. Mr. Warren received the check and wants to mail it to his bank, Florida National Bank of Jacksonville. Using a full endorsement, you are to prepare Lester Warren's check for deposit in his bank. Use the form provided below for the endorsement.



(6) Mary Hale's checkbook balance on November 1, was $309.26. Her bank statement for that date showed a balance of $278.38. Checks outstanding, that is, checks issued but not presented at the bank for payment, were No. 50 for $13.70 and No. 51 for $6.92. A deposit of $50.00, mailed on October 30, had been received by the bank too late to be entered on the statement. There was a bank service charge for $1.50.

Prepare a reconciliation statement for Mary Hale. Use the form below.

Mary Hale
Reconciliation Statement
November 1, 1972

Checkbook balance $309	26 Bank Statement balance
Checkbook balance $309.26	Bank Statement balance $278.38
Deduct Service Charge	Deduct Outstanding checks:
	Add Deposit not recorded
Correct checkbook balance $_____	Available bank balance $_____

PRETEST

TEST ON TELEPHONE TECHNIQUES

A. Circle the correct answer in each of the following:

1. Even if someone is rude over the telephone, you should not "hang up" on him . . . . True False

2. When the telephone rings, you should finish what you are doing before you answer . . . . . True False

3. If you are talking to a customer at your desk and the telephone rings, you should pick up the receiver so the caller will know that someone is there, but finish with the customer before you answer . . . . . True False

4. A stranger calls and ask for the home address and telephone number of an employee. You should not give him the information without permission . . . . . True False

5. It doesn't really matter how you handle a call. What matters is that you get (or give) the information . . . . . True False

6. Using the telephone is very important in a business office . . . . . True False

7. When you take a message over the telephone, you should (a) write down all the information, or (b) train yourself to remember . . . . . a b

8. If you don't have an answer, you should (a) tell the caller you'll look it up when you have a chance and call him back, or (b) refer the caller to someone who can give him the answer now . . . . a b

9. Someone calls and wants to place a large order with your company. Should you (a) try to take down the order, or (b) connect him with the Sales Department . a b

10. Your telephone isn't working properly. Which of the following should you do:

    a. Be patient and hope it will correct itself a

    b. Call telephone repair service b

    c. Complain to the boss and let him decide what to do c

Research for The University of Tennessee

PRETEST

B. The following conversation took place at 10:35 a.m. today:

You: Mr. Arnold's office, Miss Ames speaking.

Caller: This is Harold Baines of the First National Bank. May I speak with Mr. Arnold, please?

You: Mr. Arnold is not in his office right now. May I help you?

Caller: Yes. Please have him call.

You: I'll do that. Thank you.

---

1. Using the MEMO OF CALL below, fill in the information:

MEMO OF CALL

To M_____

From M_____

_____

Area Code Tel. No. Ext.

☐ Telephoned ☐ Will call you later

☐ Please call ☐ Called to see you

☐ In response to your call ☐ Wishes to see you

MESSAGE_____

_____

_____

Rec'd by_____ Date_____ Time_____

2. After you have filled in the blank, list on the lines below at least three items of information you were not able to fill in:

_____

_____

_____

POST-TEST

TEST ON TELEPHONE

A. You are employed by the Cook Publishing Company, where your boss is Mr. James Emory. Give below are 5 situations in which you are asked to make outside calls. Page 2 of this test is a list of "Frequently Called Numbers." Using this list, and following the instructions in each of the five cases, complete the following:

1. You are asked to get James Adams at Allied Chemical on the phone:
   a. What number would you dial? _____
   b. What would you say to the switchboard operator who answers your call?
   _____
2. Your boss wants to talk to the City Editor at Hutchinson Publishing Co.
   a. What number would you dial?_____
   b. The switchboard operator has rung the City Editor's office, and the secretary has answered. What would you say to her?
3. Your boss wants to talk with Al Raymond in the Purchasing Department at Montgomery Company, Inc.
   a. What number would you dial? _____
   b. What would you say to the switchboard operator who answers your call?
   _____
4. Mr. Emory wants to talk with Mrs. Ethel Bryant in the furniture department at Friedman's Department Store:
   a. What number would you dial? _____
   b. What would you say to the switchboard operator who answers your call?
   _____
5. Mr. Emory wants Bill Anderson at Allied:
   a. What number would you dial? _____
   b. What would you say to the switchboard operator who answers your call?
   _____

Research for The University of Tennessee

POST-TEST

B. The following questions are simple, but you will have to think before you answer them.

1. Why do you have to wait for the dial tone before you dial a number?

_____

2. Why should you wait at least ten rings after dialing before you hang up?

_____

3. If you need help in making a call, how do you help the Operator to understand you?

   a. In giving names_____

   b. In giving numbers_____

4. Why is it important to a company that you be polite when you use the telephone? _____

5. If you have an emergency, should you try to hurry the call by pulling the dial back when you are dialing? _____

6. On a touch-tone phone what do you do instead of dialing?_____

7. If you made a mistake in dialing, should you: (Circle correct one.)

   a. Finish the number, let it ring, and then hang up

   b. Hang up before you complete dialing?

