To the Graduate Council:

I am submitting herewith a thesis written by Cynthia Laine Roberts entitled "Cognitive Domain Emphases in Typewriting." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts in College Teaching, with a major in Business Education.

John J. Stallard, Major Professor

We have read this thesis
and recommend its acceptance:

Accepted for the Council:

Vice Chancellor
Graduate Studies and Research

Thesis
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COGNITIVE DOMAIN EMPHASES IN TYPEWRITING

A Thesis

Presented for the

Degree

Master of Arts in College Teaching

The University of Tennessee, Knoxville

Cynthia Laine Roberts

March 1977

1321070

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Acknowledgment is made of the contributions of the National Association of Business Teacher Education colleges and Certified Professional Secretaries in Georgia, Kentucky, Tennessee, and Virginia who provided information for this study.

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ABSTRACT

The problem of this study was to determine the relationship of cognitive domain typewriting classroom tasks to cognitive domain typewriting office tasks. To delineate this relationship, specific questions were developed to determine cognitive domain typewriting tasks and the emphases placed on such tasks in post-secondary level typewriting instruction and business offices.

The design of this study was a descriptive empirical type of survey. Questionnaires were distributed to 40 National Association of Business Teacher Education colleges and 60 Certified Professional Secretaries in Georgia, Kentucky, Tennessee, and Virginia. The Chi-square test was used to determine whether a significant difference at the .05 level existed between the responses of the NABTE colleges and the Certified Professional Secretaries on the levels of the cognitive domain being examined.

There were 120 typewriting tasks/competencies identified by the investigator and verified by a jury of experts. The results of the study showed that 48 were knowledge tasks/competencies, 11 were comprehension tasks/competencies, 29 were application tasks/competencies, 10 were analysis tasks/competencies, 15 were synthesis tasks/competencies, and 7 were evaluation tasks/competencies. Of the 120 typewriting tasks/competencies, 20 percent were significantly different at the .05 level in responses by NABTE and CPS respondents. Twenty-five percent of the typewriting tasks/competencies were given an approximate 90 percent or better agreement rating by both NABTE and CPS respondents.

Major conclusions reached in the study were:

1. NABTE and CPS respondents basically agreed in their responses to the importance or emphasis which should be placed on the 120 typewriting tasks/competencies representing the six levels of the cognitive domain.

2. In the nine knowledge typewriting tasks/competencies in which the NABTE and CPS respondents differed significantly, there was a substantial amount of disagreement in perceptions between the groups.

3. The ten application typewriting tasks/competencies in which the NABTE and CPS respondents differed significantly were concerned with the performance of basic typewriting tasks/competencies.

4. In the three synthesis typewriting tasks/competencies in which the NABTE and CPS respondents differed significantly in their responses, there was a substantial amount of disagreement in perceptions between the two groups.

5. NABTE and CPS respondents' perceptions of the six levels of the cognitive domain in typewriting tasks/competencies were highly congruent.

4. There was a reversal in the positions of the NABTE and CPS respondents concerning the typewriting tasks/competencies in which the two groups significantly differed in perceptions as the typewriting tasks/competencies moved from the lowest level to the higher levels of the cognitive domain.

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CHAPTER I

INTRODUCTION

When the business educator is called upon to teach typewriting at the collegiate level, he is usually perplexed as to what content should be included. Many times the common approach to take is to follow the outline presented in whatever textbook the department has adopted. Quite often such an approach leads to a tendency to overemphasize "copying" skills or mostly psychomotor activities.

Teachers do not seem to see the need for or place any importance upon the cognitive domain as it applies to the teaching of typewriting. Businessmen sometimes criticize graduates of business programs because of their apparent lack of cognitive applications and the ability to use conceptual skills. Such criticisms, whether real or fictional, must be addressed in the skill courses taught in colleges and universities. Business educators should be constantly seeking to improve course content to make it more relevant to business expectations.

I. STATEMENT OF THE PROBLEM

The problem of this study was to determine the relationship of cognitive domain typewriting classroom tasks to cognitive domain typewriting office tasks. In order to delineate the relationship, it was necessary to seek answers to the following questions:

1. What are cognitive domain typewriting tasks?

2. What is the emphasis on cognitive domain typewriting tasks in post-secondary level typewriting instruction?

3. What is the emphasis on cognitive domain typewriting tasks in business offices?

II. RATIONALE FOR THE STUDY

Finch recognized that the taxonomy of the cognitive domain provides a systematic approach and advocated its application in "reviewing, revising and establishing objectives for lessons, courses, and programs in business education."[1] Due to technological advancements affecting typewriting, the following questions must be asked:

> How well is the existing programs designed to meet the changing trends and developments in office procedures? What changes are necessary to achieve maximum typewriting proficiency in light of current research and current practice?[2]

Another important question is whether the appropriate emphasis is being placed on each of the six levels of the cognitive domain according to the usage in the business office.

Marting found that businessmen felt students preparing for offices needed:

(a) The ability to handle oral and written instructions;

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[1]Alton V. Finch, "Behavioral Analysis: Cognitive, Affective, and Psychomotor Domains," *National Business Education Yearbook*, (Washington, D.C.: National Business Education Association, 1971), p. 284.

[2]Joe W. Sawyer, "Typewriting Standards for Office Occupations--Are They Realistic?" *National Business Education Yearbook*, (Washington, D.C.: National Business Education Association, 1967), p. 162.

(b) The ability to handle materials efficiently, to plan and organize work;
(c) The ability to work under pressure with minimum loss of time;
(d) Versatility--the ability to adapt to changing working demands; and
(e) Responsibility--a sense of personal involvement in the success of the company.[3]

All of the above requirements are identified in the higher levels of the cognitive domain, specifically the analysis, synthesis, and evaluation levels. Typists must be taught to use their acquired skills basically to think and make decisions and judgments. Erickson reported that "office executives emphasized the importance of having employees who can think--make decisions."[4] Robinson also found that the only way to make resourceful, independent typists was to force them to make appropriate decisions. Although typists might experience failure because of their decisions, they do learn the better way to do what they must do from their failures.[5] Galloway also found that an essential requirement for office workers was the ability to exercise good judgment.[6] It is apparent that students must be taught to rely upon their knowledge and make intelligent decisions as well as

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[3]Barbara Marting, "Preparing Typists for Modern Offices," *National Business Education Yearbook*, (Washington, D.C.: National Business Education Association, 1967), p. 105.

[4]Lawrence W. Erickson, "Developing Employable Typewriting Skill," *National Business Education Yearbook*, (Washington, D.C.: National Business Education Association, 1974), p. 85.

[5]Jerry W. Robinson, "Strategies for Building Problem-Production Skills," *Strategies of Instruction in Typewriting*, (Cincinnati, Ohio: South-Western Publishing Company, 1972), p. 34.

[6]Olive Galloway, "Let's Develop Professionally Competent Typists," *Typewriting News*, (Fall, 1968), p. 1.

evaluate their work during their classroom experience so that they will be able to fulfill this important requirement once they are on the job. Therefore, emphasis on the decision-making levels of the cognitive domain (analysis, synthesis and evaluation) must be stressed in the typewriting course objectives.

Sawyer pointed out that the heart of typewriting in preparing the student for office occupations was production work.[7] West explicitly stated that "making decisions about the arrangement of materials on the page is the heart of production skills. Production typing is overwhelmingly a cognitive, not a manipulative, task."[8] Decision-making is stressed again as crucially important in the students' preparation for office occupations.

Van Fleet stated that

> the basic objective for all typewriting students in an age of automation is opportunity--opportunity both to master the entire keyboard and to build useful skill in machines operations as well as problem-solving ability demanded in business communications.[9]

All typewriting instructors must work toward this objective. This objective can only be achieved if the relationship of the cognitive domain emphasis in typewriting instruction is congruent to the cognitive domain emphasis in business offices' typewriting tasks.

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[7] Joe W. Sawyer, *op. cit.*, p. 163.

[8] Leonard J. West, "Implications of Research for Teaching Typewriting," *Delta Pi Epsilon Research Bulletin*, No. 4, 1974, p. 25.

[9] Ellamaye Webb Van Fleet, "For What Are We Training Typewriting Students?" *National Business Education Yearbook*, (Washington, D.C.: National Business Education Association, 1967), p. 39.

Therefore, research must be done in order to determine if students are being prepared with cognitive abilities at the post-secondary level to meet the typewriting requirements of business.

III. DEFINITION OF TERMS

The following are definitions of important terms used in this study:

1. *Cognitive Domain.* The recall or recognition of knowledge and the development of intellectual abilities and skills. There are six hierarchial levels included in the cognitive domain--knowledge, comprehension, application, analysis, synthesis, and evaluation.[10]

A. *Level I--knowledge.* Those behaviors and test situations which emphasize the remembering either by recognition or recall of ideas, material, or phenomena.[11]

B. *Level II--comprehension.* Those objectives, behaviors, or responses which represent an understanding of the literal message contained in a communication.[12]

C. *Level III--application.* The student can use the learned information and has the ability to apply this learning to new situations and real-life circumstances.[13]

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[10] Benjamin S. Bloom, ed. *Taxonomy of Educational Objectives, Handbook I: Cognitive Domain*, (New York, New York: David McKay Company, Inc., 1956), p. 7.

[11] *Ibid.*, p. 201.

[12] *Ibid.*, p. 204.

[13] *Ibid.*, p. 205.

D. *Level IV--analysis.* A breakdown of communication into its constituent elements or parts and to detect relationships of one part to another and to the whole.[14]

E. *Level V--synthesis.* A putting together of elements and parts so as to form a whole. Originality and creativity arise at this level.[15]

F. *Level VI--evaluation.* Those judgments made about the value of material and methods for given purposes. Quantitative and qualitative judgments about the extent to which material and methods satisfy criteria and standards are made by the students.[16]

2. *Cognitive domain typewriting tasks.* Those typewriting tasks grouped under the six levels of the cognitive domain which are performed in classrooms and in offices to complete typewriting production work.

3. *Affective domain.* Those characteristics dealing with emotional development and related to interests, attitudes, values, and goals.[17]

4. *Psychomotor domain.* Those characteristics dealing with motor activities and skills.[18]

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[14] *Ibid.*

[15] *Ibid.*, p. 206.

[16] *Ibid.*, p. 207.

[17] Sally R. Campbell, *Consumer Education in an Age of Adaptation,* (Chicago, Illinois: Consumer Information Services of Sears, Roebuck and Company, 1971), p. 10.

[18] *Ibid.*

5. *NABTE.* An acronym referring to National Association of Business Teacher Education.

6. *CPS.* An acronym referring to Certified Professional Secretary.

IV. LIMITATIONS

The limitations of the study were as follows:

1. The investigation of the cognitive domain was emphasized. The affective and psychomotor domains were not investigated in this study.

2. Faculty of those colleges that belonged to NABTE were selected as a part of the population of the study. The investigator used the faculty members to acquire their respective perceptions of what cognitive domain typewriting tasks are emphasized in their collegiate typewriting courses.

3. The investigator conducted a random sampling of Certified Professional Secretaries to acquire their respective perceptions of what cognitive domain typewriting tasks are utilized in office work.

4. The states of Georgia, Kentucky, Tennessee, and Virginia were selected to serve as the population of NABTE schools and Certified Professional Secretaries for the study.

5. Sixty-four NABTE schools and Certified Professional Secretaries were used in the study.

V. METHODS AND PROCEDURES

The design of this study was basically a descriptive empirical type of survey. Data for the survey were secured through the use of

a questionnaire. The sources and procedures used in collecting and treating the data are described in the following sections. The section is organized in the following manner: development of the instrument; selection of the population and the sample; and analyses of the data.

Development of the Instrument

The preliminary cognitive competency statements were developed by reviewing and eliciting common cognitive domain competencies from business education dissertations, theses, and publications dealing specifically with the subject of typewriting. (See Appendix A) The investigator developed competency statements and categorized each statement according to the six levels of the cognitive domain. The chairman of the writer's committee critiqued the statements, after which the instrument was given to the committee members for suggestions and critical analyses. Based on these suggestions, the investigator further revised the competency statements.

The investigator and chairman of the investigator's committee selected six business education leaders to serve as a jury of experts to verify the cognitive statements regarding the assignment of the statements to the appropriate cognitive domain levels or categories to be used in the questionnaire. (See Appendix B) Four business education leaders returned the competency statements with their perceptions and/or beliefs noted for each statement. Comments and suggestions made by the jury of experts helped the investigator to become aware of the statements which needed to be revised or discarded. When two of the four experts' perceptions about any of the statements

disagreed with the researcher's perceptions, the statement was discarded. Refinement of the instrument was made based on the jury of experts perceptions which resulted in a total of 120 cognitive domain statements (See Appendix C).

Selection of the Population and the Sample

The states of Georgia, Kentucky, Tennessee, and Virginia were selected for this survey. Cover letters and questionnaires were sent to all Business Education department heads at the 40 colleges belonging to the National Association of Business Teacher Education in Georgia, Kentucky, Tennessee, and Virginia (See Appendix C). The department heads were requested to give the questionnaire to the person in their department who was primarily responsible for the teaching of typewriting. The distribution and return of the questionnaires by the NABTE schools are shown in Table I.

TABLE I

DISTRIBUTION AND RETURN OF QUESTIONNAIRES TO NATIONAL ASSOCIATION OF BUSINESS TEACHER EDUCATION COLLEGES BY STATE IN JULY, 1976

State	Questionnaires	
	Distributed	Returned
Georgia	12	9
Kentucky	8	5
Tennessee	9	5
Virginia	11	7
Total	40	26

A random sampling of the Certified Professional Secretaries in Georgia, Kentucky, Tennessee, and Virginia was made from the *Certified Professional Secretary 1973-74 Directory* and *Supplement to the 1973-74 Directory*. Fifteen secretaries were randomly selected from each state, representing a total sample of 60 Certified Professional Secretaries. (See Appendix D) The distribution and return of the questionnaires by the Certified Professional Secretaries are shown in Table II.

TABLE II

DISTRIBUTION AND RETURN OF QUESTIONNAIRES TO CERTIFIED PROFESSIONAL SECRETARIES BY STATE IN JULY, 1976

State	Questionnaires		
	Distributed	Returned	Non-Deliverable
Georgia	15	9	0
Kentucky	15	7	2
Tennessee	15	7	2
Virginia	15	9	1
Total	60	32	5

Analyses of the Data

The completed questionnaires were classified and coded according to the type (NABTE or CPS), state (Georgia, Kentucky, Tennessee, or Virginia), and the response (1, 2, 3, 4, or 5) to each of the statements by the investigator and transferred to computer cards by The University of Tennessee Computer Center.

Twenty-two of the 40 questionnaires that were mailed to the 40 NABTE schools, or 55 percent, were returned. After the followup letter was mailed to the colleges which had not responded (See Appendix C), four more questionnaires were returned, making the total number 26, or 65 percent.

Thirty-two of the 60 questionnaires that were mailed to the 60 Certified Professional Secretaries, or 53 percent, were returned. The investigator contacted six Certified Professional Secretaries in Knoxville, Tennessee, and arranged by phone to deliver the questionnaires to them to complete. (See Appendix D) After completion of the questionnaires by these six Certified Professional Secretaries, the total number of responses was 38, or 58 percent. Classifications of the statements for the use of the Chi-Square test were type (NABTE or CPS) and statement response (1, 2, 3, 4, or 5). Computations were based on the expected frequency of each of the five responses (strongly agree, agree, undecided, disagree, and strongly disagree) occurring in the NABTE group and the CPS group. When the expected frequency of a 1 (strongly agree) or 2 (agree) response was less than 5, the cells were combined. When the expected frequency of a 4 (disagree) or 5 (strongly disagree) response was less than 5, the cells were combined. This combining/collapsing of cells resulted in Chi-Square being determined for some of the statements at the .05 level with three degrees of freedom and for other statements at the .05 level with two degrees of freedom.

The analyses of tasks/competencies in typewriting from the survey are presented in Chapter III.

VI. ORGANIZATION OF THE STUDY

The study is presented in the following sequence:

In Chapter I, the introduction, the problem, rationale, definition of terms, limitations of the study, and methods of procedure are presented.

In Chapter II, pertinent research related to the cognitive domain emphases in typewriting is reviewed.

In Chapter III, the analyses of data are presented.

In Chapter IV, the findings, conclusions, and recommendations are presented.

