

AN ANALYSIS OF THE COMPETENCIES NEEDED BY BOOKKEEPING/
ACCOUNTING TEACHERS AS PERCEIVED BY AUTHORITIES
AND TEACHERS OF BOOKKEEPING/ACCOUNTING

A Dissertation
Presented to
the Faculty of the Graduate School
University of Houston

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Charles Theo Norton
August 1975

ACKNOWLEDGMENTS

The writer expresses his deepest appreciation to Dr. W. Arthur Allee, Chairman of the doctoral research committee, for kindness, patience, and assistance far beyond the call of duty, in preparation of this dissertation. He is particularly appreciative to the research chairman for making him see the value of a residence in writing a dissertation. Special "thanks" are extended to Dr. Kenneth Brown for his assistance and encouraging words. Sincere appreciation is extended to Dr. Bette Stead and Dr. Carl Shaw for their assistance.

A special thanks to Dr. Theodore Nicksick, Jr., President, Wharton County Junior College, Dr. Ora Roades, Dean, and the Board of Trustees for granting the researcher one year of professional leave.

To the writer's wife, Patsy, who helped him in the capacity as a critic, and who gave so generously of herself financially and spiritually, he is deeply indebted.

Charles Theo Norton

AN ANALYSIS OF THE COMPETENCIES NEEDED BY BOOKKEEPING/
ACCOUNTING TEACHERS AS PERCEIVED BY AUTHORITIES
AND TEACHERS OF BOOKKEEPING/ACCOUNTING

An Abstract of a Dissertation
Presented to
the Faculty of the Graduate School
University of Houston

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Charles Theo Norton
August 1975

ABSTRACT

Norton, Charles Theo. An Analysis of the Competencies Needed by Bookkeeping/Accounting Teachers As Perceived by Authorities and Teachers of Bookkeeping/Accounting. Unpublished doctoral dissertation. University of Houston, August 1975.

This study was designed to determine the perceptions and differences in perceptions of bookkeeping/accounting authorities nationally and teachers of bookkeeping/accounting in Texas concerning the importance of listed competencies to be demonstrated by the teacher of bookkeeping/accounting.

The following procedures were used in developing a list of competencies: (1) experienced teachers of bookkeeping/accounting at the secondary level were observed to identify concepts of teaching bookkeeping/accounting; (2) research studies and professional literature in the field of bookkeeping/accounting was reviewed; (3) textbooks used in the state of Texas and the related teacher's manual were reviewed; (4) methods of teaching bookkeeping/accounting and/or business texts were reviewed for competencies.

The following procedures were used in developing the questionnaires. Questionnaire I: (1) observed competencies and competencies taken from the literature were arranged by subject area; (2) competency statements were presented to the research committee and two classes in

graduate business teacher education for refinement; (3) the refined questionnaire was mailed to teachers and authorities asking them to rate the list and to add other competencies.

Questionnaire II: (1) competency statements on this questionnaire were the original competencies, revised competencies, and added competencies; (2) this questionnaire requested further refining and a rating to determine a consensus.

Questionnaire III: (1) this questionnaire consisted of a Consensus Sheet and the returned original Questionnaire II; (2) participants were requested to review their original ratings in relation to the group consensus and to join the group if they were in disagreement or make a statement as to why they did not want to join the consensus.

An analysis of the responses of the two groups was made and conclusions and recommendations were made which may be helpful in establishing a CBTE program in Business Education.

Using the Chi-square, significance was determined at the .05 level on the competency statements. Conclusions based on the findings of this study produced a list of competencies rated crucial by both groups, crucial by authorities and highly desirable by teachers, crucial by teachers and highly desirable by authorities, and highly desirable by both groups.

TABLE OF CONTENTS

	Page
LIST OF TABLES	xi
 Chapter	
1. INTRODUCTION	1
THE PROBLEM	4
Statement of the Problem	4
Need for the Study	4
Limitations of the Study	8
Delimitations of the Study	8
DEFINITION OF TERMS	8
Bookkeeping/Accounting	8
Bookkeeping/Accounting Authority	9
Business Education	9
Business Education Authority	9
Business Teacher Education	9
Competency	10
Competency-Based Teacher Education	10
Delphi Technique	10
Dodl's Categories	10
Performanced-Based Teacher Education	11
SUMMARY	11
2. METHOD OF PROCEDURE	13
DESIGN OF THE STUDY	13

Chapter	Page
SELECTION OF PARTICIPANTS	15
Classroom Teachers	15
Authorities	17
DEVELOPMENT OF QUESTIONNAIRE	17
DISTRIBUTION OF QUESTIONNAIRES	19
Chi-square Test	22
PERSONAL INFORMATION ABOUT PARTICIPANTS . .	22
ORGANIZATION OF THE REPORT	22
3. REVIEW OF RELATED RESEARCH AND LITERATURE . .	24
COMPETENCY-BASED TEACHER EDUCATION	24
BUSINESS EDUCATION COMPETENCIES	30
SUMMARY	37
4. SUMMARY OF DATA	38
THE POPULATION	38
Classroom Teachers	38
Bookkeeping/Accounting Authorities . . .	41
DEVELOPMENT AND PRESENTATION OF QUESTIONNAIRE I	44
DEVELOPMENT AND PRESENTATION OF QUESTIONNAIRE II	45
PRESENTATION OF QUESTIONNAIRE III	45
INTERPRETATION OF DATA OBTAINED FROM QUESTIONNAIRE III	46
Planning	46
Administration	52
Instruction	54

Chapter	Page
Communication	71
Evaluation	74
Development of Pupil Self	77
Development of Personal Skills	79
SUMMARY	83
5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	84
SUMMARY	84
CONCLUSIONS	85
Planning	85
Administration	87
Instructions (Methods/Techniques)	88
Instructions (Content)	90
Communications	91
Evaluation	93
Development of Pupil Self	94
Development of Personal Skills	95
RECOMMENDATIONS	97
ANNOTATED BIBLIOGRAPHY	100
SELECTED BIBLIOGRAPHY	105

APPENDIXES

A.	Request for Participation from Teachers	112
	Return Postal Card (Teachers)	114
	Follow-up Letter to Teachers	115
	Request for Participation from Authorities . .	116
	Return Postal Card (Authorities)	117
	Follow-up Letter to Authorities	118
B.	Initial Questionnaire I	120
	Memorandum of Instruction	121
	Postage Paid Envelope	134
	Follow-up Memorandum	135
C.	Reference Sources for Questionnaire I and the Expanded Questionnaire II	136
D.	Questionnaire II	150
	Memorandum of Instructions	151
	Follow-up Memorandum	165
E.	Questionnaire III (II).	166
	Consensus Sheet	168
	Follow-up Memorandum	189
F.	Personal Information Sheet (Teachers)	214
	Personal Information Sheet (Authorities). . . .	215
G.	Competencies Crucial by Both Groups	217
	Competencies Crucial by Authorities and Highly Desirable by Teachers	220
	Competencies Crucial by Teachers and Highly Desirable by Authorities	222
	Competencies Highly Desirable by Both	224

LIST OF TABLES

Table	Page
1. Number of Questionnaires Mailed, Number, and Percent Returned	21
2. Degrees Earned by Classroom Teachers Reported by Number and Percent	39
3. Semester Hours of Accounting Taken by Classroom Teachers by Number and Percentage	40
4. Work Related Experience of Classroom Teachers by Number and Percentage	41
5. Years of Work Related Experience of Authorities by Number and Percent	42
6. Degrees Earned by Bookkeeping/Accounting Authorities by Number and Percent	43
7. Comparison of Authorities and Teachers Responses on Planning Competencies Including Chi-Square, Degrees of Freedom, and Percent of Response	48
8. Comparison of Authorities and Teachers Responses On Administration Competencies Including Chi-Square, Degrees of Freedom, and Percent of Response	53
9. Comparison of Authorities and Teachers Responses on Instruction Competencies (Methods/Techniques) Including Chi-Square, Degrees of Freedom, and Percent of Response	55
9A. Comparison of Authorities and Teachers Responses on Instruction Competencies (Content) Including Chi-Square, Degrees of Freedom, Percent of Response	60
10. Comparison of Authorities and Teachers Responses on Communication Competencies Including Chi-Square, Degrees of Freedom, and Percent of Response	72

Table

Page

11.	Comparison of Authorities and Teachers Responses of Evaluation Competencies Including Chi-Square, Degrees of Freedom, and Percent of Response	75
12.	Comparison of Authorities and Teachers Responses on Pupil Self Competencies Including Chi-Square Degrees of Freedom and Percent of Response	78
13.	Comparison of Authorities and Teachers Responses on Personal Skill Competencies Including Chi-Square, Degrees of Freedom, and Percent of Response	80

Chapter 1

INTRODUCTION

Accountability is a demand heard in public education today. Legislatures and school boards across the nation are becoming concerned about how teachers teach as well as what they teach. We are experiencing much soul-searching from within and from without the educational system. Serious questions are being asked concerning education. The fact that during the last several years bond issues have failed to pass is testimony that the public is asking that education give a better accounting of how we are using its money and to justify the ever-increasing cost of education.

Criticism of education is heard at all levels. Marland¹ reports that we have failed to impart either broad understandings or specific skills to tens of thousands of young Americans. He reports that out of 300,000 job applications received in 1968 by Pacific Telephone almost one-half did not meet even modest basic requirements for vocational skills.

¹Sidney P. Marland, "Education for the Real World," Business Education Forum, XXVI (November, 1971), 3.

Complaints are heard from colleges and universities that students are scoring lower on entrance exams. Student attrition is on the increase. Many who graduate say they are unprepared for employment or entering other institutions for additional education or training. Marland² states that it is evident among students, parents, educators, and government officials that the American learning system is not preparing young people adequately for the jobs. Government statistics show that nearly 2.5 million young people leave formal education every year without adequate preparation for working careers.

Why are these people so ill prepared? Perhaps changes in social culture and advancement in technology can be blamed; however, that is only one facet of the problem. The blame must rest in part on the teachers and on teacher-training institutions. Educators must identify what a teacher should know in order to impart knowledge to their students.

Nash and Agne report:

. . . Teacher educators are growing impatient with the piecemeal and obsolete curricula innovations that have characterized so many of their programs in the past. Amidst this inchoative but rising public demand that teachers in the cities and suburbs become professional skill strategists who can successfully prepare children to read, write, and compute, teacher educators are beginning to reassess their training mission. And as more public schools turn to performance

²Sidney P. Marland, "Training More People for Jobs in the Real World," U. S. News and World Report, LXXIV (June 25, 1973), 49.

contracting with business and industry to insure that their students learn the basic skills necessary for technological survival, colleges of education are reevaluating their own preparation programs in order to reaffirm their central position in the education of this country's teachers. As a result, curriculum reforms in teacher education are based on the premise that the teacher's primary professional responsibility is to master those performative skills that will insure that students in schools everywhere (by virtue of their own skill proficiencies) can compete equitably and successfully for diminishing job openings and prestigious college admission . . .³

Teacher-training institutions must identify and instill competencies that are needed to assure that once a teacher is on the job, he will be able to perform in such a manner that students will acquire the necessary skills and knowledges to be successful in whatever they endeavor.

Previous studies have analyzed the preparation and certification of secondary school business teachers. No indepth studies were found concerning competencies a teacher of bookkeeping/accounting at the secondary level should possess for certification. Articles and texts have been written on skills needed to teach business subjects. However, most of these concern methods of teaching rather than competencies.

This study is designed to be the first phase in the development of a competency-based teacher education program for teachers of high school bookkeeping/accounting.

³Robert J. Nash and Russel M. Agne, "Competency in Teacher Education: A Prop for the Status Quo?" Journal of Teacher Education, XXII (Summer, 1971), 147.

THE PROBLEM

Statement of the Problem

No specific body of knowledge now exists that identifies competencies needed to teach bookkeeping/accounting at the high school level. This study identifies competencies as perceived by teachers of bookkeeping/accounting in the field.

More specifically, the purpose of this study was to: (1) evolve a list of competencies needed by bookkeeping/accounting teachers; (2) rank in order of crucial and highly desirable the competencies needed by teachers of bookkeeping/accounting; (3) analyze the competencies perceived by authorities and teachers of bookkeeping/accounting; (4) make recommendations to departments of business teacher education as to the entry-level competencies needed for certification to teach bookkeeping/accounting.

Need for the Study

Educators agree, generally, on the need for sweeping changes in teacher education. Howsam and Houston say, "in changing times, unchanging schools are anomalous."⁴

Certification of teachers nationally has tended to follow a pattern. This pattern has been based on completion

⁴W. Robert Houston and Robert B. Howsam, Competency-Based Teacher Education (Palo Alto: Science Research Associates, Inc., 1972), 1.

of certain basic and major area courses, the attainment of a certain grade-point average, and the successful completion of student teaching. By successfully meeting these criteria, the graduate is assumed to be qualified to teach.

Schalock⁵ says that operationally such criteria for certification require that a student demonstrate that he knows enough in various courses that he can pass them, that he is able to apply what he knows at some minimal level as a student teacher for a certain number of weeks, and that he is acceptable as a member of the teaching profession as judged by the faculty of the college from which he graduates.

Teacher-education institutions must evaluate more closely the teachers they are preparing. Competency-based teacher education is one way that institutions of higher learning can assess the capabilities of their graduates.

The competency-based teacher education concept comes from the emphases on goal-orientation and individualization. Objectives can be made explicit by and for the learner. The student can then pursue the various learning activities, and thus develop performance skills at the same time.⁶

⁵H. Del Schalock, "The Focus of Performance Based Certification: Teaching Behavior or the Products That Derive from a Teacher's Behavior." (Paper prepared for the Performance Based Certification Conference, Florida State Department of Education, Miami Beach, Florida, May 19-22, 1970).

⁶Houston and Howsam, op. cit., p. 3.

Education, especially business education, is concerned with change. The rapid change in our society is creating problems of obsolescence. Corey⁷ reports that past patterns of organizations in education and training have tended to lack flexibility, remaining rigid to a certain degree. Examine the typical programs in high school book-keeping/accounting and see whether they have been changed to supply the competencies now needed in the business office. Have teachers been challenged to meet the competencies required by providing relevant and quality technical instruction to meet the needs of today's students? Have teachers been provided an opportunity to acquire such competencies? Dale⁸ says that teacher-education institutions can now become members of teams committed to revolutionize the quality of instruction and to create a new and highly effective body of instructional materials.

Business teacher education has developed various lists of competencies needed by the business teacher. Three studies were found related directly to business-teacher competencies. Brown⁹ developed a checklist for describing

⁷Mary L. Corey, "Program Revitalization Needs Leadership for the Top," Business Education Forum, XXVIII (May, 1974), 33.

⁸Edgar Dale, "Toward Excellence in Instruction," Business Education Forum, XXVII (October, 1973), 8.

⁹Betty Jean Brown, "The Relationship Between Supervisors and Student Evaluation of Teaching Effectiveness of General Business Teachers," Business Education Forum, XXVII (October, 1972), 34.

good and poor teaching behavior. Herbert¹⁰ identified specific typewriting competencies. Prather¹¹ identified specific competencies in shorthand. The ordering of importance of activities has not been determined. An in-depth study is needed to develop an identification of competencies needed in bookkeeping/accounting and other business subjects.

A new perspective of education is provided through competency-based teacher education. This study, through the analysis made of the perception of business education teachers and authorities, should be of value to teachers currently in the field, as it will provide the background needed to update and enlarge their present competencies. Future teachers will find the research helpful in determining specific areas in which they are weak. Departments of business teacher education in higher educational institutions will find it valuable as a basis for teacher development.

¹⁰Margaret Hebert, "An Analysis of the Competencies Needed by Typewriting Teachers as Perceived by Authorities and Teachers of Typewriting," (unpublished Doctor's dissertation, University of Houston, 1973).

¹¹Helen Prather, "An Analysis of the Competencies Needed by Shorthand Teachers as Perceived by Authorities and Teachers of Shorthand" (unpublished Doctor's dissertation, University of Houston, 1974).

Delimitations

The study was delimited to (1) a review of professional literature for the years 1963 through June, 1974; (2) classroom observation of teachers of bookkeeping/accounting in the Houston Independent School District; (3) a questionnaire survey of randomly selected teachers of bookkeeping/accounting in public and private secondary schools in the state of Texas; (4) a survey of selected national authorities in bookkeeping/accounting; (5) a review of current texts in bookkeeping/accounting; (6) a review of methods books of teaching bookkeeping/accounting; and (7) identification of competencies only instead of learning activities of prospective teachers.

Limitations

The study was limited to the cooperation received from the classroom teacher and authority participants.

DEFINITION OF TERMS

The terms used in this study will be familiar to teachers of business education. To insure clarity of thought, an explicit definition is given.

Bookkeeping/Accounting

A course on the secondary level in which day-to-day business transactions are recorded in journals, posted to

ledgers, and summarized in the preparation of summary statements that are presented to employers.

Bookkeeping/Accounting Authority

A person who has authored texts on bookkeeping since 1960, texts on methods of teaching bookkeeping/accounting, or published articles since 1963 in professional journals concerning bookkeeping/accounting on the secondary level.

Business Education

Those business programs and courses taught ordinarily at the secondary level.¹²

Business Education Authority

Those persons who have contributed, as evidenced by their writing and research, to the field of business education.

Business Teacher Education

A term used to refer to the professional preparation of teachers in the field of business education.¹³

Competency-Based Teacher Education

A system of teacher education which has as its purpose the development of specifically described knowledges,

¹²C. A. Nolan, Carlos Hayden, and Dean Malsbary, Principles and Problems of Business Education (Cincinnati: South-Western Publishing Company), p. 6.

¹³Ibid., p. 11.

skills, and behaviors that enable a teacher to meet performance criteria for classroom teaching--abbreviation CBTE.¹⁴

Competency

A knowledge, skill, or judgment which the student will demonstrate at a predetermined proficiency level before initial and/or continuing certification.¹⁵

Delphi Technique

A technique for organizing and sharing "expert" forecasts about the future. A technique that prevents professional status and high position from forcing judgment in certain directions.¹⁶

Dodl's Categories

A taxonomy of teacher competencies developed by Normal Dodl. These competencies include seven areas:

- a. Assessing and evaluating student behavior.
- b. Planning instruction.
- c. Conducting or implementing instruction.
- d. Performing administrative duties.

¹⁴W. Robert Houston and Robert B. Howsam, Competency Based Teacher Education (Palo Alto: Science Research Associates, Inc., 1972), p. 6.

¹⁵*Ibid.*, p. 3.

¹⁶W. Timothy Weaver, "The Delphi Forecasting Method," Phi Delta Kappan, LII (January, 1971), 267.

- e. Communicating.
- f. Developing personal skills.
- g. Developing pupil-skills.¹⁷

Performance-Based Teacher Education

A term interchangeable with competency-based teacher education for this study--abbreviated PBTE.

SUMMARY

Teacher training institutions must identify and instill competencies that are needed to assure that once a teacher is on the job he will be able to perform in such a manner that the student will acquire the necessary skills and knowledges to be successful in whatever they endeavor.

In the words of Howard Flieger, Editor of U. S. News and World Report:

Are children learning the right thing in the right way from the right person. . .

Every employer, career counselor and educator in the country knows that pupils by the thousands are being advanced grade by grade to eventual graduation as functional illiterates.

They cannot read, write, spell or do their sums with anything more complicated than a number under ten. They are moving from school to the job market with little equipment to earn an honest living and no knowledge to advance in any skill.

Clearly the system is wrong!¹⁸

¹⁷Normal Dodl, The Florida Catalog of Teacher Competencies (Florida: Department of Education), 1972.

¹⁸Howard Flieger, "Can Teachers Teach?" U. S. News and World Report, LXXVII (October 28, 1974), 96.

This study was designed to determine the perceptions and differences in perceptions of bookkeeping/accounting authorities and teachers of bookkeeping/accounting concerning the importance of listed competencies to be demonstrated by the teacher of bookkeeping/accounting on the secondary level.

Competency-based teacher education is one way institutions of higher learning can assess the capabilities of their graduates.

This study should be of value to teachers currently in the field, future teachers, and departments of business teacher education.

Chapter 2

METHODS OF PROCEDURES

The procedures followed in conducting this investigation were divided into six divisions: (1) Design of the study, (2) Selection of the Participants, (3) Development of Questionnaire, (4) Distribution of Questionnaires, (5) Personal Information about the Participants, and (6) Organization of the Report.

DESIGN OF THE STUDY

The study was designed to bring expert opinion together without bringing pressure on the participants to conform to a peer group code or be pressured by another of higher professional status. The design of the study is a modified Delphi.

Delphi Technique

Typically, the Delphi procedure may take a form such as the following: (1) The first questionnaire may ask the respondents, who remain anonymous to one another, for an opinion involving experienced judgment. (2) The statements or opinions are gathered into a questionnaire which the respondents are requested to rate or evaluate

by some criterion. (3) The third questionnaire includes the list of ratings and the consensus of the group. It asks the participants either to revise their opinion, if outside the consensus, or specify their reason for remaining outside the consensus. (4) The fourth questionnaire provides a final opportunity for the revision of opinions.

The procedure generally succeeds in its objective of encouraging a convergence of opinion or at least a majority opinion and a clearly defined minority opinion.¹⁹

For the purpose of this study, the Delphi technique was modified. The first questionnaire contained a partial list of competencies. In addition, blank lines were left at the bottom of each category so that respondents could add their own thoughts. Questionnaire II contained the revised and added statements of the participants. The participants were then asked to rate the competency statements. Questionnaire II was collected and the consensus determined. Questionnaire III consisted of the same statements as Questionnaire II but had the consensus of the group indicated. The participants were asked to re-evaluate their ratings and join the consensus or else make a statement as to their reason for remaining outside the consensus.

¹⁹W. Timothy Weaver, "The Delphi Forecasting Method," Phi Delta Kappan, LII (January, 1971), 267-271.

SELECTION OF PARTICIPANTS

Classroom Teachers

The participants consisted of two groups--classroom teachers in the State of Texas and authorities in the field nationally. Using a list of teachers furnished by South-Western Publishing Company, a random sample of the total population was selected. To determine the number of teachers required to infer to the whole population, the NEA Small Sample Formula²⁰ was used. For a population of 1,297 teachers of bookkeeping/accounting in the State of Texas, 224 would be needed. The formula, explanation, and calculation follows:

$$n = \frac{\chi^2 N \bar{p}(1-\bar{p})}{d^2(N-1) + \chi^2 \bar{p}(1-\bar{p})}$$

n = the required sample size

χ^2 = the table value of chi-square for 1 degree of freedom and desired confidence level (2.706)

N = the population size

\bar{p} = the population proportion which it is desired to estimate (assumed to be .50 since this would provide the maximum sample size)

d = the degree of accuracy expressed as a proportion (.05).