8. If you call someone, and the secretary tells you he is not in, should you:

   a. Say, "Thank you" and hang up?

   b. Leave a message?

9. If you have an important message for the vice-president in charge of personnel, but you know that he out of town, should you:

   a. Tell the first person who answers the telephone?

   b. Be sure to give the message to the switchboard operator?

   c. Ask for his office, and leave the message with his secretary?

PRETEST

FREQUENTLY CALLED NUMBERS

NAME	NUMBER	EXTENSION
Allied Chemical Corporation	286-9431	
Adams, James		312
Anderson, William (Bill)		689
Andrews & Morgan, Accountants	212-1278	
Elliot, Barker, Jones & Smith Attorneys-at-Law	725-6568	
Friedman's Department Store	319-8742	
Furniture Department		123
Shoe Department		142
Women's Apparel		201
Hutchinson Publishing Company	349-8754	
Ames, Rudolph (City Editor)		
Jackson & Son Printing Company	332-8868	
Johnson Meat Packing Company	298-5439	
Morrison, John A., Sales Manager		
Montgomery Company, Inc.	444-3902	
Moore, James (Sales)		124
Palmer, Paul (Personnel)		302
Raymond, Albert (Accounting)		125
Raymond, Albert (Purchasing)		314
Roberts & Fisher Manufacturing Corp.	882-4197	
Wilson, Hall & Abrams, Realtors	297-4461	
Abrams, Daniel		178
Hall, Everett		719
Wilson, Homer		156

Research for The University of Tennessee

PRETEST - HUMAN RELATIONS

Fill out this check list and the one on the following page to analyze your employment traits and how well you live and work with others. Be honest with yourself in checking each answer. After you finish the checklist, review your weak points and develop a plan to help yourself improve. Check it often to see how much you have improved.

	Points			
	3	2	1	
	Always or Almost Always	Sometimes	Seldom or Never	Points Scored
1. If someone is blamed or criticized for something I have done, I readily admit that I am the one at fault.				
2. If I find an article that has been mislaid or lost by others, I do my best to locate the owner or turn it in to "lost and found."				
3. If I am complimented or given credit for something I did not do, I make every effort to see that the right person is recognized.				
4. I return promptly to friends things that I borrow such as books, tools, sporting goods, and other personal items.				
5. I receive geniune satisfaction from seeing others succeed.				
6. When it is justified, I appreciate and profit from criticism given me by others.				
7. If I cannot possibly be present to perform a responsibility that I have accepted, I arrange to have the duty performed by someone else.				
8. I am modest about my accomplishments and successes; I avoid "putting on airs" and bragging about myself.				

9.	When I have a difficult assignment, I do my best to complete it.				
10.	I am considerate of my fellow students and workers who are less fortunate than I.				
11.	I am willing to hear the other fellow's point of view before making a decision or giving an opinion.				
12.	I do more on my job or in my studies than is expected of me.				
13.	At parties I am a good conversationalist as well as a good listener.				
14.	In social gatherings I am courteous to other people and especially thoughtful of my host and elderly people in my group.				
15.	I send thank-you notes or otherwise express appreciation to people who have entertained me or who have extended favors to me.				
16.	If a salesclerk gives me too much change, I immediately return it.				
17.	I am a good loser in contests or games; I am a "good sport" when I lose an argument or a bet.				
18.	When I am out with a few friends, I willingly do my part to pay my share of the expenses for transportation, food and entertainment.				
19.	I show good taste in clothing; I try to wear proper garments at the right time.				
20.	I use good manners at the dinner table, at social affairs, and in public places.				

TOTAL

Research for The University of Tennessee

POST-TEST - HUMAN RELATIONS

UNIT TEST ON LAP I

1. List three reasons for working.

2. Define mobility.

3. Why is mobility important in getting a job?

4. What occupational groups are growing most rapidly?

5. In which occupational group is the demand for workers decreasing?

6. Define technology.

7. Define automation.

8. Will higher education be necessary in finding and keeping jobs in the future? Explain.

9. Why is the choosing of a suitable occupation so important to an individual?

10. What steps should one take in choosing his life's work?

The University of Tennessee
College of Education
Knoxville 37916

Department of Vocational-Technical Education

TO: Vocational Office Education Teachers in Duval and Knox Counties

FROM: Marlyne E. Adams, Graduate Research Assistant, The University of Tennessee, Knoxville, Tennessee

SUBJECT: AN INVESTIGATION OF INDIVIDUALIZED INSTRUCTION IN VOCATIONAL OFFICE EDUCATION MEASURING STUDENT ACHIEVEMENT

DATE: September 3, 1973

I enjoyed visiting with you by phone on May 10 when we talked about the following study.