Appendix A contains a bibliography of the task/competency statements sources; Appendix B contains a list of the jury of experts, a copy of the cover letter and questionnaire to the jury of experts; Appendix C contains a listing of the National Association of Business Teacher Education colleges used in this study, copies of the cover letter and questionnaire to the colleges, and the sample follow-up letter; and Appendix D contains a listing of the Certified Professional Secretaries used in this study, copies of the cover letter and questionnaire to the secretaries, and a listing of the Certified Professional Secretaries in Knoxville, Tennessee, included in this study.

CHAPTER II

REVIEW OF RELATED LITERATURE

Benjamin Bloom[1] developed the *Taxonomy of Education Objectives* from which the cognitive domain was introduced to the educational world. Bloom discusses at length the cognitive domain, the hierarchial stages of the cognitive domain, the evaluation of student learning using the cognitive domain, and the illustration of objectives, testing techniques, and sample test items in eleven major subject disciplines and levels.[2]

The question of the degree of "mental activity" involved in skill subjects as well as the question of continuity of the mental processes influencing higher performance levels have been raised by many educators as well as non-educators. Cognition deals with mental activity in that it is the "thinking domain of human behavior."[3] Nellermoe reports that one major influencing factor in achieving a high level of proficiency in a skill activity is cognition.[4]

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[1]Benjamin S. Bloom, ed., *Taxonomy of Educational Objectives, Handbook I: Cognitive Domain*, (New York, New York: David McKay Company, Inc., 1956).

[2]Benjamin S. Bloom, et al. *Handbook on Formative and Summative Evaluation of Student Learning*, (New York, New York: McGraw-Hill Book Company, 1971).

[3]"Assess Student Cognitive Performance, Module D-2," *Professional Vocation Teacher Education Module*, (Columbus, Ohio: The Ohio State University, 1974), pp. 11-14.

[4]Donald A. Nellermoe, "The Role of Cognition in Psychomotor Activities," *The Journal of Business Education*, Vol. 48, (March, 1973), pp. 250-252.

Few typewriting students reach the higher cognitive level typewriting stages because of early contentment of satisfactory accomplishment by the student at whatever level plus a teacher satisfaction of student performance at that level. Nellermoe stresses that "too many teachers continue to seek for assistance for their typewriting students because they minimize the cognitive (knowledge-understanding-information)--or mental aspects."[5] The implementation of cognitive domain course objectives and goals could cause a reversal in cognitive thinking in typewriting and better prepare students for the world of work.

I. RELATED STUDIES

The purpose of this section was to review related theses and dissertations pertaining to cognitive domain research. A comprehensive search was made of the literature published during the past ten years on the subject of the cognitive domain. The major sources utilized for the literature review were the *Business Index*, the *Business Education Index*, the *Dissertation Abstracts*, the *Education Index*, and the *Master's Thesis Abstracts*. Research related to the cognitive domain and business education was very limited.

Hebert Study

The problem of Hebert's[6] study was to answer the question: What are the perceptions and differences in perceptions of business

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[5] *Ibid.*, p. 251.

[6] Margaret Hebert, "Analysis of Competencies Needed by Typewriting Teachers as Perceived by Business Teachers and By Authorities

education authorities and practicing teachers relative to the importance of specified competencies to be demonstrated by the teacher of beginning typewriting?

The population consisted of business education authorities and classroom teachers of beginning typewriting. Reactionaires were given to both groups for their ratings of the competency statements. These compentency statements were generated through the use of a threefold basis: the practitioner's basis, a philosophical basis, and an instructional basis.

Using the Chi-square, significance was determined at the .05 level of the competency statements which were common to the two groups.

The results of the study produced a set of competencies which may be used in initiating a program in Competency-Based Teacher Education in business education for the teacher of beginning typewriting. A profile of the differences in perception of business education authorities and classroom teachers in the Houston Metropolitan area was also obtained from this study.

Hebert's study is related to the present study in that she used a philosophical and instructional basis to identify competency statements as did this researcher. Hebert also used a Likert-style questionnaire to collect the data for the study. The same technique was used by this researcher to collect the data for this study. As in the present study, Hebert used the Chi-square to determine the

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in Business Education," University of Houston (Unpublished Doctoral Dissertation), 1973.

significance at the .05 level of the competency statements which were common to the two groups.

Porreca and Stallard Study

Porreca and Stallard[7] conducted a study to verify and validate common affective domain competencies of students among vocational areas. In order to identify the common affective domain competencies of students among vocational areas, Porreca and Stallard reviewed and elicited common affective domain competencies from publications representing agriculture, business and office, distributive, home economics, and industrial education; verified the elicited common affective domain competencies by submitting the identified competencies to groups of employees, employers, and agriculture, business and office, distributive, home economics, and industrial education teachers; and validated the affective domain competencies by state-level directors of vocational education to determine the degree of commonality.

Porreca and Stallard concluded from their study that state-level directors of vocational education appear to agree that there are common affective domain competencies of students which exist among vocational education areas. They also found that the perceptions among employees, employers, and secondary and area school vocational teachers appear to be similar to the perceptions of state-level directors of vocational education as to what constitutes affective domain competencies.

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[7]Anthony G. Porreca and John J. Stallard, "Common Affective Domain Competencies Among Vocational Students," University of Tennessee (Mini-Grant Research Project), June, 1975.

As in the present study, Porreca and Stallard obtained their competencies from various publications in the vocational areas. The investigator used the verification method of Porreca and Stallard to determine the perceptions of the jury of experts. Data were gathered by Porrecca and Stallard using a Likert-style questionnaire, as did the researcher.

Stencil Study

Stencil[8] conducted a study to determine the effect of educational cognitive style on beginning shorthand performance. The study identified those elements of the educational cognitive style held in common by the highly successful beginning shorthand students. The study also identified those elements held in common by the unsuccessful beginning shorthand students. The differences between the collective cognitive styles of the highly successful and the unsuccessful student groups were also identified in Stencil's study.

Although Stencil's study is not directly related to the present study, it is mentioned because it was the sole study found by the investigator directly relating cognition with a skill subject and business education.

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[8]Carol F. Stencil, "Effects of Educational Cognitive Style on Beginning Shorthand Performance," Michigan State University, (Unpublished Doctoral Dissertation), 1973.

II. COGNITIVE DOMAIN STUDIES IN OTHER FIELDS

The following cognitive domain studies are related to the present study in the methodology of classifying the data into the hierarchial levels of the cognitive domain.

Fast Study

Fast[9] analyzed and classified 12 high school chemistry achievement tests using Bloom's *Taxonomy*. Validation of Fast's ability to classify the chemistry test items was based on the percent of agreement with those of a judging panel.

The study by Fast and the present study are related in that both investigators classified items or statements using Bloom's *Taxonomy* and had the statements validated by a judging panel.

Klein Study

The purpose of Kelin's[10] study was to investigate whether a particular definition of cognitive behaviors could be elicited and detected in children in the age range seven through nine. The definition of cognition used was from Bloom's *Taxonomy*. Content validity was established for the test instrument through the process of asking

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[9]Kenneth V. Fast, "An Analysis of the Twelve ACS-NSTA High School Chemistry Achievement Tests, 1957-1971, Using Bloom's *Taxonomy of Education Objectives Handbook I: Cognitive Domain*," University of Maryland, (Unpublished Doctoral Dissertation), 1972.

[10]Minnie F. Klein, "Evaluation of Instruction: Measurement of Cognitive Behavior as Defined by the *Taxonomy of Educational Objectives*," University of California, Los Angeles (Unpublished Doctoral Dissertation), 1965.

three judges to rate each test item according to the level of cognitive behavior they thought was required for each item.

Klein's study was related to the present study in that both studies used the same definition of the cognitive domain to construct the instruments. Both studies also used judges to verify the instruments.

Pancella Study

Pancella[11] analyzed standardized and commercial tenth grade biology examinations using Bloom's *Taxonomy*. A panel of twelve distinguished judges was used to validate Pancella's competency in classifying the biology test items according to Bloom's *Taxonomy*. A random, proportional sample of 56 items was prepared for the judges to agree or disagree with the classification of the sample.

The Pancella study and the present study are related in that both investigators classified items or statements using Bloom's *Taxonomy* and had the statements verified by a jury of experts.

Winthrow Study

Winthrow's[12] study determined the extent to which the questions written in sixteen southern states' history books that were used on

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[11]John R. Pancella, "Use of the *Taxonomy of Educational Objectives Handbook I: Cognitive Domain* (Bloom) to Analyze and Describe Standardized and Commercial 10th Grade Biology Examinations," University of Maryland, (Unpublished Doctoral Dissertation), 1970.

[12]John Raynor Winthrow, "An Analysis of the Levels of Cognitive Skill Required by the Textbook Questions in Selected State Histories," University of Virginia, (Unpublished Doctoral Dissertation), 1971.

the junior high level contributed to each of the six levels of Bloom's *Taxonomy*. Winthrow categorized each question into any one of the six levels defined by a rating guide based upon the *Taxonomy*.

Winthrow found that the inadequacy of the textbooks at the higher four levels was documented by the fact that only 7.4 percent of the questions were categorized above the comprehension level. A disproportionate loading of questions at the knowledge and comprehension levels as well as scarcity of questions categorized at the application and analysis levels was found.

The Winthrow study and the present study are related in that both investigators classified questions or statements using Bloom's *Taxonomy*.

CHAPTER III

ANALYSES OF TASKS/COMPETENCIES IN TYPEWRITING

The data were based on the responses to questionnaires collected from typing instructors at colleges belonging to the National Association of Business Teacher Education and Certified Professional Secretaries in the states of Georgia, Kentucky, Tennessee, and Virginia. In order to indicate the importance which should be placed on each task/competency listed on the questionnaires, NABTE and CPS respondents were provided five choice value levels: (1) Strongly Agree, (2) Agree, (3) Undecided, (4) Disagree, and (5) Strongly Disagree. A total of 26 NABTE colleges and 38 Certified Professional Secretaries returned questionnaires to the investigator. There were 64 usable questionnaires returned.

The first section of this chapter presents the analyses related to level I--knowledge of the cognitive domain. Other sections in this chapter reflect the analyses of the remaining levels of the cognitive domain--comprehension, application, analysis, synthesis, and evaluation.

The tables show data collected from the NABTE colleges and Certified Professional Secretaries. The Chi-square test was used to determine whether a significant difference at the .05 level existed between the responses of the NABTE colleges and Certified Professional Secretaries on the levels of the cognitive domain being examined.

I. LEVEL I--KNOWLEDGE

Table III includes statements on tasks/competencies which refer to the knowledge aspects of typewriting. NABTE and CPS responses in percentages are reported in the table as well as Chi-square calculations.

Of the 48 knowledge tasks/competencies statements, nine were significantly different at the .05 level. As an example, task/competency 2 is stated as follows: "On the envelope, mailing notations, 'Hold for Arrival,' 'Please Forward,' and 'Personal' are typed three spaces below the return address in all capital letters." Twenty-seven percent of the NABTE respondents strongly agreed that task/competency 2 was important for emphasis in the classroom, whereas only 5 percent of the CPS respondents strongly agreed that task/competency 2 was important on the job. Of the NABTE respondents, 54 percent agreed as compared to 40 percent of CPS respondents; 12 percent of NABTE respondents were undecided while only 5 percent of CPS respondents were undecided; 8 percent of NABTE respondents disagreed, whereas 34 percent of CPS respondents disagreed; and none of the NABTE respondents strongly disagreed with the importance of this task/competency as compared to 16 percent of CPS respondents who strongly disagreed with the task/competency. Eighty-one percent of the NABTE respondents either strongly agreed or agreed with this typewriting task/competency, whereas 50 percent of the CPS respondents either disagreed or strongly disagreed with this typewriting task/competency, resulting in a significant difference in perception of the importance of task/competency 2 between the two groups.

TABLE III

LEVEL I (KNOWLEDGE) TYPEWRITING TASKS/COMPETENCIES AS PERCEIVED BY NABTE AND CPS RESPONDENTS

Tasks/Competencies	Respondents N=64[a]	Response in Percentages					Chi-Square
		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
1. The reference initials are typed even with the left margin a double space below the signature line and title of the writer of the letter.	NABTE	42	54	0	4	0	1.3646
	CPS	34	55	3	5	3	
2. On the envelope, mailing notations, "Hold for Arrival," "Please Forward," and "Personal" are typed three spaces below the return address in all capital letters.	NABTE	27	54	12	8	0	12.5750*
	CPS	5	40	5	34	16	
3. The postscript notation is typed one double space below the reference initials flush with the left margin of a letter.	NABTE	39	46	8	4	4	1.9966
	CPS	24	61	5	8	3	
4. Each footnote itself is singlespaced, but double spacing is used between each footnote.	NABTE	58	39	0	4	0	2.3320
	CPS	40	58	0	3	0	

TABLE III (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
5. If a letter has a carbon copy notation and an enclosure notation, the enclosure notation is typed first.	NABTE	42	50	4	4	0	2.7776
	CPS	26	55	5	8	5	
6. Main headings are typed in all capital letters.	NABTE	50	46	4	0	0	9.9116**
	CPS	16	66	13	5	0	
7. When typing tables, triple space between the main heading and the columnar headings.	NABTE	50	39	4	8	0	8.3334**
	CPS	21	40	18	16	5	
8. In a letter, the notations, "Registered Mail" or "Certified Mail," are typed one double space below the date, beginning at the left margin in all capital letters.	NABTE	19	42	8	23	8	.7198
	CPS	11	53	13	13	11	
9. Figures should be used for page numbers in manuscripts.	NABTE	65	35	0	0	0	6.9803*
	CPS	34	58	8	0	0	

TABLE III (CONTINUED)

Tasks/Compentencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
10. The inside address of a letter should appear not less than four lines spaces below the date line and even with the left margin.	NABTE	27	42	15	12	4	
	CPS	26	40	13	16	5	.3516
11. Side subheadings in a manuscript should be separated from the preceding text by two blank lines.	NABTE	42	54	0	4	0	
	CPS	8	63	18	11	0	14.2541**
12. In typing the title of a book which is printed in italics, the italics may be shown by underscoring.	NABTE	27	73	0	0	0	
	CPS	27	73	0	0	0	.0779
13. All punctuation marks used at the end of a sentence are followed by two spaces.	NABTE	58	35	4	4	0	
	CPS	61	40	0	0	0	3.0411
14. The enclosure notation is typed one double space below the reference initials flush with the left margin of a letter.	NABTE	35	54	8	4	0	
	CPS	29	61	0	11	0	4.0827

TABLE III (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
15. Words can only be divided between syllables; therefore, one-syllable words should never be divided.	NABTE	69	31	0	0	0	.7799
	CPS	70	27	0	3	0	
16. The salutation of a letter is begun at the left margin a double space below the inside address or the attention line.	NABTE	46	46	4	4	0	1.1033
	CPS	34	58	5	3	0	
17. The symbol for indicating that typing material should be in *all capitals* is the ≡.	NABTE	31	54	8	8	0	2.9851
	CPS	16	55	18	0	11	
18. When typing tables, double space between the main heading and secondary heading.	NABTE	23	65	4	8	0	1.5214
	CPS	18	58	8	13	3	
19. In the block style of letters, all lines are typed flush with the left margin.	NABTE	50	42	8	0	0	5.4014
	CPS	26	71	3	0	0	

TABLE III (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
20. In a business letter with mixed punctuation, a colon after the salutation and a comma after the complimentary closing are used.	NABTE	58	39	4	0	0	12.8547**
	CPS	16	76	3	3	3	
21. The length of the underscore of the columnar heading is determined by the longest line in the columnar heading.	NABTE	27	62	8	4	0	1.5986
	CPS	24	55	8	13	0	
22. The attention line of a letter is typed one double space below the inside address beginning with the left margin.	NABTE	35	42	12	12	0	7.3418
	CPS	26	68	5	0	0	
23. Avoid dividing proper nouns, separating initials preceding a name, separating a title from a surname, dividing figures, separating a figure from the abbreviation, symbol, or word with which it is used, or dividing a date.	NABTE	54	42	0	4	0	1.4770
	CPS	63	32	3	0	3	

TABLE III (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
24. The closing line in a modified block style letter is started at the center of the page, matching the date line, a double space below the body of the letter.	NABTE	42	42	8	4	4	
	CPS	13	58	11	13	5	7.3702
25. After a semicolon, space once.	NABTE	40	52	4	4	0	
	CPS	41	51	0	5	3	1.8726
26. The carbon copy notation is typed one double space below the reference initials beginning at the left margin of the letter.	NABTE	31	42	19	4	4	
	CPS	21	66	8	5	0	3.8291
27. Three blank lines are ordinarily left for the pen-written signature on a letter.	NABTE	31	54	8	8	0	
	CPS	16	34	5	29	16	10.2761**
28. The company signature is typed in all capital letters a double space below the complimentary closing in a letter.	NABTE	35	42	4	8	12	
	CPS	13	55	11	18	3	4.6745