²⁰ _____, "The NEA Small Sample Formula," The NEA Research Bulletin, XXXVIII (December, 1960), 99.

$$2.706 \times 1,297 = 3,509.682$$

$$3,509.682 \times .50 = 1,754.841$$

$$1,754.841 \times 0.50 = 877.420$$

$$0.0025 \times 1,296 = 3.240$$

$$2.706 \times 0.50 = 1.353$$

$$1.353 \times 0.50 = 0.676$$

$$0.676 + 3.240 = 3.916$$

$$877.420 \div 3.916 = 224.060$$

Rounded to 224 participants

To obtain 224 participants, the list furnished by South-Western Publishing Company was numbered from 1 to 1,297. Using a table of random numbers, 650 numbers were selected.²¹

On September 25, 1974, letters of request for participation (Appendix A, page 113) were mailed to 650 book-keeping/accounting teachers in the secondary schools of the State of Texas. A stamped reply postal card (Appendix A, page 114) was enclosed. The last day to respond was October 25, 1974. A follow-up letter (Appendix A, page 115) was mailed to those who had not responded. Two hundred seventy-two had responded positively by October 25, 1974.

²¹Gene V. Glass and Julian C. Stanley, Statistical Methods In Education and Psychology, (New Jersey: Prentice-Hall, Inc., 1970), p. 510.

Authorities

Authorities were selected nationally. Using the Business Education Index from 1962 to 1974, names were selected based on the publication of articles in the field of bookkeeping/accounting. Authors of bookkeeping/accounting texts at the high school level were asked to participate as were writers of methods books in teaching of bookkeeping/accounting. The list contained 62 names.

On September 25, 1974, letters of request for participation (Appendix A, page 116) and a reply postal card (Appendix A, page 117) were mailed to the 62 selected authorities. The last day to respond was October 25, 1974. A follow-up letter (Appendix A, page 118) was mailed to those who had not responded by October 15, 1974. Forty-four authorities had accepted by October 25, 1974.

DEVELOPMENT OF QUESTIONNAIRE

The original questionnaire contained a list of competencies developed by the researcher from several sources. Teachers of bookkeeping/accounting at the secondary level in the Houston Independent School District were observed in the fall semester. The teachers were selected by the supervisor of business education. The teachers taught in different sections of the city and thus consisted of a student population of various cultures, values, and abilities.

Other competencies were taken from review of research, professional business education literature, book-keeping/accounting textbooks, teachers' manuals in book-keeping/accounting, and methods textbooks of teaching bookkeeping/accounting or business subjects.

None of the original identified competencies were rated by the researcher. They were noted and then placed in categories.

The competency statements were typed in questionnaire form and presented to members of the dissertation committee²² for suggestions. Revisions were made and the instrument presented to two graduate classes in business education for criticism and comments. Suggestions were noted and statements were refined that were not clear.

The respondents were asked to react to each competency statement listed as being (C) crucial, (H) highly desirable, (D) desirable but not absolutely necessary, (N) nonimportant, (I) incorrectly stated and needs revision, (X) do not use--concept inappropriate. Space was provided in each category for respondents to add additional competency statements.

²²Drs. W. Arthur Allee, Kenneth W. Brown, Carl Shaw, and Bette A. Stead.

DISTRIBUTION OF QUESTIONNAIRES

The initial questionnaire and letter (Appendix B, page 121) was mailed on October 21, 1974, to the teachers and authorities who had indicated a willingness to participate. By that date more than the required 224 teachers had responded, and 35 authorities had accepted. An addressed, postage paid, envelope (Appendix B, page 134) was enclosed. Other participants were mailed questionnaires as their acceptance was received. The deadline for return of Questionnaire I was November 5, 1974. A follow-up memorandum (Appendix B, page 135) was mailed to participants on November 1, 1974. Two hundred seventy-two teachers and 44 authorities had agreed to participate in the study by the due date of Questionnaire I. The questionnaire was returned by two hundred fifty-one, 92.2 percent of the classroom teachers and forty, 90.9 percent of the authorities.

Questionnaire II was prepared after refining, combining, and expanding the competencies listed on Questionnaire I. The research chairman assisted in the refinement. Reference sources for Questionnaire I and the expanded Questionnaire II is shown in Appendix C, page 136.

Questionnaire II (Appendix D, page 150), memorandum (Appendix D, page 151), and envelope were mailed on November 10, 1974. A follow-up memorandum (Appendix D, page 165) was mailed on November 29, 1974. Two hundred thirty-eight,

94.8 percent of the teachers and thirty-nine, 97.5 percent of the authorities returned Questionnaire II.

Questionnaire III (Appendix E, page 166) was in two parts. Part one was Questionnaire II and part two was the Consensus Sheet. The Delphi technique requires the researcher not to alter statements for the final round of ratings. The Consensus Sheet is Questionnaire II and indicates the modal (majority) consensus. Participants were returned Questionnaire II and requested to observe the consensus in relation to their own rating of each competency statement. Participants were asked to join the consensus or make a statement as to why they did not choose to join the consensus.

The participants' Questionnaire II was returned to them with the Consensus Sheet (Questionnaire III). The questionnaire was mailed to teachers on January 6, 1975, and to authorities on January 8, 1975. The final date for returning Questionnaire III for teachers was January 27, 1975, and February 1, 1975, for authorities. The difference in time of return was due to Christmas holidays. A follow-up memorandum (Appendix E, page 199) was mailed to the teachers on January 14, and authorities on January 25, 1975. Telephone calls were made to authorities who had not responded by February 5, 1975. Teachers were not called, as more than the required 224 had responded by that date.

Of the 272 teachers who agreed to participate, 231 returned the original questionnaire and Consensus Sheet (Questionnaire III); four returns were not usable. Of the 44 authorities who originally agreed to participate, 36 returned the original questionnaire and Consensus Sheet (Questionnaire III).

Table I, below, shows the number of questionnaires sent, returned, and percent of return of both groups.

Table 1
NUMBER OF QUESTIONNAIRES MAILED AND
NUMBER AND PERCENT RETURNED

Question- naire	Number Sent		Number Returned		Percentage of Return	
	A*	T+	A*	T+	A*	T+
I	44	272	40	251	91	92
II	40	251	39	238	98	94
III	39	238	36	227	92	95

*Authorities +Teachers

Color coding, believed by the researcher to be important in getting responses, was used throughout. The return participation card was blue. Questionnaire I to authorities was white and teachers blue. Questionnaire II was pink for authorities and green for teachers. The Consensus (Questionnaire III) was yellow for teachers and light blue for authorities. All correspondence was on white. Enclosed envelopes were white, professionally printed with return address and a First-Class Postal Permit.

Chi-square Test

A Chi-square test was made on each competency statement of teachers and authorities to determine whether there was a significant difference. The Chi-square Test was chosen because it is a simple and direct test of significance. It is suitable when observations can be classified into discrete categories and treated as frequencies.²³

PERSONAL INFORMATION ABOUT THE PARTICIPANTS

The procedures for gathering personal information about the participants was to be attached to the final questionnaire (Consensus Sheet) questions that would give the researcher some insight into the background and thinking of those who participated. Information requested from the teachers is shown in Appendix F, page 214 and authorities in Appendix F, page 215.

ORGANIZATION OF THE REPORT

The study is divided into five chapters. Chapter 1 contains the introduction, which includes the statement of the problem, need for the study, limitations of the study, delimitations, definition of terms, and summary.

Chapter 2 contains a description of the methods and procedures used in making the study. The design of the

²³Celeste McCollough and Voche Van Atta, Statistical Concepts: A Program for Self-Instruction (New York: McGraw-Hill Book Company, 1963), p. 85.

study, selection of participants, development and distribution of questionnaires, personal information source, and the organization of the study are also included.

Chapter 3 discusses the literature reviewed. Topics included are competency-based teacher education and business teacher education competencies.

Chapter 4 contains a summary of the study and the data which is used for interpretation in Chapter 5.

Chapter 5 contains the conclusions, findings, and recommendations for business-teacher preparation programs in the area of bookkeeping/accounting.

A table of contents is in the front, followed by a list of tables, and an appendix and bibliography follows Chapter 5.

Chapter 3

REVIEW OF RELATED RESEARCH AND LITERATURE

A review of the literature revealed many articles concerning general knowledges and skills that a business teacher should have. Competency-based teacher education literature was available in abundance; however, articles specifically related to CBTE for the business teacher were limited. Articles specifically related to bookkeeping/accounting were reviewed and used along with other sources for development of a partial questionnaire which was mailed to teachers and authorities of bookkeeping/accounting for expansion.

COMPETENCY-BASED TEACHER EDUCATION

The question has not been what needs to be changed but rather how to implement change. The competency movement has not come about on its own; it is the outgrowth of interest generated by the U. S. Office of Education Elementary Models Projects. Ten studies were made by this office and each arrived at an emphasis on competencies.

CBTE is also known as performance-based education. Many educators in the field believe that performance is too

narrow and that competency is a better term because competency-based includes knowledge as well as performance.

A conference on the national level by the National Education Association concerning competency and performance-based education stated that teacher education stands at the source of professional practice. Seemingly, the best strategy would be to concentrate on quality control at the source, where the problem is manageable. The best hope is to integrate the teaching profession and its training components and to focus on improvement of the quality of teacher education.²⁴

Massanari reports that CBTE means that professional roles will be conceptualized, objectives will be made explicitly, and an achievement of the competencies and objectives will be demonstrated by students before exiting from a training program. Instruction and learning experiences will facilitate the achievement of the competencies and objectives by placing heavy emphasis on individualization.²⁵

Bowls says "CBTE forces educators to take a hard look at what their teaching is designed to accomplish."²⁶

²⁴Robert B. Howsam, "Performance-Based Instruction," Today's Education, LXI (April, 1972), 32.

²⁵Karm Massanari, "CBTE's Potential for Improving Educational Development," Journal of Teacher Education, XXIV (Fall, 1973), 244.

²⁶F. Douglas Bowls, "Competency-Based Teacher Education: The Houston Story," Education Leadership, XXX (March, 1973), 510.

In a CBTE program the developer attempts to isolate the specific abilities that appear requisite to effective teaching, then designs instructional packets described as learning modules, to elicit these specific abilities as terminal behavior.²⁷

Dodl takes the position that CBTE is to prepare teachers to competently perform teaching functions. Specification of competencies serves three major purposes:

1. It describes or defines the desired product of the program.
2. It establishes major goals for the instructional program.
3. It serves as a principal basis for student assessment, providing evidence upon which to base recommendations for certification.²⁸

The student in a competency-based program is held responsible for demonstrating identified competencies. Three types of criteria are used to determine the student's level of achievement. These are, "knowledge criteria," which are used to assess the cognitive understandings of the student; performance criteria, which are used to assess the teaching behaviors of the student; and consequence criteria, which are used to assess the student's teaching

²⁷Ibid.

²⁸Norman R. Dodl, "Selecting Competency Outcomes for Teacher Education, Journal of Teacher Education, XXIV (Fall, 1973), 194.

effectiveness by examining the emotional and intellectual growth of his pupils."²⁹

CBTE also has its critics, and controversy has developed, especially in the areas of objectives, curriculum design, evaluation, certification, and implementation.

Objectives are difficult to write but are the heart of the CBTE program. Houston and Howsam³⁰ report that two of the major problems in writing objectives are the overabundance of terms used to describe various types of objectives and the variety of persons writing the objectives.

Houston and Howsam³¹ further report that curriculum design is a serious issue. Faculties cannot agree whether teaching is a skill or a knowledge of subject matter. Subject competencies can be taught, but can conceptual skills? What happens to academic freedom? Will humanistic values be lost? How will technology fit into the curriculum? Will technology further dehumanize the student? Will a single-track system or ordered learning be developed? At what level, graduate or undergraduate, will it be started? How will curriculums fit into schools as they now exist?

²⁹James M. Cooper, Wilford A. Weber, and Charles E. Johnson, A Systems Approach to Program Design, (Berkley: McCutchen Publishing Corporation, 1973), p. 15.

³⁰Robert Houston and Robert Howsam, Competency-Based Teacher Education, (Palo Alto: Science Research Associates Inc., 1972), p. 25.

³¹*Ibid.*, p. 44.

CBTE forces the use of evaluative feedback. According to Houston and Howsam, the evaluation issue centers around the following:

1. Is everything measurable?
2. Is teaching an art or a skill?
3. What kind of behavior does a teacher emit when teaching, and does the same behavior reappear?
4. If the real value in teaching is the effect the teaching has on the student, how are you to get this information to evaluate the teacher trainee?³²

Certification is more of an issue with state legislatures than educational institutions. State legislatures will have to change, and this change will be difficult because traditionally they have wanted to maintain control over public education. The issues, according to Houston and Howsam, centers mainly on whether a degree should be required; whether a teacher shows competency in all areas and at all levels; whether a teacher has to demonstrate a like for children; whether certification be national rather than state; whether performance should be the top priority or should moral and character values enter into the picture; should college professors be willing to change; and will the college administration buy the program since it will mean rearrangement of staff and the elimination of courses and programs now mandated?³³

³²Ibid., p. 59.

³³Ibid., p. 166.

Implementation will not be easy because higher educational institutions are slow to change. The greatest assistance will probably come from consortiums, because consortiums are one of the most powerful instruments for educational change and improvement.³⁴

Regardless of the basis for assessing competency, two general conditions must be met if competency-based teacher preparation programs are to become a reality: (1) reasonably precise statements of the specific competencies must be made, and (2) at the same time, reliable procedures must be developed for assessing competencies in terms of the appropriate criteria.³⁵

The major argument in favor of competency-based teacher education is the one-to-one relationship it represents between performance prior to certification and performance subsequent to it. If a teacher is to be accountable for bringing about specified learner outcomes, then it would seem reasonable to require prospective teachers to demonstrate that they are competent to bring about such outcomes.

The real justification for a competency-based teacher education program can best be summarized by Schalock:

³⁴Ibid., p. 81.

³⁵M. Vere DeVault, Dan W. Andersen, and George E. Dickson, Problems and Prospects for the Decade Ahead, (Berkley: McCutchen Publishing Corporation, 1973), p. 49.

1. It represents or provides an absolute criterion of teaching effectiveness, and thereby meets the ultimate test of accountability.
2. It accommodates individual differences in teaching preferences or styles in that it allows for wide variation in the means of teaching a given outcome, i.e., in teaching behaviors, but holds all teachers accountable for being able to bring about given classes or outcomes.
3. It allows for the fact that at this point in time we are not at all clear about the specific teaching behaviors that bring about specified outcomes in pupils or the specific behaviors that bring about selected noninstructional programs to be found and utilized.
4. It forces the entire educational system, as well as teacher education, to be clear about the goals or objectives of education, and to become clear about the means for the realization of those objectives.
5. It takes much of the guesswork out of hiring new teachers, for each teacher would have a private folder which summarized in detail what they can or cannot do at the time they receive their certification.³⁶

BUSINESS EDUCATION COMPETENCIES

A review of the research revealed several studies in the area of competency-based business teacher education. McCullough developed a list of competencies for teaching Business Machines, Office Practice, Basic Business, Shorthand, Typewriting, Bookkeeping/Accounting/Recordkeeping.

³⁶Del H. Schalock, "Alternative Strategies and Foci for Teacher Education," (Field Test Copy), (Monmouth, Oregon: Oregon College of Education, 1970).

and Data Processing. The list was developed by the author, business education teachers, and students. She says,

1. The beginning business teacher should have an understanding of the use of financial records in business and industry. That is, the teacher should have a knowledge of:
 - (a) The bookkeeping cycle
 - (b) Debits and Credits
 - (c) Special journals
 - (d) Subsidiary ledgers
 - (e) Financial statements
 - (f) Analysis of financial statements
 - (g) Relationships between accounting and data processing
 - (h) Accounting terminology
2. The beginning business teacher should have a knowledge of, and ability to perform and teach, the correct operation and uses of adding machines and calculators.
3. The beginning business teacher should have the ability to use an overhead projector in making class presentations. This includes the ability to:
 - (a) Make transparencies
 - (b) Write clearly
 - (c) Address the class while writing
 - (d) Think while standing and writing with little reference to the textbook and other aids
 - (e) Develop problem situations illustrating accounting principles
4. The beginning business teacher should have the ability to use good teaching techniques--that is, those consistent with current methods advocated by the authorities in the field.
5. The beginning business teacher should be familiar with most of the commonly used textbooks, workbooks, practice sets and other instructional materials (films, filmstrips, etc.) used in secondary classrooms.

6. The beginning business teacher should have the ability to develop evaluation materials such as tests, checklists, etc., and to develop grading standards which are consistent with the needs of business at job-entry level.³⁷

Wells surveyed teachers to identify skills and knowledges needed by high school business teachers. He also obtained an appraisal of selected business education graduates as to the adequacy of their preparation in these skills and knowledges.

A list of skills and knowledges were developed from a review of the most commonly used high school textbooks. Selected graduates from business teacher preparation programs were surveyed to obtain their appraisals of the adequacy of their preparation.

All topics in the questionnaire represented skills and knowledges necessary to enable the teacher to teach the content that should be included. No less than 75 percent of the graduates of a good business teacher preparation program should rate their preparation as being sufficient to teach the topics established in this study, and no more than 25 percent should rate their preparation as being insufficient to teach these topics.

Preparation should provide skills and knowledges to teach the topics in management, data processing,

³⁷Edith McCullough, "Performance-Based Business Teacher Education," California Business Education Journal, VII (May, 1973), 21-28.

statistics, finance, business law, marketing, economics, communications, and accounting. In general, teachers felt inadequate to teach the topics established in this investigation.³⁸

Brown studied the relationship between supervisors' and students' evaluations of teaching effectiveness of general business teachers. The population consisted of general business teachers, their supervisors, and their students in general business. A performance check list was developed by students describing good and poor teaching behavior. A Delphi technique was used to develop a rating scale for supervisors. A questionnaire for collecting background information from teachers was developed. A comparison was made between the most effective and least effective teacher to determine whether a relationship existed in evaluations of those teachers grouped by years of teaching experience, years of general business teaching, and years of outside work experience.

No significant relationship was found between years of teaching experience and teaching effectiveness as evaluated by students but the opposite was true in the supervisors' evaluations.

³⁸ Barron Wells, "The Business Teacher Education Curriculum: Identifications and Appraisals of Skills and Knowledges in Selected Areas of Business Administration," Business Education Forum, XXVII (October, 1972), 52.

No significant relationship existed between years of business teaching and teaching effectiveness or years of outside work experience and teaching effectiveness as judged by students and supervisors.

A significant relationship existed between student evaluations and immediate supervisor evaluations of teaching effectiveness in general business.

There was some correlation between student and supervisors evaluations; however, students and supervisors probably used different criteria in evaluations.³⁹

Harrington made a study to determine essential competencies of vocational education administrators in the state of Illinois. A committee refined a list of 801 competencies to 324 for further study. The instrument was mailed to vocational education administrators who further refined the competencies. The competencies were categorized according to degrees of importance. Scores of 1.66 or less on a three-point scale were classified as essential. Three hundred five competencies were categorized according to degree of importance. The results were that 247 of the 305 competencies were judged to be essential. These included 49 of the 51 knowledges identified, 50 of the 61 attitudes, and 148 of the 193 skills included in the instrument.

³⁹Betty Jean Brown, "The Relationship Between Supervisor and Student Evaluations of Teaching Effectiveness of General Business Teachers," Business Education Forum XXIX (October, 1972), 34.

The relative importance of knowledges, skills, and attitudes varied within the five categories of administrative activity. Seventeen of the total 305 competencies indicated a significant difference at the .05 level.

Essential competencies of vocational administrators can be identified; and competencies dealing with knowledges were more frequently judged as being essential than were competencies dealing with attitudes and skills.⁴⁰

Hebert made an analysis of competencies needed by typewriting teachers as perceived by business teachers and by authorities in business education. Her purpose was to develop a list of competencies needed by the teacher of beginning typewriting; to interview selected teachers in the Houston metropolitan area to obtain their appraisals and rankings of the competencies; to survey authorities in business education in the United States to obtain their appraisals and rankings of identified competencies; to make an analysis of the responses of the two groups.

The modified Delphi technique was applied to both teachers and authorities. A chi-square was used to identify the competency statements which were common to both groups. The result was a set of competencies which may be used in

⁴⁰Charles T. Harrington, "Essential Competencies to Vocational Education Administrators in the State of Illinois," Business Education Forum, XXIX (October, 1974), 35.

initiating a program in competency-based teacher education in business education for the teacher of typewriting.⁴¹

Prather investigated the perceptions and differences in perception of business education authorities and practicing business teachers relative to the importance of competencies to be demonstrated by the teacher of shorthand.

A list of competencies were developed from three sources: Observation of teachers in a class situation; review of literature in professional business education journals; teaching suggestions as revealed in the instructors manual and handbook.

A modified Delphi was used. Competencies were rated and expanded by shorthand classroom teachers across Texas and nationally by authorities. A chi-square was used to determine those competency statements common to each group.

The result was a set of competencies generated by both authorities and teachers which may be used in initiating a program of competency-based teacher education in business education for the teacher of shorthand.⁴²

⁴¹Margaret Hebert, "An Analysis of Competencies Needed by Typewriting Teachers as Perceived by Business Teachers and by Authorities in Business Education," Business Education Forum, XXIX (October, 1974), 36

⁴²Helen Prather, "An Analysis of Competencies Needed by Shorthand Teachers as Perceived by Business Teachers and by Authorities in Business Education," (unpublished Doctors dissertation, University of Houston, 1974).

SUMMARY

A review of the literature revealed that the competency-based movement has not come about on its own but as a result of interest created by the U. S. Office of Education Elementary Models Project.

The competency-based movement has been criticized on the grounds that so many terms exist and the involvement of so many different people in writing the objectives. Curriculum design is also a serious issue. The plus side of the CBTE movement is the one-to-one relationship it represents and the fact that it makes both teacher and student accountable.

A review of literature in business education revealed that little has been done in this area relating to competency-based teacher education and that a need exists for development of literature in this area. Only six research studies were found relating directly to business teacher competencies.

Chapter 4

SUMMARY OF DATA

Chapter 4 is divided into four sections: (1) information about the participants, (2) development of Questionnaires I, II, III, and presentation of data, (3) Questionnaire III responses, and (4) the statistical treatment of the data obtained from Questionnaire III.

THE POPULATION

Classroom Teachers

The research sought to obtain professional education, training, and experience, as well as occupational experience which have affected and contributed to the overall qualifications of the participants. Of the 227 classroom teachers, the majority, 136 (60 percent), had at least a bachelor's degree; the remaining, 91 (40 percent), had completed the master's degree. Table 2 presents a summary of the professional degrees of the teachers.