You may be interested to know that permission has been given by Mr. Groover to investigate the learning activity packages which he and the Duval County School System, Jacksonville, Florida, prepared. Mr. Groover is Supervisor of Planning and Evaluation, Business, Distributive & Diversified Education.

Mr. Bruce Hinton of Knox County has contacted each of the schools in Knox County which has a Vocational Office Education Program.

Your participation in gathering the necessary data to conduct this research will benefit curriculum development, evaluation, and improvement in business education.

1. Please administer the enclosed tests to your Vocational Office Education students.
2. Please complete the Research Information form for both teacher and student information. You may wish to have someone in the Guidance Office to help with this completion.

The completed research report will give information only for the combined group, and will not list any individual student.

You may return the completed information to your principal. Please let him know if you wish to receive a summary of the completed research.

Your cooperation is very much appreciated.

School _____

County _____

THE UNIVERSITY OF TENNESSEE
Vocational-Technical Education Department

Teacher _____
Degree _____
Number years taught subject __
Number years bus experience __
In service training during 1970, 1971, & 1972? __
Yes ___ No ___

Teacher: Is individualized instruction superior to normal classroom instruction? ___
Yes ___ No ___

Student Name	SCORES			Grade Point Average	Socio-Economic Information			
	GATBE	Eng.	I.Q.		Education		Occupation	
					Mother	Father	Mother	Father

METHOD OF TEACHING

Information on Achievement By Area

STUDENT ACHIEVEMENT

Filing I.A		Filing I.B		Grooming II.A		Grooming II.B		How to Find the Right Job III.A		How to Find the Right Job III.B		Job Interview IV.A		Job Interview IV.B		Mail Handling V.A.		Mail Handling V.B.		Record Keeping VI.A		Record Keeping VI.B		Telephone Techniques VII.A		Telephone Techniques VII.B		World of Work VIII.A		World of Work VIII.B	
Pre		Post		Pre		Post		Pre		Post		Pre		Post		Pre		Post		Pre		Post		Pre		Post		Pre		Post	
$\bar{X}$		$\bar{X}$		$\bar{X}$		$\bar{X}$		$\bar{X}$		$\bar{X}$		$\bar{X}$		$\bar{X}$		$\bar{X}$		$\bar{X}$		$\bar{X}$		$\bar{X}$		$\bar{X}$		$\bar{X}$		$\bar{X}$	

(Use another sheet if more space needed_

MEA 72-73

APPENDIX F

NOBELS HIGH PRIORITY LISTS

TABLE VIII

FIRST SEQUENCE OF NINE HIGH-PRIORITY ABILITIES PROPOSED FOR PREPARATION OF OFFICE PERSONNEL

High-Priority Emerging Ability	Ability Common to This Level of Personnel			
	Manage-ment	Super-visory	Clerical	Prof.-Tech.
A1-Ability to comprehend and conceptualize the system of the organization or unit as a vast network or information flow and to understand as an employee one's position in the operation of the system.	X	X	X	X
B2-Ability to adjust quickly to new equipment, procedures, and work sequences brought about by rapid technological changes for the purpose of updating skills, increasing individual productive capacity, and raising company output.	X	X	X	X
B4-Ability to perform adequately in one system, switch to another system and perform adequately, and then switch back and perform adequately again. (Total job flexibility.)	X	X	X	X
C3-Ability to recognize how inaccurate data entering a system may affect outcomes on succeeding jobs.	X	X	X	X
D1-Ability to gain rapport with all racial groups.	X	X	X	X

TABLE VIII (Continued)

High-Priority Emerging Ability	Ability Common to This Level of Personnel			
	Manage-ment	Super-visory	Clerical	Prof.-Tech.
E2-Ability to communicate via data communication devices and to know the limitations methods of utilization, and choose from available equipment for particular operations.	X	X	X	X
G2-Ability to input data in an on-line real-time system to obtain information for report preparation, office work production, and exception reporting.	X	X	X	X
G3-Ability to review information system output to determine if there are errors.	X	X	X	X
G4-Ability to determine what happened to produce the results in an information system and to provide corrections of data, if needed.	X	X	X	X