TABLE III (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
29. The letters "bcc" represent blind carbon copy.	NABTE	39	54	8	0	0	3.1538
	CPS	32	58	3	8	0	
30. Leaders are spaced periods that lead the eye from one column to the next column.	NABTE	46	46	4	4	0	6.0582
	CPS	24	63	13	0	0	
31. Units of measure, distance, and dimensions are properly expressed in figures.	NABTE	31	58	8	4	0	.5044
	CPS	24	62	11	3	0	
32. There are six vertical lines to an inch.	NABTE	42	50	4	4	0	3.6214
	CPS	26	50	16	5	3	
33. In a manuscript bibliography, the first line of each entry is typed at the left margin and succeeding lines are indented five spaces, single spaced, with a double space between entries.	NABTE	35	58	8	0	0	12.9051**
	CPS	8	50	29	13	0	

TABLE III (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
34. When typing a stencil, turn the typewriter ribbon indicator to white or "S."	NABTE	35	42	12	8	4	1.3896
	CPS	24	57	11	3	5	
35. On the envelope, mailing notations, "Special Delivery," "Certified Mail," and "Registered" are typed in capital letters below the stamp position.	NABTE	27	54	12	4	4	1.6290
	CPS	19	49	16	11	5	
36. Paper that is 8 1/2" wide has 102 elite spaces.	NABTE	54	42	4	0	0	8.3716**
	CPS	27	43	22	3	5	
37. Hyphenated compounds should only be divided between the elements as illustrated by the word "self-perception" which should only be divided at the hyphen.	NABTE	42	50	8	0	0	1.0285
	CPS	37	55	5	3	0	

TABLE III (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
38. The heading for the second page of a letter consists of the name of the addressee, the date, and page number, placed one-inch from the top edge of the paper.	NABTE	31	65	0	4	0	4.5154
	CPS	14	73	8	3	3	
39. Double spacing means leaving one blank line between each two typewritten lines.	NABTE	50	46	4	0	0	6.9113
	CPS	30	57	0	8	5	
40. After a colon used within a sentence, space twice.	NABTE	50	42	8	0	0	6.2034
	CPS	34	61	0	5	0	
41. Avoid division after a one- or two-letter syllable and do not carry only one or two letters of the word to the next typed line or page.	NABTE	54	46	0	0	0	1.5374
	CPS	55	40	3	3	0	

TABLE III (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages					Chi-Square
		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
42. Manuscripts typed in final form are always double spaced except for the quoted material and footnotes.	NABTE	42	46	8	4	0	6.8975
	CPS	14	70	8	8	0	
43. The last word in a paragraph or the last word on a page should not be divided.	NABTE	42	46	12	0	0	5.2032
	CPS	47	50	0	0	3	
44. In one horizontal inch of pica type, there are 10 strokes; there are 12 strokes in one horizontal inch of elite type.	NABTE	46	46	8	0	0	2.9592
	CPS	27	60	11	0	3	
45. If the date of a letter is placed at the center of the paper, the complimentary closing and typed name should also be placed at the center.	NABTE	16	64	4	16	0	3.4484
	CPS	5	53	5	32	5	

TABLE III (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
46. Triple spacing means leaving two blank lines between each two typewritten lines.	NABTE	40	56	4	0	0	5.3505
	CPS	29	50	3	8	11	
47. The subject line of a letter is centered one double space below the salutation or typed even with the left margin.	NABTE	24	64	8	4	0	.6045
	CPS	21	66	5	8	0	
48. When typing tables, double space between the columnar headings and the first line of the columns.	NABTE	31	58	8	4	0	2.6281
	CPS	16	66	8	8	3	

*Significant at the .05 level with two degrees of freedom. (Chi-square = 5.991)

**Significant at the .05 level with three degrees of freedom. (Chi-square = 7.815)

[a]26 respondents were NABTE; 38 respondents were CPS.

Task/competencies 6, 7, 9, 11, 20, 27, 33, and 36 in Table III represent the remaining tasks/competencies at the knowledge level of the cognitive domain in which a significant difference at the .05 level existed in the responses of the NABTE and CPS respondents. As in the example concerning task/competency 2, task/competencies 7, 11, 27, 33, and 36 had a significant difference in the responses by NABTE and CPS respondents due to the agreement of NABTE in their perception of the importance of these tasks/competencies and the disagreement of CPS respondents in their perception of the importance of these tasks/competencies.

Task/competencies 6, 9, 20 and had a significant difference in the responses by NABTE and CPS respondents due to the degree of agreement in their perception of the importance of these tasks/competencies. As an example, task/competency 6 is stated as follows: "Main headings are typed in all capital letters." Fifty percent of the NABTE respondents strongly agreed that task/competency 6 was important for emphasis in the classroom, whereas only 16 percent of the CPS respondents strongly agreed that task/competency 6 was important on the job. Of the NABTE respondents, 46 percent agreed as compared to 66 percent of the CPS respondents who felt that task/competency 6 was important. The significant difference in perception of the importance of task/competency 6 is due to the difference in agreement response (strongly agree or agree) between NABTE and CPS respondents.

Eighteen of the tasks/competencies at the knowledge level received approximately a 90 percent agreement rating by both NABTE and CPS respondents. As an example, task/competency 4 is stated as

follows: "Each footnote itself is singlespaced, but double spacing is used between each footnote." Fifty-eight percent of NABTE respondents strongly agreed, and 39 percent of NABTE respondents agreed with the importance of emphasizing this task/competency, which resulted in 97 percent agreement of NABTE respondents. Forty percent of CPS respondents strongly agreed, and 58 percent agreed with the importance of emphasizing this task/competency, which resulted in 98 percent agreement of CPS respondents.

Tasks/competencies 1, 9, 12, 13, 14, 15, 16, 20, 23, 25, 29, 37, 38, 40, 41, 43, and 44 in Table III represent the remaining tasks/competencies at the knowledge level of the cognitive domain in which approximately 90 percent of the NABTE respondents and approximately 90 percent of CPS respondents agreed as to the importance of these tasks/competencies.

Tasks/competencies 9 and 20 were significantly different at the .05 level in the responses by NABTE and CPS respondents. Both of these tasks/competencies also received an approximate 90 percent agreement rating by the NABTE respondents as well as the CPS respondents. This occurrence was caused by the fact that the tasks/competencies were significantly different because of the degree of difference by the two groups in responding either strongly agree or agree to tasks/competencies 9 and 20.

II. LEVEL II--COMPREHENSION

Table IV includes statements on tasks/competencies which refer to the comprehension aspects of typewriting. NABTE and CPS responses

TABLE IV

LEVEL II (COMPREHENSION) TYPEWRITING TASKS/COMPETENCIES AS PERCEIVED BY NABTE AND CPS RESPONDENTS

Tasks/Competencies	Respondents N=64[a]	Response in Percentages					Chi-Square
		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
1. As indicated by the proof-reading symbols, make all the necessary corrections and type a table from rough-draft form.	NABTE	58	35	4	4	0	2.7872
	CPS	37	50	8	5	0	
2. Using a 6-inch line, today's date, and single spacing, the student will type a memorandum on a half-sheet of paper.	NABTE	27	50	15	8	0	4.7134
	CPS	11	50	16	18	5	
3. The student will type a letter in modified block style with indented paragraphs, open punctuation, and subject line.	NABTE	31	50	12	0	8	6.0093
	CPS	13	50	8	26	3	
4. The student will type the two-columnar tabulation problem setting the left margin at 25 and a tab stop at 50, using a half-sheet of paper and single spacing.	NABTE	8	27	39	27	0	1.3741
	CPS	3	21	37	21	18	

TABLE IV (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
5. The student will type the appropriate salutation for a business letter to Miss Nancy Hall.	NABTE	23	58	8	8	4	3.3213
	CPS	16	76	5	3	0	
6. The student will type a business letter in block style with mixed punctuation.	NABTE	46	42	8	4	0	15.4702**
	CPS	5	68	13	11	3	
7. The student will type a business letter in modified block style, open punctuation, starting the return address on line 12, and using a 60-space line with indented enumerated items.	NABTE	23	31	19	19	8	1.2427
	CPS	3	45	32	18	3	
8. The student will type the items from script using a 50-space line, single spacing items plus double spacing between them, centering the heading in correct style on line 10.	NABTE	8	39	31	19	4	1.6971
	CPS	3	58	18	21	0	

TABLE IV (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
9. Using 40 as the center point, the student will determine the correct placement of the left margin for a writing line of 60 spaces.	NABTE	12	48	20	20	0	.2525
	CPS	8	58	16	16	3	
10. The student will arrange the tabular material by vertical centering to determine top and bottom margins.	NABTE	39	50	8	4	0	4.5122
	CPS	16	63	16	5	0	
11. According to the proofreading marks, the student will make the adjustments and type the material in full-block letter style with open punctuation.	NABTE	20	52	20	8	0	5.2547
	CPS	16	55	5	18	5	

**Significant at the .05 level with three degrees of freedom. (Chi-square = 7.815)

[a]26 respondents were NABTE; 38 respondents were CPS.

in percentages are reported in the table as well as Chi-square calculations.

Of the 11 comprehension tasks/competencies statements, only one was significantly different at the .05 level. Task/competency 6 is stated as follows: "The student will type a business letter in block style with mixed punctuation." Forty-six of the NABTE respondents strongly agreed that task/competency 6 was important for emphasis in the classroom, whereas only 5 percent of the CPS respondents strongly agreed that task/competency 6 was important for emphasis on the job. Of the NABTE respondents, 42 percent agreed as compared to 68 percent of the CPS respondents; 8 percent of NABTE respondents were undecided while 13 percent of CPS respondents were undecided; 4 percent of NABTE respondents disagreed, whereas 11 percent of CPS respondents disagreed; and none of the NABTE respondents strongly disagreed with the importance of this task/competency as compared to 3 percent of CPS respondents who strongly disagreed with the task/competency. Eighty-eight percent of the NABTE respondents either strongly agreed or agreed with this typewriting task/competency, whereas 14 percent of the CPS respondents either disagreed or strongly disagreed with this typewriting task/competency and 13 percent of the CPS respondents were undecided, resulting in a significant difference in perception of the importance of task/competency 6 between the two groups.

Only one of the tasks/competencies at the comprehension level received approximately 90 percent agreement rating by both NABTE and CPS respondents. Task/competency 1 is stated as follows: "As

indicated by the proofreading symbols, make all the necessary corrections and type a table from rough draft." Fifty-eight percent of NABTE respondents strongly agreed, and 35 percent of the NABTE respondents agreed with the importance of emphasizing this task/competency, resulting in 93 percent agreement of NABTE respondents. Thirty-seven percent of CPS respondents strongly agreed, and 50 percent of CPS respondents agreed with the importance of emphasizing this task/competency, resulting in 87 percent agreement of CPS respondents.

III. LEVEL III--APPLICATION

Table V includes statements on tasks/competencies which refer to the application aspects of typewriting. NABTE and CPS responses in percentages are reported in the table as well as Chi-square computations.

Of the 29 application tasks/competencies, ten were significantly different at the .05 level. As an example, task/competency 2 is stated as follows: "Given the parts of a business letter in unarranged order, the student will arrange the parts as they appear properly placed/typed in the business letter." Seventy-three percent of NABTE respondents strongly agreed that task/competency 2 was important in emphasizing in the classroom, whereas only 37 percent of the CPS respondents strongly agreed that task/competency 2 was important in emphasizing on the job. Of the NABTE respondents; 23 percent agreed as compared to 58 percent of the CPS respondents; none of the NABTE and CPS respondents were undecided; 4 percent of NABTE respondents disagreed, whereas none of the CPS respondents disagreed; and none

TABLE V

LEVEL III (APPLICATION) TYPEWRITING TASKS/COMPETENCIES AS PERCEIVED BY NABTE AND CPS RESPONDENTS

Tasks/Competencies	Respondents N=64[a]	Response in Percentages					Chi-Square
		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
1. To make an address file alphabetically by state and city, the student will type names and addresses on 3 x 5 cards in proper form.	NABTE	27	50	12	12	0	2.7676
	CPS	13	58	8	16	5	
2. Given the parts of a business letter in unarranged order, the student will arrange the parts as they appear properly placed/typed in the business letter.	NABTE	73	23	0	4	0	8.2747*
	CPS	37	58	0	0	5	
3. Given accompanying tables, the student will insert and set-up the tables within a business letter.	NABTE	62	31	0	8	0	7.7961
	CPS	29	47	8	16	0	
4. Using a half-sheet of paper, a 50-space line, and single spacing, the student will type a memorandum.	NABTE	31	46	19	4	0	6.5159
	CPS	8	55	24	11	3	

TABLE V (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi Square
5. From the unarranged data, the student will type an original and two carbon copies of an annotated bibliography to accompany a left-bound manuscript.	NABTE	35	54	4	8	0	12.2577**
	CPS	5	55	21	11	8	
6. Given the necessary information, the student will type a purchase order form.	NABTE	35	50	8	8	0	2.1926
	CPS	32	63	3	0	3	
7. The student will type a business letter using block style and supplying appropriate punctuation based on the instructor's directions.	NABTE	62	35	4	0	0	7.4679
	CPS	29	66	3	3	0	
8. Given an initial draft of handwritten material for a one-page typewritten report which is both narrative and statistical in nature, the student will type the report using any generally accepted style.	NABTE	58	39	0	4	0	8.7233**
	CPS	24	58	5	11	3	

TABLE V (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
9. In unbound manuscript style, the student will type a manuscript, single spacing enumerated items and indenting five spaces from each margin.	NABTE	35	58	4	4	0	13.5931**
	CPS	8	46	32	14	0	
10. Given an initial draft, handwritten material for a one-page business letter, the student will type the letter using any generally accepted style and punctuation.	NABTE	54	46	0	0	0	7.2497
	CPS	24	68	3	5	0	
11. Given a two-page letter, the student will type an appropriate heading for a second page.	NABTE	69	31	0	0	0	8.3912**
	CPS	37	47	3	11	3	
12. In a business letter containing a postscript, the student will correctly type and place the postscript.	NABTE	42	50	4	0	4	1.4485
	CPS	29	58	5	5	3	

TABLE V (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
13. The student will type a memorandum in correct form centering vertically and horizontally the listed items within the body.	NABTE	44	24	12	16	4	9.8479**
	CPS	24	63	3	11	0	
14. From handwritten copy, the student will type an agenda, centering vertically and double spacing.	NABTE	31	50	4	15	0	3.6797
	CPS	16	50	16	11	8	
15. From the facts given concerning the title, author, and date, the student will prepare a title page for a leftbound manuscript.	NABTE	50	46	0	4	0	11.0508**
	CPS	16	63	16	5	0	
16. From an uncorrected typewritten copy, the student will type a speech in final form making all the necessary changes for accuracy in spelling, punctuation, grammar, and mechanics.	NABTE	27	27	27	19	0	7.1815
	CPS	26	50	5	13	5	

TABLE V (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
17. Given the necessary information and form to type a warranty deed, the student will type a warranty deed on legal-size paper.	NABTE	42	42	12	4	0	7.3601
	CPS	13	63	21	3	0	
18. Given a listing, the student will type the items on a half-sheet of paper using double spacing and centering the problem vertically and each line horizontally.	NABTE	23	58	4	12	4	17.3450**
	CPS	11	18	32	32	8	
19. In a tabulation problem containing a source note, the student will correctly type and document the source note based on an appropriate, accepted style.	NABTE	31	58	4	8	0	7.1098
	CPS	13	61	24	3	0	
20. From a rough draft table, the student will prepare a ruled table containing three columns of tabulated material.	NABTE	35	54	4	8	0	3.5658
	CPS	21	63	13	3	0	

TABLE V (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
21. Based on previous learning, the student will type a business letter using any generally accepted letter style and any generally accepted punctuation style.	NABTE	46	50	4	0	0	4.4581
	CPS	24	66	5	5	0	
22. Given dictation of a letter at the typewriter, the student will arrange and type the letter in the prescribed style, erase and correct neatly all typing errors and proofread.	NABTE	27	46	12	12	4	2.3555
	CPS	24	55	3	11	8	
23. Given motions, reports, and resolutions to be presented at a board meeting, the student will prepare a typed copy to be distributed to the board members.	NABTE	19	58	4	19	0	6.1998
	CPS	13	82	3	3	0	
24. Using a 50-space line, single spaced paragraphs, and a centered heading, the student will center an announcement on a half-sheet.	NABTE	27	46	15	12	0	.4162
	CPS	3	63	21	11	3	

TABLE V (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentage: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
25. For a letter to be duplicated, the student will prepare the material as a model from which a master can be typed.	NABTE	31	50	8	12	0	6.7415
	CPS	18	74	8	0	0	
26. Given the parts (date, from, to, and subject) of a memorandum, the student will arrange and type the parts in an acceptable style.	NABTE	50	46	0	4	0	7.8757**
	CPS	18	76	3	3	0	
27. Using a rough draft, the student will type a two-page manuscript in top-bound form.	NABTE	32	56	12	0	0	10.0479**
	CPS	5	66	18	8	3	
28. Given book titles, the student will center each one horizontally on the page and allow six vertical spaces between the titles.	NABTE	8	28	32	32	0	1.0913
	CPS	3	28	45	16	8	

TABLE V (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages					Chi-Square
		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
29. Using the correct proof-reading symbols to denote errors, the student will proof-read a business letter and retype the business letter making the necessary corrections.	NABTE	39	39	12	12	0	6.2736
	CPS	32	61	0	5	3	

*Significant at the .05 level with two degrees of freedom. (Chi-square = 5.991)

**Significant at the .05 level with three degrees of freedom. (Chi-square = 7.815)

[a]26 respondents were NABTE; 38 respondents were CPS.

of the NABTE respondents strongly disagreed with the importance of this task/competency as compared to 5 percent of CPS respondents who strongly disagreed with this task/competency. The significant difference in perception of the importance of task/competency 2 is due to the difference in agreement response (strongly agree or agree) between NABTE and CPS respondents.