Semester hours in accounting earned at the college level by the classroom teacher group was as follows: Forty-nine percent had 8 hours or less; 34 percent had at least 9 hours but no more than 16 hours; 17 percent reported in excess of 16 hours. Table 3, page 40, gives a description of accounting credit for classroom teachers.

Table 2
Degrees Earned by Bookkeeping/Accounting
Classroom Teachers Reported by
Number and Percent

Degree	Number	Percent
Bachelor of Science	67	30
Bachelor of Business Administration	54	24
Bachelor of Arts	15	6
Master of Science	64	28
Master of Business Administration	15	6
Master of Arts	12	5
Total	227	99

Table 3

Semester Hours of Accounting Taken by
Bookkeeping/Accounting Classroom
Teachers Reported by Number
and Percent

Semester Hours	Number	Percent
8 or Less	110	49
9 - 16	78	34
16 or More	39	17
Total	227	100

The majority of the teachers, 83 percent, had three or more years of teaching experience; 17 percent had less than 3 years.

Over half of the classroom teacher participants (66 percent) indicated they had work related experience in the area of bookkeeping/accounting. The work experience is shown in Table 4.

Almost all of the teachers in the study received their education in Texas colleges. Two hundred attended schools in the state. Fifty-nine percent of the total teacher participants indicated that educational institutions in Texas are doing an adequate job in training teachers, but 22 percent said that certification procedures were inadequate.

Table 4

Work Related Experience of Bookkeeping/Accounting
Classroom Teachers Reported by
Number and Percent

Years	Number	Percent
0	77	33
1	32	14
2-4	52	23
5-9	39	17
10+	27	13
Total	227	100

Concerning the future of bookkeeping/accounting, the classroom teachers indicated that it had potential at the high school level.

A large percentage of the teacher participants, 62 percent, indicated they knew very little about CBTE; 34 percent indicated that the concept appealed to them.

Bookkeeping/Accounting Authorities

The bookkeeping/accounting authorities participating in the research represent a comprehensive background of teaching, professional education, scholarly publications, and work experience. Of the 36 participants in this group, 35 had teaching experience on the secondary level, and 34 were certified to teach in some state. In addition to

secondary teaching experience, 14 had experience at the community/junior college level, and all had taught at the senior college level.

Authorities were backed in their teaching experience by work experience in the bookkeeping/accounting field. Seventy-six percent had two or more years of work related experience. Table 5 shows the years of work related experience of the authority participants.

Table 5

Years of Work Related Experience of Bookkeeping/Accounting Authorities Reported by Number and Percent

Years	Number	Percent
0	4	11
1 or Less	3	8
2-4	16	44
5-9	7	19
10+	5	13
No Reply	1	5
Total	36	100

All the authorities participating in this study had at least a master's degree; 72 percent possessed a doctorate. Table 6 provides a description of professional degrees held by authorities.

Table 6

Degrees Earned by Bookkeeping/Accounting Authorities
Reported by Number and Percent

Degree	Number	Percent
Master	10	28
Ph.D.	9	25
Ed.D.	13	36
Doctorate (unspecified)	4	11
Total	36	100

All the authorities reported having earned hours in accounting. Four had less than 16 hours. Members of this group had all written in the bookkeeping/accounting area. Ten published articles was the arbitrary cut-off point for the purpose of this research; some indicated that they had published in excess of 100 articles. Five of the participants stated that they had written textbooks or other related books. (Others may have written books, but this information was not specifically requested.)

The majority, 67 percent, indicated certification nationally needed revising, but said that teacher-training institutions are doing an adequate job in preparing teachers.

CBTE as a basis for certification rated favorably with 64 percent of the authority group. Six to them said

they had limited knowledge of competency-based education. Five of the respondents in this group definitely did not favor the CBTE approach.

DEVELOPMENT AND PRESENTATION OF QUESTIONNAIRE I

Questionnaire I, patterned after the Hebert⁴³ and Prather⁴⁴ study, contained a list of competencies derived from observation of teachers in the Houston Independent School District, a review of research and professional literature related to bookkeeping/accounting, textbooks and the teachers' guide in bookkeeping/accounting, and methods of teaching bookkeeping/accounting texts.

Questionnaire I was typed following the Dodl⁴⁵ system of taxonomy. The competency statements were categorized according to planning, administration, instruction (method/technique and content), communication, evaluation, development of personal skills. Following each category, blank lines were provided for use in adding competencies which the respondents believed were omitted. The participants were asked to rate the original and added competencies as to crucial, highly desirable, desirable, nonimportant, incorrectly stated--needs revision, or do not use--concept inappropriate.

⁴³Hebert, loc. cit.

⁴⁴Prather, loc. cit.

⁴⁵Dodl, loc. cit.

DEVELOPMENT AND PRESENTATION OF QUESTIONNAIRE II

Questionnaire II was composed of the original or revised competency plus the additional competencies which were added by the participants. The revised questionnaire was presented to the researcher's advisor for approval and then resubmitted to the participants. Competency statements of both groups were combined into a single questionnaire. Questionnaires were kept separate through color coding for easier analysis.

Appendix C, page 137 shows the final questionnaire. The asterisk (*) indicates competencies observed in a classroom situation. The double asterisk (**) indicates competencies added by participants. The number in parenthesis refers to the article listed in the bibliography from which the competency statement was taken.

Questionnaire II requested participants to rate the competencies a second time in an attempt to obtain a modal consensus. Questionnaire II was returned and a modal consensus was determined for each group. From this tally the final questionnaire, Questionnaire III, was prepared.

PRESENTATION OF QUESTIONNAIRE III

Questionnaire III (Appendix E, page 168) was composed of the respondent's original Questionnaire II and a Consensus Sheet. The modal consensus was indicated by an

asterisk. Respondents were requested to review their original ratings of Questionnaire II in relation to the consensus of their group. They were requested to join the group consensus; if they chose to remain outside the consensus of their group, they were asked to make a brief statement as to why.

INTERPRETATION OF DATA OBTAINED FROM QUESTIONNAIRE III

In this section, the data will be analyzed. Each category of competencies is presented using a table to show the chi-square values, degrees of freedom, and a comparison of the percentage of each response from the classroom teachers and authorities in selecting crucial (C), highly desirable (H), desirable but not absolutely necessary (D), nonimportant (N), incorrectly stated needs revision (I), and do not use; concept inappropriate (X).

Planning

Planning is often the difference between success and failure in the business world, and so it is in the classroom. Planning incorporates the functions of determining goals and objectives. Planning is rational decision-making in advance to promote effective operation of the classroom and proper treatment of the subject matter.

Competencies in the Planning area in which no significant differences were found and significant differences

were found are indicated in Table 7. In addition, this table indicates the percentage of responses obtained from bookkeeping/accounting teachers and from bookkeeping/accounting authorities.

Of those planning competencies not significantly different, none were rated by both groups as crucial.

The following competencies under Planning were rated as highly desirable by both groups:

Competency 2.1, "Unit objectives in behavioral terms"

Competency 2.2, "Objectives in behavioral terms"

Competency 3, "Preparing a course of study for the beginning bookkeeping/accounting course for long-range planning"

Competency 4.4, "Balance sheet approach"

Competency 7, "Selecting supplementary materials"

Competency 8, "Establishing a system of performance"

Competency 9, "Selecting equipment for the bookkeeping/accounting classroom"

Competency 11, "Planning with other bookkeeping accounting faculty"

Competency 15, "Assessing community resources"

Competency 16, "Acquainting administrators, counselors, and other teachers with the need for bookkeepers/accountants"

Competency 19, "Developing individualized instruction"

Competency 21, "Planning for development of minimal students"

Competency 24, "Planning for presenting career information in the bookkeeping/accounting field"

Table 7

Comparison of Bookkeeping/Accounting Authorities and Teachers Responses On
Planning Competencies Including Chi-Square
Degrees of Freedom and Percent of Response

No.	Chi-Square	DF+	Authorities (36)						Teachers (227)					
			C	H	D	N	I	X	C	H	D	N	I	X
1*	78.51	3	17	58	25	-	-	-	4	7	88	1	-	-
2.1	.47	4	11	81	3	3	3	-	7	86	5	1	-	-
2.2	1.31	4	14	75	6	3	3	-	7	85	6	1	-	-
3	3.55	4	3	83	11	3	-	-	7	88	3	1	1	-
4.1*	117.20	4	81	14	6	-	-	-	7	85	6	2	.44	-
4.2*	156.87	4	3	6	78	14	-	-	5	89	4	.44	.44	-
4.3*	145.89	4	6	6	78	11	-	-	7	86	5	.44	-	1
4.4	3.52	3	11	75	11	3	-	-	8	87	3	1	-	-
5	.01	4	6	8	83	3	-	-	4	7	83	5	-	1
6*	101.68	3	6	81	14	-	-	-	82	10	8	.44	-	-
7	1.55	3	6	89	6	-	-	-	15	81	4	.44	-	-
8	.30	3	19	81	-	-	-	-	14	83	2	1	-	-
9*	12.17	3	3	64	33	-	-	-	5	84	10	1	-	-
10*	93.98	4	6	14	81	-	-	-	4	84	10	2	-	.44
11	.52	4	8	78	11	3	-	-	4	82	8	3	-	2
12	1.11	3	-	14	83	3	-	-	1	7	89	3	-	-
13	7.35	3	8	17	69	6	-	-	1	11	86	2	-	-
14	4.49	3	-	19	78	3	-	-	-	7	89	3	-	1
15	2.07	4	3	75	17	6	-	-	1	83	15	1	-	.44

*Significant Difference at the .05 Level

+Degrees of Freedom

1=3.841 3=7.815 5=11.070

2=5.991 4=9.488

Table 7 continued

No.	Chi-Square	DF*	Authorities (36)						Teachers (227)					
			C	H	D	N	I	X	C	H	D	N	I	X
16	1.31	4	9	83	9	-	-	-	8	86	3	3	-	.44
17	1.80	4	6	3	91	-	-	-	1	8	88	1	-	1
18*	30.05	3	8	53	39	-	-	-	7	85	7	2	-	-
19	5.87	4	17	72	11	-	-	-	6	89	4	1	.44	-
20	1.57	4	6	11	81	3	-	-	2	6	83	6	-	3
21	7.35	5	8	72	14	-	3	3	1	89	7	.44	1	1
22*	11.67	3	28	69	3	-	-	-	7	89	3	1	-	-
23*	66.87	4	6	72	19	3	-	-	6	12	81	.44	-	1
24	.51	3	8	89	3	-	-	-	4	89	6	.44	-	-
25*	59.88	2	86	11	3	-	-	-	22	78	.44	-	-	-

*Significant Difference at the .05 Level

+Degrees of Freedom

1=3.841 3=7.815 5=11.070

2=5.991 4=9.488

The following competencies in Planning were rated as desirable by both groups.

Competency 5, "Planning pre-testing procedures"

Competency 12, "Planning a simulated office environment"

Competency 13, "Surveying community to determine kinds of jobs available"

Competency 14, "Developing a follow-up program of former students"

Competency 17, "Planning for work experience for the student"

Competency 20, "Planning for the grouping of students"

Significant differences at the .05 level were found to exist in the following Planning competencies:

Competency 1, "Planning how the bookkeeping/accounting course fits into the total school program and its relationship to other courses"

Fifty-eight percent of authorities believed this competency highly desirable, whereas 88 percent of the classroom teachers thought it was desirable.

Competency 4.1, "Developmental approach"

Authorities voiced stronger support for this competency than did teachers. Eighty-one percent of the authorities rated it crucial, while 85 percent of the teachers said it was highly desirable.

Competency 4.2, "Journal approach"

Authorities, 78 percent rated it desirable; 89 percent of the teachers said highly desirable.

Competency 4.3, "Ledger approach"

The teachers, 86 percent, saw this competency as highly desirable; 78 percent of the authorities rated it desirable.

Competency 6, "Selecting textbooks"

Eighty-two percent of the teachers saw this as crucial, while the largest majority of authorities, 81 percent, rated it highly desirable.

Competency 9, "Selecting equipment for bookkeeping/accounting classroom"

Teachers and authorities rated this competency highly desirable. Eighty-four percent of the teachers, and 64 percent of the authorities rated it such.

Competency 10, "Providing for use of multi-media equipment"

Eighty-four percent of the teachers rated this one highly desirable; 81 percent of the authorities said it was desirable.

Competency 18, "Planning for teaching late entrants"

The majority of both groups rated it highly desirable. Authorities, 53 percent, and teachers, 85 percent, gave it this rating.

Competency 22, "Planning standards of acceptable performance"

Sixty-nine percent of the authorities and 89 percent of the teachers rated this competency highly desirable.

Competency 23, "Planning before and after school help for students"

Teachers were less committed than authorities concerning this competency; 81 percent said it was desirable, while authorities, 72 percent, rated it highly desirable.

Competency 25, "Planning for the development of good work habits and attitudes"

A crucial rating was the consensus of 86 percent of the authorities; teachers, 78 percent, rated it highly desirable.

Administration

Administration includes organizing activities, conferring with parents and students, executing short and long-range plans, supervising students, classroom, equipment, and evaluating students.

Competencies in the Administration area in which no significant differences were found and significant difference were found are indicated in Table 8. In addition, this table indicates the percent of responses obtained from bookkeeping/accounting teachers and from bookkeeping/accounting authorities.

The following competencies under Administration were rated crucial by both groups:

Competency 3, "Observing work being done and helping if needed"

The following competencies in Administration were rated as highly desirable by both groups:

Table 8

Comparison of Bookkeeping/Accounting Authorities and Teachers
Responses On Administration Competencies Including Chi-
Square Degrees of Freedom and Percent of Response

No.	Chi-Square	DF*	Authorities (36)						Teachers (227)					
			C	H	D	N	I	X	C	H	D	N	I	X
1	1.80	2	17	78	6	-	-	-	11	88	1	-	-	-
2	4.53	2	8	81	11	-	-	-	1	92	7	-	-	-
3	3.36	2	83	14	3	-	-	-	95	5	-	-	-	-
4	3.52	5	-	-	86	11	-	3	3	5	88	4	.44	.44
5	.16	5	6	81	11	3	-	-	7	82	7	3	.44	.44
6*	145.27	3	8	14	78	-	-	-	9	87	3	1	-	-
7	4.44	4	17	72	8	-	3	-	17	82	.44	.44	-	-
8	3.82	4	22	69	6	-	3	-	11	82	6	1	-	-
9	8.19	4	17	64	14	3	3	-	8	87	4	-	-	-

*Significant Difference at the .05 Level

+Degree of Freedom

1=3.841 3=7.815 5=11.070

2=5.991 4=9.488

Competency 1, "Organizing classroom for maximum efficiency"

Competency 2, "Conducting conferences"

Competency 5, "Explaining safety precautions in use of equipment"

Competency 7, "Developing in students respect and responsibility for making proper use of equipment"

Competency 8, "Explaining in detail the grading system used"

Competency 9, "Utilizing methods that will simplify grading"

The following competency under Administration was rated desirable by both groups:

Competency 4, "Preparing yearly budgets"

A significant difference at the .05 level was found to exist on only one of the Administration competencies.

Competency 6, "See that students share equipment"

Teachers rated this competency higher than did the authorities. Eighty-seven percent of the teachers rated it highly desirable; 78 percent of the authorities said it was desirable.

Instruction

The category of Instruction includes the "what" and the "how." The "how" are the methods/techniques used to present the "what," which is the content. More explicitly, instruction denotes conducting learning activities which are meaningful to a student.

Competencies in the Instruction area (method/techniques) in which no significant differences were found

Table 9

Comparison of Bookkeeping/Accounting Authorities and Teachers
Responses On Instruction Competencies (Methods/Techniques)
Including Chi-Square Degrees of Freedom
and Percent of Response

No.	Chi-Square	DF*	Authorities (36)						Teachers (227)					
			C	H	D	N	I	X	C	H	D	N	I	X
1	.32	2	92	6	3	-	-	-	96	3	.44	-	-	-
2	1.00	3	17	83	-	-	-	-	13	85	.44	.44	-	-
3	.89	3	86	14	-	-	-	-	91	7	1	-	.44	-
4*	116.81	3	81	11	8	-	-	-	8	90	1	-	1	-
5*	133.18	4	86	8	6	-	-	-	7	90	3	.44	.44	-
6*	103.31	3	72	19	8	-	-	-	7	91	2	.44	-	-
7	4.64	5	-	3	72	19	3	3	3	5	84	7	.44	.44
8*	100.65	2	89	8	3	-	-	-	12	87	1	-	-	-
9*	6.40	2	14	81	6	-	-	-	15	85	-	-	-	-
10	1.84	3	86	8	3	-	3	-	95	4	1	-	-	-
11.1	4.30	2	14	81	6	-	-	-	6	93	1	-	-	-
11.2*	11.53	3	17	75	3	-	6	-	5	92	3	-	-	-
11.3*	116.59	5	83	11	3	-	3	-	8	88	3	.44	-	.44
11.4*	140.56	3	94	3	-	-	3	-	8	91	1	-	-	-
11.5*	85.47	2	42	58	-	-	-	-	96	4	.44	-	-	-
11.6*	6.47	2	19	78	3	-	-	-	7	93	-	-	-	-
11.7*	105.39	3	83	8	6	-	3	-	10	88	2	-	-	-
11.8	3.89	5	11	78	8	3	-	-	3	83	10	3	.44	1
12	3.92	3	6	80	14	-	-	-	4	91	4	1	-	-

*Significant Difference at the .05 Level

+Degree of Freedom

1=3.841 3=7.815 5=11.070

2=5.991 4=9.488

and significant differences were found are indicated in Table 9. In addition, this table indicates the percent of responses obtained from bookkeeping/accounting teachers and from bookkeeping/accounting authorities.

The following Instructional competencies (methods/techniques) were rated crucial by both groups:

Competency 1, "Teaching for understanding"

Competency 3, "Teaching so as to challenge and motivate the learner"

Competency 10, "Teaching for application rather than for rote learning"

The following Instructional (methods/techniques) competencies were rated highly desirable by both groups:

Competency 2, "Making materials used as realistic as possible"

Competency 9, "Stressing proper work habits"

Competency 11.1, "Using planned, purposeful, and repetitive practice"

Competency 11.2, "Preparing learner for learning"

Competency 11.8, "Reinforcing student participation through reward"

Competency 12, "Providing short review of previous days work"

The following Instructional (methods/techniques) competencies were rated desirable by both groups:

Competency 7, "Keeping class together"

A significant difference at the .05 level was found to exist on the following Instructional (methods/techniques) competencies.

Competency 4, "Presenting principles in proper sequence to avoid relearning situations"

Authorities, 81 percent, rated this crucial; classroom teachers, 90 percent, said it was highly desirable.

Competency 5, "Teaching for concepts"

Authorities, 86 percent, rated this competency as crucial; teachers, 90 percent, rated it highly desirable.

Competency 6, "Providing balance among theory, drill, and practice"

Seventy-two percent of the authorities rated it crucial; 91 percent of the teachers said highly desirable.

Competency 8, "Providing for student learning through reading, visual examples, discussion, demonstration, and review"

Eighty-nine percent of the authorities said crucial; teachers, 87 percent, said highly desirable.

Competency 9, "Stressing proper work habits"

Although this competency had a significant difference, both authorities and teachers said it was highly desirable. Eighty-one percent of the authorities and 85 percent of the teachers rated it this way.

Competency 11.2, "Preparing the learner for learning"

Both the authorities and teachers agree that this competency is highly desirable. Seventy-five percent of the authorities and 92 percent of the teachers gave it this rating.

Competency 11.3, "Providing for individual differences"

Authorities, 83 percent, rated this crucial, and 88 percent of the teachers said highly desirable.

Competency 11.4, "Providing for successes and motivation"

Ninety-four percent of the authorities rated this one crucial. Ninety-one percent of the classroom teachers said highly desirable.

Competency 11.5, "Helping learner to relate parts to whole"

Teachers, 96 percent of them, said this was crucial. The majority of the authorities, 58 percent, said it was highly desirable; 42 percent of the authorities rated it crucial.

⑧ Competency 11.6, "Encouraging participation to enhance learning"

The authorities and teachers agreed that this is a highly desirable competency. Ninety-three percent of the teachers and 78 percent of the authorities gave it this rating.

Competency 11.7, "Taking the student from where her or she is and move forward"

Teachers, 88 percent, said highly desirable. Authorities, 83 percent, said it was crucial.

Competencies in the Instruction area (content) in which no significant differences were found and significant differences were found are indicated in Table 9A. In addition, this table indicates the percent of response obtained from bookkeeping/accounting teachers and from bookkeeping/accounting authorities.

