

DOCUMENT RESUME

ED 105 145

CE 003 410

TITLE General Curriculum Guide for Business Education in Utah; Revised Edition.

INSTITUTION Utah State Board for Vocational Education, Salt Lake City.

PUB DATE Aug 74

NOTE 49p.

EDRS PRICE MF-\$0.76 HC-\$1.95 PLUS POSTAGE

DESCRIPTORS Bibliographies; *Business Education; *Business Subjects; *Curriculum Guides; Educational Accountability; Educational Philosophy; *Elementary Secondary Education; Employment Qualifications; High School Curriculum; Junior High Schools; Occupational Clusters; Office Occupations; Punctuation; State Programs

IDENTIFIERS *Utah

ABSTRACT

The guide is for the use of teachers in the areas of business and office occupations, grades 7-12. It focuses on recommended curriculum offerings and accountability levels for business and office occupations subjects and represents an effort to promote articulation and communication among the various educational settings in the State. The subjects covered are: basic business, bookkeeping, business communications, business law, cooperative office education, data processing, office machines, office procedures, personal finance, shorthand, simulation, transcription, and typewriting. In addition, principles of philosophy for business education in Utah (vocational, general education, and advanced career preparation) are listed. Suggested business curricula for junior high schools and high schools very briefly touch on general objectives and recommended courses. Recommended career oriented clusters for business education are also specified. The appendix lists the 27 most used punctuation rules in business correspondence and the most important attitudes and personality traits for clerical employment. An 11-page bibliography is included. (AG)

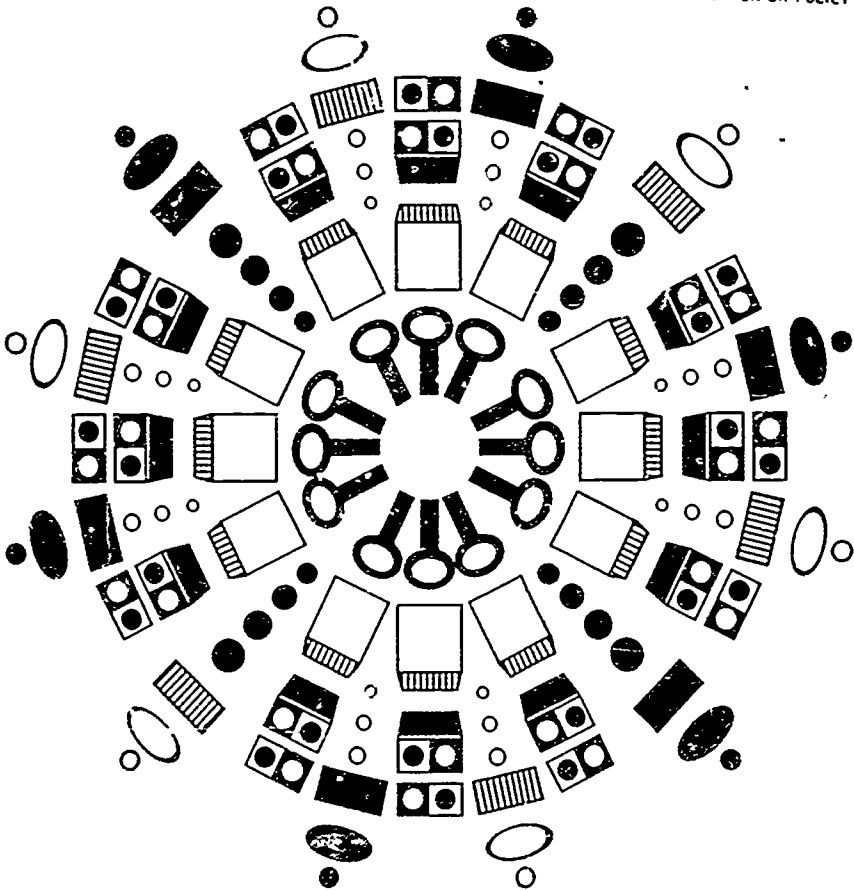
BUSINESS AND OFFICE OCCUPATIONS

State Business and Office Occupations Curriculum Guide

ED105145

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT
OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY



15110540

UTAH STATE BOARD OF EDUCATION

Teacher's Manual

**GENERAL CURRICULUM GUIDE
FOR
BUSINESS EDUCATION IN UTAH**

August 1974
(revised)

UTAH STATE BOARD OF EDUCATION

Dr. Vaughn L. Hall	Associate Superintendent, Adult, Vocational and Rehabilitation Services
Mr. Walter E. Ulrich	State Director, Vocational Education
Mr. Gary M. Lloyd	State Specialist, Business and Office Occupations

TEACHER COMMITTEE FOR GUIDE DEVELOPMENT

**Dr. Lucille T. Stoddard
Mrs. Annette Thomason
Mrs. LuAnne Poulsen
Mr. Robert B. Jameson**

FOREWORD

This publication has been prepared as a general curriculum guide for use by teachers in business and office occupations areas in grades seven through twelve. The Guide focuses on recommended curriculum offerings and accountability levels for business and office occupations subjects.

Walter E. Ulrich, State Director
Vocational Education

UTAH STATE BOARD OF EDUCATION

Walter D. Talbot, Executive Officer
1400 University Club Building
Salt Lake City, Utah 84111

W. Robert Wright, Chairman
Bountiful, Utah

Mrs. Lila B. Bjorklund, Vice Chairman
Salt Lake City, Utah

Sheldon S. Allred
Price, Utah

Jesse Anderson
Ogden, Utah

William W. Cannon
Salt Lake City, Utah

John L. Owen
Wellsville, Utah

A. Glenn Christensen
Salt Lake City, Utah

Stephen L. Garrett
Cedar City, Utah

Mrs. Esther R. Landa
Salt Lake City, Utah

Reuben D. Law
Provo, Utah

E. Varian Mortenson
Murray, Utah

LaPreal W. Lublin, Secretary
Salt Lake City, Utah

STATE COURSE OF STUDY COMMITTEE

Walter D. Talbot, Chairman
Superintendent of Public Instruction
Salt Lake City, Utah

Oral L. Ballam, Dean
Utah State University
Logan, Utah

McRay Cloward, Dean
Southern Utah State College
Cedar City, Utah

C. Bryce Draper, Superintendent
Cache School District
Logan, Utah

Stephen P. Heneley, Dean
University of Utah
Salt Lake City, Utah

Clarke N. Johnsen, Superintendent
Tooele School District
Tooele, Utah

Orson W. Peterson, Superintendent
Emery School District
Huntington, Utah

Joyce Craig
Midway, Utah

Mrs. E. E. Ericksen
Salt Lake City, Utah

Dr. Eugene Garcia
Salt Lake City, Utah

Dorothy B. Watkins
Ogden, Utah

TABLE OF CONTENTS

Preface	v
Philosophy for Business Education in Utah	1
Vocational	2
General Education	3
Advanced Career Preparation	4
Suggested Business Curriculum for Junior High Schools	4
Suggested Business Curriculum for High Schools	4
Recommended Course Clusters for Business Education	6
Basic Business	7
Bookkeeping	8
Business Communications	9
Business Law	10
Cooperative Office Education	11
Data Processing	12
Office Machines	13
Office Procedures	14
Personal Finance	16
Shorthand	17
Simulation	19
Transcription	21
Typewriting	23
Appendix	26
27 Most Frequently Used Punctuation Rules in Business Correspondence	
Most Important Attitudes and Personality Traits for Clerical Employment	
Bibliography	31

PREFACE

This guide was written primarily in response to inquiries received from Utah business and office education teachers for general curriculum guidelines. These teachers were concerned about such problems as realistic standards that reflected those found in contemporary businesses, methods that promoted learning most effectively, philosophy concerning trends in education, certification standards and directions, and other related problems and practices. In addition, educators recognized that an articulation problem has become rather severe in business and office education programs in the State among junior high, secondary, and post-secondary schools.

With these problems in mind, then, the developers of the Guide worked toward structuring a document that would be just what the title denotes — a curriculum *guide* with contents designed to help business and office education teachers formulate curriculum policy and practice in their classrooms.

The Guide was written to reflect the findings of current research. An examination of this research showed that many teaching practices were being followed that were not in agreement with the recommendations of the research. Thus, some suggestions were made that differ from actual practices, nevertheless, when the research reflected these suggestions, they were made.

The accountability concept was initiated as an integral part of the Guide. Although some teachers view accountability negatively, business educators have been working with the concept for many years. As defined in the Guide, accountability simply means responsibility; and this responsibility is shared by the teacher with the learner.

The reality of the classroom and the reality of the work setting were elements with which the developers of the Guide were also concerned. The rationale was that, to be useful, the Guide must be adaptable and flexible so that it could be used in both small and large schools and for work settings that range from repetitive clerical tasks to executive secretarial positions.

Finally, the Guide represents an effort to promote articulation and communication among the various educational settings in the State. If business education programs are to flourish, such articulation must be fostered and promoted.

This revised edition contains primarily the same information as the first edition but has been updated to include research completed during the past two years.

Several sub-guides in the various subject areas are being developed as adjuncts to this main, general guide. Teachers needing more specific guidelines for generating and developing programs should refer to these sub-guides as soon as they become available.

PHILOSOPHY FOR BUSINESS EDUCATION IN UTAH

Some principles and activities are common to all disciplines within the business education curriculum. Listed below without regard to order of importance they are:

1. Methods should be used which promote and foster problem-solving, decision-making, logical-thinking, and judgment skills.
2. Equipment, terminology, methods, and facilities should be compatible with those used in contemporary business offices.
3. Credit by examination should be offered by all post-secondary institutions in the state for equivalent courses taken by students at the high school level.
4. Economic principles and data processing concepts should be integrated throughout the business curriculum.
5. Appropriate vocabulary and spelling instruction should be emphasized in all business and office education classes.
6. Teachers should be held accountable for the achievement of students providing the following three factors are present: (1) the student is capable, (2) administrative support is available, and (3) the time variable is modified or eliminated.
7. A conceptual rather than a factual approach should be used whenever possible in the instructional process.
8. Each teacher should strive to help each student develop an adequate and realistic self-concept.
9. Inasmuch as the average employee changes jobs several times in a lifetime, the adaptability to occupational change must be inherent in all business programs.
10. The development of proper attitudes and desirable personality traits should be stressed in all business classes.
11. Whenever possible, skills should be taught as clusters.
12. Each business program in the state of Utah should actively encourage the development of student business clubs. (Future Business Leaders of America for the secondary schools and Phi Beta Lambda for the post-secondary schools is approved by the State Board of Education).
13. Articulation of business programs should be fostered among the various educational institutions in the State of Utah.
14. Students should be given training in developing human relations skills, ethical awareness, and proper attitudes for business conditions.
15. Work experience should be an integral part of teacher preparation.
16. Business teachers should be actively engaged in guidance, placement, and counseling, and should work closely with school counselors.

17. The student should be oriented to the total systems approach in business.
18. Library resources such as reference manuals, audio-visual aids, and current periodicals should be available for student use.
19. The business educator should have a sound educational philosophy which recognizes that education establishes a set of ideals, values and attitudes. He or she should also represent a positive model of these values.
20. Business educators should be actively involved in both community and professional organizations.

Business education programs throughout the state of Utah are primarily designed to emphasize three major areas — general education, vocational education, and preparation for advanced careers in business. Specific objectives for each of these three areas are listed below.