Tasks/competencies 5, 8, 9, 11, 13, 15, 18, 26, and 27 in Table V represent the remaining tasks/competencies at the application level of the cognitive domain in which a significant difference at the .05 level existed in the responses of the NABTE and CPS respondents. As in the example concerning task/competency 2, tasks/competencies 15 and 26 had a significant difference in the responses by NABTE and CPS due to the degree of agreement (strongly agree or agree) in their perception of the importance of the tasks/competencies.

Tasks/competencies 5, 8, 9, 11, 18, and 27 had a significant difference in the responses by NABTE and CPS due to the agreement of NABTE in their perception of the importance of these tasks/competencies and the disagreement of CPS respondents in their perception of the importance of these tasks/competencies. As an example, task/competency 5 is stated as follows: "From the unarranged data, the student will type an original and two carbon copies of an annotated bibliography to accompany a left-bound manuscript." Thirty-five percent of NABTE respondents strongly agreed that task/competency 5 was important in emphasizing in the classroom, whereas only 5 percent of the CPS respondents strongly agreed that task/competency 5 was important in emphasizing on the job. Of the NABTE

respondents, 54 percent agreed as compared to 55 percent of the CPS respondents; 4 percent of NABTE respondents were undecided while 21 percent of the CPS respondents were undecided; 8 percent of NABTE respondents disagreed, whereas 11 percent of CPS respondents disagreed; none of the NABTE respondents strongly disagreed with the importance of this task/competency as compared to 8 percent of CPS respondents who strongly disagreed with this task/competency. The significant difference in perception of the importance of task/competency 5 is due to the agreement of NABTE and the disagreement of CPS as to the importance of task/competency 5.

Task/competency 13 is the only application statement in which the significant difference results from the agreement of CPS respondents in their perception of the importance of this task/competency and the disagreement of NABTE in their perception of the importance of this task/competency. Task/competency 13 is stated as follows: "The student will type a memorandum in correct form centering vertically and horizontally the listed items within the body." Fourty-four percent of the NABTE respondents strongly agreed that task/competency 13 was important in emphasizing in the classroom, whereas only 24 percent of the CPS respondents strongly agreed that task/competency 13 was important in emphasizing on the job. Of the NABTE respondents, 24 percent agreed as compared to 63 percent of the CPS respondents; 12 percent of NABTE respondents were undecided while 3 percent of the CPS respondents were undecided; 16 percent of NABTE respondents disagreed, whereas 11 percent of CPS respondents disagreed; and 4 percent of NABTE strongly disagreed with the importance of this task/competency

as compared to none of CPS respondents who strongly disagreed with this task/competency.

Six of the tasks/competencies at the application level had approximately a 90 percent agreement rating by both NABTE and CPS respondents. As an example, task/competency 7 is stated as follows: "The student will type a business letter using block style and supplying appropriate punctuation based on the instructor's direction." Sixty-two percent of NABTE respondents strongly agreed, and 35 percent of NABTE respondents agreed with the importance of emphasizing this task/competency, resulting in 97 percent agreement of NABTE respondents. Twenty-nine percent of CPS respondents strongly agreed, and 66 percent of CPS respondents agreed with the importance of emphasizing this task/competency, resulting in 95 percent agreement of CPS respondents.

Tasks/competencies 2, 10, 12, 21, and 26 in Table V represent the remaining tasks/competencies at the application level of the cognitive domain in which approximately 90 percent of the NABTE respondents and approximately 90 percent of the CPS respondents agreed as to the importance of these tasks/competencies.

IV. LEVEL IV--ANALYSIS

Table VI includes statements on tasks/competencies which refer to the analysis aspects of typewriting. NABTE and CPS responses in percentages are reported in the table as well as Chi-square calculations.

Of the ten analysis tasks/competencies, none were significantly different at the .05 level in the responses obtained from the NABTE and CPS respondents.

TABLE VI

LEVEL IV (ANALYSIS) TYPEWRITING TASKS/COMPETENCIES AS PERCEIVED BY NABTE AND CPS RESPONDENTS

Tasks/Competencies	Respondents N=64[a]	Response in Percentages					Chi-Square
		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
1. From an old contract, the student will edit the unnecessary parts, update the contract, and retype the contract.	NABTE	31	42	19	8	0	5.8257
	CPS	13	53	11	16	8	
2. Given a statistical report, the student will determine the inaccuracies and retype the report.	NABTE	42	42	8	8	0	7.4931
	CPS	18	37	16	24	5	
3. From a detailed tabulation concerning monthly sales, the student will identify the highest sales for each month and list them accordingly in typewritten form.	NABTE	23	39	12	27	0	6.0853
	CPS	11	55	24	11	0	
4. Given a rough draft of a letter which is filled with repetitions and unnecessary words, the student will read, edit, and retype the letter eliminating the redundant material.	NABTE	35	54	12	0	0	2.3163
	CPS	34	50	8	8	0	

TABLE VI (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
5. Given a business letter, the student will identify all punctuation and grammatical errors, correct them, and retype the business letter.	NABTE	54	39	4	4	0	1.7161
	CPS	50	45	0	3	3	
6. Given a typed manuscript, the student will proofread and indicate all needed corrections and retype the manuscript.	NABTE	54	35	4	8	0	5.8608
	CPS	26	47	16	8	3	
7. From the notes of a board meeting, the student will edit and type the minutes.	NABTE	27	54	15	4	0	1.9438
	CPS	18	53	16	11	3	
8. From the typewritten draft of a book review, the student will condense the review into a one-page, typewritten summary.	NABTE	8	35	23	31	4	.2443
	CPS	11	34	26	16	13	

TABLE VI (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages					Chi-Square
		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
9. From a handwritten message, the student will condense and type a fullrate telegram.	NABTE	12	60	20	4	4	.5405
	CPS	13	66	13	0	8	
10. From the rough draft copy, the student will edit a manuscript and type it in an unbound manuscript format.	NABTE	28	60	8	4	0	5.6299
	CPS	11	55	24	5	5	

[a]26 respondents were NABTE; 38 respondents were CPS.

Only one of the tasks/competencies at the analysis level received a 90 percent agreement rating by both NABTE and CPS respondents. Task/competency 5 is stated as follows: "Given a business letter, the student will identify all punctuation and grammatical errors, correct them, and retype the business letter." Fifty-four percent of NABTE respondents strongly agreed, and 39 percent of NABTE respondents agreed with the importance of emphasizing this task/competency, resulting in 93 percent agreement of NABTE respondents. Fifty percent of CPS respondents strongly agreed, and 45 percent of CPS respondents agreed with the importance of emphasizing this task/competency, resulting in 95 percent agreement of CPS respondents.

V. LEVEL V--SYNTHESIS

Table VII includes statements on tasks/competencies which refer to the synthesis aspects of typewriting. NABTE and CPS responses in percentages are reported in the table as well as Chi-square calculations.

Of the 15 synthesis tasks/competencies statements, three were significantly different at the .05 level. As an example, task/competency 12 is stated as follows: "Using the data given concerning the ordering of goods, the students will construct and type a letter requesting the shipment of such goods." Thirty-five percent of the NABTE respondents strongly agreed that task/competency 12 was important in emphasizing in the classroom, whereas 18 percent of the CPS respondents strongly agreed that task/competency 12 was important

TABLE VII

LEVEL V (SYNTHESIS) TYPEWRITING TASKS/COMPETENCIES AS PERCEIVED BY NABTE AND CPS RESPONDENTS

Tasks/Competencies	Respondents N=64[a]	Response in Percentages					Chi-Square
		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
1. From a handwritten note, the student will compose and type a letter, arranging within the letter an enumerated listing.	NABTE	58	35	4	4	0	4.1643
	CPS	34	61	3	3	0	
2. Given the necessary information, the student will design and type a form letter for acknowledging manuscripts and enclosures to be included in the office procedures manual.	NABTE	32	36	12	20	0	3.5388
	CPS	16	58	8	16	3	
3. From a random listing, the student will create and type a table arranging the material in alphabetical order by author in proper tabulation form.	NABTE	42	39	8	8	4	3.8221
	CPS	21	61	8	8	3	

TABLE VII (CONTINUED)

Tasks/Competencies	Respondents N-64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
4. Given business forms, copies of manuscripts, tabulated reports, or outlines, the student will arrange and type the problems, erase and correct neatly all typing errors, proofread, and determine whether the work is acceptable.	NABTE	65	35	0	0	0	11.4378**
	CPS	29	47	11	13	0	
5. In order to indicate the content of a memorandum, the student will compose and type an appropriate subject line.	NABTE	23	69	0	8	0	1.5355
	CPS	18	68	5	8	0	
6. In a tabulation problem containing a main heading requiring two lines, the student will decide where the main heading should be divided to correctly place the heading and will then type the table.	NABTE	46	50	0	4	0	2.6771
	CPS	29	66	3	3	0	
7. From a handwritten report, the student will compile the facts into an organized tabular form and type.	NABTE	39	50	4	8	0	5.0650
	CPS	16	63	13	8	0	

TABLE VII (CONTINUED)

Tasks/Competencies	Respondents N-64[a]	Response in Percentages					Chi-Square
		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
8. From a rough draft message, the student will develop and type a business form letter.	NABTE	35	42	12	12	0	3.5791
	CPS	21	66	8	3	3	
9. In response to routine company correspondence, the student will compose and type reply letters.	NABTE	31	58	12	0	0	4.8789
	CPS	26	71	0	3	0	
10. Using a daily employee attendance report as a guide, the student will design and type a quarterly employee attendance report.	NABTE	12	40	28	20	0	7.2143*
	CPS	5	74	5	8	8	
11. From a list of honor students, the student will compose a congratulatory letter at the typewriter to one of the honor students.	NABTE	8	58	12	19	4	1.8703
	CPS	13	53	21	8	5	

TABLE VII (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
12. Using the data given concerning the ordering of goods, the student will construct and type a letter requesting the shipment of such goods.	NABTE	35	35	15	15	0	12.3332**
	CPS	18	74	8	0	0	
13. Given a number of form letters to revise, the student will categorize the paragraphs to put them in logical sequence and retype the form letters.	NABTE	15	42	23	19	0	3.2231
	CPS	11	68	14	5	3	
14. Given the minutes of a meeting of the board of directors, the student will summarize in typewritten form the discussion in memorandum form.	NABTE	19	31	19	31	0	1.8893
	CPS	5	29	32	26	8	

TABLE VII (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages					Chi-Square
		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
15. Using a detailed tabulation concerning monthly sales, the student will reconstruct the material into a chart to show the highest sales per month and retype the chart accordingly.	NABTE	16	32	28	16	8	4.3809
	CPS	13	61	16	5	5	

*Significant at the .05 level with two degrees of freedom. (Chi-square = 5.991)

**Significant at the .05 level with three degrees of freedom. (Chi-square = 7.815

[a]26 respondents were NABTE; 38 respondents were CPS.

in emphasizing on the job. Of the NABTE respondents, 35 percent agreed as compared to 74 percent of CPS respondents; 15 percent of NABTE respondents were undecided while 8 percent of CPS respondents were undecided; 15 percent of NABTE respondents disagreed, whereas none of the CPS respondents disagreed; and none of the respondents of either group responded strongly disagreed to task/competency 12. Ninety-two percent of CPS respondents either strongly agreed or agreed with this task/competency, whereas 15 percent of NABTE disagreed and 15 percent of NABTE were undecided concerning the importance of this task/competency, resulting in a significant difference in perception of the importance of the task/competency between the two groups.

Tasks/competencies 4 and 10 in Table VII represent the remaining tasks/competencies at the synthesis level of the cognitive domain in which a significant difference at the .05 level existed in the responses of the NABTE and CPS respondents. As in the example concerning task/competency 12, task/competency 10 had a significant difference in the responses by NABTE and CPS respondents due to the agreement of CPS respondents in the importance of this task/competency and the disagreement of NABTE respondents in their perception of the importance of this task/competency.

Task/competency 4 is the only synthesis statement in which the significant difference results from the agreement of NABTE in their perception of the importance of this task/competency and the disagreement of CPS respondents in their perception of the importance of this task/competency. Task/competency 4 is stated as follows:

"Given business forms, copies of manuscripts, tabulated reports, or outlines, the student will arrange and type the problems, erase and correct neatly all typing errors, proofread, and determine whether the work is acceptable." One hundred percent of the NABTE respondents either strongly agreed or agreed with this typewriting task/competency, and 13 percent of the CPS respondents disagreed and 11 percent were undecided with this typewriting task/competency, resulting in a significant difference in perception of the importance of task/competency 4 between the two groups.

Two of the tasks/competencies at the synthesis level received approximately a 90 percent agreement rating by both NABTE and CPS respondents. As an example, task/competency 1 is stated as follows: "From a handwritten note, the student will compose and type a letter, arranging within the letter an enumerated listing." Fifty-eight percent of NABTE respondents strongly agreed, and 35 percent of NABTE respondents agreed with the importance of emphasizing this task/competency, resulting in 93 percent agreement of NABTE respondents. Thirty-four percent of CPS respondents strongly agreed, and 61 percent of CPS respondents agreed with the importance of emphasizing this task/competency, resulting in 95 percent agreement of CPS respondents.

Number 6 in Table VII represents the remaining task/competency at the synthesis level of the cognitive domain in which approximately 90 percent of the NABTE respondents and approximately 90 percent of the CPS respondents agreed as to the importance of these tasks/competencies.

VI. LEVEL VI--EVALUATION

Table VIII includes statements on tasks/competencies which refer to the evaluation aspects of typewriting. NABTE and CPS responses in percentages are reported in the table as well as Chi-square computations.

Of the seven evaluation tasks/competencies, one was significantly different at the .05 level. Task/competency 3 is stated as follows: "The student will set up unarranged tabulated material so that it is attractively and evenly placed within the report, making the decisions about spacing between columns before typing." Seventy-three percent of the NABTE respondents strongly agreed that task/competency 3 was important in emphasizing in the classroom, whereas 40 percent of the CPS respondents strongly agreed that task/competency 3 was important in emphasizing on the job. Of the NABTE respondents, 23 percent agreed as compared to 53 percent of the CPS respondents; none of the NABTE were undecided while 5 percent of the CPS respondents were undecided; 4 percent of the NABTE respondents disagreed, whereas 3 percent of the CPS respondents disagreed; and none of the respondents of either group responded strongly disagreed to task/competency 3. The significant difference in perception of the importance of task/competency 3 is due to the difference in agreement response (strongly agree or agree) between NABTE and CPS respondents.