The following Instructional competencies (content) were rated crucial by both groups:

Competency 1, "Knowing and identifying source documents"

Competency 2, "Knowing correct journalizing techniques for all journals"

Competency 3, "Knowing correct posting procedures"

Competency 4, "Knowing way to determine if ledger is in balance"

Competency 5, "Showing how to solve the book-keeping/accounting equation with one part missing"

Competency 6, "Explaining the difference between assets, liability, and capital accounts"

Competency 7, "Explaining the effect revenue and expense accounts have on the capital account"

Competency 8, "Explaining how to increase and decrease asset, liability, and capital accounts"

Competency 9, "Explaining 'temporary' accounts"

Competency 12, "Explaining vocabulary of frequently used bookkeeping/accounting terms"

Competency 16, "Showing how to close accounts and transfer balances"

Competency 18, "Showing how to take a post-closing trial balance"

Competency 21, "Knowing proper banking procedures"

Competency 22, "Showing how to reconcile the bank statement"

Competency 23, "Knowing procedures for handling petty cash"

Competency 24, "Knowing purchase and purchase return procedures"

Competency 26, "Knowing sales and sales return procedures"

Competency 27, "Showing how to prove cash"

Table 9A

Comparison of Bookkeeping/Accounting Authorities and Teachers
Responses On Instructional Competencies (Content)
Including Chi-Square Degrees of Freedom and
Percent of Response

No.	Chi-Square	DF*	Authorities (36)						Teachers (227)					
			C	H	D	N	I	X	C	H	D	N	I	X
1*	8.16	2	92	8	-	-	-	-	99	.44	1	-	-	-
2	5.56	2	83	14	3	-	-	-	96	4	-	-	-	-
3	3.80	2	86	11	3	-	-	-	96	4	-	-	-	-
4	1.14	2	92	6	3	-	-	-	96	4	-	-	-	-
5*	12.48	2	75	17	8	-	-	-	95	4	1	-	-	-
6	2.95	1	92	8	-	-	-	-	98	2	-	-	-	-
7*	8.63	1	86	14	-	-	-	-	98	2	-	-	-	-
8	7.56	3	86	11	-	-	3	-	98	2	.44	-	-	-
9*	9.15	2	78	14	8	-	-	-	94	5	1	-	-	-
10*	104.52	3	19	69	8	-	3	-	92	6	3	-	-	-
11*	103.85	2	28	67	6	-	-	-	93	4	2	-	-	-
12	.34	2	92	8	-	-	-	-	94	4	1	-	-	-
13*	131.28	2	25	64	11	-	-	-	96	3	-	-	-	-
14*	117.38	3	17	72	8	3	-	-	92	5	3	-	-	-
15*	107.92	2	22	75	3	-	-	-	93	6	1	-	-	-
16	7.54	3	75	17	6	3	-	-	93	5	1	-	-	-
17*	113.70	3	17	69	14	-	-	-	92	6	2	.44	-	-
18	3.91	2	83	11	6	-	-	-	95	4	11	-	-	-
19*	128.14	3	6	64	17	14	-	-	90	4	4	1	-	-

*Significant Difference at the .05 Level

+Degree of Freedom

1=3.841 3=7.815 5=11.070

2=5.991 4=9.488

Table 9A continued

No.	Chi Square	DF*	Authorities (36)						Teachers (227)					
			C	H	D	N	I	X	C	H	D	N	I	X
20*	8.27	3	19	72	8	-	-	-	10	89	1	-	.44	-
21*	6.45	2	89	6	6	-	-	-	96	5	-	-	-	-
22	2.32	3	86	8	3	3	-	-	96	4	-	-	-	-
23	.72	2	86	8	5	-	-	-	92	6	2	-	-	-
24*	15.89	2	78	8	14	-	-	-	93	6	1	-	-	-
24	3.25	3	8	83	6	3	-	-	13	86	1	-	-	-
26*	15.08	2	78	11	11	-	-	-	94	5	-	-	-	-
27	1.99	2	89	8	3	-	-	-	96	4	-	-	-	-
28.1	.55	4	3	78	14	6	-	-	3	84	9	3	1	-
28.2*	6.46	2	25	67	8	-	-	-	10	86	4	-	-	-
28.3*	50.81	4	6	31	57	6	-	-	3	85	10	2	1	-
29	1.15	3	8	81	11	-	-	-	4	89	7	.44	-	-
30	.75	3	3	81	17	-	-	-	3	86	10	.44	-	-
31.1*	93.17	5	6	17	75	3	-	-	3	84	8	3	.44	1
31.2	7.81	4	6	67	25	3	-	-	3	85	8	3	-	1
31.3*	95.14	4	11	14	72	3	-	-	2	85	8	4	-	1
32*	84.98	3	81	14	3	3	-	-	12	86	2	-	-	-
33	.27	2	95	3	3	-	-	-	94	5	-	-	-	-
34	.22	2	94	3	3	-	-	-	95	4	-	-	-	-
34*	148.01	3	3	6	86	6	-	-	5	89	5	1	-	-
36	4.52	2	19	75	6	-	-	-	8	90	2	-	-	-
37*	107.00	4	11	8	78	3	-	-	5	85	8	1	-	1
38*	20.56	3	17	67	6	11	-	-	4	87	8	-	-	-
39	3.34	2	3	86	11	-	-	-	7	90	3	-	-	-
40	1.14	3	8	83	8	-	-	-	7	89	3	-	-	-

*Significant Difference at the .05 Level

+Degree of Freedom

1=3.841 3=7.815 5=11.070

2=5.991 4=9.488

Table 9A Continued

No.	Chi-Square	DF*	Authorities (36)						Teachers (227)					
			C	H	D	N	I	X	C	H	D	N	I	X
41	2.74	4	6	78	11	3	-	3	8	87	5	.44	-	-
42*	19.76	2	3	81	17	-	-	-	15	84	1	-	-	-
43*	172.61	2	6	3	92	-	-	-	8	88	4	-	-	-
44*	129.95	4	3	11	81	6	-	-	4	89	6	-	-	1
45	2.25	4	14	72	11	3	-	-	6	84	7	2	-	1
46*	90.23	5	11	78	11	-	-	-	7	10	80	1	1	1
47	2.02	3	6	81	14	-	-	-	8	86	6	-	-	1
48	4.04	5	6	78	11	3	3	-	7	88	4	1	-	1
49	4.79	2	81	8	11	-	-	-	93	4	3	-	-	-
50*	111.53	3	25	61	11	3	-	-	94	3	2	-	-	-
51*	15.71	4	3	67	25	3	-	3	5	89	5	-	-	-

*Significant Difference at the .05 Level

+Degrees of Freedom

1=3.841 3=7.815 5=11.070

2=5.991 4=9.488

Competency 33, "Knowing how to keep subsidiary ledgers"

Competency 34, "Explaining how to use control accounts"

Competency 49, "Showing how to correct errors through correcting entries"

The following Instructional (content) competencies were rated highly desirable by both groups:

Competency 20, "Explaining the use of statements once they are prepared"

Competency 25, "Explaining the different methods of sales"

Competency 28.1, "Showing how to figure depreciation using the sum-of-the years digits"

Competency 28.2, "Showing how to figure depreciation using the straight-line method"

Competency 29, "Knowing how to take an inventory"

Competency 30, "Explaining periodic and perpetual inventory"

Competency 31.2, "Showing how to determine value of merchandise on hand using FIFO"

Competency 36, "Explaining procedures for control of cash on hand"

Competency 38, "Showing how to prepare invoices and customer statements"

Competency 39, "Showing how to compute and record bad debts"

Competency 40, "Showing how to compute and record prepaid expenses"

Competency 41, "Showing how to compute and record accrued expenses, interest, and income"

Competency 42, "Explaining importance of book-keeping/accounting for tax purposes"

Competency 45, "Explaining accruals"

Competency 47, "Showing how to compute and record interest earned or owed up to a certain date"

Competency 48, "Showing how to compute and record discounts on notes and invoices"

Competency 51, "Explaining difference between book-keeping, record keeping, and accounting"

The following Instructional (content) competencies were rated desirable by both groups:

(None of the Instructional competency statements received a desirable rating by both groups.)

A significant difference at the .05 level was found to exist on the following Instructional (content) competencies:

Competency 1, "Knowing and identifying source documents"

Ninety-nine percent of the teachers and 92 percent of the authorities rated this competency crucial. The difference seemed to exist with the 8 percent of the authorities who rated it highly desirable.

Competency 5, "Showing how to solve the bookkeeping/accounting equation with one part missing"

Classroom teachers were more in agreement in their group than were the authorities. Both groups gave it a crucial rating, but 17 percent of the authorities said it was highly desirable and another 8 percent said desirable. The remaining authorities, 75 percent, said crucial; 95 percent of the teachers said crucial, 4 percent desirable, and 1 percent desirable.

Competency 7, "Explaining the effects revenue and expense accounts have on the capital account"

Both groups gave this competency a crucial rating; however, 14 percent of the authorities disagreed within their group, as this is the number who rated it highly desirable; 86 percent of this group rated it crucial.

The classroom teachers, 98 percent of them, said the competency was crucial. The other 2 percent said it was highly desirable.

Competency 9, "Explaining 'temporary' accounts"

Teachers and authorities agreed on a crucial rating for this competency; however, 14 percent of the authorities considered it highly desirable and another 8 percent said desirable. This would indicate some disagreement within the authority group; 78 percent did say it was crucial.

Within the teacher group, 94 percent said it was crucial; 5 percent said highly desirable, and 1 percent desirable.

Competency 10, "Explaining basic math computations"

Teachers, 92 percent, said crucial as compared to 19 percent of the authorities. Sixty-nine percent of the authorities rated it highly desirable, but only 6 percent of the teachers gave it this rating. Eight percent of the authorities and 3 percent of the teachers said desirable.

Competency 11, "Explaining steps in finding errors"

Ninety-three percent of the teachers said it was crucial, and 67 percent of the authorities said highly desirable.

Competency 13, "Showing how to prepare a worksheet"

Ninety-six percent of the classroom teachers rated this competency crucial, but authorities viewed it differently; 64 percent of this group said highly desirable.

Competency 14, "Showing how to prepare financial statements in various forms and styles"

Ninety-two percent of the teachers rated it as crucial; 72 percent of the authorities rated it highly desirable. Disagreement was evident among the authorities; 17 percent rated it crucial, 8 percent desirable, and 3 percent as nonimportant.

Competency 15, "Showing how to record adjusting entries"

Ninety-three percent of the teachers rated this as crucial, and authorities, 75 percent of them, rated it highly desirable.

Competency 17, "Showing how to analyze the financial statement"

Teachers were generally close in agreement; 92 percent rated it crucial, and 6 percent highly desirable. Authorities are divided. The largest majority, 69 percent, say it is highly desirable, but 17 percent said it was crucial and another 14 percent said desirable.

Competency 19, "Showing how to make reversing entries"

The authorities gave a wide range of ratings to this competency. Sixty-four percent said it was highly desirable, 17 percent desirable, 14 percent nonimportant, and 6 percent crucial. The teacher group did not disagree as much; 90 percent said crucial, 4 percent highly desirable, 4 percent desirable, and 1 percent nonimportant.

Competency 20, "Explaining the use of statements once they are prepared"

Eighty-nine percent of the teachers and 72 percent of the authorities rated this highly desirable. Disagreement appeared to exist between authorities more than the classroom teacher group. Authorities, 19 percent of them, rated it crucial; 8 percent said desirable. Ten percent of the teachers said it was crucial and 1 percent said it was desirable.

Competency 21, "Knowing proper banking procedures"

Eighty-nine percent of the authorities and 96 percent of the teachers rated this crucial.

Competency 24, "Knowing purchasing and purchase returns procedures"

Ninety-three percent of the teachers rated this competency crucial as compared to 78 percent of the authorities. The spread of opinion among authorities indicates disagreement within their own group.

Competency 26, "Knowing sales and sales return procedures"

Ninety-four percent of the teachers and 78 percent of the authorities rated it crucial.

Competency 28.2, "Showing how to figure straight-line depreciation"

Disagreement was evident in both groups. Teachers, 86 percent, rated it highly desirable, 10 percent said it was crucial, and 4 percent said desirable. In the authority group, 67 percent said highly desirable, 25 percent crucial, and 8 percent desirable.

Competency 28.3, "Showing how to figure declining balance depreciation"

A scattered range of opinions existed between the teachers and authorities. Eighty-five percent of the teachers rated this competency highly desirable, 10 percent desirable, 3 percent crucial, and 2 percent nonimportant. Authorities, 57 percent, rated it desirable, 31 percent highly desirable, 6 percent crucial, and 6 percent nonimportant.

Competency 31.1, "Showing how to determine the value of merchandise on hand FIFO"

Eighty-four percent of the teacher respondents gave this a highly desirable rating, while 75 percent of the authorities rated it desirable. Three percent of both groups rated it nonimportant.

Competency 31.3, "Showing how to determine the value of merchandise on hand, Cost or Market, the lower"

Teachers, 85 percent, rated it highly desirable; authorities, 72 percent, said desirable.

Competency 32, "Explaining full payroll procedures, including income tax information"

Authorities, 81 percent, judged this crucial as compared to 12 percent of the teachers. Teachers, 86 percent, rated highly desirable.

Competency 35, "Showing how to do a credit check"

Eighty-nine percent of the teachers considered it highly desirable and 86 percent of the authorities rated it desirable.

Competency 37, "Showing how to use the 10-key, electronic printer, and posting machine properly"

Disagreement existed within both groups. Seventy-eight percent of the authorities rated it desirable, 11 percent crucial, 8 percent highly desirable, and 3 percent nonimportant. Teachers, 85 percent, rated it highly desirable, 8 percent desirable, 5 percent crucial, 1 percent nonimportant, and 1 percent do not use; concept inappropriate.

Competency 38, "Showing how to prepare invoices and customer statements"

Both groups rated this competency as highly desirable; 87 percent of the teachers and 67 percent of the authorities rated it this way. However, there was a spread of opinion in the authority group. Seventeen percent rated it crucial, 11 percent as nonimportant, and 6 percent as desirable.

Competency 42, "Explaining importance of bookkeeping/accounting for tax purposes"

Eighty-one percent of the authorities and 84 percent of the teachers rated it highly desirable.

Competency 43, "Showing procedures for disposition of assets"

Ninety-two percent of the authorities rated this competency desirable; teachers, 88 percent, considered it highly desirable.

Competency 44, "Showing how to prepare a notes receivable and notes payable ledger"

Eighty-nine percent of the teachers rated this competency highly desirable as compared to 81 percent of the authorities who said it was desirable.

Competency 46, "Explaining basic data processing procedures as applied to bookkeeping/accounting"

Seventy-eight percent of the authorities rated it highly desirable. Eighty percent of the teacher group said it was desirable.

Competency 50, "Showing how to correct an account without erasing"

Ninety-four percent of the teachers rated this competency as crucial. Authorities showed disagreement; 61 percent rated it highly desirable, 25 percent said crucial, 11 percent desirable, and 3 percent said it was nonimportant.

Competency 51, "Explaining difference between bookkeeping, record keeping, and accounting"

Authorities were not in close agreement with this competency; 67 percent rated it highly desirable, 25 percent desirable, 3 percent crucial, 3 percent nonimportant,

and 3 percent said do not use; concept inappropriate. Teachers, 89 percent, rated it as highly desirable, 5 percent crucial, and 5 percent desirable.

Communication

Communication involves skills in speaking, writing, and listening. Communication involves the use of devices in addition to speaking and writing to communicate thought.

Table 10 shows the competency statements in which significant and no significant differences exist. In addition, the table contains the chi-square and percentage of distribution for both teachers and authorities:

The following Communication competencies were found to be crucial to both groups:

Competency 5, "Writing easily understood tests, working guides, and instructions"

Competency 8, Recognizing situations when students or class is lost or not understanding"

The following competencies in Communications were rated highly desirable by both groups:

Competency 1, "Using correct speaking skills"

Competency 3.1, "Using chalkboard"

Competency 6, "Teaching listening skills"

Competency 7, "Developing ability to work from verbal and written directions"

The following Communication competencies were found to be desirable by both groups:

Competency 3.3, "Using movies and movie projectors"

Table 10

Comparison of Bookkeeping/Accounting Authorities and Teachers
Responses On Communication Competencies Including Chi-
Square Degrees of Freedom and Percent of Response

No.	Chi-Square	DF*	Authorities (36)						Teachers (227)					
			C	H	D	N	I	X	C	H	D	N	I	X
1	2.06	3	22	72	6	-	-	-	14	84	2	-	.44	-
2*	88.87	2	81	17	3	-	-	-	11	87	2	-	-	-
3.1	2.81	4	14	72	14	-	-	-	6	83	8	2	-	1
3.2*	91.40	3	83	14	3	-	-	-	11	83	4	1	-	-
3.3	1.07	4	-	9	86	6	-	-	2	4	91	2	-	.44
3.4*	111.53	3	6	8	83	3	-	-	2	87	9	2	-	-
3.5	.58	4	-	3	89	8	-	-	.44	3	90	4	-	2
3.6*	132.42	4	3	6	89	3	-	-	4	89	6	.44	.44	-
3.7	2.43	3	-	-	89	-	-	11	-	2	89	5	-	4
4*	92.46	2	83	14	3	-	-	-	11	86	2	-	-	-
5*	10.88	4	78	17	3	3	-	-	94	3	2	-	.44	-
6	.00	2	11	86	3	-	-	-	10	88	2	-	-	-
7	.33	2	11	86	3	-	-	-	15	85	-	-	-	-
8	1.12	2	94	3	-	-	3	-	96	4	-	-	-	-

*Significant Difference at the .05 Level
+Degree of Freedom

1=3.841 3=7.815 5=11.070
2=5.991 4=9.488

Competency 3.5, "Using felt boards"

Competency 3.7, "Closed-circuit television"

Significant differences were found to exist on the following Communication competencies:

Competency 2, "Using proper questioning techniques"

Eighty-seven percent of the teachers rated it highly desirable; 81 percent of the authorities rated it crucial.

Competency 3.2, "Using chalkboard"

Eighty-three percent of the authorities rated it crucial, while 83 percent of the teachers voted it highly desirable.

Competency 3.4, "Using bulletin boards"

Eighty-seven percent of the classroom teachers rated it highly desirable as compared to 83 percent of the authorities who said it was desirable.

Competency 3.6, "Using bookkeeping/accounting charts"

Eighty-nine percent of the teachers rated it as highly desirable and 89 percent of the authorities voted it desirable.

Competency 4, "Allowing for pupil/teacher and pupil/pupil interaction"

Authorities, 83 percent, considered it crucial, and 86 percent of the teacher group rated it highly desirable.

Competency 5, "Writing easily understood tests, working guides, and instructions"

Both groups agreed that the competency was crucial. Seventy-eight percent of the authorities and 94 percent of the teachers rated it so.

Evaluation

Evaluation tells the student and teacher how they are moving toward their goals. It shows the learner where he is weak, and it tells the teacher where he needs to reteach. Through evaluation, behavioral change can be determined.

Table 11 shows the competencies where there are no significant differences as well as significant differences in evaluation competencies. In addition, the table shows the Chi-square and percent of response of both groups.

None of the Evaluation competencies were rated crucial by both groups; however, the following Evaluation competencies were listed as highly desirable.

Competency 2, "Evaluating oral feed back"

Competency 3, "Evaluating seriousness of errors"

Competency 4, "Evaluating projects"

Competency 9, "Evaluating students work based on predetermined objectives"

Competency 10, "Evaluating attitudes and personal characteristics"

No Evaluation competencies were identified as desirable by both groups.

The following Evaluation competencies were significantly different at the .05 confidence level.

Competency 1, "Evaluating through pretest, practice, and posttest"

Eighty-one percent of the authorities rated it crucial, while 89 percent of the teachers considered it highly desirable.

Table 11

Comparison of Bookkeeping/Accounting Authorities and Teachers
Responses On Evaluation Competencies Including Chi-Square
Degrees of Freedom and Percent of Response

No.	Chi-Square	DF*	Authorities (36)						Teachers (227)					
			C	H	D	N	I	X	C	H	D	N	I	X
1*	131.43	4	81	11	8	-	-	-	5	89	5	.44	-	.44
2	2.47	2	17	78	6	-	-	-	8	90	2	-	-	-
3	1.92	3	8	81	8	-	1	-	6	90	4	-	-	-
4*	8.79	2	17	75	8	-	-	-	7	92	1	-	-	-
5*	145.28	3	6	6	85	3	-	-	5	89	4	1	-	-
6*	119.60	2	14	17	69	-	-	-	6	90	4	-	-	-
7*	118.19	5	8	3	78	-	6	6	5	81	7	2	2	3
8*	119.24	5	78	8	14	-	-	-	7	89	3	.44	.44	.44
9*	12.87	3	19	78	3	-	-	-	3	95	1	.44	-	-
10*	13.08	5	17	67	14	3	-	-	3	87	7	2	.44	2

*Significant Difference at the .05 Level

+Degree of Freedom

1=3.841 3=7.815 5=11.070

2=5.991 4=9.488

Competency 4, "Evaluating projects"

Both groups rated this one highly desirable on the consensus sheet. Ninety-two percent of the teachers and 75 percent of the authorities gave it this rating.

Competency 5, "Evaluating workbooks"

Teachers placed more emphasis on this competency; 89 percent rated it highly desirable; 85 percent of the authorities said it was desirable.

Competency 6, "Evaluating neatness of work"

Teachers, 90 percent, judged this highly desirable; 69 percent of the authorities said it was desirable.

Competency 7, "Accepting work completed only satisfactorily"

Teachers, 81 percent, rated it highly desirable; authorities, 78 percent, rated it desirable.

Competency 8, "Evaluating students on individual basis"

Seventy-eight percent of the authorities saw this as crucial; teachers, 89 percent, saw it as highly desirable.

Competency 9, "Evaluating students work based on predetermined objectives"

Both groups saw this competency highly desirable. Ninety-five percent of the teachers and 78 percent of the authorities gave it this rating.

Competency 10, "Evaluating attitudes and personal characteristics"

Eighty-seven percent of the teachers and 67 percent of the authorities rated this competency highly desirable; however, authorities differed within their own group.

Development of Pupil Self

Teachers are in a unique position to help students in this area. Students often have questions concerning careers which makes it important that teachers be knowledgeable in assisting in this exploration. Students need help in developing good work habits and attitudes which carry over into later life.

Table 12 shows those competency statements where no significant and significant differences exist at the .05 confidence level on Development of Pupil Self.

No competencies were judged crucial to both groups in the Development of Pupil Self. The following were rated as highly desirable by both groups.

Competency 1, "Assisting student in identification of life goals"

Competency 2, "Assisting student in critical examination of self to develop self-esteem and ability to succeed"

Competency 3, "Assisting student in developing ability to follow instructions"

Competency 4, "Encouraging students to deal with each other as human beings of intrinsic worth"

Competency 5, "Stressing the understanding of group processes"

Competency 7, "Encouraging career exploration"

Competency 8, "Giving self-direction through indirect guidance and good work habits"

None of the competency statements under Development of Pupil Self were judged as desirable.

Table 12

Comparison of Bookkeeping/Accounting Authorities and Teachers
Responses On Pupil Self Competencies Including Chi-Square
Degrees of Freedom and Percent of Response

No.	Chi-Square	DF*	Authorities (36)						Teachers (227)					
			C	H	D	N	I	X	C	H	D	N	I	X
1	1.49	5	-	82	12	3	3	-	1	87	11	.44	-	.44
2	2.14	4	3	82	9	6	-	-	2	87	10	1	-	.44
3	.00	2	18	79	3	-	-	-	17	81	2	-	-	-
4*	11.93	4	23	66	11	-	-	-	8	88	2	1	-	1
5	4.48	4	3	80	14	3	-	-	3	89	4	2	-	1
6*	127.03	4	3	9	86	3	-	-	2	90	7	.44	-	.44
7	1.84	3	11	80	9	-	-	-	5	90	4	-	-	.44
8	1.75	2	3	88	9	-	-	-	5	93	3	-	-	-

*Significant Difference at the .05 Level

+Degree of Freedom

1=3.841 3=7.815 5=11.070

2=5.991 4=9.488

The following Pupil Self competencies were rated significantly different by the two groups:

Competency 4, "Encouraging students to deal with each other as human beings of intrinsic worth"

Classroom teachers and bookkeeping/accounting authorities saw it as highly desirable. Eighty-eight percent of the teachers and 66 percent of the authorities judged it so.

Competency 6, "Participating in community and school activities"

Highly desirable was the choice of 90 percent of the teachers; 86 percent of the authorities said it was desirable.

Development of Personal Skills

This area includes working with others, improving skills, identifying with peers, job commitment, assisting students and fellow faculty, and working toward goals.

Table 13 shows the Development of Personal Skills where no significant difference as well as significant difference exists. In addition, this table includes a Chi-square and a percentage of responses by authorities and teachers of bookkeeping/accounting.