Vocational

To structure an adequate vocational program, several criteria are suggested:

1. A variety of career oriented clusters or options should be offered. These clusters should be flexible and should include several areas of specialization. They should also provide opportunities for low ability, high ability and disadvantaged students.
2. Teachers should be held accountable to see that each student has mastered the skills identified as those needed for entrance and advancement in specific business occupations. This accountability is contingent on the following three factors: (a) the student is capable, (b) administrative support is available, and (c) the time variable is modified or eliminated.
3. Every student enrolled in a vocational or career business program or cluster should have marketable skills at graduation.
4. Time is no longer the primary fixed variable in a vocational program. Individualized programs should be initiated that allow students to progress in an independent manner.
5. Cooperative office education, simulation, and block programs should be used to provide realistic work situations for students.
6. If a student is found to be weak in any area which hinders his progress, remedial work should be provided based on appropriate diagnostic techniques and evaluative methods.
7. To provide better utilization of equipment and facilities, adult programs should be incorporated into the business program to furnish training and retraining opportunities for those who are preparing to enter or re-enter the labor market or who are anticipating a change in their employment status.

8. Before being retaught, the content of each course should be examined critically to determine whether such courses meet the current vocational needs of students. All work offered should be relevant. If courses are not relevant, they should be changed or omitted from the curriculum.
9. Certificates of proficiency should be developed and used in the State so that students will no longer be subjected to employment tests in which the content and/or techniques used are not relevant. Testing centers should be set up on a regional basis by the State Department of Education.
10. Regardless of the changing and contrasting modes of behavior in contemporary society, students should be able to interpret business attitudes and patterns of behavior to the extent that they can obtain jobs and can progress in those positions.
11. Specialization in a vocation should be as close as possible to the termination of a student's program, e.g., shorthand training should be completed in the twelfth grade.
12. Advisory committees should be used for all vocational programs.
13. Flexible scheduling arrangements should be used whenever feasible to facilitate the learning process.
14. Innovative programs that reflect the changing requirements of business should be designed and offered.

General Education

Business educators are responsible for:

1. Providing students with principles and skills that will enable them to be responsible consumers.
2. Helping students to integrate the economic concepts that are essential to every person as a citizen.
3. Strengthening students' basic English and computational skills.
4. Helping students to understand the impact of data processing in our society and developing their abilities to use data processing capabilities to advantage.
5. Introducing the student to the primary processes and basic functions of business.
6. Aiding students to develop judgmental and evaluative skills.
7. Acquainting students with the various career opportunities in business.
8. Helping students develop an appreciation for the dignity of work.

Advanced Career Preparation

The business education teacher also has an obligation to:

1. Provide students with a background for advanced training in business subjects.
2. Introduce students to potential business careers and to educational institutions in which specialized training can be obtained.
3. Help students obtain a broad general background in business.
4. Aid students to develop the ability to communicate effectively through both the spoken and the written word.

SUGGESTED BUSINESS CURRICULUM FOR JUNIOR HIGH SCHOOLS

General Objectives

The junior high school business program is primarily exploratory in nature. More specifically, this curriculum should:

1. Provide exploratory experiences in career selection.
2. Provide pre-vocational guidance assistance.
3. Contribute to the consumer, business, and socio-economic understandings of all students.
4. Form a foundation for the study of advanced business subjects.

Suggested Curriculum

Required of all junior high students:

- a. Basic Business

Recommended for all junior high students:

- a. Typewriting I (personal use emphasis, first semester)
- b. Typewriting II (pre-vocational emphasis, second semester)
- c. Career Exploration (7th or 8th grade, one semester)

SUGGESTED BUSINESS CURRICULUM FOR HIGH SCHOOLS

General Objectives

The high school business program is designed to provide pre vocational, vocational, advanced career preparation, and general education experiences for the student. More specifically, this curriculum should:

1. Provide primarily pre vocational experiences in the 9th and 10th grades.
2. Provide primarily vocational experiences in the 11th and 12th grades.
3. Offer activities and classes that would contribute to each student's becoming an effective citizen capable of making sound economic judgments.
4. Provide a foundation for advanced study in business and/or a vocational competency.
5. Offer several career clusters that are designed to provide for a variety of abilities and interests.
6. Provide an opportunity for students to acquire vocational competency in the stenographic and clerical skills.
7. Emphasize decision making, communication, logic, reasoning, and manipulative skills.

Suggested Curriculum

Three Career Clusters

- a. General Clerical
- b. Advanced business careers preparation
- c. Stenographic

(Plus accelerated courses for any of the above.)

Recommended for all high school students:

- a. Personal Finance
- b. Introduction to Data Processing
- c. Typewriting I and II (if not taken in junior high)

RECOMMENDED CAREER ORIENTED CLUSTERS FOR BUSINESS EDUCATION

	CLERICAL	STENOGRAPHIC	ADVANCED CAREER PREPARATION
Ninth	Typewriting I, II Basic Business	Typewriting I, II Basic Business	Typewriting I, II Basic Business
Tenth	Business Communications Personal Finance	Business Communications Personal Finance	Business Communications Personal Finance
Eleventh	Typewriting III Bookkeeping Data Processing	Typewriting III (Typewriting IV optional) Shorthand I Data Processing Bookkeeping	Business Law Bookkeeping Data Processing
Twelfth	Economics Office Procedures Simulated Office Educa- tion and/or Coopera- tive Office Education Business Machines	Economics Shorthand II and Trans- cription Office Procedures Simulated Office Educa- tion and/or Coopera- tive Office Education Business Machines	Economics Business Machines Electives from English, Speech, Math, and Dis- tributive Education

Additional Business Electives

Machine Shorthand
Personal Use Shorthand
Business and Management Principles
Machine Transcription
Computer and Systems
Personal Development and Human Relations
Business Exploratory
Recordkeeping (Low ability)
Career Exploration
Business Math

Two-Hour Block Suggestions

Office Procedures and Shorthand IV
(Transcription)
Typewriting IV with Office Procedures
Office Procedures and Correlated Cooper-
ative Office Education Class
Simulated Office Education and Office
Procedures

*Typewriting I, II, III, and IV — one semester
each

Suggestion for combining related classes under a one year — one hour per day class.

Office Machines — Bookkeeping — Data Processing

5-7 Weeks

14-18 Weeks

9-11 Weeks

BASIC BUSINESS

General Recommendations

1. This course should be a survey course designed to provide a broad exposure to the world of business.
2. The primary objective of basic business is the development of consumer and socio-economic competencies.
3. This class should be taught by a business teacher.
4. Economic principles should be the primary basis for instruction.
5. A wealth of resource materials is available for this class; therefore, resource units should be generously but selectively prepared and used.
6. Basic business should be offered for a full year in the junior high school.
7. Units on transportation, mail services, communication, and travel should be omitted.
8. If taken in the ninth grade, basic business should be accepted as part of the general education requirements for graduation from high school.
9. Teacher education institutions should offer a more intensive teacher-training program for preparing prospective teachers to teach basic business.
10. Career exploration should be an important part of this course.

Areas of Accountability

Each teacher of basic business is accountable* for developing the following competencies at the conclusion of one year of basic business.

1. The ability to describe basic economic principles such as:
 - a. Supply and demand process
 - b. Federal reserve board functions
 - c. Mass production
 - d. Basic characteristics of free enterprise
 - e. Money—origin and use
 - f. Labor—principles and problems
2. The ability to function wisely as a consumer by:
 - a. Keeping personal financial records
 - b. Constructing and following a budget
 - c. Using banking services efficiently

*As defined in the General Philosophy, page 1, number 6.

- d. Defining credit, listing the most common sources of credit, and making wise credit decisions
- e. Describing the varied insurance plans and demonstrating his knowledge of such plans by matching plans and cases correctly.

BOOKKEEPING

General Recommendations

1. The bookkeeping cycle should receive primary emphasis.
2. Ten-key adding machines and/or electronic calculators should be available for students to use during class.
3. Bookkeeping classes should be designed to provide general business background rather than a vocational competency.
4. The equipment, methods, and content of bookkeeping courses should be compatible with contemporary practices.
5. The development of problem-solving competencies should be a major aspect of bookkeeping instruction.
6. Bookkeeping should be taught for one semester at the high school level.
7. Automated data processing principles should be integrated throughout all phases of the bookkeeping cycle.
8. Bookkeeping teachers should participate in in-service training programs designed to update their skills and to acquaint them with bookkeeping techniques in the automated office.
9. If possible, a lab with ten-key adding machines, electronic calculators, and typewriters should be made available for student use out of class.
10. Realistic practice in applying fundamental bookkeeping principles and concepts in everyday business situations should be integrated into the course.
11. Economic concepts and management use of bookkeeping data should be emphasized.
12. The possibility of combining bookkeeping, data processing, and office machines may be considered where these subjects could be included in a one year course (see page 6).

Areas of Accountability

When a student has completed one semester of bookkeeping, the teacher is accountable for the student's ability to:

1. Describe each facet of the bookkeeping cycle as well as the relationship of each facet to the total process.

2. Record business transactions and describe the effect of such transactions upon the bookkeeping equation and the financial statements.
3. Describe how automated data processing techniques are used to facilitate the bookkeeping process.
4. Classify and analyze information on financial statements.
5. Perform computations accurately and locate and correct errors quickly.
6. Describe and perform common business transactions using common forms and correct technology.
7. Demonstrate the ability to apply accounting information to management decisions.
8. Describe the flow of data as it relates to bookkeeping systems.
9. Describe the various employment and career opportunities available for bookkeepers and accountants.
10. Perform basic bookkeeping operations relative to the accounting cycle.
11. Describe the effect of the "profit motive" on the success or failure of businesses.
12. Apply bookkeeping principles to personal-use situations.
13. Reconcile a bank statement quickly and accurately.

BUSINESS COMMUNICATIONS

General Recommendations

1. Business communications should be taught by a business teacher.
2. This course should cover the writing of business letters, reports, memoranda, and other types of written business communications.
3. A practical approach should be taken for all writing.
4. The psychological principles of behavior that govern human responses, keeping ethical business practices in mind, should receive emphasis throughout the course.
5. Business communications should be offered for one semester.
6. This class should deal with all four of the basic areas of communication — writing, speaking, reading, and listening.
7. An integrated approach should be used whereby application of principles is stressed.
8. Training should be given to help students develop informal communication skills for conferences, group interaction, and inter-personal relations.

9. Methods that aid transfer should be given primary consideration.
10. Creativity should be stressed, particularly in writing and speaking activities.
11. The 27 most frequently used punctuation rules (see appendix) or their equivalent should be emphasized.
12. Students should receive 1/2 unit of English credit for this course.

Areas of Accountability

At the conclusion of the business communications course, the teacher is accountable for the student's ability to:

1. Identify the type of letter plan needed for specific case study problems and demonstrate the necessary techniques for using each plan so that work completed is mailable.
2. Demonstrate the ability to listen carefully by clearly summarizing material given him orally.
3. Organize and present a short oral report.
4. Write short memos, reports, and other written communications that illustrate proper structural, grammatical, and format principles.
5. Know and use with 100 percent accuracy the 27 most frequently used rules of punctuation (see appendix) or their equivalent.