Two of the tasks/competencies at the evaluation level received approximately a 90 percent agreement rating by both NABTE and CPS respondents. As an example, task/competency 7 is stated as follows: "Given a two-page letter, the student will type the letter supplying

TABLE VIII

LEVEL VI (EVALUATION) TYPEWRITING TASKS/COMPETENCIES AS PERCEIVED BY NABTE AND CPS RESPONDENTS

Tasks/Competencies	Respondents N=64[a]	Response in Percentages					Chi-Square
		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
1. Given an inbasket situation containing several different jobs, the student will evaluate and list in sequence the priority in which the items should be handled and will then type the jobs.	NABTE	65	19	8	4	4	2.0387
	CPS	68	26	3	3	0	
2. Given a number of form letters, the student will compare and contrast the form letters before duplicating them as company standard forms to be sure that they are not replicates and then will retype them.	NABTE	40	16	32	12	0	3.8101
	CPS	24	37	26	8	5	
3. The student will set up unarranged tabulated material so that it is attractively and evenly placed within the report, making the decisions about spacing between columns before typing.	NABTE	73	23	0	4	0	8.0418**
	CPS	40	53	5	3	0	

TABLE VIII (CONTINUED)

Tasks/Competencies	Respondents N=64[a]	Response in Percentages: Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Chi-Square
4. Given a typewritten report, the student will determine the major points in the report and decide how to develop the report into tabular form and then type.	NABTE	23	35	27	15	0	1.9548
	CPS	11	37	32	18	3	
5. Given unarranged data for headings, the student will decide how each should appear at the beginning of a statement of 8 1/2" x 11" paper and will then type the statements.	NABTE	23	39	27	8	4	2.0784
	CPS	11	49	24	14	3	
6. Given a typed business letter, the student will evaluate the letter as to its mailability and retype if necessary.	NABTE	54	31	8	8	0	5.5450
	CPS	26	58	8	8	0	
7. Given a two-page letter, the student will type the letter supplying any needed punctuation and decide where to end page 1 and begin page 2.	NABTE	50	42	4	4	0	6.0850
	CPS	32	68	0	0	0	

**Significant at the .05 level with three degrees of freedom. (Chi-square = 7.815)

[a]26 respondents were NABTE; 38 respondents were CPS.

any needed punctuation and decide where to end page 1 and continue page 2." Fifty percent of NABTE respondents strongly agreed, and 42 percent of NABTE respondents agreed with the importance of emphasizing this task/competency, resulting in 92 percent agreement of NABTE respondents. Thirty-two percent of CPS respondents strongly agreed, and 68 percent of CPS respondents agreed with the importance of emphasizing this task/competency, resulting in 100 percent agreement of CPS respondents.

Number 3 in Table VIII represents the remaining task/competency at the evaluation level of the cognitive domain in which approximately 90 percent of the NABTE respondents and approximately 90 percent of CPS respondents agreed as to the importance of this task/competency.

CHAPTER IV

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this chapter is to present the findings, conclusions, recommendations resulting from the survey of National Association of Business Teacher Education colleges and Certified Professional Secretaries in Georgia, Kentucky, Tennessee, and Virginia.

The problem of this study was to determine the relationship of cognitive domain typewriting classroom tasks to cognitive domain typewriting office tasks. In order to delineate the relationship, it was necessary to seek answers to the following questions:

1. What are cognitive domain typewriting tasks?

2. What is the emphasis on cognitive domain typewriting tasks in post-secondary level typewriting instruction?

3. What is the emphasis on cognitive domain typewriting tasks in business offices?

Questionnaires were distributed to 40 National Association of Business Teacher Education colleges and 60 Certified Professional Secretaries in Georgia, Kentucky, Tennessee, and Virginia. A follow-up letter was sent to the NABTE colleges who had not returned the questionnaires. Twenty-six respondents in the 40 NABTE colleges completed the questionnaires; whereas 32 respondents of the 60 Certified Professional Secretaries completed the questionnaires, plus an additional 6 Certified Professional Secretaries in Knoxville,

Tennessee, making the total number of CPS respondents 38. The Chi-square test at the .05 level was used to determine whether a significant difference existed between the NABTE colleges responses and the CPS responses to the typewriting tasks/competencies statements.

I. FINDINGS

The first section of this chapter reflects the composite findings related to level I--knowledge of the cognitive domain. Other sections in this chapter reflect the findings of the remaining levels of the cognitive domain--comprehension, application, analysis, synthesis, and evaluation.

Level I--Knowledge

Major findings in this survey relating to level I--knowledge of the cognitive domain were as follows:

1. Forty-eight knowledge typewriting tasks/competencies were identified by the investigator and verified by the jury of experts. Table III (page 23) includes all 48 knowledge typewriting tasks/competencies.

2. Nine of the 48 knowledge tasks/competencies were significantly different in the responses obtained from NABTE and CPS respondents. These nine statements are as follows:

   A. On the envelope, mailing notations, "Hold for Arrival," "Please Forward," and "Personal" are typed three spaces below the return address in all capital letters.

   B. Main headings are typed in all capital letters.

C. When typing tables, triple space between the main heading and the columnar headings.

D. Figures should be used for page numbers in manuscripts.

E. Side subheadings in a manuscript should be separated from the preceding text by two blank lines.

F. In a business letter with mixed punctuation, a colon after the salutation and a comma after the complimentary closing are used.

G. Three blank lines are ordinarily left for the pen-written signature on a letter.

H. In a manuscript bibliography, the first line of each entry is typed at the left margin and succeeding lines are indented five spaces, single spaced, with a double space between entries.

I. Paper that is 8 1/2" wide has 102 elite spaces.

3. The nine knowledge typewriting tasks/competencies in which the NABTE and CPS respondents differed significantly in their responses are format-oriented tasks/competencies which deal with several diverse areas of typewriting (envelopes, tables, manuscripts, etc.).

4. Of the nine knowledge typewriting tasks/competencies in which the NABTE and CPS respondents significantly differed in their responses, six of these tasks/competencies were significantly different due to the agreement of NABTE in their perception of the importance of these tasks/competencies and the disagreement of CPS

respondents in their perception of the importance of these tasks/competencies.

5. Of the nine knowledge typewriting tasks/competencies in which the NABTE and CPS respondents significantly differed in their responses, three of these tasks/competencies were significantly different due to the difference in agreement response (strongly agree or agree) between the NABTE and CPS respondents.

6. Eighteen of the 48 tasks/competencies at the knowledge level received approximately a 90 percent agreement rating by both NABTE and CPS respondents.

Level II--Comprehension

Major findings in this survey relating to level II--comprehension of the cognitive domain were as follows:

1. Eleven comprehension typewriting tasks/competencies were identified by the investigator and verified by the jury of experts. Table IV (page 36) includes all 11 comprehension typewriting tasks/competencies.

2. One of the 11 comprehension tasks/competencies was significantly different in the responses obtained from NABTE and CPS respondents. This statement is as follows:

A. The student will type a business letter in block style with mixed punctuation.

3. In the comprehension typewriting task/competency in which the NABTE and CPS respondents significantly differed in their responses, the significant difference was due to the agreement of NABTE

and the disagreement of CPS respondents in their perceptions of the importance of this task competency.

4. One of the 11 tasks/competencies at the comprehension level received approximately a 90 percent agreement rating by both NABTE and CPS respondents.

Level III--Application

Major findings in this survey relating to level III--application of the cognitive domain were as follows:

1. Twenty-nine application typewriting tasks/competencies were identified by the investigator and verified by the jury of experts. Table V (page 41) includes all 29 application typewriting tasks/competencies.

2. Ten of the 29 application tasks/competencies were significantly different in the responses obtained from NABTE and CPS respondents. These statements are as follows:

A. Given the parts of a business letter in unarranged order, the student will arrange the parts as they appear properly placed/typed in the business letter.

B. From the unarranged data, the student will type an original and two carbon copies of an annotated bibliography to accompany a leftbound manuscript.

C. Given an initial draft of handwritten material for a one-page typewritten report which is both narrative and statistical in nature, the student will type the report using any generally accepted style.

D. In unbound manuscript style, the student will type a manuscript, single spacing enumerated items and indenting five spaces from each margin.

E. Given a two-page letter, the student will type an appropriate heading for the second page.

F. The student will type a memorandum in correct form centering vertically and horizontally the listed items within the body.

G. From the facts given concerning the title, author, and date, the student will prepare a title page for a left-bound manuscript.

H. Given a listing, the student will type the items on a half-sheet of paper using double spacing and centering the problem vertically and each line horizontally.

I. Given the parts (date, from, to, and subject) of a memorandum, the student will arrange and type the parts in an acceptable style.

J. Using a rough draft, the student will type a two-page manuscript in top-bound form.

3. Of the ten application typewriting tasks/competencies in which the NABTE and CPS respondents differed significantly in their responses, two were concerned with typing manuscripts, two were concerned with typing letters, and two were concerned with typing memorandums. The remaining four application typewriting tasks/competencies in which the NABTE and CPS respondents differed significantly in their responses dealt with unrelated typewriting tasks (title page, bibliography, etc.).

4. Of the ten application typewriting tasks/competencies in which the NABTE and CPS respondents significantly differed in their responses, six of these tasks/competencies were significantly different due to the agreement of NABTE in their perception of the importance of these tasks/competencies and the disagreement of CPS respondents in their perception of the importance of these tasks/competencies. One of the ten application typewriting tasks/competencies was significantly different due to the agreement of CPS respondents in their perception of the importance of the task/competency and the disagreement of NABTE respondents in their perception of the importance of the task/competency.

5. Of the ten application typewriting tasks/competencies in which the NABTE and CPS respondents significantly differed in their responses, three of these tasks/competencies were significantly different due to the difference in agreement response (strongly agree or agree) between the NABTE and CPS respondents.

6. Six of the 29 tasks/competencies at the application level received approximately a 90 percent agreement rating by both NABTE and CPS respondents.

Level IV--Analysis

Major findings in this survey relating to level IV--analysis of the cognitive domain were as follows:

1. Ten analysis typewriting tasks/competencies were identified by the investigator and verified by the jury of experts. Table VI (page 52) includes all ten analysis typewriting tasks/competencies.

2. None of the ten analysis tasks/competencies were significantly different in the responses obtained from NABTE and CPS respondents.

3. One of the ten tasks/competencies at the analysis level received approximately a 90 percent agreement rating by both NABTE and CPS respondents.

Level V--Synthesis

Major findings in this survey relating to level V--synthesis of the cognitive domain were as follows:

1. Fifteen synthesis typewriting tasks/competencies were identified by the investigator and verified by the jury of experts. Table VII (page 56) includes all 15 synthesis typewriting tasks/competencies.

2. Three of the 15 synthesis tasks/competencies were significantly different in the responses obtained from NABTE and CPS respondents. These statements are as follows:

A. Given business forms, copies of manuscripts, tabulated reports, or outlines, the student will arrange and type the problems, erase and correct neatly all typing errors, proofread, and determine whether the work is acceptable.

B. Using a daily employee attendance report as a guide, the student will design and type a quarterly employee attendance report.

C. Using the data given concerning the ordering of goods, the student will construct and type a letter requesting the shipment of such goods.

3. The three synthesis typewriting tasks/competencies in which the NABTE and CPS respondents differed significantly in their responses dealt with diverse aspects of typewriting.

4. One of the three synthesis typewriting tasks/competencies in which the NABTE and CPS respondents differed significantly was due to the agreement of NABTE respondents in their perception of the importance of the task/competencies and the disagreement of CPS respondents in their perception of the importance of the task/competencies. Two of the three synthesis typewriting tasks/competencies in which the NABTE and CPS respondents differed significantly was due to the agreement of CPS respondents in their perception of the importance of the task/competency and the disagreement of NABTE respondents in their perception of the importance of the task/competency.

5. Two of the 15 tasks/competencies at the synthesis level received approximately a 90 percent agreement rating by both NABTE and CPS respondents.

Level VI--Evaluation

Major findings in this survey relating to level VI--evaluation of the cognitive domain were as follows:

1. Seven evaluation typewriting tasks/competencies were identified by the investigator and verified by the jury of experts. Table VIII (page 64) includes all seven evaluation typewriting tasks/competencies.

2. One of the seven evaluation tasks/competencies was significantly different in the responses obtained from NABTE and CPS respondents. This statement is as follows:

A. The student will set up unarranged tabulated material so that it is attractively and evenly placed within the report, making the decisions about spacing between columns before typing.

3. In the evaluation typewriting task/competency in which the NABTE and CPS respondents significantly differed in their responses, the significant difference was due to the difference in agreement responses (strongly agree or agree) between the NABTE and CPS respondents.

4. Two of the seven tasks/competencies at the evaluation level received approximately a 90 percent agreement rating by both NABTE and CPS respondents.

II. COMPREHENSIVE FINDINGS

Major findings in this survey relating to all levels of the cognitive domain were as follows:

1. Of the 120 typerwiting tasks/competencies, 24, or 20 percent were significantly different at the .05 level in responses by NABTE and CPS respondents.

2. Of the 120 typewriting tasks/competencies, 30, or 25 percent were given an approximate 90 percent or better agreement rating by both NABTE and CPS respondents.

III. CONCLUSIONS

The following conclusions were reached on the basis of the surveying of 26 National Association of Business Teacher Education

colleges and 38 Certified Professional Secretaries in Georgia, Kentucky, Tennessee, and Virginia:

1. NABTE and CPS respondents basically agreed in their responses to the importance or emphasis which should be placed on the 48 knowledge tasks/competencies. This conclusion is based on the following findings.

A. Only nine, or 19 percent, of the 48 knowledge tasks/competencies were significantly different in the responses obtained from NABTE and CPS respondents.

B. Eighteen, or 38 percent, of the 48 knowledge tasks/competencies received approximately a 90 percent agreement rating by both NABTE and CPS respondents.

2. In the nine knowledge typewriting tasks/competencies in which the NABTE and CPS respondents differed significantly in their responses, there was a substantial amount of disagreement in perceptions between the groups. This conclusion is based on the finding that six, or 74 percent, of the nine knowledge tasks/competencies were significantly different due to the agreement of NABTE in their perception of the importance of these tasks/competencies and the disagreement of CPS respondents in their perception of the importance of these tasks/competencies.

3. NABTE and CPS respondents basically agreed in their responses to the importance or emphasis which should be placed on the 11 comprehension tasks. This conclusion is based on the finding that only one, or 9 percent, of the comprehension tasks/competencies were significantly different in the responses obtained from NABTE and CPS respondents.

4. NABTE and CPS respondents basically agreed in their responses to the importance or emphasis which should be placed on the 29 application tasks. This conclusion is based on the following findings:

A. Only ten, or 35 percent, of the application tasks/competencies were significantly different in the responses obtained from NABTE and CPS respondents.

B. Six, or 21 percent, of the 29 application tasks/competencies received approximately a 90 percent agreement rating by both NABTE and CPS respondents.

5. The ten application typewriting tasks/competencies in which the NABTE and CPS respondents differed significantly in their responses were concerned with the performance of basic typewriting tasks/competencies. This conclusion is based on the finding that six, or 60 percent, of the ten application typewriting tasks/competencies in which a significant difference occurred between the two groups responses dealt with basic typewriting tasks/competencies such as typing manuscripts, letters, and memorandums.

6. NABTE and CPS respondents basically agreed in their responses to the importance or emphasis which should be placed on the ten analysis tasks. This conclusion is based on the finding that none of the ten analysis tasks/competencies were significantly different in the responses obtained from NABTE and CPS respondents.

7. NABTE and CPS respondents basically agreed in their responses to the importance or emphasis which should be placed on the 15 synthesis tasks. This conclusion is based on the finding that only three of the synthesis tasks/competencies or 20 percent were

significantly different in the responses obtained from NABTE and CPS respondents.

8. In the three synthesis typewriting tasks/competencies in which the NABTE and CPS respondents differed significantly in their responses, there was a substantial amount of disagreement in perceptions between the groups. This conclusion is based on the finding that 2, or 67 percent, of the three synthesis tasks/competencies were significantly different due to the agreement of CPS respondents in their perception of the importance of these tasks/competencies and the disagreement of NABTE respondents in their perception of the importance of these tasks/competencies.

9. NABTE and CPS respondents basically agreed in their responses to the importance or emphasis which sould be placed on the seven evaluation tasks. This conclusion is based on the following findings:

A. Only one, or 14 percent, of the evaluation tasks/competencies were significantly different in the responses obtained from NABTE and CPS respondents.

B. Two, or 29 percent, of the seven evaluation tasks/competencies received approximately a 90 percent agreement rating by both NABTE and CPS respondents.

10. The likeness of perception of NABTE and CPS respondents concerning typewriting tasks/competencies at all six levels of the cognitive domain is further evidenced by the finding that of the 120 typewriting tasks/competencies, only 20 percent were significantly different at the .05 level in responses by NABTE and CPS respondents.