The following Development of Personal Skill Competencies were rated crucial by both groups:

Competency 4, "Setting an example for students"

Competency 6, "Being committed to your job and profession"

Table 13

Comparison of Bookkeeping/Accounting Authorities and Teachers
Responses On Personal Skill Competencies Including Chi-
Square Degrees of Freedom and Percent of Response

No.	Chi-Square	DF*	Authorities (36)						Teachers (227)					
			C	H	D	N	I	X	C	H	D	N	I	X
1	4.56	5	3	74	14	-	-	-	6	80	4	1	6	2
2	.00	3	3	94	3	-	-	-	4	93	2	1	-	-
3*	26.50	5	23	49	11	6	6	6	4	89	3	1	2	1
4*	12.22	3	89	9	3	-	-	-	56	40	4	-	1	-
5*	138.07	5	6	11	83	-	-	-	4	89	5	1	1	1
6	.00	2	94	6	-	-	-	-	95	5	1	-	-	-
7*	168.53	2	11	83	6	-	-	-	97	3	1	-	-	-
8	.77	4	3	94	3	-	-	-	9	88	2	1	-	1
9*	95.69	2	83	11	6	-	-	-	11	88	1	-	-	-
10*	10.08	3	9	79	9	-	-	3	10	89	1	-	-	-
11	3.62	5	3	83	11	-	-	3	4	90	3	2	1	1
12	1.54	4	6	86	3	-	3	3	6	93	1	-	1	-
13	3.30	2	83	14	3	-	-	-	94	5	1	-	-	-
14	6.75	3	77	11	9	3	-	-	93	6	1	-	-	-
15	1.59	1	91	9	-	-	-	-	97	3	-	-	-	-
16*	132.42	2	93	3	3	-	-	-	9	91	-	-	-	-
17	2.45	2	89	9	3	-	-	-	97	3	-	-	-	-
18	1.17	2	94	3	3	-	-	-	98	2	-	-	-	-
19	2.28	3	89	6	3	-	3	-	98	2	-	-	1	-
20*	132.08	4	11	89	3	3	-	3	93	6	1	-	-	-

*Significant Difference at the .05 Level
+Degree of Freedom

1=3.841 3=7.815 5=11.070

2=5.991 4=9.488

Competency 13, "Revising methods and materials in keeping with the times"

Competency 14, "Giving extra time and help to students willingly"

Competency 15, "Seeking better ways and methods for improving teaching"

Competency 17, "Demonstrating the ability to perform the skills he is teaching"

Competency 18, "Teaching with confidence"

Competency 19, "Avoiding false pretense"

The following Development of Personal Skills

competencies were rated as highly desirable by both groups:

Competency 1, "Working with student as a peer, not as a person with extreme authority"

Competency 2, "Updating skills through work experience and schooling"

Competency 3, "Identifying with the student"

Competency 10, "Recognizing own values or beliefs and the incompatibilities between yours and others"

Competency 11, "Being able to explain own instructional strategy in terms of learning theory"

Competency 12, "Solving problems in a decisive manner"

None of the competencies in the Development of Personal Skills were termed as desirable by both groups.

The following Development of Personal Skills competencies were rated significantly different by the two groups:

Competency 3, "Identifying with the student"

The majority of both groups rated this one highly desirable; 89 percent of the teachers and 49 percent of the

authorities rated it so. The distribution within the authority group indicated considerable disagreement.

Competency 4, "Setting an example for students"

Eighty-nine percent of the authorities rated this crucial as compared to 56 percent of the teachers.

Competency 5, "Participating in community served"

Eighty-nine percent of the teachers rated this highly desirable; 83 percent of the authorities said it was desirable.

Competency 7, "Being cooperative in teaching situations with other teachers, paraprofessionals, and resource persons"

Teachers, 97 percent, rated it crucial. The authorities, 83 percent, said it was highly desirable.

Competency 9, "Identifying personal strengths in teaching and the ability to evaluate yourself effectively"

Authorities, 83 percent, rated this crucial; 88 percent of the teachers said it was highly desirable.

Competency 10, "Recognizing own values or beliefs and the incompatibilities between yours and others"

Authorities and classroom teachers both rated this one highly desirable; 89 percent of the teachers as compared to 70 percent of the authorities judged it so.

Competency 16, "Setting high standards of scholarship for self and students"

Ninety-three percent of the authorities judged this one crucial. Ninety-one percent of the teachers rated it highly desirable.

Competency 20, "Working toward set goals at all times"

Ninety-three percent of the teachers voted it crucial while 80 percent of the authorities said highly desirable.

SUMMARY

From the 227 teachers of bookkeeping/accounting and 39 authorities, 164 competencies were developed. Of these 164, 36 were rated crucial, 70 highly desirable, and 11 as desirable by both groups. Many were found to be significantly different.

The data from this chapter will be used for making conclusions and recommendations in the next chapter.

Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Chapter 5 is divided into three sections: (1) a summary of the methods and procedures, (2) conclusions using data developed in Chapter 4 as presented in Tables 7-13, and (3) recommendations based on findings. A list of competencies rated crucial by authorities and teachers, crucial by teachers and highly desirable by authorities, crucial by authorities and highly desirable by teachers, and highly desirable by both is found in Appendix G, page 216.

SUMMARY

This study was designed to be the first phase in the development of a CBTE program for teachers of high school bookkeeping/accounting through identification of competencies as perceived by secondary teachers of bookkeeping/accounting in Texas and by national authorities of bookkeeping/accounting.

The methods used for developing a list of competencies were observing classroom teachers, reviewing related research and literature, and submitting the competencies to classroom teachers of bookkeeping/accounting and to authorities for

expansion and refinement. An adaptation of an opinion-forcing technique, the Delphi, was used to collect the data for the study. The data were analyzed, using a Chi-square technique, to determine whether a significant difference existed between the responses of the classroom teachers and authorities.

A review of research did not reveal a list of competencies in the area of bookkeeping/accounting as perceived by authorities and teachers in the field.

The classroom teachers were selected randomly from Texas, and the number required was determined by the NEA Small Sample Formula. Selection of authorities was based on their contribution to the literature.

CONCLUSIONS

The conclusions are drawn from the data developed in Chapter 4 as displayed in Tables 7-13.

Planning

According to the consensus as shown in Table 7, page 48, only three competencies were listed crucial. Authorities listed as crucial (4.1) developmental approach and (25) planning for the development of good work habits and attitudes; whereas, teachers listed as crucial (6) selecting textbooks. The authorities and teachers do not place equal importance on these three competencies.

Although authorities and teachers do not agree on those planning competencies they rate as crucial, they do agree that most of the competencies in the planning area are highly desirable. Twenty-nine competencies were listed; authorities rated 62 percent of them as highly desirable, and teachers rated 71 percent highly desirable. The two groups concurred in their highly desirable ratings in 51 percent of the responses.

Planning competencies, when compared, showed a significant difference in the response of the bookkeeping/accounting authorities and Texas classroom teachers on 11 of the 29 competency statements. Authorities placed more emphasis than teachers on (1) planning how the bookkeeping/accounting course fits into the total school program and its relationship to other courses, (4.1) the developmental approach, (23) planning before and after school help for students, and (25) planning for development of good work habits and attitudes.

✓ Teachers placed more importance than authorities on (4.2) the journal approach, (4.3) the ledger approach, (6) selecting textbooks, (9) selecting equipment for bookkeeping/accounting classroom, (10) providing for the use of multimedia equipment, (18) planning the teaching of late entrants, and (22) planning standards of acceptable performance. Strong support for these competencies was indicated within the group.

Although rated highly desirable by both groups, three competencies, (9) selecting equipment for bookkeeping/accounting classroom, (18) planning for the teaching of late entrants, and (22) planning standards of acceptable performance showed a significant difference. External agreement existed between the groups, but internal disagreement by authorities was noted.

Administration

As shown by the consensus in Table 8, page 53, only one competency, (3) observing work being done and helping if needed, was considered crucial. Both groups agreed on this one competency being crucial, but teachers feel stronger about it than do the authorities.

Nine competencies are listed; 66 percent are seen as highly desirable by both groups. Competency 9, utilizing methods that will simplify grading, although ranked highly desirable by both groups, shows a variance of opinion among the authority respondents.

A significant difference is shown in (6) seeing that students share equipment. Authorities and teachers disagree on the real value of this competency. Authorities consider it desirable for the teacher of bookkeeping/accounting while the teachers consider it highly desirable. Authorities disagree more among themselves on this competency than do teachers.

Both groups are in close agreement on (4) preparing a yearly budget. Both consider it no more than desirable.

Authorities and teachers would have little difficulty in reaching consensus in this area.

Instructional (Methods/Techniques)

Table 9, page 55, lists 19 competencies. Teachers and authorities do not agree 100 percent on the ratings, but they do agree that all but one of the competencies are either crucial or highly desirable. Competency 7, keeping class together, was rated desirable by a majority of both groups.

Authorities see the competencies listed in this section more crucial than do teachers. Fifty-three percent of the statements were rated crucial by the authorities as compared to teachers who rated only 21 percent of them crucial. Authorities and teachers do agree that (1) teaching for understanding, (3) teaching so as to challenge and motivate the learner, and (10) teaching for application rather than rote learning is crucial to the teacher of book-keeping/accounting.

Eight psychological guides were listed. All were rated crucial or highly desirable; however, authorities and teachers were able to agree on only two, (11.1) using planned, purposeful, and repetitive practice, and (11.8) reinforcing student participation through reward. The remaining six psychological guides showed a significant difference. Of these competencies showing a significant

difference, authorities strongly support (11.4) providing for success and motivation. Authorities indicate disagreement within their group on (11.2) preparing the learner for learning, (11.5) helping learner to relate parts to whole, and (11.6) encouraging participation to enhance learning.

Competencies 11.3, providing for individual differences and 11.7, taking the student from where he or she is and moving forward appear to have a relationship as seen by both groups. Eighty-three percent of the authorities gave each of these a crucial rating, and 88 percent of the teachers gave each a highly desirable rating.

Competency (11.5) helping learner relate parts to whole is more important than any other listed psychological guide to teachers as indicated by it being the only guide listed crucial by them and receiving this by 96 percent of the group.

Teachers view competencies (4) presenting principles in proper sequence to avoid relearning situations, (5) teaching for concepts, (6) providing balance among theory, drill, and practice, and (8) providing for student learning through reading, visual example, discussion, demonstration, and review less seriously than do authorities. The size of the discrepancy of these competencies indicate strong disagreement between the two groups.

Competency 9, stressing proper work habits, received a rating of highly desirable by both groups but shows a significant difference. The difference appears to be within the authority group where 6 percent saw this as desirable.

Instructional (Content)

Fifty-five competencies, Table 9A, page 60, are listed in the content area. Teachers place more importance on content than do authorities. Teachers rated 53 percent of them crucial to the bookkeeping/accounting teachers as compared to authorities who listed only 40 percent crucial. Teachers rated all but one of the remaining competencies as highly desirable. Competency (46), explaining basic data processing procedures as applied to bookkeeping/accounting, was rated desirable.

Teachers and authorities would have little difficulty in agreeing on (4) knowing way to determine if ledger is in balance, (6) explaining difference between assets, liabilities, and capital accounts, (12) explaining steps in finding errors, (33) knowing how to keep subsidiary ledgers, and (34) explaining how to use control accounts, as these competencies received a crucial rating of 90 percent or better by both groups.

Authorities rated seven competencies as desirable; however, conflict appears within three of these. Disagreement exists within this group as to the value of (28.3) declining balance, (31.1) FIFO, and (31.3) cost or market, the lower.

Twenty-nine of the content competencies showed a significant difference when compared. Seventeen were exceptionally significant: (10) explaining basic math computations, (11) explaining steps in finding errors, (13) showing how to prepare worksheets, (14) showing how to prepare financial statements in various forms and styles, (15) showing how to record adjusting entries, (14) showing how to analyze the financial statement, (19) showing how to make reversing entries, (28.3) declining balance, (31.1) LIFO, (31.3) cost or market, the lower, (32) explaining full payroll procedures, including income tax information, (35) showing how to do a credit check for accounts receivable, (37) showing how to use a 10-key, electronic printer, and posting machine properly, (43) showing procedures for disposition of assets, (44) showing how to prepare a notes receivable and notes payable ledger, (46) explaining basic data processing procedures as applied to bookkeeping/accounting, and (50) showing how to correct an account without erasing. Teachers in every case but one, competency 32, explaining full payroll procedures, including income tax information, considered these competencies more important than authorities.

Communications

Table 10, page 72, shows the ratings of 14 communication competencies. Five are rated as crucial by authorities, and teachers concur with the authorities on two of them. They agree on (5) writing easily understood tests, working

guides, and instructions, and (8) recognizing situations when student or class is lost or not understanding. None of the competencies were rated crucial exclusively by teachers.

The two groups agree that four of the competencies are highly desirable. They list (1) using correct speaking skills, (3.1) using overhead projectors, (6) teaching listening skills, and (7) developing ability to work from verbal and written directions. Teachers appear to have more harmony within their group concerning these competencies than do the authorities.

Teachers and authorities agree that (3.3) using movies and movie projectors, (3.5) using felt boards, and (3.7) closed-circuit television is of little importance to the bookkeeping/accounting teacher as indicated by the high rating of desirable by both groups.

An examination of the ratings reveal that six of the competencies are significantly different. The trend of the authorities was to rate the significantly different competencies as crucial, while teachers responded highly desirable.

Proficiency in the use of audio/visual equipment was viewed, generally, as being only desirable by authorities. Two competencies (3.1) using overhead projectors and (3.2) using chalkboard were considered important by the authority group as indicated by the highly desirable and crucial ratings. Teachers concur with the authorities on the importance of these two competencies. In addition, teachers rate favor-

ably (3.4) using bulletin boards and (3.6) using bookkeeping/accounting charts.

One competency, (6) teaching listening skills, showed a close distribution within both groups as indicated by the .00 Chi-square. Near perfect agreement exists on this competency.

Evaluation

Of the ten competencies listed under evaluation and reported in Table 11, page 75, only two were considered as crucial by either of the participating groups. The authorities agree that (1) evaluating through pretest, practice, and post test and (8) evaluating students on individual basis were crucial. None of the competencies were rated crucial by teachers. The teacher group considered all of the competencies highly desirable, and the authorities concurred on five. They agree on (2) evaluating oral feed back, (3) evaluating seriousness of errors, (4) evaluating projects, (9) evaluating student work based on predetermined objectives, and (10) evaluating attitudes and personal characteristics.

Teachers are in agreement more than the authorities concerning (4) evaluating projects, (9) evaluating students' work based on predetermined objectives, and (10) evaluating attitudes and personal characteristics. Authorities show a stronger preference for evaluating by using (1) pretest and posttest and (8) evaluating students on individual basis.

Authorities show little interest in (5) evaluating workbooks as shown in the desirable rating; teachers feel evaluating workbooks highly desirable.

Although (6) evaluating neatness of work is desirable by authorities, teachers consider it more important as indicated by the highly desirable rating it was given.

Significant difference was noted on eight of the listed competencies. The largeness of the Chi-square on four of the competency statements indicate that the two groups would have difficulty agreeing on these. Difference exists within the authority group concerning the value of these competencies.

Teachers give strong support to each competency statement within their group. The lowest rating given was to competency (7) accepting only work completed satisfactorily, which received a highly desirable rating by 81 percent of the group.

Development of Pupil Self

Table 12, page 78, gives a summation of the pupil self competencies. None of the competencies are considered crucial by either group.

All but one of the competencies are considered highly desirable by both teachers and authorities, which indicates strong agreement between and within both groups. Competency (6) participating in community and school activities is viewed highly desirable by teachers but only desirable by authorities.

A significant difference is noted in two of the competency statements. Competency (4) encouraging students to deal with each other as human beings of intrinsic worth and (6) participating in community and school activities were considered as highly desirable by teachers as indicated by the strong support within the group. Authorities also consider (4) encouraging students to deal with each other as human beings of intrinsic worth highly desirable, but within their group disagreement prevails as to the real value of this competency to the bookkeeping/accounting teacher. Competency (6) participating in community and school activities is of little value to authorities.

Development of Personal Skills

Personal skill competencies are shown in Table 13, page 80. Each group listed 10 competencies as crucial. Authorities and teachers agreed on the crucial rating for eight of these competencies. The two competencies not in agreement were (7) being cooperative in teaching situations with other teachers, paraprofessionals, and resource persons and (9) identifying personal strengths in teaching and the ability to evaluate yourself effectively. Teachers feel extremely strong concerning being cooperative in teaching situations with other teachers, paraprofessionals, and resource persons. Ninety-seven percent of this group rated this competency crucial.

Competency (6) being committed to your job and profession was rated almost identically by both groups. The Chi-square of .00 and the 94 and 95 percent rating of crucial by the participants stress the importance of this competency.

Personal skill competencies are essential to both groups, as only one competency was rated by the majority as less than highly desirable. Competency 5, participating in the community served, was rated desirable by the authority group.

Indications are that authorities do not agree on Competency 3, identifying with the student. Indications are that teachers would disagree on the value of (4) setting an example for students.

Teachers are more goal-oriented. Competency 20, working toward set goals at all times, recieved a crucial rating by them. Authorities consider it highly desirable. Teachers indicate more concern for helping students as indicated in Competency 14, giving extra time and help to the student willingly. Authorities prize scholarship more than classroom teachers as shown in Competency 16, setting high standards of scholarship for self and for students. Ninety-three percent of the authorities rated this crucial as compared to 91 percent of the teachers who rated it highly desirable.

Eight competencies were listed as significantly different. Of these eight, teachers and authorities would have some difficulty in agreeing on five as indicated by the

size of the Chi-square. These are: (5) participating in the community served, (7) being cooperative in teaching situations with other teachers, paraprofessionals, and resource persons, (9) identifying personal strengths in teaching and the ability to evaluate yourself effectively, (16) setting high standards of scholarship for self and for student, and (20) working toward set goals at all times. The two groups could very easily agree on (2) updating skills through work experience and schooling, and (6) being committed to your job and profession.

RECOMMENDATIONS

A major purpose of this study was to make recommendations to departments of business teacher education concerning competencies needed by the beginning teacher of book-keeping/accounting; therefore, the following recommendations are offered for consideration:

(1) That immediate attention be given to those competencies judged as crucial by authorities and teachers, crucial by teachers and highly desirable by authorities, crucial by authorities and highly desirable by teachers, and highly desirable by both groups.

(2) That seminars and workshops should be considered to acquaint business teachers in Texas with the CBTE movement; 62 percent indicated they knew very little about CBTE.

(3) That research be completed to determine why so many authorities and teachers differed on the desired competencies for teachers of bookkeeping/accounting at the secondary level.

(4) That research be undertaken to determine what activities would provide the teacher trainees exposure to those areas judged crucial by both groups, crucial by one group and highly desirable by the other, and highly desirable by both groups.

(5) That modules or activities be developed and validated to provide student teachers exposure to those competencies identified as being of value to the teacher of bookkeeping/accounting.

(6) That a similar study be made using a different group. Some suggested groups are:

(a) three groups of teachers who use three different texts (example: Gregg, South-western, and Pitman)

(b) teachers in high schools and methods instructors in four-year colleges

(c) community college instructors and four-year college authorities

(d) teachers selected nationally as well as authorities.

(7) That efforts be made to provide better communications between writers of textbooks and classroom teachers.

(8) That efforts be made to determine the amount of college accounting needed to be competent in teaching content of a high school bookkeeping/accounting course.

ANNOTATED BIBLIOGRAPHY

A. Books

1. Boynton, Lewis D. Methods of Teaching Bookkeeping-Accounting. 2d. ed. Dallas: South-Western Publishing Company, 1970.
The material in this book assists the beginning teacher of bookkeeping/accounting in developing a method of teaching.
2. Carlson, Paul A. Bookkeeping Instruction in the Twentieth Century and the Evaluation of 20th Century Bookkeeping and Accounting. Dallas: South-Western Publishing Company, 1967.
Carlson discusses in Monograph 118 the history of bookkeeping instruction from 1900 and the chronological development of 20th Century Bookkeeping and Accounting.
3. Dodi, Norman. The Florida Catalog of Teacher Competencies. Florida: Department of Education, 1972.
The book discusses the basis for screening items listed in the Catalog.
4. Harms, Harm and B. W. Stehr. Methods of Vocational Business Education. 2d. ed. Dallas: South-Western Publishing Company, 1963.
Using their years of classroom experience as a basis, the authors spell out the means of effective teaching. Emphasis is on teaching methodology rather than teaching philosophy.
5. Houston, W. Robert. Exploring Competency-Based Education. Berkeley: McCutchan Publishing Corp., 1974.
As a movement, CBTE has made gains in the past few years. Selected writings attempt to put into perspective and issues that surround the CBTE movement.

6. Houston, W., and Robert B. Howsam. Competency-Based Teacher Education Progress, Problems, and Prospects. Chicago: Science Research Associates, Inc., 1972.

Five areas related to CBTE are discussed-- objectives, curriculum design, evaluation, certification, and consortia.

7. McCollough, Celeste and Loche Van Alta. Statistical Concepts. New York: McGraw-Hill Book Company, Inc., 1963.

This work is a program for self-instruction. (It was used in this study to review the Chi-square Test).

8. Musselman, Vernon and J Marshall Hanna. Teaching Bookkeeping and Accounting. New York: Gregg Division, McGraw-Hill Book Company, Inc., 1960.

The book covers the entire accounting cycle and the full range of teaching problems.

9. Nolan, C. A., Carlos Hayden, and Dean R. Malsbary. Principles and Problems of Business Education. 3d. ed. Dallas: South-Western Publishing Company, 1967.

The authors discuss factors that cause problems from within and without in the field of business education.

B. PERIODICALS

10. Cyphert, Frederick R. and Walter L. Grant. "The Delphi Technique: A Case Study," Phi Delta Kappan, LII (January, 1970), 272-273.

The authors discuss the use of the Delphi Technique in attempting to generate some useful perspective on changes in American education.

11. Finch, Alton. "Graduates Appraise Undergraduate Collegiate Business Education," Journal of Business Education, XLIV (December, 1968), 113-114.

The article defends business education.

12. Flieger, Howard. "Can Teachers Teach?" U. S. News and World Report LXXVII (October 28, 1974), 96.
 Flieger discusses the weakness of teacher training and states, "clearly the system is wrong."

13. Gallagher, Paul D. "Module Format and the Instructional Process," Performance-Based Teacher Education, II (November, 1973), 3.
 The article discusses and gives an example of a module.

14. Hottleman, Girard D. "The Accountability Movement," The Education Digest, XXXIX (April, 1974), 17.
 The free enterprise plan (Voucher) of education is explored.