BUSINESS LAW

General Recommendations

1. Three major objectives which should be integral to business law are:
 - a. That the student has a knowledge of legal principles and rules and that he can relate them to both his personal and business affairs.
 - b. That the student acquires the technical vocabulary necessary to understand and use the law in his personal, civic, and business affairs.
 - c. That the student develops habits of thinking in legal terms and of recognizing the legal implications of situations as they arise.
2. Exploring career opportunities within the field of law should be an important objective of business law.
3. Business law should be taught to eleventh or twelfth grade students.

1. This course should be taught as a semester course in the secondary schools.
2. The class should include the application of legal principles and practices to both personal and business relations.

Areas of Accountability

At the conclusion of the business law class, the teacher is accountable for each student's ability to:

1. Logically analyze case studies or role play situations and make appropriate decisions based on sound legal analysis.
2. Determine when qualified legal counsel should be sought.

COOPERATIVE OFFICE EDUCATION

General Recommendations

1. All vocational business education students should have the opportunity to participate in a co-op program designed for their specialty.
2. The training station experience should be compatible with the career goals of the students.
3. The cooperative experience is a culminating activity which integrates all previously learned skills and should, therefore, be scheduled during the final school year.
4. To meet state requirements, a training agreement signed by the student, the parent, the employer, and the participating institution should be completed for each student.
5. In service training should be provided for participating on-the-job supervisors.
6. The coordinator should visit or call the training station approximately once every 3-4 weeks.
7. Students should be paid no less than the prevailing minimum wage or student learner wage and should receive school credit for the work experience.
8. Not less than 3 hours a week should be designed especially for and correlated with the work experience, this class should be taught by the coordinator and should be required of all co-op students.
9. A coordinator who is released half time for coordination purposes should be assigned no more than 25 students.

- 10 The student should work a minimum of three hours and a maximum of five hours a day.
11. Each coordinator should be given a travel allowance.
- 12 Each coordinator should be assigned an office which affords privacy, a telephone, and other special facilities when necessary.
13. The training station should provide a variety of experiences which will better acquaint the student with various business activities.
14. Careful screening involving faculty, parents, and the employer should precede admittance to the co-op program.
15. Advisory committees should be used to aid in securing proper training stations.

Areas of Accountability

After a period of work experience, the teacher is accountable for the student's ability to:

1. Work cooperatively with others.
2. Apply those skills and knowledges learned at school to the work setting at performance levels acceptable to supervisory personnel.
3. Demonstrate neat appearance and acceptable personality traits.

DATA PROCESSING

General Recommendations

1. This class should be designed to prepare students to understand automated data processing and its impact on business even though their jobs may not be directly connected with any specific vocational level of data processing.
2. Emphasis should be placed upon electronic data processing concepts. Most unit record equipment is becoming obsolete and should therefore not be stressed in the high school program.
3. Students may be trained vocationally at the high school level to become keypunch operators and tape librarians.
4. Workshops in data processing occupations, curriculum, and equipment should be provided for teachers, counselors, and school administrators. Teacher education institutions should incorporate business data processing concepts into their programs.
5. "Hands-on" time on a computer is not necessary for secondary school programs.

6. One of the objectives of the course should be to acquaint students with the changes that have taken place in processing data as a result of electronic computers.
7. Introduction to data processing should be a one semester class. No advanced data processing classes should be offered at the secondary school level.
8. An abundance of resource material is available which should be selectively used to supplement the text.
9. One of the objectives of this class should be to provide career exploration in the electronic data processing field.
10. No attempt should be made on the high school level to train students as programmers, however, programming may be demonstrated as an educational technique.
11. Whenever possible, data processing should be correlated closely with other courses such as bookkeeping, office practice, and business machines.

Areas of Accountability

When a student has completed a semester of data processing, the teacher is accountable for the student's ability to:

1. Define and recognize the similarities and differences between automated and electronic data processing in terms of
2. Lay out and design a punched card.
3. Recognize and define the function of input, output, and computing memory devices.
4. Construct a simple flowchart and describe the logic used.
5. Describe the basic function of a computer program.
6. Discuss and describe career and educational opportunities in data processing.
7. Have sufficient skill at the keypunch to convert data into machine language.

OFFICE MACHINES

General Recommendations

1. This course should be offered to all students for not more than one semester.

2. Instruction should be given on the ten-key adding machines and electronic calculator.
3. Understanding the mathematical concepts and correct operating techniques, including touch skill, should be given as much emphasis as gaining speed on the machine.
4. Because the business community requires 100 percent accuracy, the student should be trained to meet that standard.
5. Mathematical concepts should be reviewed and stressed throughout the course. Business mathematics and machine mastery should be integrated.
6. Teacher education institutions should offer more instruction in methods of machine operation and should prepare prospective teachers to operate the machines effectively, change tapes, and make simple adjustments.

Areas of Accountability

When a student has completed a semester of office machines, the teacher is accountable for the student's ability to:

1. Use office machines to perform basic mathematical functions such as:
 - a. Adding, subtracting, multiplying, and dividing.
 - b. Computing problems involving decimals and percentages.
 - c. Converting fractions to decimals and decimals to fractions.
 - d. Computing chain discount problems.
 - e. Solving increase and decrease problems and percentages of each.
 - f. Computing problems involving simple interest.
2. Apply problem-solving skills by using the machines to solve problems presented in narrative and unarranged form.
3. Trace errors when totals are out of balance.
4. Complete payroll problems such as time cards, withholding exemptions, etc.
5. Operate the machines by touch.

OFFICE PROCEDURES

General Recommendations

1. Office procedures is a finishing, capstone class. This class should be taken just before the student enters the work force, preferably in the 12th grade.

2. Judgment skills, work organization, and decision-making skills should be stressed constantly throughout the course.
3. Any work with duplicating machines should be on an acquaintance-level only.
4. In addition to electric typewriters, students should have executive typewriters, ten-key adding machines, electronic calculators, and transcription machines available for use during class.
5. A major objective should be the refinement of interpersonal relationships and cooperative attitudes as well as the development of acceptable grooming habits and personal qualities and traits.
6. Grammar, punctuation, and computational skills should be integrated in all phases of the class.
7. All types of up-to-date reference materials should be available, their use explained, and students encouraged to use them in decision and problem-solving situations.
8. Office procedures should be taught for one year at the secondary level.
9. Proofreading and checking skills should be taught throughout the course.
10. Filing procedures should include instruction in the use of microfiche, microfilm, and other contemporary filing and storage techniques. Terminal digit, subject, and geographic filing procedures should be omitted.
11. Students should have opportunities to learn to cope with interruptions, priority decisions, and the pressure of attending to several tasks in almost simultaneous sequence.
12. Training in the ability to work accurately under the pressure of time should be integrated into this course.
13. Training in applying for work, interviewing, and other employment procedures should be given.
14. Whenever possible, office simulation should be taught during the last semester of this class. (When this option is used, the total offering should be on a two-hour block of time.)
15. Students should be given training and experience in supervising others.
16. Students should be familiar with word processing techniques.

Areas of Accountability

When a student has completed one year of office procedures, the teacher is accountable for the student's ability to:

1. Type six average-length mailable letters in one hour from the transcription machine with one carbon copy and an envelope for each letter—about 30 words per minute.

- 2 Be competent in the use of the ten-key adding machine, electric typewriter, and transcription machine.
- 3 Have an acquaintanceship level of skill on the executive typewriter, electronic and printing calculator, and duplicating and copying machines.
- 4 Use the telephone proficiently, demonstrating good judgment and human relations skills.
- 5 File quickly and accurately using primarily the alphabetic method.
- 6 Handle both incoming and outgoing mail efficiently.
- 7 Compose routine letters, reports, and memoranda.
- 8 Recognize and abide by accepted rules of business and social etiquette.
- 9 Work cooperatively and effectively in small groups with little teacher supervision.
- 10 Use up-to-date reference materials effectively.
- 11 Apply confidently for employment.

PERSONAL FINANCE

General Recommendations

1. This class should be offered to all high school students for one semester. Students should receive general education credit for this class.
2. A major objective of this class should be to familiarize the student with resource materials such as periodicals and government and consumer publications.
3. Implications of consumer legislation should be stressed.
4. This class should emphasize American business, credit, banking, investments, insurance, and money management.
5. An abundance of resource material and personnel is available for this class, if properly structured, this topic may not fully lend itself to a textbook.
6. A major objective of this class should be to foster evaluative and objective-type reasoning skills for making personal financial decisions.
7. Students should also have an opportunity to become aware of the point of view of business firms, governments, and other segments of the economy regarding consumer matters.

Areas of Accountability

At the conclusion of this course, the teacher is responsible for each student's ability to:

1. Demonstrate wise shopping skills.
2. List resources available that facilitate wise purchases.
3. Demonstrate good budgeting skills.
4. Identify the major consumer protection laws and government policies that affect the consumer, and detail their meaning for consumers.
5. Describe positive and negative effects of advertising on consumer choice.
6. Demonstrate, through case study or other approaches, the ability to shop for money and credit wisely.
7. Define individual financial goals.
8. Discuss the different savings, investments, and insurance programs currently available, indicating advantages, disadvantages, and special characteristics of each.
9. Describe the various types of living accommodations available and identify the advantages and disadvantages of each.
10. List the various advantages and disadvantages of renting, buying, or leasing major consumer purchases.
11. Accurately compute simple personal income tax problems involving both standard and itemized deductions.

SHORTHAND

General Recommendations

1. Two semesters of typewriting should be a prerequisite for shorthand.
2. Theory, brief forms and their derivatives, and word endings should be emphasized continuously.
3. The 1500 most frequently used words should be emphasized throughout the instructional process.*
4. Homework assignments and goals should be varied and include activities such as dictaprint, tapes, records, self-dictation and other reading and writing activities to help students achieve theory

*Taken from the Ed. D. dissertation of Dr. DeVern J. Perry and published as a research project by Delta Pi Epsilon, Alpha Omega Chapter, Brigham Young University, Provo, Utah.

- mastery, improve writing accuracy, increase reading speed, improve knowledge of brief forms and derivatives, automatize high frequency words, and develop other facets of shorthand skill.
- 5 The use of the shorthand dictionary and other reference materials should be stressed.
 - 6 Teacher recommended shortcuts should not be used in the initial learning stages of shorthand.
 - 7 Students should have access to typewriters in every shorthand class taught, including beginning shorthand.
 - 8 Whenever possible, a decision-making approach should be followed in teaching nonshorthand and transcription activities.
 - 9 Grammar, punctuation, and spelling skills should be emphasized continuously.
 - 10 After theory presentation, concentrated effort should be given to the production of mailable copy.
 - 11 Individualized instructional techniques via tapes and, or other types of media should be used.
 - 12 Proper diagnostic techniques should be especially emphasized at the conclusion of theory presentation, and individualized remedial instruction should then be given. Such techniques could include special homework projects, tapes, programmed materials, or other remedial devices.
 - 13 Performance-type evaluation techniques should be the primary method of testing used throughout the instructional process.
 - 14 Shorthand teachers should work closely with school counselors in the selection of students.
 - 15 Early new-matter dictation and transcription should be offered.
 - 16 Provision should be made to review theory systematically throughout the instructional process.
 - 17 Students should be trained to write theoretically correct outlines.
 - 18 Intensive practice should be given on the first 1500 most frequently occurring words in business correspondence.