11. There was a reversal in the positions of the NABTE and Certified Professional Secretaries concerning the typewriting tasks/competencies in which the two groups differed significantly in perceptions as the typewriting tasks/competencies moved from the lowest level to the higher level of the cognitive domain. This conclusion is based on the following findings:

A. Seventy-four percent of the nine knowledge tasks/competencies were significantly different due to the agreement of NABTE respondents and the disagreement of the CPS respondents.

B. Sixty-seven percent of the three synthesis tasks/competencies were significantly different due to the agreement of CPS respondents and the disagreement of the NABTE respondents.

IV. RECOMMENDATIONS

As a result of this research, the following recommendations are made for further study:

1. Conduct similar studies in other sections of the United States to compare the perceptions of NABTE colleges and Certified Professional Secretaries in Georgia, Kentucky, Tennessee and Virginia.

2. Conduct similar studies in other areas of business education to determine if business educators are meeting the needs of business people in other areas besides typewriting; and

3. Conduct follow-up studies of business education program graduates to determine the success of the graduates on the job to determine if the curriculum that is being taught is relevant.

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BIBLIOGRAPHY

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APPENDICES

APPENDIX A

BIBLIOGRAPHY OF THE TASK/COMPETENCY STATEMENT SOURCES

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APPENDIX B

LIST OF THE JURY OF EXPERTS AND SAMPLE COVER LETTER AND QUESTIONNAIRE TO THE JURY OF EXPERTS

JURY OF EXPERTS

Dr. Frank Busch*
College of Business
Department of Business Education
Louisiana Technical University
Ruston, Louisiana

Dr. Calfrey Calhoun*
College of Education
Department of Business Education
University of Georgia
Athens, Georgia

Dr. Lawrence Erickson*
Assistant Dean
College of Education
University of California, Los Angeles
Los Angeles, California

Dr. Howard Jackson*
College of Business
Department of Business Education
Virginia Commonwealth University
Richmond, Virginia

Dr. Elvon Warner**
College of Education
Department of Business Education
University of Northern Iowa
Cedar Falls, Iowa

Dr. Fred Winger**
College of Education
Department of Business Education
Oregon State University
Corvallis, Oregon

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*Agreed to be a member of the jury of experts by returning the completed questionnaire for input in the study.

**Did not return the questionnaire.

THE UNIVERSITY OF TENNESSEE
KNOXVILLE 37916

College of Business Administration

SAMPLE COPY

March 5, 1976

Dear

I am a graduate student at the University of Tennessee working toward a master's degree in Business Education. I am researching the topic, "Cognitive Domain Emphases in Typewriting," with the attempt to determine what statements and/or competencies (tasks) are performed in the six levels of cognitive domain.

The listing of statements are not intended to be complete but are indicative of examples that would be included in each of the levels; also, we are not concerned with the affective or psychomotor domains. After input has been made by the jury, the instrument will be submitted to typewriting instructors at the collegiate level and to secretaries who are currently employed. A determination will be made to see if a relationship exists as to what is taught with what business expectations are.

My committee is comprised of Dr. John J. Stallard, major advisor (chairman), Dr. Donald Reese, and Professor George Wagoner. We would like to have your input as a member of the jury of experts to determine if you perceive the classifications as we perceive them. Your research is recognized and respected by many in the business education field, and we would be honored and pleased to have you serve as a member of the jury of experts.

The instrument and a stamped, self-addressed envelope are enclosed. I have also included a "Classification of Objectives in the Cognitive Domain" to give you additional insight.

If possible, I would like to have your reactions before April 5, 1976. Your participation in the study is greatly appreciated.

Sincerely,

Cynthia L. Roberts
Graduate Teaching Assistant
Department of Business Education
and Office Administration

Enclosures

From: Sears Educator Resource Series--"Consumer Education in an Age of Adaptation"

CLASSIFICATION OF OBJECTIVES IN THE COGNITIVE DOMAIN

LEVEL	EMPHASIS	OBJECTIVE	VERBS TO USE
I Knowledge	recognition and recall--ability to remember facts in a form close to the way they were presented	Show that you know.	list, tell, define, identify, label, locate, recognize
II Comprehension	grasp the meaning and intent of information--the ability to tell or translate in your own words.	Show that you understand.	explain, illustrate, describe, summarize, interpret, expand, convert, measure
III Application	use of information--ability to apply learning to new situations and real-life circumstances	Show that you can use what is learned.	demonstrate, apply, use, construct, find solutions, collect information, perform, solve, choose appropriate procedures
IV Analysis	reasoning--ability to break down information into component parts and to detect relationships of one part to another and to the whole	Show that you perceive and can pick out the most important points in material presented.	analyze, debate, differentiate, generalize, conclude, organize, determine, distinguish
V Synthesis	originality and creativity--ability to assemble separate parts to form a new whole	Show that you can combine concepts to create original or new idea.	create, design, plan, produce, compile, develop

LEVEL	EMPHASIS	OBJECTIVE	VERBS TO USE
VI Evaluation	criteria or standards for evaluation and judgment--ability to make judgments based on criteria or standards	Show that you can judge and evaluate ideas, information, procedures and solutions.	compare, decide, evaluate, conclude, contrast, develop criteria, appraise

EDUCATIONAL OBJECTIVES AND CURRICULUM DEVELOPMENT

Educational objectives have been classified in three domains--the cognitive, the affective and the psychomotor.

The cognitive domain concerns the intellectual abilities and the development of thought processes.

The affective domain concerns emotional development and is related to interests, attitudes, values and goals.

The psychomotor domain concerns motor activities and skills.

The following represents statements and/or competencies (tasks) in each of the six (6) levels of the cognitive domain. Please indicate by checking "yes" or "no" according to your perceptions whether the statements and/or competencies (tasks) are indicative of the respective level. If your response is "no," please comment in the space provided.

KNOWLEDGE--LEVEL I

Letters and Envelopes

1. In the block style of letters, all lines are typed flush with the left margin. Yes____ No____

2. If the date of a letter is placed at the center of the paper, the complimentary closing and typed name should also be placed at the center. Yes____ No____

3. The enclosure notation is typed one double space below the reference initials flush with the left margin of a letter. Yes____ No____

4. The carbon copy notation is typed one double space below the reference initials beginning at the left margin of the letter. Yes____ No____

5. In a letter, the notations, "Registered Mail" or "Certified Mail" are typed one double space below the date, beginning at the left margin, in all capital letters. Yes____ No____

6. The heading for the second page of a letter consists of the name of the addressee, the date, and page number, placed one-inch from the top edge of the paper. Yes____ No____

7. On the envelope, mailing notations, "Special Delivery," "Certified Mail," and "Registered" are typed in capital letters below the stamp position. Yes____ No____

8. On the envelope, mailing notations, "Hold for Arrival," "Please Forward," and "Personal" are typed three spaces below the return address in all capital letters. Yes____ No____

9. The attention line of a letter is typed one double space below the inside address beginning with the left margin. Yes____ No____

10. The salutation of a letter is begun at the left margin a double space below the inside address or the attention line. Yes____ No____

11. The inside address of a letter should appear not less than four line spaces below the date line and even with the left margin. Yes____ No____

12. The postscript notation is typed one double space below the reference initials flush with the left margin of a letter. Yes____ No____

13. The subject line of a letter is centered one double space below the salutation or typed even with the left margin. Yes____ No____

14. The closing line in a modified block style letter is started at the center of the page, matching the date line, a double space below the body of the letter. Yes____ No____

15. The reference initials are typed even with the left margin a double space below the signature line and title of the writer of the letter. Yes____ No____

16. Three blank lines are ordinarily left for the penwritten signature on a letter. Yes____ No____

17. If a letter has a carbon copy notation and an enclosure notation, the enclosure notation is typed first. Yes____ No____

18. In a business letter with mixed punctuation, a colon after the salutation and a comma after the complimentary closing are used. Yes____ No____

19. The company signature is typed in all capital letters a double space below the complimentary closing in a letter. Yes____ No____

Punctuation

20. All punctuation marks used at the end of a sentence are followed by two spaces. Yes____ No____

21. After a semicolon, space once. Yes____ No____

22. After a colon used within a sentence, space twice. Yes____ No____

Tabulation

23. When typing tables, triple space between the main heading and the columnar headings. Yes____ No____

24. The length of the underscore of the columnar heading is determined by the longest line in the columnar heading. Yes____ No____

25. When typing tables, double space between the main heading and the secondary heading. Yes____ No____

26. When typing tables, double space between the columnar headings and the first line of the columns. Yes____ No____

27. Leaders are spaced periods that lead the eye from one column to the next column. Yes____ No____

Word Division

28. Words can only be divided between syllables; therefore, one-syllable words should never be divided. Yes____ No____

29. Avoid division after a one- or two-letter syllable and do not carry only one or two letters of the word to the next typed line or page. Yes____ No____

30. Hyphenated compounds should only be divided between the elements as illustrated by the word "self-perfection" which should only be divided at the hyphen. Yes____ No____

31. Avoid dividing proper nouns, separating initials preceding a name, separating a title from a surname, dividing figures, separating a figure from the abbreviation, symbol or word with which it is used, or dividing a date. Yes____ No____

32. The last word in a paragraph or the last word on a page should not be divided. Yes____ No____

Manuscripts

33. Manuscripts typed in final form are always double spaced except for the quoted material and footnotes. Yes____ No____

34. Side subheadings in a manuscript should be separated from the preceding text by three blank lines. Yes____ No____

35. Each footnote itself is singlespaced, but double spacing is used between each footnote. Yes____ No____

36. Figures should be used for page numbers in manuscripts. Yes____ No____

37. In a manuscript bibliography, the first line of each entry is typed at the left margin and succeeding lines are indented five spaces, single spaced, with a double space between entries. Yes____ No____

Spacing

38. Double spacing means leaving two blank lines between each two typewritten lines. Yes____ No____

39. Triple spacing means leaving two blank lines between each two typewritten lines. Yes____ No____

40. The ZIP code is typed two spaces to the right of the name of the state. Yes____ No____

41. There are six vertical spaces to an inch. Yes____ No____

42. In one horizontal inch of pica type, there are 10 strokes; there are 12 strokes in one horizontal inch of elite type. Yes____ No____

43. Paper that is 8 1/2" wide has 102 elite spaces. Yes____ No____

Other

44. Units of measure, distance, and dimensions are properly expressed in figures. Yes____ No____

45. In typing the title of a book which is printed in italics, the italics may be shown by underscoring. Yes____ No____

46. The symbol for indicating that typing material should be in *all capitals* is the ≡. Yes____ No____

47. Main headings are typed in all capital letters. Yes____ No____

48. The letters "bcc" represent blind carbon copy. Yes____ No____

49. When cutting a stencil, turn the typewriter ribbon indicator to white or "S." Yes____ No____

COMPREHENSION--LEVEL II

The student will demonstrate his comprehension of the material by performing the following tasks:

Letters

1. Type a letter in modified block style with indented paragraphs, open punctuation, and subject line. Yes____ No____

2. Type a business letter in block style with mixed punctuation. Yes____ No____

3. Type the appropriate salutation for a business letter to Miss Nancy Hall. Yes____ No____

4. According to the proofreading marks, make the adjustments and type the material in full-block letter style with open punctuation. Yes____ No____

5. Type a business letter in modified block style, open punctuation, starting the return address on line 12, and using a 60-space line with indented enumerated items. Yes____ No____

Tables

6. As indicated by the proofreading symbols, amke all the necessary corrections and type a table from rough-draft form. Yes____ No____

7. Type a table with braced (spanner) headings with both horizontal and vertical rulings, 10 spaces between columns, extend the rulings five spaces into the margins, using a full sheet and double spacing the body. Yes____ No____

8. Arrange the tabular material by vertical centering to determine top and botton margins. Yes____ No____

9. Type the two-columnar tabulation problem, setting the left margin at 25 and a tab stop at 50, using a half-sheet of paper and single spacing. Yes____ No____

10. Type the items from script using a 50-space line, single spacing items plus double spacing between them, centering the heading in correct style on line 10. Yes____ No____

Other

11. Using 40 as the center point, the student will determine the correct placement of the left margin for a writing line of 60 spaces. Yes____ No____

12. Using a 6-inch line, today's date, and single spacing, the student will type a memorandum on a half-sheet of paper. Yes____ No____

13. After studying the textbook illustration of a data sheet, the student will type his own personal data sheet. Yes____ No____

APPLICATION--LEVEL III

Letters

1. Given the parts of a business letter in unarranged order, the student will arrange the parts as they appear properly placed/ typed in the business letter. Yes____ No____

2. Given a two-page letter, the student will type an appropriate heading for the second page. Yes____ No____

3. In a business letter containing a post-script, the student will correctly type and place the postscript. Yes____ No____

4. For a letter to be duplicated, the student will prepare the material as a model from which a master can be typed. Yes____ No____

5. The student will type a business letter using block style and supplying appropriate punctuation based on the instructor's directions. Yes____ No____

6. Based on previous learning, the student will type a business letter using any generally accepted letter style and any generally accepted punctuation style. Yes____ No____

7. Given an initial draft, handwritten material for a one-page business letter, the student will type the letter using any generally accepted style and punctuation. Yes____ No____

8. Given dictation of a letter at the typewriter, the student will arrange and type the letter in the prescribed style, erase and correct neatly all typing errors and proofread. Yes____ No____

9. Using the correct proofreading symbols to denote errors, the student will proofread a business letter and retype the business letter making the necessary corrections. Yes____ No____

Tabulation

10. In a tabulation problem containing a source note, the student will correctly type and document the source note based on an appropriate, accepted style. Yes____ No____

11. Given accompanying tables, the student will insert and set-up the tables within a business letter. Yes____ No____

12. Given a listing, the student will type the items on a half-sheet of paper using double spacing and centering the problem vertically and each line horizontally. Yes____ No____

13. From a rough draft table, the student will prepare a ruled table containing three columns of tabulated material. Yes____ No____

Manuscripts

14. From the facts given concerning the title, author, and date, the student will prepare a title page for a leftbound manuscript. Yes____ No____

15. From the unarranged data, the student will type an original and two carbon copies of an annotated bibliography to accompany a leftbound manuscript. Yes____ No____

16. Given an initial draft of handwritten material for a one-page typewritten report which is both narrative and statistical in nature, the student will type the report using any generally accepted style. Yes____ No____

17. Using a rough draft, the student will type a two-page manuscript in top-bound form. Yes____ No____

18. In unbound manuscript style, the student will type a manuscript, single spacing enumerated items and indenting five spaces from each margin. Yes____ No____

Other

19. Given book titles, the student will center each one horizontally on the page and allow six vertical spaces between the titles. Yes____ No____

20. The student will type a memorandum in correct form, centering vertically and horizontally the listed items within the body. Yes____ No____

21. From handwritten copy, the student will type an agenda, centering vertically and double spacing. Yes____ No____

22. Using a half-sheet of paper, a 50-space line, and single spacing, the student will type a memorandum. Yes____ No____

23. Using a 50-space line, single spaced paragraphs and a centered heading, the student will center an announcement on a half-sheet. Yes____ No____

24. Given the necessary information, the student will type a purchase order form. Yes____ No____

25. To make an address file alphabetically by state and city, the student will type names and addresses on 3 x 5 cards in proper form. Yes____ No____

26. From an uncorrected typewritten copy, the student will type a speech in final form, making all the necessary changes for accuracy in spelling, punctuation, grammar, and mechanics. Yes____ No____

27. Given the parts (date, from, to, and subject) of a memorandum, the student will arrange and type the parts in an acceptable style. Yes____ No____

28. Given motions, reports and resolutions to be presented at a board meeting, the student will prepare a typed copy to be distrubuted to the board members. Yes____ No____

29. Given the necessary information and form to type a warranty deed, the student will type a warranty deed on legal-size paper. Yes____ No____

ANALYSIS--LEVEL IV

Letters

1. Given a rough draft of a letter which is filled with repetitions and unnecessary words, the student will read, edit, and retype the letter eliminating the redundant material. Yes____ No____

2. Given a business letter, the student will identify all punctuation and grammatical errors, correct them, and retype the business letter. Yes____ No____

Tabulation

3. From a detailed tabulation concerning monthly sales, the student will identify the highest sales for each month and list them accordingly in typewritten form. Yes____ No____

4. Given a statistical report, the student will determine the inaccuracies and retype the report. Yes____ No____

Manuscripts

5. From the rough draft copy, the student will edit a manuscript and type it in an unbound manuscript format. Yes____ No____

6. Given a typed manuscript, the student will proofread and indicate all needed corrections and retype the manuscript. Yes____ No____

Other

7. From a handwritten message, the student will condense and type a full-rate telegram. Yes____ No____

8. From the typewritten draft of a book review, the student will condense the review into a one-page typewritten summary. Yes____ No____