15. McCullough, Edith L. "Performance-Based Business Teacher Education," California Business Education Journal, VII (May, 1973), 21-28.
 The author discusses the competencies needed by the beginning business teacher in business machines, office practice, basic business, type-writing, shorthand, data processing, and book-keeping/accounting.

16. Marland, Sidney P. "Education for the Real World," Business Education Forum, XXVI (November, 1971), 3.
 The article discusses the failure of teachers to prepare students for the real world. Career education is discussed as the real goal.

17. Marland, Sidney P. "New Ideas for Better Schools," U. S. News and World Report, LXXIV (November 1, 1971), 80-83.
 The U. S. Commissioner of Education discusses how good are American schools and what should be done to improve them.

18. Massanari, Karl. "CBTE's Potential for Improving Educational Personnel Development," Journal of Teacher Education, XXIV (Fall, 1973), 244.
 The article discusses how CBTE provides help to educators in reconsidering the nature of teacher-training programs and accountability.

19. Nash, Robert and Russel M. Agne. "Competency in Teacher Education: A Prop for the Status Quo?" The Journal of Teacher Education, XXII (Summer, 1971), 147-155.

Nash discusses the four general assumptions underlining competency-based teacher preparation programs--(1) produce teachers with specialized techniques, skills, and dispositions that facilitate learning; (2) modular experiences; (3) demonstrated mastery; (4) evaluation shifted from student input to professional output.

20. Rosner, Benjamin and Patricia M. Kay. "Will the Promise of C/PBTE Be Fulfilled," Education Digest, XXXIX (April, 1974), 2.

Teachers may eventually have a greater voice in training and licensing of its members.

21. Roth, Robert. "Certifying Teachers: An Overhaul Is Under Way," The Educational Digest, XXXVIII (April, 1973), 24.

The article explores PBTE plan for certification. New Jersey is used as an example of states now employing PBTE for certification.

22. Sparks, Richard. "Are We Ready for National Certification of Professional Educators?" The Education Digest, XXXVI (January, 1971), 16.

The CBTE movement as a way for national certification would enable teachers to cross into other states.

23. Sybouts, Ward. "Performance-Based Teacher Education: Does It Make A Difference?" Phi Delta Kappan, LIV (January, 1973), 304.

The article discusses the NUSTEP (Nebraska University Secondary Teacher Education Program).

24. Tonne, Herbert A. "A Critique of Bookkeeping Instructional Content," Journal of Business Education, XLVI (December, 1970), 106-108.

The author examines bookkeeping instruction and content and concludes, ". . . small additions here. A minimization of some subject matter there. . .the same course we taught 75 years ago. . ."

25. Weaver, W. Timothy. "The Delphi Forcasting Method," Phi Delta Kappan, LII (January, 1971), 267-271.
The intuitive methodology for organizing and sharing "expert" forecast is discussed.

C. DISSERTATIONS

26. Hebert, Margaret. An Analysis of the Competencies Needed by Typewriting Teachers as Perceived by Authorities and Teachers of Typewriting. Houston: University of Houston, 1973.
This study developed a list of competencies which may be used in initiating a CBTE program.
27. Prather, Helen. An Analysis of the Competencies Needed by Shorthand Teachers as Perceived by Authorities and Teachers of Shorthand. Houston: University of Houston, 1974.
This study produced a set of shorthand competencies and may be used in initiating a CBTE program.
28. Wells, Barron. The Business Teacher Education Curriculum: Identification and Appraisals of Skills and Knowledges in Selected Areas of Business Administration. Houston: University of Houston, 1971.
The study appraises business education graduates as to the adequacy of their preparation.

SELECTED BIBLIOGRAPHY

29. Amelio, Anthony. "Competencies Needed by Beginning Bookkeeping Workers According to Public Accountants," Journal of Business Education, XLIV (March, 1969), 239-242.
30. Barca, Della Kay N., and Ruth N. Fried. "Vitalize Bookkeeping Class With Realistic Project," Business Education Forum, XXVI (November, 1971), 47.
31. Bowles, F. Douglas. "Competency-Based Teacher Education: The Houston Story," Educational Leadership, XXX (March, 1973), 510.
32. Boynton, Lewis D., Robert M. Swanson, and Paul A. Carlson. Century 21 Accounting. Dallas: South-Western Publishing Company, (1974).
33. Brady, M., and E. H. Backledge. "Ten Ways to Motivate Students in Bookkeeping," Business Education World, (February 2, 1962), 23.
34. Brendel, Leroy, and Herbert Yengel. "The Dedicated and Professional Business Teacher," National Business Education Yearbook, X (1972), 316.
35. Briggs, Robert. "Office Machines in the Bookkeeping Classroom," Business Education Forum, XXIII (May, 1969), 20-22.
36. Brogan, Mary Rice. "Teacher Training in Colleges Called Poor," Houston Chronicle, (October 26, 1974), Section 1, p. 3, Cols. 3-4.
37. Brooks, Lloyd Demar. "The Relationship Between Related Work Experience and Teaching Effectiveness of Vocational Office Education Teachers," Business Education Forum, XXVII (October, 1973), 33-34.
38. Brown, Betty Jean. "The Relationship Between Supervisor and Student Evaluation of Teaching Effectiveness of General Business Teachers," Business Education Forum, XXVII (October, 1972), 34.
39. Buckley, C. J. "Why Reversing Entries?" Business Education Forum, XXVII (April, 1973), 42.

40. Burns, Bonaventure M. "The Effectiveness of Integrated Remedial Arithmetic Instruction with the Teaching of Elementary Bookkeeping," National Business Education Quarterly, (Fall, 1962), 12.
41. Butts, Eugene, and Gary L. Pickett. "Student-Centered Teacher-Directed Learning Approach," Business Education Forum, XXVIII (February, 1974), 47-48.
42. Campbell, William Giles. Form and Style in Thesis Writing. 3d. ed. Boston: Houghton Mifflin Company, 1969,
43. Casady, Cleo P. "The Value of High School Bookkeeping Courses," Business Education Forum, XXIX (October, 1974), 19.
44. Clayton, Dean and Louis Moles. "Evaluation in Individualized Instruction," Business Education Forum, XXVI (December, 1971), 20-23.
45. Cooper, James M., Wilford A. Weber, and Charles E. Johnson. A Systems Approach to Program Design. Berkeley: McCutchan Publishing Corporation, 1973.
46. Corey, Mary L. "Program Revitalization Needs Leadership from the Top," Business Education Forum, XXVIII (May, 1974), 33.
47. Dale, Edgar. "Toward Excellence in Instruction," Business Education Forum, XXVII (October, 1973), 8.
48. De Valut, M. Vere, Dan W. Andersen, and George E. Dickerson. Problems and Prospects for the Decades Ahead. Berkeley: McCutchan Publishing Corporation, 1973.
49. Devine, John William. "A Comprehensive Analysis, Classification, and Syntheses of Research Finding and Thought on Teaching Bookkeeping/Accounting," Dissertation Abstracts, 23:4039, 1961.
50. Dodl, Norman R. "Selecting Competency Outcomes for Teacher Education," Journal of Teacher Education, XXIV (Fall, 1973), 194.
51. Dryzga, Dennis E. "Evaluation of Bookkeeping Students," The Balance Sheet, XLIX (January, 1968), 204-205.
52. Edenfelt, Roy A. "The Reform of Teacher Education--Key to Better Schools," Today's Education, LXII (April, 1973), 20.

53. Ellis, William Grenville. "The Relationship of Related Work Experience to the Teaching Success of Beginning Business Teachers," Dissertations Abstracts, 30:1072-A, September, 1969.
54. Freeman, Herbert. "Performance Goals in High School Accounting," Business Education Forum, XXVII (December, 1972), 14-16.
55. Freeman, M. Herbert, Marshall J. Hanna, Gilbert Kahn, and David Weaver. Accounting 10/12, 2d ed. New York: Gregg-Division, McGraw-Hill Book Company, 1973.
56. Gibbs, William E. "Implementing Individualized Instruction in Bookkeeping," The Balance Sheet, LI (April, 1970), 350-353.
57. Glass, Gene V., and Julian C. Stanley. Statistical Methods In Education and Psychology. New Jersey: Prentice-Hall, Inc., 1970.
58. Gootnick, David Edmund. "Electrifying Classroom Teaching With the Overhead Projector," Business Education Forum, XXVIII (February, 1974), 3-4.
59. Guthrie, Mearl R. "Business Teacher Education Programs Need Complete Overhauling," Business Education Forum, XXIII (May, 1969), 14-15.
60. Harrington, Charles T. "Essential Competencies to Vocational Education Administration in the State of Illinois," Business Education Forum, XXIX (October, 1974), 35.
61. Hampton, Donald. "Involvement: Essential for Professional Growth," The Balance Sheet, L (May, 1969), 398-399.
62. Henderson, Braxton. "Bookkeeping and the Low-Ability Student," The Balance Sheet, XLIV (February, 1963), 251-252.
63. Hill, Winfred F. Learning: A Survey of Psychological Interpretations. Scranton: Chandler Publishing Company, 1963.
64. Hindemeyer, Michael. "Speculative Departures in Teacher Preparation," The Clearing House, XLVII (October, 1972), 91.
65. Hoey, Patrick. "Introduce Federal Income Taxes in Bookkeeping and Accounting," The Balance Sheet, LI (January, 1970), 206.

66. Houston, W. Robert. "Designing Competency-Based Instructional Systems," Journal of Teacher Education, XXIV (Fall, 1973), 200.
67. Huff, Rita. "Does Evaluation in Bookkeeping Bother You?" Business Education Forum, XVIII (March, 1964), 20.
68. Huff, Rita. "Make Bookkeeping Course Current and Useful by Changing Content and Objectives," Business Education Forum, XXVI (March, 1972), 72.
69. Iannone, Ronald. "Teacher Education: What Are the Alternatives?" The Clearing House, XLVII (November, 1972), 135.
70. Iskra, John. "Accounting," National Business Education Association Yearbook, X (1972), 160.
71. Jensen, Glenn. "Preparing Competent Teachers of Teachers," Educational Leadership, XXX (February, 1973), 429.
72. Kuklinski, Waldo. "What Executives Say About Bookkeeping," Business Education Forum, XXII (February, 1968), 18-19.
73. Lesak, Joseph A. "Accounting Students Learn Data Processing," The Balance Sheet, XLIX (February, 1968), 247-250.
74. Lessinger, Leon M. "Accountability in Public Education," Today's Education, LIX (May, 1970), 512.
75. Lindsey, Margaret. "Performance-Based Teacher Education: An Examination of a Slogan," Journal of Teacher Education, XXIV (Fall, 1973), 180.
76. Lucero, Alfonso. "A Management Approach for Bookkeeping Instruction," Business Education Forum, XXVIII (April, 1973), 23-25.
77. Luing, Larry L. "The Teacher Outside the Classroom," The Balance Sheet, XLIX (April, 1968), 347-349.
78. McCullough, Edith. "Performance-Based Business Teacher Education," California Business Education Journal, VII (May, 1973), 21-28.
79. McMullan, Gilber E. "Teaching Bookkeeping to Disadvantaged Students," Business Education Forum, XXIII (February, 1969), 20.

80. Marlow, Claudia C., and Richard S. Marlow. "Career Study: A Key to the Future," Business Education Forum, XXVI (March, 1972), 58-60.
81. Marmas, James. "Are Business Teacher Education Programs Adequate?" Business Education Forum, XXIII (May, 1969), 16-17.
82. Moroz, Eileen. "Needed Curricular Changes In Undergraduate Business Teacher Education," Business Education Forum, XXVI (December, 1971), 28-30.
83. Musselman, Vernon and Moseetta Sykes. "Services, Accruals, and Deferrals," Business Education Forum, XXVII (March, 1973), 35.
84. Musselman, Vernon. "Teaching the Income Statement," The Balance Sheet, L (January, 1968), 206.
85. Nickel, K. N. "Accountability for What? For Whom?" The Clearing House, XLVIII (January, 1974), 303.
86. O'Connell, Helen M. "Individualized Learning Guides In First-Year Accounting," Business Education World, LII (March-April, 1973), 12-13.
87. Patterson, Herman F. "Teaching the Income Statement," Business Education Forum, XXVIII (October, 1973), 27.
88. Pino, Dominic. "Let's Make Bookkeeping Instruction Realistic," The Balance Sheet, L (May, 1969), 400.
89. Porter, John W. "Accountability--Challenge and Opportunity," Business Education Forum, XXVII (April, 1973), 37-39.
90. Rosner, Benjamin. "The Promise of CBTE," The Education Digest, XXXIX (September, 1973), 25.
91. Satlow, I. David. "Current Thought on Teaching Bookkeeping," The Journal of Business Education, XXXIX (October, 1962), 20-22.
92. Satlow, I. David. "Current Thought on Teaching Bookkeeping," The Journal of Business Education, XXXIX (October, 1963), 14-15
93. Satlow, I. David. "Current Thought on Teaching Bookkeeping," The Journal of Business Education, XL (October, 1964), 16-18.

94. Satlow, I. David. "Long-Range Planning in Book-keeping," The Journal of Business Education, XXXIX (March, 1963), 234-236.
95. Schuck, Robert. "A Revitalized Curriculum for Business," The Clearing House, XLV (September, 1970), 32.
96. Selden, William. "The Community Survey and the Follow-up Study," Journal of Business Education, XLVIII (January, 1973), 162-164.
97. Shannon, John R. "Selecting Bookkeeping Learning Activities," Business Education Forum, XXVII (December, 1972), 18-20.
98. Shearron, Gilbert, and Charles E. Johnson. "A CBTE Program in Action: University of Georgia," Journal of Teacher Education, XXIV (Fall, 1973), 187.
99. Solomon, Marianne. "Community Resources Workshops," The Balance Sheet, LII (November 3, 1970), 113-115.
100. Stelter, Gayle A. "Teach Adjusting Entries A Little At A Time," The Balance Sheet, LV (March, 1974), 249-250.
101. Stelter, Gayle. "A Work-Experience Program In Book-keeping for One Hour A Day," Business Education World, XLI (December, 1961), 28.
102. Stoner, J. K. "Basic Accounting Concepts and the Accounting Teacher," Business Education Forum, XXVII (February, 1973), 40-42.
103. Tonne, Herbert A. "The Dilemma of Teacher Education," The Delta Pi Epsilon Journal, XIII (May, 1971), 24-32.
104. Weaver, David H. "The Whys In High School Accounting--Concepts, Principles, and Controls," Business Education World, LII (January-February, 1972), 5-6.
105. West, Leonard. "Survey of Bookkeeping Job Activities in Relation to the High School Bookkeeping Curriculum," The Delta Pi Epsilon Journal, XVII (November, 1974), 1-33.

OTHER SOURCES

106. _____. "Generic Competencies--Secondary," Competency-Based Teacher Education, Houston: University of Houston Competency-Based Teacher Education Center, 1973.
107. _____. "The NEA Small Sample Formula," The NEA Research Bulletin, XXXVIII (December, 1960), 99.
108. _____. "The Psychology and the Instructional Pattern of Teaching Bookkeeping." (Pamphlet) Cincinnati: South-Western Publishing Company. (No Date).

APPENDIX A

Letter to Teachers and Authorities
Requesting Participation

Follow-Up Letter
to Teachers and Authorities

P. O. Box 66623
Houston, TX 77006
September 25, 1974

Dear Fellow Business Educator:

My doctoral study at the University of Houston concerns competencies needed by teachers of beginning bookkeeping/accounting at the secondary level. A study of this nature requires the assistance of business educators and authorities who see the value of improving teacher education programs.

Will you please help me with this study? You can assist in determining competencies by completing questionnaires which will be sent sometime this fall. The questionnaires will require only twenty minutes of your time.

The results of this study should aid in the certification of teachers. I shall appreciate your returning the enclosed postal card by October 25.

Sincerely yours,

Charles T. Norton
Doctoral Candidate

Enclosure

First Class
Permit No. 15160
Houston, Texas

BUSINESS REPLY MAIL
NO POSTAGE REQUIRED IF MAILED IN U. S. A.

Charles Theo Norton
P. O. Box 66623
Houston, Texas 77006

- ☐ I will participate in your study.
- ☐ I would like a copy of the results mailed to me
- Name _____
- Address _____
- _____ Zip _____
- Phone _____

P. O. Box 66623
Houston, TX 77006
October 15, 1974

Dear

Recently I mailed you a letter with a card enclosed asking for your participation in my study which is to identify competencies needed for teaching bookkeeping/accounting on the secondary level. As a teacher, your assistance is really needed.

A blue card is enclosed for you to complete and return if you will participate. May I count on you for help?

Sincerely yours,

Charles T. Norton

Enclosure

P. O. Box 66623
Houston, TX 77006
September 25, 1974

Your name has been identified from the professional literature, textbooks, or supplementary materials as an authority in the area of bookkeeping/accounting. My dissertation, which I am doing at the University of Houston, concerns competencies needed to teach this subject. I need your expertise in identification of the specific competencies.

The study will require a minimum amount of your time. You will be requested to respond to three questionnaires over the next few months. Each questionnaire will require approximately twenty minutes to complete.

The information gathered from authorities and teachers of bookkeeping/accounting should be valuable in certification of future teachers. Will you indicate your willingness to participate in this study by completing the enclosed postal card and returning it by October 25? Your assistance is greatly appreciated.

Sincerely yours,

Charles T. Norton
Doctoral Candidate

Enclosure

First Class
Permit No. 15160
Houston, Texas

BUSINESS REPLY MAIL
NO POSTAGE REQUIRED IF MAILED IN U. S. A.

Charles Theo Norton
P. O. Box 66623
Houston, Texas 77006

- ☐ I will participate in your study.
☐ I would like a copy of the results mailed to me.

Name _____

Address _____

_____ Zip _____

Phone _____

P. O. Box 66623
Houston, TX 77006
October 15, 1974

Dear

Recently I mailed you a letter asking for your participation in my study, which is to identify competencies needed for teaching bookkeeping/accounting on the secondary level. As an authority, your assistance is really needed.

A blue card is enclosed for you to complete and return if you will participate.

Sincerely yours,

Charles T. Norton

Enclosure

First Class
Permit No. 15160
Houston, Texas

BUSINESS REPLY MAIL
NO POSTAGE REQUIRED IF MAILED IN U. S. A.

Charles Theo Norton
P. O. Box 66623
Houston, Texas 77006

- ☐ I will participate in your study.
- ☐ I would like a copy of the results mailed to me.

Name _____

Address _____

_____ Zip _____

Phone _____

APPENDIX B

Cover Memorandum and Questionnaire I
to Teachers and Authorities

Follow-Up Memorandum
to Teachers and Authorities

TO: Participants DATE: October 21, 1974

FROM: Charles T. Norton SUBJECT: Questionnaire I
Doctoral Candidate Bookkeeping/
Accounting Compe-
tencies

Your willingness to participate in my study is appreciated. Your concepts and those identified by others will be compiled, refined, and finalized into an accumulation which can be used by teacher educators.

The Delphi technique will be used to refine data for this study. This technique attempts to accumulate expert opinions without bringing the experts together in a specific situation. I shall be contacting you through a series of three questionnaires. Following each, you will receive feedback and an opportunity to assist in the refinement of the data. Each questionnaire should take approximately 25 minutes of your time. The questionnaires will be designed as follows:

1. The first questionnaire, which is enclosed, asks you to rate the competencies listed and to add to the list those competencies which you believe were omitted.
2. From the second questionnaire, you will receive a feedback of the responses given by you and other contributors. Based upon your opinion and your knowledge, you will again be asked to rate these competencies.
3. The third questionnaire will indicate your responses in relation to the consensus of the group and you will again be asked to give your ratings. If you choose to remain outside the consensus of the group, you will be asked to state your reasons briefly.

SPECIAL INSTRUCTIONS

1. Please circle your opinion on each question.
2. Put your name at the top. (Because the same set of participants are used through the study, you need to sign your name. Your name will not be used in the study.)
3. RETURN QUESTIONNAIRE BY NOVEMBER 7, 1974. (It is important that we stay on schedule so that we can finish before the Christmas holidays.)