Areas of Accountability

First Semester. When a student has completed one semester of shorthand, the teacher is accountable for the student's ability to:

- 1 Take shorthand at 60 words a minute for 3 minutes from unfamiliar material and transcribe with 95 percent accuracy.
2. Transcribe dictated shorthand theory word lists with 95 percent accuracy.
3. Write, in shorthand, all dictated words with 95 percent accuracy.

4. Write and transcribe dictated brief forms with 100 percent accuracy.
5. Write and transcribe the first 500 most frequently used words in business correspondence with 100 percent accuracy.

Second Semester. When a student has completed two semesters of shorthand, the teacher is accountable for his ability to:

1. Consistently write shorthand at 80 words a minute for 3 minutes from unfamiliar material and transcribe with 95 percent accuracy.
2. Transcribe three mailable average-length letters (125-150 words each) in thirty minutes from his own notes (transcription rate approximately 15 words per minute) dictated at a rate of 80 words per minute including envelope and one carbon copy.
3. Use the 27 most frequently used rules of punctuation (see appendix) or their equivalent with 100 percent accuracy.
4. Use reference books efficiently.
5. Write and transcribe the first 1500 most frequently used words in business correspondence with 100 percent accuracy.

Third Semester. When a student has completed three semesters of shorthand, the teacher is accountable for the student's ability to:

1. Transcribe four average-length letters (125-150 words each) from dictation (dictation rate of 100 words a minute) within 30 minutes (transcription rate approximately 20 words a minute) in mailable form with one carbon copy and envelope.
2. Consistently write shorthand at 100 words a minute for three minutes from unfamiliar material and transcribe with 95 percent accuracy.
3. Pass the NBEA stenographic test, or a similar test, at no lower than the 75th percentile.

SIMULATION

General Recommendations

1. Whenever possible, business programs should include both simulation and cooperative office education. However, simulated office education should precede the cooperative experience.
2. Those secretarial or clerical students not participating in cooperative programs should be required to take the simulated office experience class.
3. Simulation should be a capstone class and should be offered toward the end of a student's program.
4. The major objective of the simulated class is to foster desirable attitudes and traits such as dependability, initiative, cooperation, cheerfulness, and willingness to assume responsibility.

5. Secondary objectives of the simulated class are to (1) develop the knowledge, skills, and abilities that are required for initial employment and (2) provide sufficient proficiency in basic office skills to enable students to retain such jobs and to advance in them.
6. The simulated class should also develop (1) a knowledge of job opportunities, requirements, and responsibilities; (2) a knowledge of the techniques of finding and applying for work; and (3) such personal qualities as good attitudes, desirable work habits, regular attendance, neatness, thoroughness, and a sense of values and responsibility.
7. The simulation class should be structured to provide realistic office situations through simulated conditions.
8. Simulation activities should include communicating orally, calculating, filing, transcribing from the machine or from shorthand notes, recording and verifying, and typewriting.
9. The class should be structured in such a manner that the use of skills is merged with an atmosphere that will reflect important attitudes and personality traits as listed in the appendix.
10. The materials that are used in the simulated package should include as many opportunities as possible for the student to (1) apply the 27 most frequently used punctuation rules, (2) choose among and between confusing words such as affect and effect, (3) apply rules of capitalization, (4) apply rules of number usage, (5) apply word division rules, (6) spell the most frequently misspelled words correctly, (7) place letters correctly on the page, (8) use the mechanics of letter writing properly, and (9) proofread accurately.
11. The class should be structured so that students are given experience in developing judgmental, decision-making skills, in working under pressure, organizing their work, handling several projects simultaneously, and in learning to budget their time.
12. To qualify for funding, this class is to be scheduled for a two-hour continuous block of time for not less than one semester.

Areas of Accountability

When a student has completed the simulated office education class, the teacher is accountable for the student's ability to:

1. Work cooperatively and congenially with others.
2. Prepare a resume and interview successfully for a job.

3. Have an acquaintanceship level on the executive typewriter, electronic and printing calculator, and duplicating and copying machines.
4. Handle mail efficiently.
5. Compose letters, reports, and memoranda.
6. Use up-to-date reference materials effectively.
7. Transcribe available material from transcribing machines or from shorthand notes.
8. File quickly and accurately.
9. Place letters correctly on the page and use the mechanics of letter writing properly.
10. Use the 27 most frequently used punctuation rules accurately.
11. Proofread quickly and accurately.
12. Choose correctly between and among confusing words, use word division, number usage, and capitalization rules correctly, and spell correctly.

TRANSCRIPTION

General Recommendations

1. Students should spend the major part of class time transcribing from their shorthand notes.
2. Each student should have reference materials such as dictionaries, secretarial handbooks, reference books, and zip code manuals available for use at all times.
3. Transcription as a separate class should be taught for one semester only.
4. Fifteen to twenty words a minute is a minimum acceptable transcription rate.*
5. Tasks in the classroom should simulate actual office assignments as much as possible.
6. Shorthand transcription competency can be measured by one criterion only — the ability to transcribe accurately and quickly.
7. Training should be given on the nonshorthand activities that have been identified as a part of the transcription process. These include materials handling, work arrangement, machine adjustment, and machine manipulation.

*This rate is an approximation. Norms are being developed for transcription problems in the shorthand sub-guide

8. Some office-style dictation should be given throughout the semester.
9. Memoranda, reports, manuscripts and other special types of material should be included in the material dictated for transcribing.
10. The 27 most commonly used punctuation rules (see appendix) or their equivalent should be emphasized.
11. Mailability should be the primary terminal performance criterion. This standard means no visible errors on work transcribed.
12. Students should use electric typewriters for all transcription work.
13. The development of decision-making skills should be emphasized at all times during transcription activities.

Areas of Accountability

When a student has completed one semester of transcription, the teacher is accountable for the student's ability to:

1. Transcribe mailable copy at a rate of 15 to 20 words a minute from his own notes.
2. Proofread and evaluate his own work.
3. Use reference materials efficiently.
 1. Transcribe in mailable form notes taken from office-style dictation.
 5. Perform the nonshorthand skills that are a part of the transcription process quickly and efficiently.
 - 6 Use subject and attention lines, postscripts, zip and other mailing notations accurately.
 7. Estimate letter length so that a letter is attractively arranged on a page.
 8. Use number and word division rules correctly.
 9. Transcribe memoranda, manuscripts, and reports in mailable form.
 10. Demonstrate good judgment with regard to placement, form, format, and content consistency.
 11. Use correctly the 27 most frequently used punctuation rules (see appendix) or their equivalent.
 12. Correctly write, transcribe, and spell the 1500 most frequently used business words.

TYPEWRITING

General Recommendations

1. Inasmuch as the large majority of businesses use electric machines, typewriters used in the classroom should be electric.
2. Production should be emphasized in the instructional process. Little emphasis should be given to straight-copy work.
3. Typewriting should be scheduled in terms of semesters rather than in terms of years. Each semester should be self-contained.
4. After introduction of the keyboard, the decision-making methods should be the primary mode of instruction for practical applications of typewriting skill.
5. Two semesters of typewriting (Typewriting I and Typewriting II) should be offered to all junior high school students.
6. Training should be given to develop composition and grammar skills.
7. The goal for production work should be mailable copy — no visible errors. Production typewriting requires two critical elements — quality of work and time required to complete the work. Mere problem typing is not production typing. Norms for individual problems, projects, and examinations should be developed so that teachers and students would be able to evaluate production work more accurately. These norms should reflect both completion time and quality of work.
8. Testing should be primarily on production-type problems.
9. Each student should be able to progress as rapidly as possible through all four semesters of typewriting. When he has completed the material for each semester, credit should be given and the student allowed to move ahead.
10. The make of typewriter should be standardized in each typewriting classroom.
11. Students should type on realistic business forms and letterheads whenever possible.
12. Number typing and proofreading skills should be emphasized.
13. Certificates of proficiency should be given whenever the student has reached a specified goal. These certificates may then be used to verify training.
14. Students need not be given straight copy timed writings after they reach a speed of 30 words per minute except as necessary to prepare them for employment examinations or for motivational purposes.
15. Speed in typewriting should be stressed before accuracy.

16. Efficient handling of materials, judgment, and eye placement skills should be taught for production work.
17. Before progressing to more advanced levels of typewriting, students should be able to demonstrate their proficiency at the skills identified at preceding levels.
18. Students should be encouraged to develop good typewriting techniques, particularly in first semester.
19. After the first semester, all production work should be typed from unarranged rough draft and/or script copy.

Areas of Accountability

First Semester. When a student has completed one semester of typewriting, the teacher is accountable for the student's ability to:

1. Type in acceptable form with all errors corrected from unarranged copy:
 - *a. A two-page simple manuscript with one footnote in 30 minutes.
 - b. Horizontal and vertical centering problems including a simple one-half page unarranged table that contains both words and numbers in 10 minutes.
 - c. Simple letters with four-line envelopes in 15 minutes.
 - d. Lined forms correctly aligned.
2. Crowd and spread letters and align properly.
3. Make error corrections using several kinds of correction techniques.
4. Manipulate machine parts, change ribbons, and care for the typewriter properly.
5. Type a simple, 1/2-page unarranged table containing both words and numbers in 10 minutes.*
6. Type a two-page simple manuscript with one footnote in 30 minutes.
7. Type a simple, short letter in 15 minutes.

Second Semester. When a student has completed two semesters of typewriting, the teacher is accountable for the student's ability to.

1. Type in acceptable form with all errors corrected from unarranged rough draft and/or script copy:
 - a. Longer tables with column headings
 - b. Modified block and block-style letters with envelopes
 - c. One-page letters with short tables
 - d. Self-composed short personal business letters
 - e. Memoranda
 - f. Announcements

*Production speeds are only approximations. Norms are being developed for production problems in the typewriting sub-guide and should be substituted for these times as soon as the ideas are available.

- g. Outlines
 - h. Formal reports
 - i. Any of the above with one carbon copy
 - j. A complete manuscript including title page, bibliography, and table of contents.
2. Divide words properly.
 3. Type two unarranged medium-length mailable letters with envelopes in 20 minutes.
 4. Type envelopes with four-line and addresses at the rate of two per minute.
 5. Set up and type a three-page formal report with footnotes, title page, table of contents, and bibliography in two class periods of 50 minutes each.
 6. Type an unarranged three-column, five-line table with column headings in 10 minutes.
 7. Make appropriate placement and style decisions.

Third Semester. When a student has completed his third semester of typewriting, the teacher is accountable for the student's ability to:

- 1 Type a three-page, unarranged production problem in approximately 50 minutes that includes manuscript format and tabulation skills.
- 2 Type the correct information from unarranged data in the proper places on various types of forms commonly used in business with all errors corrected.
3. Use photocopy, thermofax, and other copy machines efficiently and economically.
4. Type five mailable single-page, average-length (125-150 words each) letters in proper form in an hour from unarranged copy.
- 5 Pass the NBEA entrance test for typists, or a similar test, at at least the 75th percentile.
6. Follow both oral and written directions accurately and quickly.
- 7 Use correct format and placement for subject lines, attention lines, mailing and special notations, and multiple page headings.