TABLE IX

SECOND SEQUENCE OF TWENTY-ONE HIGH-PRIORITY ABILITIES PROPOSED FOR PREPARATION OF OFFICE PERSONNEL

High-Priority Emerging Ability	Ability Common to This Level of Personnel			
	Management	Supervisory	Clerical	Prof. Tech.
G6-Ability to utilize contemporary record storage techniques including microfilm, microfiche, aperture cards, etc., including indexing and operating the system.		X	X	X
H1-Ability to operate various pieces of new equipment through self-instruction or in-service training. (MTST, Electronic Calculator, ATS, etc.)		X	X	X
H2-Ability to operate various computer data manipulation devices. (Input, Output, storage, and Retrieval)		X	X	X
H3-Ability to operate microfilm and microfiche equipment.		X	X	X
I3-Ability to convert data to appropriate coding schemes.		X	X	X
I4-Ability to assemble and arrange input data for processing.		X	X	X
I1-Ability to write and execute information system programs.		X		X

TABLE IX (Continued)

High-Priority Emerging Ability	Ability Common to This level of Personnel			
	Manage-ment	Super-visory	Clerical	Prof. Tech.
C1-Ability to analyze the needs, attitudes, motivations, and actions of others to facilitate the desired outcomes.	X	X		X
C2-Ability to interface between management and informational systems personnel	X	X		X
E1-Ability to summarize output from information systems for the purpose of presenting management with concise reports.	X	X		X
E3-Ability to interpret and communicate the findings resulting from research studies.	X	X		X
F1-Ability to identify and select among a number of alternate combinations of equipment, procedures, and people for that combination which best accomplishes a certain established objective, purpose, or goal according to certain criteria.	X	X		X
F2-Ability to identify information needed by management for decision-making purposes.	X	X		X

TABLE IX (Continued)

High-Priority Emerging Ability	Ability Common to This Level of Personnel			
	Manage-ment	Super-visory	Clerical	Prof.-Tech.
F3-Ability to formulate plans for collection, processing storage, and retrieval of information to meet the needs of the organization.	X	X		X
F4-Ability to contribute to or conduct a feasibility study.	X	X		X
F5-Ability to contribute to or conduct cost effectiveness studies.	X	X		X
F6-Ability to ascertain what information should be programmed into an integrated information system.	X	X		X
F7-Ability to formulate standards, to measure performance, and to implement control activities, comparing results with expectations and reporting exceptions.	X	X		X
G1-Ability to construct basic flowcharts for projects, systems, or subsystems for purposes of planning, analyzing, impelementing, controlling, and budgeting.	X	X		X
H4-Ability to ascertain and analyze the capabilities and functions of copying machines, data reproduction equipment, and data display terminals.	X	X		X

TABLE IX (Continued)

High-Priority Emerging Ability	Ability Common to This Level of Personnel			
	Manage-ment	Super-visory	Clerical	Prof.-Tech.
I2-Ability to locate information systems services and to select those that are appropriate.	X	X		X

VITA

Marlyne Ellis Adams was born in Culbertson, North Carolina on May 14, 1934. She attended elementary school and high school in Blairsville, Georgia, where she was graduated in 1950.

After attending Perry Business College in Gainesville, Georgia and completing the Secretarial Science Program, Mrs. Adams was in the employ of Retail Credit Company in Atlanta, Georgia for 11 years as a secretary while she pursued her Bachelor of Business Administration Degree at Georgia State University. After receiving her degree in 1963, she established a secretarial agency which she operated for five years. In 1964 she began teaching at DeKalb Community College and taught there four years in the evening and three years on the day faculty while pursuing the Master of Business Education Degree at Georgia State University. During the eight years Mrs. Adams taught at DeKalb Community College, she taught Accounting, Business Communications, Business English, Business Law, Business Machines, Business Math, Consumer Economics, Medical Transcription, Medical Typewriting, Office Management, Record Keeping I and II, Secretarial and Clerical Office Procedures, Shorthand I, II, III, and Typewriting I and II.

At the completion of the Master's Degree in 1971, Mrs. Adams commenced the doctorate in Vocational-Technical Education at The University of Tennessee, Knoxville in 1972. She was a graduate teaching assistant at The University of Tennessee from March, 1972 to March, 1974 teaching Marketing and Business Education. She also served as a graduate research assistant in Vocational-Technical Education. During the Spring Quarter, 1974 she served as a coordinator for student teachers at The University of Tennessee.

She is currently a member of the American Vocational Association, American Business Communications Association, Delta Pi Epsilon, National Business Education Association, and Phi Delta Kappa.

She is married to Larry Delano Adams who is a registered representative. They have one son, Brian.