QUESTIONNAIRE I

COMPETENCIES NEEDED BY THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE
SECONDARY LEVEL

Charles T. Norton
University of Houston

Please return by November 7, 1974

DIRECTIONS: Within each of the 6 columns at the right, please react to each competency in terms of:

C = Crucial	N = Nonimportant
H = Highly desirable	I = Incorrectly stated; needs revision
D = Desirable but not absolutely necessary	X = Do not use; concept inappropriate

~~THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD~~
UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Planning

- | | |
|--|-----------------|
| 1. Planning how the bookkeeping/
accounting course fits into the
total school program and its relation-
ship to other courses | 1. C H D N I X |
| 2. Preparing over-all objectives of the
bookkeeping/accounting course | |
| 2.1 Unit objectives in behavioral
terms | 2.1 C H D N I X |
| 2.2 Objectives of individual lessons
in behavioral terms | 2.2 C H D N I X |
| 3. Preparing of a syllabus for the
beginning bookkeeping/accounting
course | 3. C H D N I X |
| 4. Planning the teaching approach to use | |
| 4.1 Developmental approach (from
common experience of the learner
to uncommon experience of the
learner) | 4.1 C H D N I X |
| 4.2 Journal approach (using book
of original entry) | 4.2 C H D N I X |

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

4.3	Ledger approach (sequence of events to the effect on individual accounts)	4.3	C	H	D	N	I	X
4.4	Balance sheet approach (showing student where he is going)	4.4	C	H	D	N	I	X
5.	Planning pre-assessment techniques	5.	C	H	D	N	I	X
6.	Selecting textbooks	6.	C	H	D	N	I	X
7.	Selecting supplementary materials (practice sets etc.)	7.	C	H	D	N	I	X
8.	Establishing a system of performance (grading technique)	8.	C	H	D	N	I	X
9.	Selecting classroom furniture	9.	C	H	D	N	I	X
10.	Selecting equipment for bookkeeping/ accounting classroom	10.	C	H	D	N	I	X
11.	Planning with other bookkeeping/ accounting faculty	11.	C	H	D	N	I	X
12.	Determining how the course serves the community	12.	C	H	D	N	I	X
13.	Surveying community to determine kinds of jobs available	13.	C	H	D	N	I	X
14.	Developing a follow-up program of former students	14.	C	H	D	N	I	X
15.	Assessing community resources (speakers, field trips)	15.	C	H	D	N	I	X
16.	Recruiting students to the program	16.	C	H	D	N	I	X
17.	Planning for work experience for the student	17.	C	H	D	N	I	X
18.	Planning for teaching late entrants (example 5 days)	18.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

19. Developing programmed instruction

19. C H D N I X

Other suggestions for Planning
 Competencies

C H D N I X

C H D N I X

Please use back for additional
 competencies

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD
 UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Administration

1. Organizing classroom for maximum
 efficiency

1. C H D N I X

2. Conducting conferences (students,
 parents, teachers)

2. C H D N I X

3. Making correct use of confidential
 records

3. C H D N I X

4. Starting class immediately

4. C H D N I X

5. Explaining safety precautions in
 use of equipment

5. C H D N I X

Other suggestions for Administrative
 Competencies

C H D N I X

C H D N I X

Please use back for additional
 competencies

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Instruction

Methods/Techniques

1. Teaching for understanding	1.	C	H	D	N	I	X
2. Making materials used as realistic as possible	2.	C	H	D	N	I	X
3. Teaching so as to challenge and motivate the learner	3.	C	H	D	N	I	X
4. Teaching nothing that has to be unlearned later	4.	C	H	D	N	I	X
5. Teaching for concepts	5.	C	H	D	N	I	X
6. Providing proper balance among theory, drill, and practice	6.	C	H	D	N	I	X
7. Keeping class together	7.	C	H	D	N	I	X
8. Providing for student learning through reading, visual examples, discussion, and demonstration	8.	C	H	D	N	I	X
9. Stressing proper work habits	9.	C	H	D	N	I	X
10. Teaching for application rather than for rote learning	10.	C	H	D	N	I	X
11. Using psychological guides							
11.1 Using planned, purposeful, and repetitive practice	11.1	C	H	D	N	I	X
11.2 Preparing learner for learning	11.2	C	H	D	N	I	X
11.3 Providing for individual differences	11.3	C	H	D	N	I	X
11.4 Planning successes as a climate for growth	11.4	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

11.5	Avoiding piecemeal learning (relate parts to whole)	11.5	C	H	D	N	I	X
11.6	Encouraging participation to enhance learning	11.6	C	H	D	N	I	X
11.7	Taking the student from where he or she is	11.7	C	H	D	N	I	X
11.8	Reinforcing learning through the use of senses	11.8	C	H	D	N	I	X

Other suggestions for methods/techniques
 competencies

Please use back for additional
 competencies

Content

1.	Knowing and identifying source documents	1.	C	H	D	N	I	X
2.	Knowing correct journalizing techniques for all journals	2.	C	H	D	N	I	X
3.	Knowing correct posting procedures	3.	C	H	D	N	I	X
4.	Knowing way to determine if ledger is in balance	4.	C	H	D	N	I	X
5.	Showing how to solve the bookkeeping/ accounting equation with one part missing	5.	C	H	D	N	I	X
6.	Explaining the difference between asset, liability, and capital accounts	6.	C	H	D	N	I	X
7.	Explaining the effects revenue and expense accounts have on the capital account	7.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

8. Explaining how to increase and decrease asset, liability, and capital accounts	8.	C	H	D	N	I	X
9. Explaining "temporary" accounts	9.	C	H	D	N	I	X
10. Explaining basic math computations (fundamental processes)	10.	C	H	D	N	I	X
11. Explaining steps in finding errors	11.	C	H	D	N	I	X
12. Explaining vocabulary of frequently used bookkeeping/accounting terms	12.	C	H	D	N	I	X
13. Showing how to prepare work sheets	13.	C	H	D	N	I	X
14. Showing how to record adjusting entries	14.	C	H	D	N	I	X
15. Showing how to close accounts and transfer balances	15.	C	H	D	N	I	X
16. Showing how to prepare financial statements in various forms and styles	16.	C	H	D	N	I	X
17. Showing how to take a post-closing trial balance	17.	C	H	D	N	I	X
18. Showing how to make reversing entries	18.	C	H	D	N	I	X
19. Showing how to analyze the financial statements	19.	C	H	D	N	I	X
20. Knowing proper banking procedures (checks, deposits, etc.)	20.	C	H	D	N	I	X
21. Showing how to reconcile the bank statement	21.	C	H	D	N	I	X
22. Knowing procedures for handling petty cash	22.	C	H	D	N	I	X
23. Knowing purchasing and purchase return procedures (requisitions, purchase order, memorandums)	23.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

24. Showing how to prove cash	24.	C	H	D	N	I	X
25. Showing how to figure depreciation							
25.1 Sum-of-the years digits	25.1	C	H	D	N	I	X
25.2 Straight line	25.2	C	H	D	N	I	X
25.3 Declining balance	25.3	C	H	D	N	I	X
26. Knowing how to take an inventory	26.	C	H	D	N	I	X
27. Explaining periodic and perpetual inventory	27.	C	H	D	N	I	X
28. Showing how to determine value of merchandise on hand							
28.1 LIFO (Last in first out)	28.1	C	H	D	N	I	X
28.2 FIFO (First in first out)	28.2	C	H	D	N	I	X
28.3 Cost or Market, the lower	28.3	C	H	D	N	I	X
29. Explaining full payroll procedures	29.	C	H	D	N	I	X
30. Knowing how to keep subsidiary ledgers	30.	C	H	D	N	I	X
31. Explaining how to use control accounts	31.	C	H	D	N	I	X
32. Showing how to do a credit check (for customer accounts)	32.	C	H	D	N	I	X
33. Explaining procedures for control of cash on hand	33.	C	H	D	N	I	X
34. Showing how to use 10-key, electronic printer, and posting machine properly	34.	C	H	D	N	I	X
35. Showing how to prepare invoices and customer statements	35.	C	H	D	N	I	X
36. Showing how to compute and record bad debts	36.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

37. Showing how to compute and record prepaid expenses	37.	C	H	D	N	I	X
38. Showing how to compute and record accrued expenses	38.	C	H	D	N	I	X
39. Showing how to compute and record accrued interest and income	39.	C	H	D	N	I	X
40. Showing procedures for disposition of assets	40.	C	H	D	N	I	X
41. Showing how to prepare a notes receivable and notes payable ledger	41.	C	H	D	N	I	X
42. Explaining accruals	42.	C	H	D	N	I	X
43. Explaining basic data processing procedures (manual and punched-card)	43.	C	H	D	N	I	X
44. Showing how to compute and record interest earned or owed up to a certain date	44.	C	H	D	N	I	X
45. Showing how to compute and record discounts on notes and invoices	45.	C	H	D	N	I	X
46. Showing how to correct errors through correcting entries	46.	C	H	D	N	I	X
47. Showing how to correct an account without erasing	47.	C	H	D	N	I	X
48. Explaining difference between bookkeeping, record keeping, and accounting	48.	C	H	D	N	I	X

Other suggestions for content
 competencies

C H D N I X

C H D N I X

Please use back for additional
 competencies

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Communication

- | | | | | | | | |
|---|-----|---|---|---|---|---|---|
| 1. Using correct speaking skills | 1. | C | H | D | N | I | X |
| 2. Using proper questioning techniques | 2. | C | H | D | N | I | X |
| 3. Understanding the importance of non verbal means of communications | 3. | C | H | D | N | I | X |
| 4. Demonstrating proficiency in | | | | | | | |
| 4.1 Using overhead projector | 4.1 | C | H | D | N | I | X |
| 4.2 Using chalkboard | 4.2 | C | H | D | N | I | X |
| 4.3 Using movies and movie projectors | 4.3 | C | H | D | N | I | X |
| 4.4 Using bulletin boards | 4.4 | C | H | D | N | I | X |
| 4.5 Using tape recorders | 4.5 | C | H | D | N | I | X |
| 4.6 Using video recording | 4.6 | C | H | D | N | I | X |
| 5. Allowing for pupil-teacher interaction | 5. | C | H | D | N | I | X |

Other suggestions for Communication Competencies

_____	C	H	D	N	I	X
_____	C	H	D	N	I	X

Please use back for additional competencies

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Development of Pupil Self

- | | | | | | | | |
|--|----|---|---|---|---|---|---|
| 1. Assisting student in identification of life goals | 1. | C | H | D | N | I | X |
|--|----|---|---|---|---|---|---|

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

- | | | | | | | | |
|--|----|---|---|---|---|---|---|
| 2. Assisting student in critical examination of self | 2. | C | H | D | N | I | X |
| 3. Assisting student in developing ability to follow instructions | 3. | C | H | D | N | I | X |
| 4. Encouraging students to deal with each other as human beings of intrinsic worth | 4. | C | H | D | N | I | X |
| 5. Stressing the understanding of group processes (group decision making, leadership skills, peer relationships) | 5. | C | H | D | N | I | X |
| 6. Participating in community and school activities | 6. | C | H | D | N | I | X |
| 7. Encouraging career exploration | 7. | C | H | D | N | I | X |
| 8. Giving self-direction through indirect guidance | 8. | C | H | D | N | I | X |

Other suggestions for Pupil Self Competencies

_____ C H D N I X

_____ C H D N I X

Please use back for additional competencies

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Evaluation

- | | | | | | | | |
|---|----|---|---|---|---|---|---|
| 1. Evaluating through pre-test, practice, and post-test | 1. | C | H | D | N | I | X |
| 2. Evaluating oral feed back | 2. | C | H | D | N | I | X |
| 3. Evaluating seriousness of errors | 3. | C | H | D | N | I | X |

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

- | | | | | | | | |
|---|----|---|---|---|---|---|---|
| 4. Evaluating projects (problems and practice sets) | 4. | C | H | D | N | I | X |
| 5. Evaluating workbooks | 5. | C | H | D | N | I | X |
| 6. Evaluating neatness of work | 6. | C | H | D | N | I | X |
| 7. Evaluating only work completed satisfactorily | 7. | C | H | D | N | I | X |

Other suggestions for Evaluation
 Competencies

_____	C	H	D	N	I	X
_____	C	H	D	N	I	X

Please use back for additional
 competencies

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Development of Personal Skills

- | | | | | | | | |
|---|----|---|---|---|---|---|---|
| 1. Being ethical in dealings with students | 1. | C | H | D | N | I | X |
| 2. Updating skills through work experience and schooling | 2. | C | H | D | N | I | X |
| 3. Identifying with the student | 3. | C | H | D | N | I | X |
| 4. Setting an example for the students | 4. | C | H | D | N | I | X |
| 5. Participating in the community served | 5. | C | H | D | N | I | X |
| 6. Being committed to the job to be done, and to the profession | 6. | C | H | D | N | I | X |
| 7. Being cooperative in teaching situations with other teachers, para-professionals, and resource persons | 7. | C | H | D | N | I | X |

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 X = Do not use; concept
 inappropriate

- | | |
|--|-----------------|
| 8. Accepting responsibility of multi-disciplinary instruction | 8. C H D N I X |
| 9. Identifying personal priorities in teaching | 9. C H D N I X |
| 10. Recognizing own values or beliefs and the incompatibilities between yours and others | 10. C H D N I X |
| 11. Being able to explain own instructional strategy in terms of learning theory | 11. C H D N I X |

Other suggestions for Personal Skill Competencies

C H D N I X

C H D N I X

Please use back for additional competencies

First Class
Permit No. 15160
Houston, Texas

BUSINESS REPLY MAIL

NO POSTAGE REQUIRED IF MAILED IN U. S. A.

Charles Theo Norton
P. O. Box 66623
Houston, Texas 77006

TO: PARTICIPANTS DATE: NOVEMBER 1, 1974

FROM: CHARLES T. NORTON SUBJECT: QUESTIONNAIRE I
DOCTORAL STUDENT BOOKKEEPING/ACCOUNT-
UNIVERSITY OF HOUSTON ING COMPETENCIES

YOU NOW HAVE IN YOUR POSSESSION QUESTIONNAIRE I CONCERNING
COMPETENCIES NEEDED BY BOOKKEEPING/ACCOUNTING TEACHERS. IF
YOU HAVE NOT RETURNED IT, WILL YOU PLEASE TAKE A MOMENT AND
COMPLETE IT NOW.

IT IS IMPORTANT THAT IT BE MAILED BY NOVEMBER 7. BECAUSE QUESTIONNAIRE II WILL BE PREPARED FROM THE CONTENT OF QUESTIONNAIRE I, I NEED TO HAVE THE FIRST QUESTIONNAIRE RETURNED.

I KNOW YOU ARE VERY BUSY, AND THIS IS ONE MORE THING FOR YOU TO DO, BUT YOUR HELP IS NEEDED. WITHOUT IT, I CANNOT COMPLETE MY STUDY.

APPENDIX C

Reference Source for Questionnaire I
and Remaining Questionnaires

Reference Source for the Development of Questionnaire I
and Refined Questionnaires

COMPETENCIES NEEDED BY THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE
SECONDARY LEVEL

Charles T. Norton
University of Houston

Please return by December 5, 1974
Advisor: Dr. W. Arthur Allee

DIRECTIONS: Within each of the 6 columns at the right, please react to each competency in terms of:

C = Crucial	N = Nonimportant
H = Highly desirable	I = Incorrectly stated; needs revision
D = Desirable but not absolutely necessary	X = Do not use; concept inappropriate

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Planning

- | | |
|--|-----------------|
| 1. Planning how the bookkeeping/
accounting course fits into the total
school program and its relationship
to other courses (8) | 1. C H D N I X |
| 2. Preparing over-all objectives of the
bookkeeping/accounting course (9) | |
| 2.1 Unit objectives in behavioral
terms (54) | 2.1 C H D N I X |
| 2.2 Objectives of individual lessons
in behavioral terms (54) | 2.2 C H D N I X |
| 3. Preparing a course of study for the
beginning bookkeeping/accounting
course for long-range planning (94) | 3. C H D N I X |
| 4. Planning the teaching approach to use | |
| 4.1 Developmental approach (from
common experience of the learner
to uncommon experience of the
learner) (1) | 4.1 C H D N I X |

() Number refers to bibliographical information

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

4.2	Journal approach (using book of original entry) (1)	4.2	C	H	D	N	I	X
4.3	Ledger approach (sequence of events to the effect on individual accounts) (1)	4.3	C	H	D	N	I	X
4.4	Balance sheet approach (showing student where he is going) (1)	4.4	C	H	D	N	I	X
5.	Planning pre-testing procedures (70)	5.	C	H	D	N	I	X
6.	Selecting textbooks (4)	6.	C	H	D	N	I	X
7.	Selecting supplementary materials (practice sets etc.) (4)	7.	C	H	D	N	I	X
8.	Establishing a system of performance (grading technique) (15)	8.	C	H	D	N	I	X
9.	Selecting equipment for bookkeeping/ accounting classroom (9)	9.	C	H	D	N	I	X
10.	Providing for use of multi-media equipment (*)	10.	C	H	D	N	I	X
11.	Planning with other bookkeeping/ accounting faculty (*)	11.	C	H	D	N	I	X
12.	Planning a simulated office environment (*)	12.	C	H	D	N	I	X
13.	Surveying community to determine kinds of jobs available (96)	13.	C	H	D	N	I	X
14.	Developing a follow-up program of former students (96)	14.	C	H	D	N	I	X
15.	Assessing community resources (speakers, field trips) (4)	15.	C	H	D	N	I	X

(*) Teacher/authority added competency

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

16. Acquainting administrators, counselors, and other teachers with the need for bookkeepers/accountants (*)	16.	C	H	D	N	I	X
17. Planning for work experience for the student (100)	17.	C	H	D	N	I	X
18. Planning for teaching late entrants (example 5 days) (*)	18.	C	H	D	N	I	X
19. Developing individualized instruction (*)	19.	C	H	D	N	I	X
20. Planning grouping of students (buddy system) (*)	20.	C	H	D	N	I	X
21. Planning for development of minimal students (*)	21.	C	H	D	N	I	X
22. Planning standards of acceptable performance (*)	22.	C	H	D	N	I	X
23. Planning before and after school help for students (*)	23.	C	H	D	N	I	X
24. Planning for presenting career information in the bookkeeping/accounting field (*)	24.	C	H	D	N	I	X
25. Planning for the development of good work habits and attitudes (*)	25.	C	H	D	N	I	X

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Administration

1. Organizing classroom for maximum efficiency (**)	1.	C	H	D	N	I	X
2. Conducting conferences (students, parents, teachers) (99)	2.	C	H	D	N	I	X

(**) Observed competency

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

- | | |
|---|----------------|
| 3. Observing work being done and helping if needed (**) | 3. C H D N I X |
| 4. Preparing yearly budgets (*) | 4. C H D N I X |
| 5. Explaining safety precautions in use of equipment (**) | 5. C H D N I X |
| 6. Seeing that students share equipment (**) | 6. C H D N I X |
| 7. Developing student respect and responsibility for making proper use of equipment (*) | 7. C H D N I X |
| 8. Explaining in detail the grading system used (*) | 8. C H D N I X |
| 9. Utilizing methods that will simplify grading (*) | 9. C H D N I X |

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Instruction

Methods/Techniques

- | | |
|---|----------------|
| 1. Teaching for understanding (**) | 1. C H D N I X |
| 2. Making materials used as realistic as possible (**) | 2. C H D N I X |
| 3. Teaching so as to challenge and motivate the learner (33) | 3. C H D N I X |
| 4. Presenting principles in proper sequence to avoid relearning situation (1) | 4. C H D N I X |
| 5. Teaching for concepts (**) | 5. C H D N I X |

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

6. Providing balance among theory, drill, and practice (2)	6.	C	H	D	N	I	X
7. Keeping class together (8)	7.	C	H	D	N	I	X
8. Providing for student learning through reading, visual examples, discussion, demonstration, and review (**)	8.	C	H	D	N	I	X
9. Stressing proper work habits (**)	9.	C	H	D	N	I	X
10. Teaching for application rather than for rote learning (**)	10.	C	H	D	N	I	X
11. Using psychological guides (108)							
11.1 Using planned, purposeful, and repetitive practice	11.1	C	H	D	N	I	X
11.2 Preparing learner for learning	11.2	C	H	D	N	I	X
11.3 Providing for individual differences	11.3	C	H	D	N	I	X
11.4 Providing for successes and motivation	11.4	C	H	D	N	I	X
11.5 Helping learner to relate parts to whole	11.5	C	H	D	N	I	X
11.6 Encouraging participation to enhance learning	11.6	C	H	D	N	I	X
11.7 Taking the student from where he or she is and move forward	11.7	C	H	D	N	I	X
11.8 Reinforcing student participation through reward	11.8	C	H	D	N	I	X
12. Providing short review of previous day's work (**)	12.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

Content

1. Knowing the identifying source documents (**)	1.	C	H	D	N	I	X
2. Knowing correct journalizing techniques for all journals (29)	2.	C	H	D	N	I	X
3. Knowing correct posting procedures (1)	3.	C	H	D	N	I	X
4. Knowing way to determine if ledger is in balance (**)	4.	C	H	D	N	I	X
5. Showing how to solve the bookkeeping/ accounting equation with one part missing (55)	5.	C	H	D	N	I	X
6. Explaining the difference between assets, liability, and capital accounts (**)	6.	C	H	D	N	I	X
7. Explaining the effects revenue and expense accounts have on the capital account (1)	7.	C	H	D	N	I	X
8. Explaining how to increase and decrease asset, liability, and capital accounts (8)	8.	C	H	D	N	I	X
9. Explaining "temporary" accounts (1)	9.	C	H	D	N	I	X
10. Explaining basic math computations (fundamental processes) (40)	10.	C	H	D	N	I	X
11. Explaining steps in finding errors (1)	11.	C	H	D	N	I	X
12. Explaining vocabulary of frequently used bookkeeping/accounting terms (54)	12.	C	H	D	N	I	X
13. Showing how to prepare work sheet (29)	13.	C	H	D	N	I	X
14. Showing how to prepare financial statements in various forms and styles (87)	14.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

15. Showing how to record adjusting entries (1)	15.	C	H	D	N	I	X
16. Showing how to close accounts and transfer balances (1)	16.	C	H	D	N	I	X
17. Showing how to analyze the financial statements (43)	17.	C	H	D	N	I	X
18. Showing how to take a post-closing trial balance (8)	18.	C	H	D	N	I	X
19. Showing how to make reversing entries (8)	19.	C	H	D	N	I	X
20. Explaining the use of statements once they are prepared (8)	20.	C	H	D	N	I	X
21. Knowing proper banking procedures (checks, deposits, etc.) (29)	21.	C	H	D	N	I	X
22. Showing how to reconcile the bank statement (29)	22.	C	H	D	N	I	X
23. Knowing procedures for handling petty cash (8)	23.	C	H	D	N	I	X
24. Knowing purchasing and purchase return procedures (requisitions, purchase order, memorandums) (55)	24.	C	H	D	N	I	X
25. Explaining different methods of sales (cash, charge, c.o.d., will-call) (8)	25.	C	H	D	N	I	X
26. Knowing sales and sales returns procedures (8)	26.	C	H	D	N	I	X
27. Showing how to prove cash (8)	27.	C	H	D	N	I	X
28. Showing how to figure depreciation (8)							
28.1 Sum-of-the years digits	28.1	C	H	D	N	I	X
28.2 Straight line	28.2	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

28.3	Declining balance	28.3	C	H	D	N	I	X
29.	Knowing how to take an inventory (8)	29.	C	H	D	N	I	X
30.	Explaining periodic and perpetual inventory (8)	30.	C	H	D	N	I	X
31.	Showing how to determine value of merchandise on hand (8)							
31.1	FIFO (Last in first out)	31.1	C	H	D	N	I	X
31.2	FIFO (First in first out)	31.2	C	H	D	N	I	X
31.3	Cost or Market, the lower	31.3	C	H	D	N	I	X
32.	Explaining full payroll procedures, including income tax information (29)	32.	C	H	D	N	I	X
33.	Knowing how to keep subsidiary ledgers (29)	33.	C	H	D	N	I	X
34.	Explaining how to use control accounts (8)	34.	C	H	D	N	I	X
35.	Showing how to do a credit check (for accounts receivable) (8)	35.	C	H	D	N	I	X
36.	Explaining procedures for control of cash on hand (55)	36.	C	H	D	N	I	X
37.	Showing how to use 10-key, electronic printer, and posting machine properly (**)	37.	C	H	D	N	I	X
38.	Showing how to prepare invoices and customer statements (8)	38.	C	H	D	N	I	X
39.	Showing how to compute and record bad debts (8)	39.	C	H	D	N	I	X
40.	Showing how to compute and record prepaid expenses (8)	40.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

41. Showing how to compute and record accrued expenses, interests, and income (8)	41.	C	H	D	N	I	X
42. Explaining importance of bookkeeping/accounting for tax purposes (**)	42.	C	H	D	N	I	X
43. Showing procedures for disposition of assets (32)	43.	C	H	D	N	I	X
44. Showing how to prepare a notes receivable and notes payable ledger (8)	44.	C	H	D	N	I	X
45. Explaining accruals (39)	45.	C	H	D	N	I	X
46. Explaining basic data processing procedures as applied to bookkeeping/accounting (manual and punched card) (30)	46.	C	H	D	N	I	X
47. Showing how to compute and record interest earned or owed up to a certain date (43)	47.	C	H	D	N	I	X
48. Showing how to compute and record discounts on notes and invoices (43)	48.	C	H	D	N	I	X
49. Showing how to correct errors through correcting entries (8)	49.	C	H	D	N	I	X
50. Showing how to correct an account without erasing (1)	50.	C	H	D	N	I	X
51. Explaining difference between bookkeeping, record keeping, and accounting (1)	51.	C	H	D	N	I	X