Fourth Semester. (Optional) When a student has completed four semesters of typewriting, the teacher is accountable for the student's ability to:

1. Complete a practice set or other comparable production problems successfully with little supervision.

NECESSARY REFERENCE MATERIALS

- | | |
|-------------------------------|----------------------------|
| 1. Dictionary | 7. Grammar handbook |
| 2. Secretarial reference book | 8. Reader's Guide |
| 3. ZIP Code Book | 9. Postal Guide |
| 4. City directory | 10. Company policy manuals |
| 5. Telephone book | 11. Thesaurus |
| 6. Word division manual | |

APPENDIX

27 MOST FREQUENTLY USED PUNCTUATION RULES
IN BUSINESS CORRESPONDENCE

Dr. Donald Stather*

Use a Period:

1. At the end of (a) a declarative sentence or (b) an imperative sentence.
 - (a) Business conditions continue about as usual.
 - (b) Cancel all contracts with the Gray Company at once.
2. At the end of a sentence embodying a courteous request in the form of a question.

May we have your reply to this letter as soon as possible.
3. After (a) an abbreviation which stands for a single word and (b) an abbreviation and, or initials or a proper name.
 - (a) Charles Groton, Inc.
 - (b) Chas. A. Groton, Incorporated
1. To separate (a) a whole number from a decimal fraction and (b) dollars from cents.
 - (a) This constitutes 24.5 percent of our income.
 - (b) We have paid \$459.50 in taxes during the current year.

Use a Question Mark:

5. After a direct question.

What is the reason for the delay in shipping our order?

Use a Comma:

6. After (a) each element except the last or (b) each pair of elements except the last in a series of coordinate nouns, adjectives, verbs, or adverbs.
 - (a) Not long ago, we sold only groceries, clothing, and hardware.
 - (b) These scatter rugs are available in green and white, blue and white, and green and gray.
7. To set off words or phrases which explain a preceding noun (appositives).

To John Blake, our sales manager, goes much of the credit.
8. To set off the name of a state when the name of a city precedes it.

We have shipped to you in Madison, Maine, by freight collect.
9. To set off year date which is used to explain a preceding date of the month.

Operations began on May 16, 1901, at Three Rivers.
10. To set off titles and degrees following a person's name.

Mail literature to Sherman Grayson, Esq., in my care.

*Donald G. Stather, *The Application of Rules of Punctuation in Typical Business Correspondence*, (unpublished Ed.D. dissertation, Boston University School of Education, 1960.)

11. To set off a dependent (subordinate) clause which has been transposed or placed out of order in the sentence.

When you have shipped the order from Detroit, we shall send a check.

12. To set off a parenthetical expression (word, phrase, or clause) when the degree of separation is not great enough to require the use of parentheses or dashes.

We appreciate the remittance, small as it is, received today.

13. To separate two or more simple coordinate clauses when they are joined by *nor*, *or*, *and*, or *but*.

Your product sells itself, and we take pleasure in handling it.

14. After introductory expressions, such as *of course*, *however*, *accordingly*, *after all*, *therefore*, etc., when they are used as conjunctions at the beginning of a sentence, in order to make a distinction between the thought that precedes and the thought that follows the expression.

Accordingly, your request has been handled by another office.

15. To set off a nonrestrictive clause or phrase.

Your salesman, whom I met yesterday, is a fine representative.

16. To set off figures in groups where numbers consist of four or more figures (except in serial numbers).

Nearly 49,000 free packets have been sent out this year.

17. To follow the complimentary close of a letter.

Sincerely yours,

18. To set off *Inc.* and *Ltd.* following the name of a company.

Thacker and Company, Ltd., will supply your catalog.

Use the Semicolon:

19. To separate coordinate clauses closely connected in meaning and not joined by a conjunction.

You have requested our cooperation; we have complied.

Use the Colon:

20. To follow such expressions as *thus*, *that is*, or *as follows* used to introduce enumerations, tabulations, or long quotations.

You are requested to bring the following items to the conference: sales records, manuals, scratch pads, pencils, and several good ideas for sales promotion.

21. To separate hours and minutes in indicating time.

All employees are expected to be at their desks by 9:05 a.m.

22. After a salutation in a business letter.

Gentlemen:

Use a Hyphen:

- 23 When two or more words have the force of a single modifier before a noun.
It is a well known fact that our product reaches the far corners of the earth.

Use an Apostrophe:

24. To indicate contractions of words.
We can't be certain of profits unless we all cooperate.
25. To show possessive. For the possessive singular, add 's to the nominative except where the noun ends in s or a sibilant sound.
- (a) Each clerk's duty is obvious.
(b) Each boss' responsibility is clear.
- 26 To show possessive. When the nominative plural ends in s, add the apostrophe to indicate the possessive plural.
Our customers' satisfaction is the key to our successful selling.
27. To show possessive. When the nominative plural ends in some other letter than s, and to form the possessive singular of proper nouns of one syllable ending in s, x, ch, or sh, add 's to form the possessive plural.

**MOST IMPORTANT ATTITUDES AND PERSONALITY TRAITS
FOR CLERICAL EMPLOYMENT***

The following listing compiled by Dr. Parker Liles represents the combined results of eleven studies attempting to answer the question of what attitudes and personality traits are essential to success in clerical work. Attitudes and traits are classified into categories of physical, social, mental, character, and technical, and are ranked by frequency of mention in the eleven studies. All attitudes and trait titles which were mentioned only once in any of the studies were arbitrarily eliminated. The resulting list of fifty attitudes and traits should comprise those that most businessmen, clerical workers, and business educators consider essential to employment in clerical work.

Social Traits	Frequency of Mention
1. Cooperation	9
2. Cheerfulness	8
3. Courtesy	7
4. Ability to maintain harmonious relations with associates	5
5. Tactfulness	4
6. Personality	4
7. Consideration	3
8. Friendliness	2

Mental Traits

1. Judgment and common sense	5
2. Ability to grasp and follow instructions	5
3. Ability to plan and organize work	4
4. Mental alertness	4
5. Ability to make decisions	2
6. Intelligence	2
7. Meticulousness or attention to details	2

Character Traits

1. Dependability	11
2. Initiative or resourcefulness	10
3. Acceptance of responsibility	8
4. Punctuality and attendance	7
5. Poise and emotional stability	7
6. Loyalty	5
7. Honesty and trustworthiness	5
8. Perseverance or ability to follow through	5
9. Industry	4
10. Ability to keep important matters confidential	4
	3
11. Self-confidence	3
12. Conscientiousness	2
13. Promptness in completing work	2
14. Character and integrity	2
15. Aggressiveness	2
16. Patience	2

Physical Traits

1. Personal appearance and grooming	9
2. Health	2
3. Physical endurance	2

Attitudes

1. Adaptability	7
2. Interest and enthusiasm	6
3. Willingness to do undesirable but essential tasks	5
4. Willingness to admit mistakes or accept criticism	
5. Sense of humor	3
6. Proper attitude toward work	2
7. Ability to work under pressure	2
8. Willingness to learn	2
9. Willingness to work overtime	2

*Parker Liles, "Attitudes and Personality Traits Essential for Clerical Employment," *The Clerical Program in Business Education*, The American Business Education Yearbook, Vol. 16, Harry Huffman, ed. New York: Somerset Press, 1959, p. 33-51.

Technical Traits

1. Accuracy	9
2. Neatness in maintenance of physical surroundings	5
3. Efficiency	5
4. Neatness of work	3
5. Good speech habits	3
6. Thoroughness	2
7. Technical skill in tasks performed	2

BIBLIOGRAPHY

- A Guide to Research in Business Education. Milton C. Olson, Ed. *NBEQ* Vol. 35, No. 2, (Winter, 1966-67), Incorporating NABPE Bul. 85.
- Agnew, Allen. "Evaluative Criteria for Business Law in California High Schools." *DPE Journal*, (February, 1968).
- Agnew, Peter L., Meehan, James R., and Pasewark, William R. *Clerical Office Practice*, 4th edition. Cincinnati: South-Western Publishing Co., 1967.
- Alderson, John W. "Determining the Effects of Order of Presentation in Special Request Letters." *The ABCA Journal of Business Communication*, (Spring, 1970).
- Amelio, Anthony. "Competencies Needed by Beginning Bookkeeping Workers According to Public Accountants." *Journal of Business Education*, (March, 1969).
- Anderson, Dianne Sargent. "A Comparison of the Written Communication Ability Demonstrated by Students Following Three Different Curriculum Patterns in the Brigham Young University College of Business." Unpublished Master's thesis, Brigham Young University, 1964.
- Anderson, John Norman. "A Study to Determine the Relationship of the Money Management Attitudes of Freshmen & Senior Business and Non-Business Students at Main Township High School East Park Ridge, Illinois." Unpublished Master's thesis, Northern Illinois University, 1964.
- Anderson, Lawrence L. "The Use of Calculating Machines in 135 Firms in the San Francisco Oakland Area." Unpublished Ed.D. dissertation, Colorado State College, 1967.
- Anderson, Ruth I. "Utilizing Shorthand Research in the Classroom." *NEBQ*, (March, 1966), 46-56.
- Anderson, Ruth I. "What We Know About Shorthand and Transcription." *Business Education Forum*, (January, 1954), 23-25.
- Athos, Anthony G., and Coffey, Robert E. *Behavior in Organizations. A Multi Dimensional View*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963.
- Bach, George Leland. *Economics. An Introduction to Analysis and Policy*, 4th edition. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963.
- Baird, Jack Stanley. "The Effectiveness of Introducing Regular Dictation of Unpracticed Material Before the Completion of Gregg Shorthand Theory." Doctor's thesis, Oregon State University, 1967.
- Balsley, Irol W. "Occupational Competency - The Goal of Second Year Transcription." *Business Education Forum*, (December, 1968), 7.
- Balsley, Irol W. and Robinson, Jerry W. *Integrated Secretarial Studies*, Jubilee Edition. Cincinnati: South-Western Publishing Company, 1964.
- Bangs, F. Kendrick, and Hillestad, Mildred C. "Curricular Implications of Automated Data Processing for Educational Institutions," a United States Office of Education research study based on a research proposal developed by Delta Phi Epsilon, project No. BR5-0111, University of Colorado, Boulder, Colorado, 1968.
- Barr, James. "Shorthand and Transcription, 1957-1967," *BSU Journal For Business Educators*, (May, 1971), 8-13.
- Bartholomae, Lloyd William. "The Typewriter as a Tool for Improving Spelling." Unpublished Doctor's dissertation, University of California, Los Angeles, 1968.