9. From the notes of a board meeting, the student will edit and type the minutes. Yes____ No____

10. From an old contract, the student will edit the unnecessary parts, update the contract, and retype the contract. Yes____ No____

SYNTHESIS--LEVEL V

Letters

1. Given the necessary information, the student will design and type a form letter for acknowledging manuscripts and enclosures to be included in the office procedures manual. Yes____ No____

2. From a handwritten note, the student will compose and type a letter, arranging within the letter an enumerated listing. Yes____ No____

3. From a rough draft message, the student will develop and type a business form letter. Yes____ No____

4. Using the data given concerning the ordering of goods, the student will construct and type a letter requesting the shipment of such goods. Yes____ No____

5. In response to routine company correspondence, the student will compose and type reply letters. Yes____ No____

6. Given a number of form letters to revise, the student will categorize the paragraphs to put them in a more logical sequence and retype the form letters. Yes____ No____

Tabulation

7. From a random listing, the student will create and type a table arranging the material in alphabetical order by author in proper tabulation form. Yes____ No____

8. Using a detailed tabulation concerning monthly sales, the student will reconstruct the material into a chart to show the highest sales per month and retype the chart accordingly. Yes____ No____

9. From a handwritten report, the student will compile the facts into an organized tabular form and type. Yes____ No____

Memorandums

10. In order to indicate the content of a memorandum, the student will compose and type an appropriate subject line. Yes____ No____

11. Given the minutes of a meeting of the board of directors, the student will summarize in typewritten form the discussion in memorandum form. Yes____ No____

Other

12. Given a number of personnel changes, the student will revise and retype the roster of office employees. Yes____ No____

13. Using a daily employee attendance report as a guide, the student will design and type a quarterly employee attendance report. Yes____ No____

14. From a list of honor students, the student will compose a congratulatory letter at the typewriter to one of the honor students. Yes____ No____

EVALUATION--LEVEL VI

Letters

1. Given a two-page letter, the student will type the letter supplying any needed punctuation and decide where to end page 1 and continue page 2. Yes____ No____

2. Given a typed business letter, the student will evaluate the letter as to its mailability and retype if necessary. Yes____ No____

3. Given a number of form letters, the student will compare and contrast the form letters before duplicating them as company standard forms to be sure that they are not replicates and then will retype them. Yes____ No____

Tables

4. The student will set up unarranged tabulated material so that it is attractively and evenly placed within the report, making the decisions about spacing between columns before typing. Yes____ No____

5. In a tabulation problem containing a main heading requiring two lines, the student will decide where the main heading should be divided to correctly place the heading and will then type the table. Yes____ No____

6. Given a typewritten report, the student will determine the major points in the report and decide how to develop the report into tabular form and then type. Yes____ No____

Other

7. Given an inbasket situation containing several different jobs, the student will evaluate and list in sequence the priority in which the items should be handled and will then type the jobs. Yes____ No____

8. Given business forms, copies of manuscripts, tabulated reports, or outlines, the student will arrange and type the problems, erase and correct neatly all typing errors, proofread, and determine whether the work is acceptable. Yes____ No____

9. Given unarranged data for headings, the student will decide how each should appear at the beginning of a statement of 8 1/2" x 11" paper and will then type the statements. Yes____ No____

APPENDIX C

LIST OF THE NABTE COLLEGES, SAMPLE COVER LETTER AND QUESTIONNAIRE, AND FOLLOW-UP LETTER

NATIONAL ASSOCIATION OF BUSINESS TEACHER EDUCATION

COLLEGES INCLUDED IN STUDY

Georgia

Georgia State University*
Atlanta, GA 31705

Georgia Southwestern College
Americus, GA 31709

Georgia Southern College*
Statesboro, GA 30458

Georgia College*
Milledgeville, GA 31061

Fort Valley State College*
Fort Valley, GA 31030

Clark College
Atlanta, GA 30314

Albany State College*
Albany, GA 31705

University of Georgia*
Athens, GA 30602

Morris Brown College
Atlanta, GA 30314

Savannah State College*
Savannah, GA 31404

Valdosta State College*
Valdosta, GA 31601

Western Georgia College*
Carrollton, GA 30117

Kentucky

Western Kentucky University*
Bowling Green, KY 42101

University of Kentucky
Lexington, KY 40506

Northern Kentucky State College
Highland Heights, KY 41976

Murray State University*
Murray, KY 42071

Morehead State University*
Morehead, KY 40351

Kentucky State University*
Frankfort, KY 40601

Eastern Kentucky University*
Richmond, KY 40475

Pikeville College
Pikeville, KY 41501

Tennessee

University of Tennessee*
Chattanooga, TN 37401

Union University
Jackson, TN 38301

Tennessee Technological University*
Cookeville, TN 38501

Tennessee State University
Nashville, TN 37203

Middle Tennessee State University*
Murfreesboro, TN 37132

Memphis State University
Memphis, TN 38152

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*Returned the completed questionnaire for input in the study.

East Tennessee State University*
Johnson City, TN 37601

Austin Peay University
Clarksville, TN 37040

University of Tennessee*
Knoxville, TN 37916

Virginia

Virginia Union University
Richmond, VA 23220

Virginia State College*
Petersburg, VA 23803

Virginia Polytechnic Institute*
Blacksburg, VA 24061

Virginia Commonwealth University*
Richmond, VA 23284

Saint Paul's College*
Lawrenceville, VA 23868

Radford College*
Radford, VA 24142

Old Dominion University*
Norfolk, VA 22508

Norfolk State College
Norfolk, VA 23504

Madison College
Harrisonburg, VA 22801

Longwood College*
Farmville, VA 23801

Hampton Institute
Hampton, VA 23668

*Returned the completed questionnaire for input in the study.

THE UNIVERSITY OF TENNESSEE
KNOXVILLE 37916

College of Business Administration

SAMPLE COPY

May 19, 1976

Dear

I am a graduate student at the University of Tennessee working toward a master's degree in Business Education. My master's thesis is entitled, "Cognitive Domain Emphases in Typewriting." The enclosed instrument is composed of statements representing typewriting tasks and/or competencies.

I am submitting this instrument to all of the universities and colleges that are members of the National Association of Business Teacher Education in the states of Georgia, Kentucky, Tennessee, and Virginia. Would you have one of your departmental staff members who teaches primarily typewriting to complete the enclosed questionnaire. He/she should indicate the importance he/she feels should be placed on each of the typewriting statements contained in the instrument. There is no right or wrong answer. A composite of the data will be used to determine the findings of the study.

The questionnaire and a stamped, self-addressed envelope are enclosed. If possible, I would like to have the reactions by June 7, 1976.

Your institution's participation in this study is greatly appreciated.

Sincerely,

Cynthia L. Roberts
Graduate Teaching Assistant
Office Administration and
Business Education

Enclosure

The following statements represent tasks which might be included in a collegiate typewriting course(s). There is no right or wrong answer. Would you please indicate the importance which you place on these tasks in the collegiate typewriting course(s) by indicating:

SA - Strongly Agree
A - Agree
U - Undecided
D - Disagree
SD - Strongly Disagree

	SA	A	U	D	SD
1. From a handwritten note, the student will compose and type a letter, arranging within the letter an enumerated listing.	☐	☐	☐	☐	☐
2. The reference initials are typed even with the left margin a double space below the signature line and title of the writer of the letter.	☐	☐	☐	☐	☐
3. To make an address file alphabetically by state and city, the student will type names and addresses on 3 x 5 cards in proper form.	☐	☐	☐	☐	☐
4. On the envelope, mailing notations, "Hold for Arrival," "Please Forward," and "Personal" are typed three spaces below the return address in all capital letters.	☐	☐	☐	☐	☐
5. Given the parts of a business letter in unarranged order, the student will arrange the parts as they appear properly placed/typed in the business letter.	☐	☐	☐	☐	☐
6. Given accompanying tables, the student will insert and set-up the tables within a business letter.	☐	☐	☐	☐	☐
7. The postscript notation is typed one double space below the reference initials flush with the left margin of a letter.	☐	☐	☐	☐	☐
8. Each footnote itself is singlespaced, but double spacing is used between each footnote.	☐	☐	☐	☐	☐
9. If a letter has a carbon copy notation and an enclosure notation, the enclosure notation is typed first.	☐	☐	☐	☐	☐

	SA	A	U	D	SD
10. Given an inbasket situation containing several different jobs, the student will evaluate and list in sequence the priority in which the items should be handled and will then type the jobs.	☐	☐	☐	☐	☐
11. Given a number of form letters, the student will compare and contrast the form letters before duplicating them as company standard forms to be sure that they are not replicates and then will retype them.	☐	☐	☐	☐	☐
12. Main headings are typed in all capital letters.	☐	☐	☐	☐	☐
13. As indicated by the proofreading symbols, make all the necessary corrections and type a table from rough-draft form.	☐	☐	☐	☐	☐
14. Using a half-sheet of paper, a 50-space line, and single spacing, the student will type a memorandum.	☐	☐	☐	☐	☐
15. When typing tables, triple space between the main heading and the columnar headings.	☐	☐	☐	☐	☐
16. Given the necessary information, the student will design and type a form letter for acknowledging manuscripts and enclosures to be included in the office procedures manual.	☐	☐	☐	☐	☐
17. From an old contract, the student will edit the unnecessary parts, update the contract, and retype the contract.	☐	☐	☐	☐	☐
18. From the unarranged data, the student will type an original and two carbon copies of an annotated bibliography to accompany a leftbound manuscript.	☐	☐	☐	☐	☐
19. Given the necessary information, the student will type a purchase order form.	☐	☐	☐	☐	☐
20. In a letter, the notations, "Registered Mail" or "Certified Mail" are typed one double space below the date, beginning at the left margin, in all capital letters.	☐	☐	☐	☐	☐

	SA	A	U	D	SD
21. Figures should be used for page numbers in manuscripts.	☐	☐	☐	☐	☐
22. The inside address of a letter should appear not less than four line spaces below the date line and even with the left margin.	☐	☐	☐	☐	☐
23. Side subheadings in a manuscript should be separated from the preceding text by two blank lines.	☐	☐	☐	☐	☐
24. From a random listing, the student will create and type a table arranging the material in alphabetical order by author in proper tabulation form.	☐	☐	☐	☐	☐
25. The student will type a business letter using block style and supplying appropriate punctuation based on the instructor's directions.	☐	☐	☐	☐	☐
26. The student will set up unarranged tabulated material so that it is attractively and evenly placed within the report, making the decisions about spacing between columns before typing.	☐	☐	☐	☐	☐
27. In typing the title of a book which is printed in italics, the italics may be shown by underscoring.	☐	☐	☐	☐	☐
28. Given business forms, copies of manuscripts, tabulated reports, or outlines, the student will arrange and type the problems, erase and correct neatly all typing errors, proofread, and determine whether the work is acceptable.	☐	☐	☐	☐	☐
29. Given a statistical report, the student will determine the inaccuracies and retype the report.	☐	☐	☐	☐	☐
30. Given an initial draft of handwritten material for a one-page typewritten report which is both narrative and statistical in nature, the student will type the report using any generally accepted style.	☐	☐	☐	☐	☐

	SA	A	U	D	SD
31. From a detailed tabulation concerning monthly sales, the student will identify the highest sales for each month and list them accordingly in typewritten form.	☐	☐	☐	☐	☐
32. In order to indicate the content of a memorandum, the student will compose and type an appropriate subject line.	☐	☐	☐	☐	☐
33. Given a rough draft of a letter which is filled with repetitions and unnecessary words, the student will read, edit, and retype the letter eliminating the redundant material.	☐	☐	☐	☐	☐
34. In unbound manuscript style, the student will type a manuscript, single spacing enumerated items and indenting five spaces from each margin.	☐	☐	☐	☐	☐
35. Given an initial draft, handwritten material for a one-page business letter, the student will type the letter using any generally accepted style and punctuation.	☐	☐	☐	☐	☐
36. All punctuation marks used at the end of a sentence are followed by two spaces.	☐	☐	☐	☐	☐
37. Given a two-page letter, the student will type an appropriate heading for a second page.	☐	☐	☐	☐	☐
38. In a tabulation problem containing a main heading requiring two lines, the student will decide where the main heading should be divided to correctly place the heading and will then type the table.	☐	☐	☐	☐	☐
39. The enclosure notation is typed one double space below the reference initials flush with the left margin of a letter.	☐	☐	☐	☐	☐
40. Given a business letter, the student will identify all punctuation and grammatical errors, correct them, and retype the business letter.	☐	☐	☐	☐	☐
41. Words can only be divided between syllables; therefore, one-syllable words should never be divided.	☐	☐	☐	☐	☐

	SA	A	U	D	SD
42. In a business letter containing a postscript, the student will correctly type and place the postscript.	☐	☐	☐	☐	☐
43. The student will type a memorandum in correct form centering vertically and horizontally the listed items within the body.	☐	☐	☐	☐	☐
44. Given a typed manuscript, the student will proofread and indicate all needed corrections and retype the manuscript.	☐	☐	☐	☐	☐
45. The salutation of a letter is begun at the left margin a double space below the inside address or the attention line.	☐	☐	☐	☐	☐
46. The symbol for indicating that typing material should be in *all capitals* is the ≡.	☐	☐	☐	☐	☐
47. When typing tables, double space between the main heading and the secondary heading.	☐	☐	☐	☐	☐
48. Using a 6-inch line, today's date, and single spacing, the student will type a memorandum on a half-sheet of paper.	☐	☐	☐	☐	☐
49. From a handwritten report, the student will compile the facts into an organized tabular form and type.	☐	☐	☐	☐	☐
50. Given a typewritten report, the student will determine the major points in the report and decide how to develop the report into tabular form and then type.	☐	☐	☐	☐	☐
51. When typing tables, double space between the columnar headings and the first line of the columns.	☐	☐	☐	☐	☐
52. From handwritten copy, the student will type an agenda, centering vertically and double spacing.	☐	☐	☐	☐	☐
53. In the block style of letters, all lines are typed flush with the left margin.	☐	☐	☐	☐	☐
54. From the facts given concerning the title, author, and date, the student will prepare a title page for a leftbound manuscript.	☐	☐	☐	☐	☐

	SA	A	U	D	SD
55. The student will type a letter in modified block style with indented paragraphs, open punctuation, and subject line.	☐	☐	☐	☐	☐
56. From an uncorrected typewritten copy, the student will type a speech in final form, making all the necessary changes for accuracy in spelling, punctuation, grammar, and mechanics.	☐	☐	☐	☐	☐
57. In a business letter with mixed punctuation, a colon after the salutation and a comma after the complimentary closing are used.	☐	☐	☐	☐	☐
58. Given a two-page letter, the student will type the letter supplying any needed punctuation and decide where to end page 1 and continue page 2.	☐	☐	☐	☐	☐
59. Given the necessary information and form to type a warranty deed, the student will type a warranty deed on legal-size paper.	☐	☐	☐	☐	☐
60. From a rough draft message, the student will develop and type a business form letter.	☐	☐	☐	☐	☐
61. Given a listing, the student will type the items on a half-sheet of paper using double spacing and centering the problem vertically and each line horizontally.	☐	☐	☐	☐	☐
62. The length of the underscore of the columnar heading is determined by the longest line in the columnar heading.	☐	☐	☐	☐	☐
63. The attention line of a letter is typed one double space below the inside address beginning with the left margin.	☐	☐	☐	☐	☐
64. In response to routine company correspondence, the student will compose and type reply letters.	☐	☐	☐	☐	☐
65. Avoid dividing proper nouns, separating initials preceding a name, separating a title from a surname, dividing figures, separating a figure from the abbreviation, symbol or word with which it is used, or dividing a date.	☐	☐	☐	☐	☐
66. The closing line in a modified block style letter is started at the center of the page, matching the date line, a double space below the body of the letter.	☐	☐	☐	☐	☐