- Barnard, Kathleen R. "The Problems of Stenographers and Secretaries in Relation to the Literature Available for their Use." Unpublished Ph.D. dissertation, University of Texas, 1959.
- Beattie, Arthur Donald. "Relationship Between Information and Attitudes of High School Pupils Toward Personal Finance, 1962," Unpublished Ph.D. dissertation, University of Minnesota, 1962.
- Becker, Esther R., and Rollason, Peggy Norton. *The High Paid Secretary*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967.
- Bendixen, Ethel T., and Carter, Juanita E. *Production Typing*. Cincinnati: South-Western Publishing Company, 1967.
- Bennett, James C. "The Communication Needs of Business Executives," *ABCA Journal of Business Communications*, (Spring, 1971).
- Berry, Doris A. "The Role of Office Practice Instruction in the Training for General Office Assignments." Unpublished Ed.D. dissertation, Indiana University, 1963.
- Blockhus, Wanda A. "Creativity & Money Management Understandings." Unpublished Ph.D. dissertation, University of Minnesota, 1963.
- Boynton, Lewis D. *Methods of Teaching Bookkeeping*. Cincinnati: South-Western Publishing Co., 1967.
- Boynton, Lewis D., Carlson, Paul A., Forkner, Hamden L., and Swanson, Robert M. *20th Century Bookkeeping and Accounting*, 23rd edition. Cincinnati: South-Western Publishing Company, 1967.
- Boynton, Thelma P. "Transcription—The Tiger's Tail," *Balance Sheet*, (November, 1966), 109-111.
- Bradshaw, James Rulon. "Utilization of Audio Visual Hardware by Utah Business Education Teachers." Unpublished Master's thesis, Utah State University, 1969.
- Branchaw, Bernadine P. "The Effect of Varying Lengths of Practice Timings on Achievement in Intermediate Collegiate Typewriting." Ed.D., Northern Illinois University, 1972.
- Buckley, Albert Dale. "An Investigation of the Availability of Employment Requiring a Knowledge of High School Bookkeeping." Unpublished Ph.D. Dissertation, Georgia State University, 1971.
- Bulgajski, B. *The Psychology of Learning*. New York: Holt, Rinehart & Winston, 1956.
- Burgess, Walter Jackson. "Business Data Processing Instruction at the Public Secondary School Level in Georgia." Ph.D., Georgia State University, 1972.
- Calhoun, Calfrey C., and Hillestad, Mildred, editors. *Contributions of Research to Business Education*. Ninth Yearbook of the National Business Education Association. Washington, D.C.: National Education Association, 1971.
- Calland, John Phillip. "The Extent to Which Currently Proposed Shorthand Methods Have Been Substantiated by Research." Unpublished Master's thesis, Ohio State University, 1964.
- Casebier, Virginia E. "A Time Study of Activities and Responsibilities of Secretaries with Implications for the Training of Prospective Secretaries." Unpublished Ph.D. dissertation, Northwestern University, 1957.
- Cashman, Thomas J., and Keys, William J. *Data Processing. A Text and Project Manual*. New York: McGraw-Hill, 1967.

- Chase, Dayton K. A Study to Identify the Basic Skills Needed with Adding and Calculating Machines for Office Positions with Implications for Improvement of Instruction in Office Machines." Unpublished Ed.D. thesis, University of North Dakota, 1965.
- Clark, Robert D. "A Determination of the Significance of Integrating Spelling and Punctuation into the Typewriting Course." Unpublished Master's thesis, Kansas State Teachers College, 1953.
- Clark, Kathryn Bullington. "Oral Business Communication Needs as a Basis for Improving College Courses." Unpublished Ph.D. dissertation, The University of Michigan, 1968.
- Clayton, Dean. "Let's Make More Use of Paraprofessionals," *Business Education World*, (April, 1969), 12-13.
- Clow, Joan Edward. "The Relationship of Methodology Course Learnings to Student Teaching and First Year Teaching Experiences of Business Teachers." Ed.D., Northern Illinois University, 1972.
- Condon, Arnold. "A Comparative Study of the Transcription and Functional Methods of Teaching Elementary Shorthand." Unpublished Ph.D. dissertation, New York University, 1945.
- Condon, Arnold. "Improving Instruction in Shorthand . . . Through Better Use of New Media and Equipment," *Business Education Forum*, (October, 1966), 10-12.
- Cook, Fred S. "Wanted! A Modern Business Education Curriculum," *Business Education Forum*, (January, 1960), 21-22.
- Cook, Fred S. "The Need for In-School Business Data Processing Programs," Independent study, Wayne State University, Detroit, Michigan, 1966.
- Cook, Fred S., and Mead, Martha L. "Expectation for Development of the High School Business Education Curriculum," *NBEQ*, (May, 1967), 11-16.
- Copeland, Laura R. "A Comparative Analysis of Terminal Achievement of Beginning Typewriting Students in Grades 8-12 from Selected Junior and Senior High Schools in Central Utah." Unpublished Master's thesis, Brigham Young University, 1970.
- Crandall, Lars C. "An Experimental Study in Teaching Shorthand Using Tapes, Text, and Special Notebooks." Unpublished Master's thesis, Brigham Young University, 1960.
- Crawford, F. James. "The Effect of Emphasizing Production Typewriting Contrasted with Speed Typewriting in Developing Production Typewriting Ability," Unpublished Doctor's thesis, University of Pittsburgh, 1956.
- Crunk, Dorothy E. "Learning Psychology and Shorthand," *Business Education Forum*, (November, 1968), 17-18.
- Dame, J. Frank and Brinkman, Albert R. *Guidance in Business Education*, 3rd edition. Cincinnati: South-Western Publishing Co., 1965.
- Danielson, Harriet Ann. "The Relationship Between Competency in Shorthand Vocabulary and Achievement in Shorthand Dictation." Unpublished Doctor's thesis, Indiana University, 1959.
- Data Processing Management Association. *Principles of Automatic Data Processing*. Park Ridge, Illinois: DPMA, 1969.
- Daughtrey, A. S. *Methods of Basic Business and Economic Education*. Cincinnati: South-Western Publishing Co., 1965.

- Dehl, Lincoln Wesley. "Factors Contributing to the Selection of First-Level Office Supervisors with Implications for Business Education." Unpublished Ph.D. dissertation, Ohio State University, 1964.
- Delta Pi Epsilon. *The Business Teacher Learns From Cases*. Cincinnati. South-Western Publishing Co., 1957.
- Devine, John W. "A Comprehensive Analysis, Classification, and Synthesis of Research Findings and Thought on the Teaching of Bookkeeping and Accounting, 1950-60." Unpublished Ph.D. dissertation, Indiana University, 1962.
- Dohleman, C. Lee, "Identification and Evaluation of Concepts Related to Office Work Performance as a Basis for Emphasis in the Secondary School Office Practice Course." Ed.D., Northern Illinois University, 1972.
- Douglas, Lloyd V., Blanford, James T., and Anderson, Ruth I. *Teaching Business Subjects*, 2nd edition. Englewood Cliffs, New Jersey. Prentice-Hall, Inc., 1965.
- Down, Sister Mary Margaret. "Cultural Analysis of the Concept of Money Management." Unpublished Ed.D. dissertation, Cornell University, 1965.
- Draska, Robert S. "An Analysis of the Office Education Program at the Secondary School Level." *Delta Pi Epsilon Journal*, (February, 1968).
- Dudley, Thomas Jerome. "Computers and Business Education." Unpublished Doctor's thesis, University of Southern California, Los Angeles, 1965.
- Dufrain, Viola. "The Practicability of Emphasizing Speed Before Accuracy in Elementary Typewriting." Unpublished Master's thesis, University of Chicago, 1945.
- Dunn, Paul H. *You Too Can Teach*. Salt Lake City, Utah. Bookcraft, 1962.
- Ellington, Allen Ralph. "The Cloze Procedure and Selected Measures as a Means of Predicting Success in First-Year Shorthand." Ed.D., The University of Georgia, 1972.
- Erickson, Lawrence W. *Basic Components of Office Work—An Analysis of 300 Office Jobs*. Monograph 123. Cincinnati. South-Western Publishing Company, 1971.
- Fairchild, Charles H. "A Comparison of Student Achievement in High School Bookkeeping." Unpublished Master's thesis, Mankato State College, 1970.
- Falk, Ruel F. "A Survey to Determine the Number and Types of Office Machines Used in Appleton, Menasha, Neenah, and Oshkosh, Wisconsin, and Some of the Implications of Automation for the Teaching of Office Machines." Master's seminar paper, University of Wisconsin, 1965.
- Featheringham, Richard D. "The Impact of Research. Personal Use Typewriting," *Business Education Forum*, (November, 1966), 7.
- Ferguson, Frank Daniel. "Some Recommended Areas of Study for a Management Curriculum Geared to the Potential Office Manager Based on a Job Analysis of Office Managers." Unpublished Ph.D. dissertation, Louisiana State University, 1958.
- Finger, Kendall A. "A Study of the Effectiveness of Teaching Spelling as an Integral Part of Typewriting." Unpublished Master's thesis, University of Wisconsin, 1956.
- Finney, H.A. and Miller, Herbert E. *Principles of Accounting*, 6th edition. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1962.
- Fischer, Wilbert R. "An Analysis of Selected Variables To Determine Their Relationship to Performance in Secondary School, Second Semester Application Typewriting." Ph.D., The University of North Dakota, 1972.

- Freeman, M. Herbert, Hanna, J. Marshall, and Kahn, Gilbert. *Accounting 10, 12, Part IV. Business Data Processing Fundamentals*. New York: Gregg McGraw-Hill Book Co., 1968.
- Frehling, Rosemary T., and Bouchard, Sharon. *Business Correspondence, 30*. New York: McGraw-Hill Book Co., 1971.
- Frazier, Lois Elizabeth. "The Problems Beginning Secretarial Experience With Office Dictation." Unpublished Ed.D. dissertation, Indiana University, 1961.
- Fries, Albert O., Rowe, Margaret, and Travis, Dorothy L. *Applied Secretarial Practice*, 6th edition. New York: McGraw-Hill Book Co., 1968.
- Frink, Inez. "A Comprehensive Analysis and Synthesis of Research and Thought Pertaining to Shorthand and Transcription, 1916-57." Unpublished Ed.D. dissertation, Indiana University, 1961.
- Fuller, Donald C. "Reading Factors in Typewriting." Unpublished Ed.D. dissertation, Harvard University, 1943.
- Gabriel, Albert B., Jr. "An Experiment Using Programmed Instruction in Teaching One Area of Written Business Communications to College-level Students and Middle-Management level Industrial Employees to Determine the Feasibility of Using Programmed Instruction with These Two Groups." Unpublished Ph.D. dissertation, Michigan State University, 1965.
- Gamble, Harry T. "A Study of Business Arithmetic Achievement in Selected Grades of 9 to 12." Unpublished Ed.D. dissertation, Temple University, 1965.
- Gerfen, Richard Conrad. "A Study of Current Practices in the Administration Organization, and Teaching of Business Report Writing and Related Courses in Colleges and Universities of the United States." Unpublished Ph.D. dissertation, Northwestern University, 1953.
- Glenn, Annette Johnson T. "A Comparison of Terminal Achievement in First-Year Bookkeeping Between Students Taught by the Continuous Progress Method and Those Taught by the Traditional Method." Unpublished Master's thesis, Brigham Young University, 1971.
- Goetz, Leo G. "The Relationship Between Symbol Mastery and Selected Dictation Speeds in Gregg Shorthand." Unpublished Ed.D. dissertation, University of North Dakota, 1966.
- Goodfellow, Jay. "A Plan of Study to Acquaint Secondary School Students with Business Occupational Opportunities in Today's World of Work." Unpublished Master's thesis. Utah State University, 1972.
- Gordon, Andrew Jackson. "The Feasibility of Predicting the Results of Five Minute Timed Writings from the Results of One Minute Efforts in Measuring Typewriting Skill." Unpublished Master's thesis, Blacksbur, Virginia, 1958.
- Gray, Fay Beth. "A Comparison of Junior College Secretarial Curriculums with Business Criteria for Employment of Beginning Secretaries." Ph.D., Arkansas State University.
- Gregory, Darvel J. "A Comparative Study of Two Methods of Writing Shorthand Homework." Unpublished Master's thesis, Utah State University, 1968.
- Grever, Jean M. "Issues in Teaching Shorthand . . . Can Shorthand Instruction Be Improved Through Better Selection and Use of Teaching Materials?" *Business Education Forum*, (October, 1967), 5-9.
- Guilfoile, Mable S. "A Study to Determine What Wisconsin Business Educators Are Doing to Help Students Develop Personality Traits and Human Relations." Unpublished Master's thesis, University of Wisconsin, 1965.

- Hacking, John Garth. "A Survey of Utah Business Teachers to Determine Areas Emphasized in Teaching, Testing, and Grading of Shorthand at the Secondary Level." Unpublished Master's thesis, Utah State University 1970.
- Haga, Enoch J. "Electronic Data Processing—Implications for Business Education in High Schools." Unpublished Master's thesis, Sacramento State College, 1958.
- Hanna, J. Marshall, Popham, Estelle L., and Beamer, Esther K. *Secretarial Procedures and Administration*, 5th edition. Cincinnati: South-Western Publishing Co., 1968.
- Hardaway, Mathilde. *Testing and Evaluation in Business Education*, 3rd edition. Cincinnati: South-Western Publishing Co., 1966.
- Harms, Harm and Stehr, B. W. *Methods in Vocational Business Education*, 2nd edition. Cincinnati: South-Western Publishing Co., 1963.
- Hansen, Maradee P. "The Vocabulary of Written Office Memorandums." Unpublished Master's thesis, Brigham Young University, 1971.
- Hay, Leon Robert "A Study of Office Automation and the Functions and Qualifications of Programmers for Electronic Data Processing," *Journal of Business Education*, (March, 1959), 264.
- Henderson, Braxton Comer. "A Comparative Analysis of Post High School Book-keeping Experiences of Selected Business Students." Unpublished Ed.D. dissertation. Stanford University, 1960.
- Henrie, Bill Sherriff. "A Comparative Analysis of Difficulty Prediction Formulas for Shorthand Dictation Material." Unpublished Ph.D. thesis, Utah State University, 1971.
- Hillstead, Mildred. "Factors Which Contribute to the Difficulty of Shorthand." Unpublished Ph.D. dissertation, University of Minnesota, 1960.
- Himstreet, William C., and Baty Wayne Murlin. *Business Communications*, 2nd edition. Belmont, California: Wadsworth Publishing Co., Inc. 1964.
- Hobbs, Charles R. *Teaching With New Techniques*. Salt Lake City, Utah. Deseret Book Co., 1965.
- Holland, Kathryn Garrett. *Applied Business Typing*. Baltimore. The H. M. Rowe Co., 1964.
- Horn, Joe Kenneth. "The Relationship Between the Preparation and the Use of Application Letters and Data Sheets." Unpublished Ed.D. dissertation, University of Oklahoma, 1965.
- Huffman, Harry, Arensman, Ray W., and Peterson, Marla P., editors. *Criteria For Evaluating Business and Office Education*. Seventh Yearbook of the National Business Education Association. Washington, D.C.. National Education Association, 1969.
- Hunsaker, Douglas H. "The Identification of Actual and Desirable Practices Related to Objectives, Curriculums, and Courses in Utah High School Business Education Departments." Unpublished Master's thesis, Utah State University, 1969.
- Iannizzi, Elizabeth. "Transcription Errors in Relation to Dictation Errors Among Elementary and Advanced Writers of Simplified and Diamond Jubilee Gregg Shorthand." Unpublished Doctor's thesis, New York University, 1967.
- Jaworski, Geraldine. "Effects of Electronic Data Processing on Business Curriculum and the Course Content of the Clerical Training Program." Unpublished Master's thesis, Wisconsin State University, 1966.
- Jester, Donald D. "A Time Study of the Shorthand Transcription Process." Unpublished Ed.D. dissertation, Northwestern University, 1959.

- Jones, Gardner M. "Electronics and Education in Accountancy." *Delta Pi Epsilon Journal*, (June, 1959).
- Kahn, Gilbert. *Business Data Processing, Basic Principles and Applications*. New York: McGraw-Hill Book Co., 1966.
- Klaseus, Richard D. "An Analysis of Some of the Factors That Contribute to the Difficulty of Transcription Materials in Gregg Shorthand Diamond Jubilee Series." Unpublished Master's thesis, Mankato State College, 1961.
- Kleiforth, John. "A Suggested Course of Study for a Pre-Employment Studies Program for a Small Rural School." Unpublished Master's thesis, Utah State University, 1969.
- Klein, Abraham E. "Variations in the Speed of Writing of Symbol Combinations in Gregg Shorthand." Unpublished Doctor's thesis, New York University 1949.
- Knurr, Alice. "The Effect of the Length of Timed-Writings on Production Ability in Beginning Typewriting." Unpublished Master's thesis, University of Wisconsin, 1968.
- Kosy, Eugene John. "The Critical Requirements for Private Secretaries Based Upon an Analysis of Critical Incidents." Unpublished Ph.D. dissertation, University of Wisconsin, 1959.
- Kushner, John Anthony. "A Vocational Profile of the High School Graduate with Implications for Business Education." Unpublished Ed.D. dissertation, Wayne State University, 1970.
- Lamb, Marion M. *Your First Year of Teaching Shorthand and Transcription*, 2nd edition. Cincinnati: South-Western Publishing Co., 1961.
- Lamb, Marion M. *Your First Year of Teaching Typewriting*, 2nd edition. Cincinnati: South-Western Publishing Co., 1959.
- Larsen, Nathan. "The Terminal Effect of Emphasizing the Most Frequently Occurring Words in Intermediate and Advanced Gregg Shorthand." Unpublished Master's thesis, Brigham Young University, 1970.
- LaSalle, James Frank. "The Role of the Secondary School Business Education Department in Preparing Students for Employment in Business Offices Using Data Processing Equipment." Unpublished Ph.D. dissertation, Pennsylvania State University, 1963.
- Ledger, Gerald W. "Data Processing, Its Effects on the Teaching of Bookkeeping at the High School Level." MBE Seminar Report, University of Wisconsin, 1965.
- Lesikar, Raymond V. *Report Writing for Business*. Homewood, Illinois. Richard D. Irwin, Inc., 1965.
- Leslie, Louis A. and Zoubek, Charles E. *Gregg Shorthand*, Diamond Jubilee Series. New York: McGraw-Hill Book Co., 1963.
- Leslie, Louis A. and Zoubek, Charles E. *Gregg Shorthand*, 2nd edition. New York: McGraw-Hill Book Co., 1971.
- Leshe, Louis A. and Zoubek, Charles E., and Strony, Madeline S. *Gregg Dictation*, 2nd edition. New York: McGraw-Hill Book Co., 1971.
- Lessnberry, D.D., Wanous, S.J. and Duncan, C.H. *College Typewriting*, 7th edition. Cincinnati: South-Western Publishing Co., 1965.
- Lessnberry, D.D., Crawford, T. James, and Erickson, Lawrence W. *20th Century Typewriting*, 9th edition. Cincinnati: South-Western Publishing Co., 1967.
- Lougour, F. E. "Problems of Beginning Office Workers." Unpublished Ph.D. dissertation, University of Pittsburgh, 1955.

- Liles, Parker "Attitudes and Personality Traits Essential for Clerical Employment," ABE Yearbook, Vol. 16, 1959, *The Clerical Program in Business Education*, p 33-51.
- Luxner, Lois Ann. "Factors Affecting the Employability of Vocational Bookkeeping Students." Unpublished Ph.D. dissertation, University of Pittsburgh, 1970.
- MacLain, Lenore Fenton, and Dame, J. Frank. *Typewriting Techniques and Shortcuts*. Cincinnati: South-Western Publishing Co., 1961.
- Mager, Robert F. *Preparing Instructional Objectives*. Palo Alto, California. Fearon Publishers, 1962.
- Mays, Stephanie and Kerby, Nancy. "Planning a Machine Shorthand Program," *Business Education Forum*, (October, 1970), 17-18.
- McKenna, Margaret Ann. "An Experiment to Determine the Effect of the Early Introduction of New Matter Dictation in the Teaching of Beginning Shorthand to College Students." Unpublished Ph.D. dissertation, Michigan State University, 1966.
- McPherson, Carol. "A Study to Determine the Status of Audio Learning Laboratories Used for Shorthand Instruction in Utah." Unpublished Master's thesis Utah State University, 1969.
- Miller, Gertrude M. "A Synthesis of Research Findings and Thought Pertaining to Office Practice Instruction." Unpublished Ed.D. dissertation, Indiana University, 1961.
- Minear, Leon P. "Role of Business Education in National Manpower Program," *Business Education Forum*, (January, 1970), 3-6.
- Minteer, Joyce. "Essential Qualities for Writers of Original Business Reports." Unpublished Ed.D. dissertation, Indiana University, 1967.
- Mukerels, Kenneth Duane. "The Structure and Design of Typewritten Business Letters. An Analysis of Selected Variables." Unpublished Ed.D. dissertation, University of North Dakota, 1968.
- Murphy, Sam. "Selected Factors in Office Education Programs Relating to the Success of High School Graduates in Securing Initial Employment." Unpublished Ed.D. dissertation, Arizona State University, 1972.
- Nellermoe, Donald A. "Typewriting Patternism Identification at Selected Levels of Skills." Unpublished Ed.D. thesis, University of North Dakota, 1965.
- Nelson, George E., Jr. "The Effects of the Elimination of Timed Writings Upon the Achievement of Beginning Typewriting Students." Unpublished Ed.D. dissertation, Arizona State University, 1969.
- Nelson, Keith W. "Student's Attitudes Toward Selected Personal Finance Topics." Unpublished Master's thesis, University of Minnesota, 1966.
- Neuner, John J. W. and Kneeling, B. Lewis. *Administrative Office Management*, 5th edition. Cincinnati: South-Western Publishing Co., 1966.
- Niemi, Leo. "Electronic Data Processing and Its Implications for the Collegiate Business Curriculum." Unpublished Ph.D. thesis, Ohio State University, 1959.
- Nolan, C. A., Hayden, Carlos K., and Malsbary, Dean R. *Principles and Problems of Business Education*, 3rd edition. Cincinnati. South Western Publishing Co., 1967.
- Noodell, Jack. "A Study to Determine the Adequacy of High School Office Practice Instruction for the Modern Business Office." Unpublished Ed.D. dissertation, The University of Nebraska Teachers' College, 1967.
- Okrina, Bonnie L. "A Follow up of Touch Shorthand Graduates for Selected Minnesota High Schools." Unpublished Master's thesis, Mankato State College, 1970.
- Parsons, Karon May. "A Time Analysis Study of Beginning Typewriting Classes in Selected High Schools." Unpublished Master's thesis, Brigham Young University, 1969.