	SA	A	U	D	SD
67. From the notes of a board meeting, the student will edit and type the minutes.	☐	☐	☐	☐	☐
68. The student will type the two-columnar tabulation problem setting the left margin at 25 and a tab stop at 50, using a half-sheet of paper and single spacing.	☐	☐	☐	☐	☐
69. The student will type the appropriate salutation for a business letter to Miss Nancy Hall.	☐	☐	☐	☐	☐
70. The student will type a business letter in block style with mixed punctuation.	☐	☐	☐	☐	☐
71. The student will type a business letter in modified block style, open punctuation, starting the return address on line 12, and using a 60-space line with indented enumerated items.	☐	☐	☐	☐	☐
72. Using a daily employee attendance report as a guide, the student will design and type a quarterly employee attendance report.	☐	☐	☐	☐	☐
73. After a semicolon, space once.	☐	☐	☐	☐	☐
74. From a list of honor students, the student will compose a congratulatory letter at the typewriter to one of the honor students.	☐	☐	☐	☐	☐
75. The student will type the items from script using a 50-space line, single spacing items plus double spacing between them, centering the heading in correct style on line 10.	☐	☐	☐	☐	☐
76. The carbon copy notation is typed one double space below the reference initials beginning at the left margin of the letter.	☐	☐	☐	☐	☐
77. Using the data given concerning the ordering of goods, the student will construct and type a letter requesting the shipment of such goods.	☐	☐	☐	☐	☐
78. In a tabulation problem containing a source note, the student will correctly type and document the source note based on an appropriate, accepted style.	☐	☐	☐	☐	☐

	SA	A	U	D	SD
79. Three blank lines are ordinarily left for the penwritten signature on a letter.	☐	☐	☐	☐	☐
80. The company signature is typed in all capital letters a double space below the complimentary closing in a letter.	☐	☐	☐	☐	☐
81. From a rough draft table, the student will prepare a ruled table containing three columns of tabulated material.	☐	☐	☐	☐	☐
82. The letters "bcc" represent blind carbon copy.	☐	☐	☐	☐	☐
83. Leaders are spaced periods that lead the eye from one column to the next column.	☐	☐	☐	☐	☐
84. Units of measure, distance, and dimensions are properly expressed in figures.	☐	☐	☐	☐	☐
85. There are six vertical spaces to an inch.	☐	☐	☐	☐	☐
86. In a manuscript bibliography, the first line of each entry is typed at the left margin and succeeding lines are indented five spaces, single spaced, with a double space between entries.	☐	☐	☐	☐	☐
87. Based on previous learning, the student will type a business letter using any generally accepted letter style and any generally accepted punctuation style.	☐	☐	☐	☐	☐
88. When typing a stencil, turn the typewriter ribbon indicator to white or "S."	☐	☐	☐	☐	☐
89. On the envelope, mailing notations, "Special Delivery," "Certified Mail," and "Registered" are typed in capital letters below the stamp position.	☐	☐	☐	☐	☐
90. Paper that is 8 1/2" wide has 102 elite spaces.	☐	☐	☐	☐	☐
91. Hyphenated compounds should only be divided between the elements as illustrated by the word "self-perception" which should only be divided at the hyphen.	☐	☐	☐	☐	☐
92. Given a number of form letters to revise, the student will categorize the paragraph to put them in a more logical sequence and retype the form letters.	☐	☐	☐	☐	☐

	SA	A	U	D	SD
93. The heading for the second page of a letter consists of the name of the addressee, the date, and page number, placed one-inch from the top edge of the paper.	☐	☐	☐	☐	☐
94. Using 40 as the center point, the student will determine the correct placement of the left margin for a writing line of 60 spaces.	☐	☐	☐	☐	☐
95. Given dictation of a letter at the typewriter, the student will arrange and type the letter in the prescribed style, erase and correct neatly all typing errors and proofread.	☐	☐	☐	☐	☐
96. Double spacing means leaving one blank line between each two typewritten lines.	☐	☐	☐	☐	☐
97. Given unarranged data for headings, the student will decide how each should appear at the beginning of a statement on 8 1/2" x 11" paper and will then type the statements.	☐	☐	☐	☐	☐
98. After a colon used within a sentence, space twice.	☐	☐	☐	☐	☐
99. Avoid division after a one- or two-letter syllable and do not carry only one or two letters of the word to the next typed line or page.	☐	☐	☐	☐	☐
100. Given motions, reports and resolutions to be presented at a board meeting, the student will prepare a typed copy to be distributed to the board members.	☐	☐	☐	☐	☐
101. Manuscripts typed in final form are always double spaced except for the quoted material and footnotes.	☐	☐	☐	☐	☐
102. Using the correct proofreading symbols to denote errors, the student will proofread a business letter and retype the business letter making the necessary corrections.	☐	☐	☐	☐	☐
103. Using a 50-space line, single spaced paragraphs, and a centered heading, the student will center an announcement on a half-sheet.	☐	☐	☐	☐	☐

	SA	A	U	D	SD
104. The last word in a paragraph or the last word on a page should not be divided.	☐	☐	☐	☐	☐
105. For a letter to be duplicated, the student will prepare the material as a model from which a master can be typed.	☐	☐	☐	☐	☐
106. Given the parts (date, from, to, and subject) of a memorandum, the student will arrange and type the parts in an acceptable style.	☐	☐	☐	☐	☐
107. Given a typed business letter, the student will evaluate the letter as to its mailability and retype if necessary.	☐	☐	☐	☐	☐
108. In one horizontal inch of pica type, there are 10 strokes; there are 12 strokes in one horizontal inch of elite type.	☐	☐	☐	☐	☐
109. The student will arrange the tabular material by vertical centering to determine top and bottom margins.	☐	☐	☐	☐	☐
110. Given the minutes of a meeting of the board of directors, the student will summarize in typewritten form the discussion in memorandum form.	☐	☐	☐	☐	☐
111. From the typewritten draft of a book review, the student will condense the review into a one-page typewritten summary.	☐	☐	☐	☐	☐
112. From a handwritten message, the student will condense and type a full-rate telegram.	☐	☐	☐	☐	☐
113. If the date of a letter is placed at the center of the paper, the complimentary closing and typed name should also be placed at the center.	☐	☐	☐	☐	☐
114. Using a rough draft, the student will type a two-page manuscript in top-bound form.	☐	☐	☐	☐	☐
115. Given book titles, the student will center each one horizontally on the page and allow six vertical spaces between the titles.	☐	☐	☐	☐	☐
116. Triple spacing means leaving two blank lines between each two typewritten lines.	☐	☐	☐	☐	☐

	SA	A	U	D	SD
117. From the rough draft copy, the student will edit a manuscript and type it in an unbound manuscript format.	☐	☐	☐	☐	☐
118. The subject line of a letter is centered one double space below the salutation or typed even with the left margin.	☐	☐	☐	☐	☐
119. According to the proofreading marks, the student will make the adjustments and type the material in full-block letter style with open punctuation.	☐	☐	☐	☐	☐
120. Using a detailed tabulation concerning monthly sales, the student will reconstruct the material into a chart to show the highest sales per month and retype the chart accordingly.	☐	☐	☐	☐	☐

THE UNIVERSITY OF TENNESSEE
KNOXVILLE 37916

College of Business Administration

SAMPLE COPY

June 24, 1976

Dear

On May 19, 1976, I submitted to you a questionnaire concerning my thesis entitled, "Cognitive Domain Emphases in Typewriting." I asked that you give my questionnaire to one of your faculty members who is primarily responsible for the teaching of typewriting. To date the questionnaire from your institution has not been received.

Would you please have your faculty member complete the instrument as soon as possible and return it to me? The input from your respective institution is vital to the completion of the study.

Thank you for your cooperation.

Sincerely,

Cynthia L. Roberts
Graduate Teaching Assistant
Office Administration and
Business Education

APPENDIX D

LIST OF THE CERTIFIED PROFESSIONAL SECRETARIES, SAMPLE COVER LETTER AND QUESTIONNAIRE, AND A LIST OF CERTIFIED PROFESSIONAL SECRETARIES INCLUDED IN THIS STUDY IN KNOXVILLE, TENNESSEE

CERTIFIED PROFESSIONAL SECRETARIES INCLUDED IN RANDOM SAMPLE

Georgia

Ms. Evelyn E. Rogers, CPS
Atlanta, GA 30329

Ms. Carole A. Harris, CPS*
Augusta, GA 30906

Ms. Virginia B. Sligh, CPS
Rome, GA 30161

Ms. Mildred Hutcheson, CPS
Atlanta, GA 30316

Ms. Patsy S. Stone, CPS*
Ashburn, GA 31714

Ms. Geneva M. Cowan, CPS
Savannah, GA 31406

Ms. Catherine Butler, CPS*
Atlanta, GA 30318

Ms. Edith V. Johnson, CPS*
Atlanta, GA 30318

Ms. Marion P. Adams, CPS
Decatur, GA

Ms. Patricia V. Echols, CPS*
Atlanta, GA 30305

Ms. Judy Cain, CPS*
Lilburn, GA 30247

Ms. Ina Jean Joiner, CPS*
Wrightsville, GA 31096

Ms. Betty H. Groves, CPS
Chicamauga, GA 30707

Ms. Frances R. Stanford, CPS*
Martinez, GA 30907

Ms. Dianne V. Hall, CPS*
Decatur, GA 30032

Kentucky

Ms. Alma Schuler, CPS*
Louisville, KY 40205

Ms. Eleanor M. Turner, CPS**
Louisville, KY 40205

Ms. Mary B. Hebden, CPS*
Louisville, KY 40206

Ms. Carol J. Leap, CPS
Cold Springs, KY 41076

Ms. Charlyne Riley, CPS*
Shepherdsville, KY 40165

Ms. Betty Green, CPS
Paducah, KY 42001

Ms. Isabel Boston, CPS*
Calvert City, KY. 42029

Ms. Mary D. Johnson, CPS*
Lexington, KY 40205

Ms. Marguerite Griffin, CPS
Louisville, KY 40503

Ms. Sally Price, CPS**
Louisville, KY 40209

Ms. Joan C. Burns, CPS
Lexington, KY 40502

Ms. Shirley Yarbrough, CPS
Paducah, KY 42001

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*Returned the questionnaire for input in this study.

**The questionnaire was returned and marked, "non-deliverable."

Ms. Ardyce J. Ballard, CPS
Mayfield, KY 42066

Ms. Barbara Ruter, CPS*
Louisville, KY 42016

Ms. Anne G. Stengell, CPS*
Louisville, KY 40206

Ms. Doris Threlkeld, CPS
Memphis, TN 38104

Ms. Virginia Blanchard, CPS*
Harriman, TN 37748

Ms. Betty J. Williams, CPS
Memphis, TN 38128

Tennessee

Ms. Frances Thompson, CPS*
Chattanooga, TN 37421

Ms. Jennifer W. Lemons, CPS*
Nashville, TN 37218

Ms. Ruby F. Sojourner, CPS*
Memphis, TN 38112

Ms. Phyllis Archer, CPS
Athens, TN 37303

Ms. Barbara S. Cotton, CPS*
Memphis, TN 38128

Ms. Mary Ann Elrod, CPS**
Cleveland, TN 37311

Ms. Vivian Allen, CPS
Nashville, TN 37211

Ms. Virginia P. Roper, CPS
Memphis, TN 38118

Ms. Nancy J. Campbell, CPS
Concord, TN 37720

Ms. Margaret A. Maddox, CPS**
Nashville, TN 37215

Ms. Mary W. Whitehead, CPS*
Nashville, TN 37219

Ms. Clara J. Ryan, CPS*
Memphis, TN 38104

Virginia

Ms. Helen E. Kirkwood, CPS*
Vinton, VA 24179

Ms. Margaret R. Kidd, CPS
Richmond, VA 23225

Ms. Miriam L. Weaver, CPS*
Harrisonburg, VA 22801

Ms. Eileen L. Murphy, CPS
Chesapeake, VA 23321

Ms. Gail Roberts, CPS*
Alexandria, VA 22311

Ms. Eileen A. Willard, CPS*
Pulaski, VA 24301

Ms. Gladys B. Bradley, CPS*
Roanoke, VA 24018

Ms. Mervis S. Matney, CPS
Yorktown, VA 23690

Ms. R. Stacy Nichols, CPS
Fiarfax, VA 22030

Ms. Jane I. Druen, CPS
Hampton, VA 23666

Ms. Mary D. Ferguson, CPS*
Richmond, VA 23227

Ms. Ruby B. Roberts, CPS*
Virginia Beach, VA 23462

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*Returned the questionnaire for input in this study.

**The questionnaire was returned and marked, "non-deliverable."

Ms. Myrtle B. Ware, CPS*
Richmond, VA 23229

Ms. Linda K. Carrier, CPS*
Alexandria, VA 22304

Ms. Illene M. Harrison, CPS**
Alexandria, VA 22312

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*Returned the questionnaire for input in this study.

**The questionnaire was returned and marked, "non-deliverable."

THE UNIVERSITY OF TENNESSEE
KNOXVILLE 37916

College of Business Administration

SAMPLE COPY

June 9, 1976

Dear

I am a graduate student at the University of Tennessee working toward a master's degree in Business Education. My master's thesis is entitled, "Cognitive Domain Emphases in Typewriting." The enclosed instrument is composed of statements representing typewriting tasks and/or competencies.

I am submitting this instrument to a random sampling of Certified Professional Secretaries in the states of Georgia, Kentucky, Tennessee, and Virginia. Would you please complete the enclosed instrument? Please indicate the importance placed on each of the typewriting statements in your job as a secretary and/or as a supervisor of other secretaries. There is no right or wrong answer. A composite of the data will be used to determine the findings of the study.

The questionnaire and a stamped, self-addressed envelope are enclosed. If possible, I would like to have the reactions by June 30, 1976.

Your participation in this study is greatly appreciated.

Sincerely,

Cynthia L. Roberts
Graduate Teaching Assistant
Department of Business Education
and Office Administration

Enclosure

The only difference between the questionnaires given to the NABTE colleges and those given to Certified Professional Secretaries is found in the directions at the top of page 1. The statements representing typewriting tasks on the questionnaires are exactly the same. Please refer to Appendix C, page 114 for the remainder.

The following statements represent tasks which might be included in a collegiate typewriting course(s). There is no right or wrong answer. Would you please indicate the importance which you place on these tasks in the office in which you work and/or supervise by indicating:

SA - Strongly Agree
A - Agree
U - Undecided
D - Disagree
SD - Strongly Disagree

	SA	A	U	D	SD
1. From a handwritten note, the student will compose and type a letter, arranging within the letter an enumerated listing.	☐	☐	☐	☐	☐
2. The reference initials are typed even with the left margin a double space below the signature line and title of the writer of the letter.	☐	☐	☐	☐	☐
3. To make an address file alphabetically by state and city, the student will type names and addresses on 3 x 5 cards in proper form.	☐	☐	☐	☐	☐
4. On the envelope, mailing notations, "Hold for Arrival," "Please Forward," and "Personal" are typed three spaces below the return address in all capital letters.	☐	☐	☐	☐	☐
5. Given the parts of a business letter is unarranged order, the student will arrange the parts as they appear properly placed/ typed in the business letter.	☐	☐	☐	☐	☐
6. Given accompanying tables, the student will insert and set-up the tables within a business letter.	☐	☐	☐	☐	☐
7. The postscript notation is typed one double space below the reference initials flush with the left margin of a letter.	☐	☐	☐	☐	☐
8. Each footnote itself is singlespaced, but double spacing is used between each footnote.	☐	☐	☐	☐	☐

	SA	A	U	D	SD
9. If a letter has a carbon copy notation and an enclosure notation, the enclosure notation is typed first.	☐	☐	☐	☐	☐
10. Given an inbasket situation containing several different jobs, the student will evaluate and list in sequence the priority in which the items should be handled and will then type the jobs.	☐	☐	☐	☐	☐
11. Given a number of form letters, the student will compare and contrast the form letters before duplicating them as company standard forms to be sure that they are not replicates and then will retype them.	☐	☐	☐	☐	☐

CERTIFIED PROFESSIONAL SECRETARIES IN KNOXVILLE, TENNESSEE

INCLUDED IN THE STUDY

Ms. Beverly Fitzgerald, CPS
Knoxville, TN 37916

Ms. Wanda Rule, CPS
Knoxville, TN 37916

Ms. Edith Szathmary, CPS
Knoxville, TN 37916

Ms. Linda Wambles, CPS
Knoxville, TN 37916

Ms. Barbara Ward
Knoxville, TN 37916

Ms. Joyce Wallace
Knoxville, TN 37916

VITA

Cynthia Laine Roberts was born in Milan, Tennessee, on July 13, 1952. She attended elementary school in Sharon, Tennessee, and was graduated from Sharon High School in 1970. She attended the University of Tennessee at Martin and the University of Tennessee at Knoxville, where in June, 1974, she received a Bachelor of Science degree in office administration. Upon graduation, she was employed as a legal secretary in Knoxville until September, 1975.

In the fall of 1975, she accepted a teaching assistantship at the University of Tennessee and began study toward her Master of Arts in College Teaching degree with a major in business education. She received this degree in March, 1977. She is a member of Delta Pi Epsilon.

She is married to Ross Ellison Dempster of Knoxville, Tennessee.