- Patrick, Alfred. "Psychological Principles and the Development of Transcription Skill," *Balance Sheet*, (January, 1967) 209-211.
- Paulus, Edward. "An Analysis and Evaluation of Data Processing Education in Secondary Schools and Universities." Ed.D., Northern Illinois University, 1972.
- Perkins, Wilmert E. "The Development and Evaluation of Programmed Punctuation Materials for Secondary School Transcription Classes." Unpublished Ed.D. dissertation, University of California at Los Angeles, 1970.
- Perry, Devern J. "An Analytical Comparison of the Relative Word-Combination Frequencies of Business Correspondence with Phrase Frequencies of Selected Shorthand Textbooks." Unpublished Ed.D. dissertation, University of North Dakota, 1968.
- Persing, Bobbye Sorrells. "A Classroom Investigation on When to Begin New-Matter Dictation in Gregg Shorthand." Unpublished Ed.D. dissertation, The University of Oklahoma, 1966.
- Peterson, Dean Andrew. "A Study of Readability and Other Factors of Selected Business Communications." Unpublished Ed.D. dissertation, The University of Southern California, 1959.
- Pickard, Kenneth Leon. "An Experimental Study of the Effect of Remedial Instruction in English Usage on the Achievement of College Students in Business Letter Writing." Ed.D., Northern Illinois University, 1972.
- Polish, William M. "The Effectiveness of Teaching Business Arithmetic as an Integrated Part of Junior Business Training." Unpublished Dr. D. dissertation, New York University, 1945.
- Polishook, William M. "The Effectiveness of Teaching Business Arithmetic as a Separate Subject and as an Integrated Part of Junior Business Training." Unpublished Ed.D. dissertation, New York University, 1945.
- Prewitt, Lena V. B. "A Comprehensive Analysis, Classification, and Synthesis of Research Findings and Thought in the Area of Office Practice Instruction, 1951-59." Unpublished Ed.D. dissertation, Indiana University, 1961.
- Price, Ray G., Hopkins, Charles R., and Klaurens, Mary, editors. *The Emerging Content and Structure of Business Education*, Eighth Yearbook of the National Business Education Association. Washington, D.C., National Education Association, 1970.
- "Problems of Vocational Education in Utah," *Research Report*, Utah Foundation, (December, 1967), Report No. 254.
- Pullis, Joe M. "Methods of Teaching Shorthand. A Research Analysis," Project No. S G 016, U.S. Department of Health, Education, and Welfare, Dallas, Texas, 1969.
- Pullis, Joe M. "The Relationship Between Competency in Shorthand Accuracy and Achievement in Shorthand Dictation." Unpublished Ed.D. dissertation, North Texas State University, 1966.
- Pullis, Joe M. "The Relationship Between Fluency in Reading Shorthand Plates and Achievement in Shorthand Dictation." Independent Study, Louisiana Tech University, 1972.
- Rainey, Bill G. "Professors and Executives Appraise Business Communication Ed." *The ABCA Journal of Business Communications*, (Spring 1970).
- Richards, Ralph J. "A Comparison of Current Shorthand Systems Using Silverthorn's High-Frequency Word List." Unpublished Master's thesis, Utah State University, 1966.

- Risser, Pearl M. "New Role for High School Bookkeeping." *Business Education Forum*, (December, 1969), 19-21.
- Robertson, Leonard F. "An Exploratory Study of the Effect of Cooperative Education Programs in Beginning Occupations on Selected Employment Factors." Unpublished Ed.D. dissertation, Colorado State University, 1965.
- Robichaud, Beryl. *Understanding Modern Business Data Processing*. New York. McGraw-Hill Book Company, 1966.
- Robinson, Jerry W. "Effects of Copy Difficulty on Typewriting Performance." Unpublished Ed.D. dissertation, University of California, 1966.
- Robinson, John A. "A Guide to Electronic Data Processing and the Related Career Opportunities Written for the Business Education Teacher." Master's seminar report, University of Wisconsin, 1965.
- Rose, Robert E. "A Study of the Impact of Automation on American Department Store Operation with Resulting Need for Revision in the Course Content of Distributive Education Programs." Unpublished Doctor's thesis, State University of Iowa, 1963.
- Russon, Allen R., and Wanous, S. J. *Philosophy and Psychology of Teaching Typewriting*. Cincinnati: South-Western Publishing Co., 1963.
- Samuelson, Paul A. *Economics*, 7th edition. New York. McGraw-Hill Book Co., 1967.
- Sluder, Lester I. "An Analysis and Synthesis of Research Findings Pertaining to General Business." Unpublished Ed.D. dissertation, Indiana University, 1965.
- Smith, Marilyn Harmon "A Synthesis and Review of Literature Related to the Cooperative Office Work Experience Program." Unpublished Master's thesis, Utah State University, 1967.
- Soutter, Florence E. "Perceptions on Cooperative Distributive and Office Education Programs." Unpublished Ed.D. dissertation, Arizona State University, 1971.
- Spanwick, Ralph "An Investigation to Determine the Qualifications and Skills Desired, Accepted, and Actually Used in Manual Bookkeeping Jobs which were Listed in Chicago and New York City Newspapers During the Months of May and August, 1960." Unpublished Ed.D. dissertation, Northern Illinois University, 1967.
- Speas, Rita Shoaf. "The Development of an Introductory Course in Data Processing for Students of Secondary Schools." Unpublished Master's thesis, University of Tennessee, 1965.
- Stather, Donald G. "The Application of Rules of Punctuation in Typical Business Correspondence." Unpublished Ed.D. dissertation, Boston University School of Education, 1960.
- Stauffer, Val C. "A Study of Date Processing Employment Opportunities for High School Graduates in the Ogden Area with Implications for Secondary Business Education." Unpublished Master's thesis, Utah State University, 1969.
- Stewart, Marie M., Lanham, Frank W., and Zimmer, Kenneth. *Business English and Communication*. New York: McGraw-Hill Book Co., 1967.
- Stoddard, Lucille T. "A Determination of Appropriate Criteria to be Used in the Selection of High School Teachers in Cooperative Office Education Student Teaching Programs." Unpublished Ed.D. dissertation, Utah State University, 1970.
- Stoddard, Ted Dee. "An Experimental Study in the Utilization of Staff and Equipment for the Teaching of Intermediate Collegiate Shorthand." Unpublished Ed.D. dissertation, Arizona State University, 1967.

- Talbot, Alden A. "An Evaluation of Vocational Shorthand Competency Attained in Utah High Schools." Unpublished Master's thesis, Utah State University, 1969.
- Taylor, Rhenon. "Selected Psychological Principles of Learning as Related to the Teaching of Shorthand and Transcription According to the Current Literature." Unpublished Master's thesis, Utah State University, 1969.
- Thevis, Sister Agnes L. "Suggestions for Developing Employable Personalities Through the Case Method." Unpublished MBA thesis, University of Texas, 1968.
- Tingey, Helen J. "An Analysis of Teaching Intermediate Shorthand at Brigham Young University with Taped Instruction." Unpublished Master's thesis, Brigham Young University, 1965.
- Tonne, Herbert A., Popham, Estelle L., and Freeman, M. Herbert. *Methods of Teaching Business Subjects*, 3rd edition. New York. McGraw-Hill Book Co., 1965.
- Tootle, John C. "Typewriting in the Written Communication Activities of the Fifth Grade." Unpublished Ph.D. dissertation, Ohio State University, 1961.
- Treese, Marla C. "Business Communications Practices and Problems of Professional Secretaries." *The ABCA Journal of Business Communications*, (Spring, 1970).
- Treese, Marla. "Secretarial Responsibilities and Difficulties in Written Communication." *The Delta Pi Epsilon Journal*, XVI, November, 1973, 20-23.
- Tronsue, Mary Elizabeth. "A Study of Relationships of Selected Variables with Shorthand Transcription Speed." Unpublished Ed.D. dissertation, University of Maryland, 1968.
- Uthe, Eline E. "An Evaluation of the Difficulty Level of Shorthand Dictation Materials," *Journal of Business Education*, (October, 1968), 30.
- Wagoner, Kathleen Parker. "The Role of the Secretary in a Changing World. An Analysis of the Duties and Functions Performed by the Secretary." Unpublished Ph.D. dissertation, University of Iowa, 1967.
- Walker, Byrle G. "A Comparative Study of the Skill Builder Controlled Reader and Oral Dictation for Skill Development in Second Year Typewriting." Unpublished Master's thesis, Utah State University, 1971.
- Wanous, S. J. "Curriculum Standards in Business Education, Part II," *Balance Sheet*. (October, 1968), 52-55.
- Wanous, S. J. *Personal and Professional Typing*, 3rd edition. Cincinnati. South-Western Publishing Co., 1967.
- Wanous, S. J. and Wanous, E. E. *Automation Office Practice*. Cincinnati. South-Western Publishing Co., 1964.
- Wanous, S. J., Wanous, E. E., and Wagner, Gerald E. *Fundamentals of Data Processing*. Cincinnati: South-Western Publishing Co., 1971.
- Ward, William C., Jr. "An Investigation Indicating the Effect of Early Use of New-Method Dictation on the Achievement of First-Year Shorthand Students." Unpublished Master's thesis, University of Utah, 1966.
- Warmke, Roman F., Wylie, Eugene E., Wilson, W. Harmon, and Eyster, Elvin S. *Consumer Economic Problems*. Cincinnati. South Western Publishing Co., 1971.
- Warner, Douglas E. "Structured Production Assignments Versus Non-Structure Production Assignments in Programmed Intermediate Collegiate Typewriting." Unpublished Master's thesis, Brigham Young University, 1971.
- Warner, S. Elvon. "An Experimental Study Utilizing Programmed Instructional Materials and Tape Recordings in the Teaching of Intermediate Collegiate Typewriting." Unpublished Ed.D. dissertation, Arizona State University, 1969.

- Waters, Max L. "An Experimental Study of Programmed Shorthand Homework." Unpublished Ed.D. dissertation, Colorado State College, 1963.
- Watt, James Taggart. "Selected Factors Involved in the Delegation of Business Letter Writing Assignments by Insurance Company Executives." Unpublished Ph.D. dissertation, Ohio State University, 1967.
- Werner, Donald. "A Comparison of Two Methods of Teaching Business Data Processing and Accounting Concepts in High School Accounting." Unpublished Ed.D. dissertation, Arizona State University, 1971.
- West, Leonard J. "Acquisition of Stenographic Skills. A Psychological Analysis," *Business Education Forum*, (October, 1963), 7-8.
- West, Leonard J. *Acquisition of Typewriting Skills*. New York. Pitman Publishing Corp., 1969.
- West, Leonard J. "Implications of Research for Teaching Typewriting," DPE Research Bulletin, No. 2. St. Peter, Minn: Delta Pi Epsilon.
- West, Leonard J. *Review of Research in Typewriting Learning with Recommendations for Training*. San Antonio, Texas, Air Force Personnel and Training Research Center, 1957.
- West, Leonard J. "Some Relationships Between Straight-Copy Typing Skill and Performance on Joy-Type Activities." *Delta Pi Epsilon Journal*, (Summer, 1969), 17-21.
- Whitcomb, Helen, and Cochran, Laura A. *Charm for Miss Teen*. New York. McGraw-Hill Book Co., 1969.
- Whitecomb, Helen, and Lang, Rosalind. *Charm*, 2nd edition. New York. McGraw Hill Book Co., 1971.
- Wilhelms, Fred T., Heimerl, Ramon P., and Jelley, Herbert M. *Consumer Economics*. New York: McGraw-Hill Book Co., 1966.
- Winger, Fred E. "... Emerging Typewriting Curriculum Patterns as Related to Contemporary Developments," *Business Education Forum*, (November, 1967), 13-14.
- Winn, Parley Nyman. "A Synthesis of Literature Pertaining to Measurement in Bookkeeping from 1940-1966." Unpublished Master's thesis, Utah State University, 1967.
- Wiseman, Shirley Ann. "An Analysis of the Relationship Between Writing Ability and Oral Reading Ability in Shorthand." Unpublished Master's thesis, Brigham Young University, 1967.