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Communication

1. Using correct speaking skills (**)	1.	C	H	D	N	I	X
2. Using proper questioning techniques (**)	2.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

3. Demonstrating proficiency in (1)

3.1 Using overhead projector	3.1	C	H	D	N	I	X
3.2 Using chalkboard	3.2	C	H	D	N	I	X
3.3 Using movies and movie projectors	3.3	C	H	D	N	I	X
3.4 Using bulletin boards	3.4	C	H	D	N	I	X
3.5 Using felt boards	3.5	C	H	D	N	I	X
3.6 Using bookkeeping/accounting charts	3.6	C	H	D	N	I	X
3.7 Closed-circuit television	3.7	C	H	D	N	I	X

4. Allowing for pupil/teacher and pupil/pupil interaction (**)

4. C H D N I X

5. Writing easily understood tests, working guides, and instructions (*)

5. C H D N I X

6. Teaching listening skills (*)

6. C H D N I X

7. Developing ability to work from verbal and written directions (*)

7. C H D N I X

8. Recognizing situations when student or class is lost or not understanding (*)

8. C H D N I X

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Evaluation

1. Evaluating through pre-test, practice, and post-test (51)

1. C H D N I X

2. Evaluating oral feed back (**)

2. C H D N I X

3. Evaluating seriousness of errors (**)

3. C H D N I X

4. Evaluating projects (problems and practice sets) (**)

4. C H D N I X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

5. Evaluating workbooks (**)	5. C H D N I X
6. Evaluating neatness of work (**)	6. C H D N I X
7. Accepting only work completed satisfactorily (44)	7. C H D N I X
8. Evaluating students on individual basis (*)	8. C H D N I X
9. Evaluating students work based on predetermined objectives (*)	9. C H D N I X
10. Evaluating attitudes and personal characteristics (*)	10. C H D N I X

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Development of Pupil Self

1. Assisting student in identification of life goals (27)	1. C H D N I X
2. Assisting student in critical examination of self to develop self-esteem and ability to succeed (9)	2. C H D N I X
3. Assisting student in developing ability to follow instructions (**)	3. C H D N I X
4. Encouraging students to deal with each other as human beings of intrinsic worth (**)	4. C H D N I X
5. Stressing the understanding of group processes (group decision-making, leadership skills, peer relationships) (26)	5. C H D N I X
6. Participating in community and school activities (9)	6. C H D N I X
7. Encouraging career exploration (9)	7. C H D N I X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

8. Giving self-direction through in-
 direct guidance and good work
 habits (8)

8. C H D N I X

Development of Personal Skills

1. Working with student as a peer, not as
 a person with extreme authority (*)

1. C H D N I X

2. Updating skills through work experi-
 ence and schooling (9)

2. C H D N I X

3. Identifying with the student (9)

3. C H D N I X

4. Setting an example for students (9)

4. C H D N I X

5. Participating in the community
 served (26)

5. C H D N I X

6. Being committed to your job and
 profession (9)

6. C H D N I X

7. Being cooperative in teaching situ-
 ations with other teachers, parapro-
 fessionals, and resource persons (**)

7. C H D N I X

8. Accepting responsibility of multi-
 disciplinary instruction (spelling,
 grammar, etc.) (*)

8. C H D N I X

9. Identifying personal strengths in
 teaching and the ability to evaluate
 yourself effectively (26)

9. C H D N I X

10. Recognizing own values or beliefs
 and the incompatibilities between
 yours and others (*)

10. C H D N I X

11. Being able to explain own instruc-
 tional strategy in terms of learning
 theory (63)

11. C H D N I X

12. Solving problems in a decisive manner (*)

12. C H D N I X

13. Revising methods and materials in
 keeping with the times (*)

13. C H D N I X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

14. Giving extra time and help to students willingly (*)	14.	C	H	D	N	I	X
15. Seeking better ways and methods for improving teaching (*)	15.	C	H	D	N	I	X
16. Setting high standards of scholarship for self and for students (*)	16.	C	H	D	N	I	X
17. Demonstrating the ability to perform the skills he is teaching (*)	17.	C	H	D	N	I	X
18. Teaching with confidence (*)	18.	C	H	D	N	I	X
19. Avoiding false pretense (hypocrisy) (*)	19.	C	H	D	N	I	X
20. Working toward set goals at all times (*)	20.	C	H	D	N	I	X

APPENDIX D

Cover Memorandum and Questionnaire II
to Teachers and Authorities

Follow-Up Memorandum
to Teachers and Authorities

TO: PARTICIPANTS DATE: NOVEMBER 10, 1974

FROM: CHARLES T. NORTON SUBJECT: QUESTIONNAIRE II
DOCTORAL CANDIDATE BOOKKEEPING/ACCOUNT-
UNIVERSITY OF HOUSTON ING COMPETENCIES

A big "THANK YOU" for the fine work you did in refining Questionnaire I. Your criticisms and additional competency contributions were very valuable. As related ideas were combined, your competency statements may not appear as you stated them. Generic competencies, those common to all teachers, have not been included. These competencies have previously been identified. We are looking for bookkeeping/accounting competencies at the secondary level only. No attempt is made to state competencies in behavioral terms. That would be the next step after identifying the competencies.

As you rate each competency statement, please think in terms of what knowledge or abilities are needed by teachers to teach bookkeeping/accounting on the secondary level. We are looking at preparation of teachers and not high school students.

When Questionnaire II is returned, I will compile a rating for each of the listed competencies for a consensus. This rating will then be returned to you to let you see how your rating of particular competencies compared to the group. This returned questionnaire will be your third and last questionnaire.

We need to maintain a time schedule; therefore, I am asking that you return the instrument by December 5, 1974. It would help if you could get it in the mail before the Thanksgiving holidays. This would enable me to stuff on questionnaires instead of turkey and dressing. I really appreciate your help.

SPECIAL INSTRUCTIONS

1. Put your name at the top of the questionnaire.
2. Quickly rate each competency.
3. Return by DECEMBER 5, 1974 (November 27, if possible).
4. Have a nice Thanksgiving!

QUESTIONNAIRE II

COMPETENCIES NEEDED BY THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE
SECONDARY LEVEL

Charles T. Norton
University of Houston

Please return by December 5, 1974
Advisor: Dr. W. Arthur Allee

DIRECTIONS: Within each of the 6 columns at the right, please react to each competency in terms of:

C = Crucial	N = Nonimportant
H = Highly desirable	I = Incorrectly stated; needs revision
D = Desirable but not absolutely necessary	X = Do not use; concept inappropriate

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD
UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Planning

- | | | | | | | | |
|--|-----|---|---|---|---|---|---|
| 1. Planning how the bookkeeping/
accounting course fits into the
total school program and its
relationship to other courses | 1. | C | H | D | N | I | X |
| 2. Preparing over-all objectives of
the bookkeeping/accounting course | | | | | | | |
| 2.1 Unit objectives in behavioral terms | 2.1 | C | H | D | N | I | X |
| 2.2 Objectives of individual lessons
in behavioral terms | 2.2 | C | H | D | N | I | X |
| 3. Preparing a course of study for
the beginning bookkeeping/accounting
course for long-range planning | 3. | C | H | D | N | I | X |
| 4. Planning the teaching approach to
use | | | | | | | |
| 4.1 Developmental approach (from
common experience of the
learner to uncommon experience
of the learner) | 4.1 | C | H | D | N | I | X |
| 4.2 Journal approach (using book
of original entry) | 4.2 | C | H | D | N | I | X |

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

4.3	Ledger approach (sequence of events to the effect on individual accounts)	4.3	C	H	D	N	I	X
4.4	Balance sheet approach (showing student where he is going)	4.4	C	H	D	N	I	X
5.	Planning pre-testing procedures	5.	C	H	D	N	I	X
6.	Selecting textbooks	6.	C	H	D	N	I	X
7.	Selecting supplementary materials (practice sets etc.)	7.	C	H	D	N	I	X
8.	Establishing a system of performance (grading technique)	8.	C	H	D	N	I	X
9.	Selecting equipment for bookkeeping/ accounting classroom	9.	C	H	D	N	I	X
10.	Providing for use of multi-media equipment	10.	C	H	D	N	I	X
11.	Planning with other bookkeeping/ accounting faculty	11.	C	H	D	N	I	X
12.	Planning a simulated office environment	12.	C	H	D	N	I	X
13.	Surveying community to determine kinds of jobs available	13.	C	H	D	N	I	X
14.	Developing a follow-up program of former students	14.	C	H	D	N	I	X
15.	Assessing community resources (speakers, field trips)	15.	C	H	D	N	I	X
16.	Acquainting administrators, counselors, and other teachers with the need for bookkeepers/ accountants	16.	C	H	D	N	I	X
17.	Planning for work experience for the student	17.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

18. Planning for teaching late entrants (example 5 days)	18.	C	H	D	N	I	X
19. Developing individualized instruction	19.	C	H	D	N	I	X
20. Planning grouping of students (buddy system)	20.	C	H	D	N	I	X
21. Planning for development of minimal students	21.	C	H	D	N	I	X
22. Planning standards of acceptable performance	22.	C	H	D	N	I	X
23. Planning before and after school help for students	23.	C	H	D	N	I	X
24. Planning for presenting career information in the bookkeeping/accounting field	24.	C	H	D	N	I	X
25. Planning for the development of good work habits and attitudes	25.	C	H	D	N	I	X

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Administration

1. Organizing classroom for maximum efficiency	1.	C	H	D	N	I	X
2. Conducting conferences (students, parents, teachers)	2.	C	H	D	N	I	X
3. Observing work being done and helping if needed	3.	C	H	D	N	I	X
4. Preparing yearly budgets	4.	C	H	D	N	I	X
5. Explaining safety precautions in use of equipment	5.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

6. Seeing that students share equipment	6.	C	H	D	N	I	X
7. Developing in student respect and responsibility for making proper use of equipment	7.	C	H	D	N	I	X
8. Explaining in detail the grading system used	8.	C	H	D	N	I	X
9. Utilizing methods that will simplify grading	9.	C	H	D	N	I	X

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Instruction

Methods/Techniques

1. Teaching for understanding	1.	C	H	D	N	I	X
2. Making materials used as realistic as possible	2.	C	H	D	N	I	X
3. Teaching so as to challenge and motivate the learner	3.	C	H	D	N	I	X
4. Presenting principles in proper sequence to avoid relearning situations	4.	C	H	D	N	I	X
5. Teaching for concepts	5.	C	H	D	N	I	X
6. Providing balance among theory, drill, and practice	6.	C	H	D	N	I	X
7. Keeping class together	7.	C	H	D	N	I	X
8. Providing for student learning through reading, visual examples, discussion, demonstration, and review	8.	C	H	D	N	I	X
9. Stressing proper work habits	9.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

10. Teaching for application rather than for rote learning	10.	C	H	D	N	I	X
11. Using psychological guides							
11.1 Using planned, purposeful, and repetitive practice	11.1	C	H	D	N	I	X
11.2 Preparing learner for learning	11.2	C	H	D	N	I	X
11.3 Providing for individual differences	11.3	C	H	D	N	I	X
11.4 Providing for successes and motivation	11.4	C	H	D	N	I	X
11.5 Helping learner to relate parts to whole	11.5	C	H	D	N	I	X
11.6 Encouraging participation to enhance learning	11.6	C	H	D	N	I	X
11.7 Taking the student from where he or she is and move forward	11.7	C	H	D	N	I	X
11.8 Reinforcing student participation through reward	11.8	C	H	D	N	I	X
12. Providing short review of previous day's work	12.	C	H	D	N	I	X

Content

1. Knowing and identifying source documents	1.	C	H	D	N	I	X
2. Knowing correct journalizing techniques for all journals	2.	C	H	D	N	I	X
3. Knowing correct posting procedures	3.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

4. Knowing way to determine if ledger is in balance	4.	C	H	D	N	I	X
5. Showing how to solve the bookkeeping/accounting equation with one part missing	5.	C	H	D	N	I	X
6. Explaining the difference between assets, liability, and capital accounts	6.	C	H	D	N	I	X
7. Explaining the effects revenue and expense accounts have on the capital account	7.	C	H	D	N	I	X
8. Explaining how to increase and decrease asset, liability, and capital accounts	8.	C	H	D	N	I	X
9. Explaining "temporary" accounts	9.	C	H	D	N	I	X
10. Explaining basic math computations (fundamental processes)	10.	C	H	D	N	I	X
11. Explaining steps in finding errors	11.	C	H	D	N	I	X
12. Explaining vocabulary of frequently used bookkeeping/accounting terms	12.	C	H	D	N	I	X
13. Showing how to prepare work sheet	13.	C	H	D	N	I	X
14. Showing how to prepare financial statements in various forms and styles	14.	C	H	D	N	I	X
15. Showing how to record adjusting entries	15.	C	H	D	N	I	X
16. Showing how to close accounts and transfer balances	16.	C	H	D	N	I	X
17. Showing how to analyze the financial statements	17.	C	H	D	N	I	X
18. Showing how to take a post-closing trial balance	18.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

19. Showing how to make reversing entries	19.	C	H	D	N	I	X
20. Explaining the use of statements once they are prepared	20.	C	H	D	N	I	X
21. Knowing proper banking procedures (checks, deposits, etc.)	21.	C	H	D	N	I	X
22. Showing how to reconcile the bank statement	22.	C	H	D	N	I	X
23. Knowing procedures for handling petty cash	23.	C	H	D	N	I	X
24. Knowing purchasing and purchase return procedures (requisitions, purchase order, memorandums)	24.	C	H	D	N	I	X
25. Explaining different methods of sales (cash, charge, c.o.d., will-call)	25.	C	H	D	N	I	X
26. Knowing sales and sales returns procedures	26.	C	H	D	N	I	X
27. Showing how to prove cash	27.	C	H	D	N	I	X
28. Showing how to figure depreciation							
28.1 Sum-of-the years digits	28.1	C	H	D	N	I	X
28.2 Straight line	28.2	C	H	D	N	I	X
28.3 Declining balance	28.3	C	H	D	N	I	X
29. Knowing how to take an inventory	29.	C	H	D	N	I	X
30. Explaining periodic and perpetual inventory	30.	C	H	D	N	I	X
31. Showing how to determine value of merchandise on hand							
31.1 FIFO (Last in first out)	31.1	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

31.2	FIFO (first in first out)	31.2	C	H	D	N	I	X
31.3	Cost or Market, the lower	31.3	C	H	D	N	I	X
32.	Explaining full payroll procedures, including income tax information	32.	C	H	D	N	I	X
33.	Knowing how to keep subsidiary ledgers	33.	C	H	D	N	I	X
34.	Explaining how to use control accounts	34.	C	H	D	N	I	X
35.	Showing how to do a credit check (for accounts receivable)	35.	C	H	D	N	I	X
36.	Explaining procedures for control of cash on hand	36.	C	H	D	N	I	X
37.	Showing how to use 10-key, electronic printer, and posting machine properly	37.	C	H	D	N	I	X
38.	Showing how to prepare invoices and customer statements	38.	C	H	D	N	I	X
39.	Showing how to compute and record bad debts	39.	C	H	D	N	I	X
40.	Showing how to compute and record prepaid expenses	40.	C	H	D	N	I	X
41.	Showing how to compute and record accrued expenses, interest, and income	41.	C	H	D	N	I	X
42.	Explaining importance of bookkeeping/ accounting for tax purposes	42.	C	H	D	N	I	X
43.	Showing procedures for disposition of assets	43.	C	H	D	N	I	X
44.	Showing how to prepare a notes receivable and notes payable ledger	44.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

45. Explaining accruals	45. C H D N I X
46. Explaining basic data processing procedures as applied to bookkeeping/ accounting (manual and punched card)	46. C H D N I X
47. Showing how to compute and record interest earned or owed up to a certain date	47. C H D N I X
48. Showing how to compute and record discounts on notes and invoices	48. C H D N I X
49. Showing how to correct errors through correcting entries	49. C H D N I X
50. Showing how to correct an account without erasing	50. C H D N I X
51. Explaining difference between bookkeeping, record keeping, and accounting	51. C H D N I X

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Communication

1. Using correct speaking skills	1. C H D N I X
2. Using proper questioning techniques	2. C H D N I X
3. Demonstrating proficiency in	
3.1 Using overhead projector	3.1 C H D N I X
3.2 Using chalkboard	3.2 C H D N I X
3.3 Using movies and movie projectors	3.3 C H D N I X
3.4 Using bulletin boards	3.4 C H D N I X
3.5 Using felt boards	3.5 C H D N I X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

3.6 Using bookkeeping/ accounting charts	3.6	C	H	D	N	I	X
3.7 Closed-circuit television	3.7	C	H	D	N	I	X
4. Allowing for pupil/teacher and pupil/pupil interaction	4.	C	H	D	N	I	X
5. Writing easily understood tests, working guides, and instructions	5.	C	H	D	N	I	X
6. Teaching listening skills	6.	C	H	D	N	I	X
7. Developing ability to work from verbal and written directions	7.	C	H	D	N	I	X
8. Recognizing situations when student or class is lost or not understanding	8.	C	H	D	N	I	X

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Evaluation

1. Evaluating through pre-tests, practice, and post-test	1.	C	H	D	N	I	X
2. Evaluating oral feed back	2.	C	H	D	N	I	X
3. Evaluating seriousness of errors	3.	C	H	D	N	I	X
4. Evaluating projects (problems and practice sets)	4.	C	H	D	N	I	X
5. Evaluating workbooks	5.	C	H	D	N	I	X
6. Evaluating neatness of work	6.	C	H	D	N	I	X
7. Accepting only work completed satisfactorily	7.	C	H	D	N	I	X
8. Evaluating students on individual basis	8.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

- | | |
|---|-----------------|
| 9. Evaluating students work based on predetermined objectives | 9. C H D N I X |
| 10. Evaluating attitudes and personal characteristics | 10. C H D N I X |

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Development of Pupil Self

- | | |
|--|----------------|
| 1. Assisting student in identification of life goals | 1. C H D N I X |
| 2. Assisting student in critical examination of self to develop self-esteem and ability to succeed | 2. C H D N I X |
| 3. Assisting student in developing ability to follow instructions | 3. C H D N I X |
| 4. Encouraging students to deal with each other as human beings of intrinsic worth | 4. C H D N I X |
| 5. Stressing the understanding of group processes (group decision-making, leadership skills, peer relationships) | 5. C H D N I X |
| 6. Participating in community and school activities | 6. C H D N I X |
| 7. Encouraging career exploration | 7. C H D N I X |
| 8. Giving self-direction through indirect guidance and good work habits | 8. C H D N I X |

Development of Personal Skills

- | | |
|---|----------------|
| 1. Working with student as a peer, not as a person with extreme authority | 1. C H D N I X |
|---|----------------|

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

2. Updating skills through work experience and schooling	2.	C	H	D	N	I	X
3. Identifying with the student	3.	C	H	D	N	I	X
4. Setting an example for students	4.	C	H	D	N	I	X
5. Participating in the community served	5.	C	H	D	N	I	X
6. Being committed to your job and profession	6.	C	H	D	N	I	X
7. Being cooperative in teaching situations with other teachers, paraprofessionals, and resource persons	7.	C	H	D	N	I	X
8. Accepting responsibility of multidisciplinary instruction (spelling, grammar, etc.)	8.	C	H	D	N	I	X
9. Identifying personal strengths in teaching and the ability to evaluate yourself effectively	9.	C	H	D	N	I	X
10. Recognizing own values or beliefs and the incompatibilities between yours and others	10.	C	H	D	N	I	X
11. Being able to explain own instructional strategy in terms of learning theory	11.	C	H	D	N	I	X
12. Solving problems in a decisive manner	12.	C	H	D	N	I	X
13. Revising methods and materials in keeping with the times	13.	C	H	D	N	I	X
14. Giving extra time and help to students willingly	14.	C	H	D	N	I	X
15. Seeking better ways and methods for improving teaching	15.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

16. Setting high standards of scholarship for self and for students	16. C H D N I X
17. Demonstrating the ability to perform the skills he is teaching	17. C H D N I X
18. Teaching with confidence	18. C H D N I X
19. Avoiding false pretense (hypocrisy)	19. C H D N I X
20. Working toward set goals at all times	20. C H D N I X

TO: PARTICIPANTS **DATE:** NOVEMBER 29, 1974

FROM: CHARLES T. NORTON **SUBJECT:** QUESTIONNAIRE II
DOCTORAL STUDENT BOOKKEEPING/
UNIVERSITY OF HOUSTON ACCOUNTING TEACHER
 COMPETENCIES

Did you have a nice Thanksgiving? I hope so. I did a lot of stuffing on questionnaires, but I admit that I also stuffed on things more fattening.

May I remind you that I need to have Questionnaire II returned by December 5 so that your part will be completed before Christmas vacation.

Please take a moment and complete Questionnaire II.

APPENDIX E

Cover Memorandum, Consensus Sheets (Questionnaire III)
and Questionnaire II to Teachers and Authorities
Showing Rating of Competencies to Arrive at Consensus

Follow-Up Memorandums to
Teachers and Authorities for Consensus Sheet

TO: PARTICIPANTS DATE: JANUARY 6, 1975

FROM: CHARLES NORTON SUBJECT: QUESTIONNAIRE III
DOCTORAL STUDENT (II) BOOKKEEPING/
UNIVERSITY OF HOUSTON ACCOUNTING TEACHER
COMPETENCY

This is the last one! I hope that one day you will give me an opportunity to repay your generous help. You are great!--to be concerned enough about your profession to participate.

The purpose of Questionnaire III is to inform you how you responded in relation to the group and to give you an opportunity to reevaluate your response to each statement with which you do not agree. If you choose not to join the modal consensus (majority) will you please make a brief statement as to why. I am enclosing a consensus sheet for use in responding.

Please remember that we are looking at what a beginning teacher needs to know before being certified to teach. I shall mail you the results as soon as the study is completed. Thanks again for helping.

INSTRUCTIONS

1. Be sure to put your name at the top of the consensus sheet and to read the instructions on the first page of that sheet.
2. When you have completed the consensus sheet, please put BOTH the Questionnaire and the Consensus Sheet in the envelope and return to me.
3. Please complete bottom page 7 of the Consensus Sheet.
4. Please return by January 20, 1975.

Name _____

(Consensus Sheet Teacher)

This space is provided for your comments. If more space is needed, please use the back. If you use the back, please give it both a heading and a number so that they will not be confused.

1. Place right edge of questionnaire next to the line at the left, then align numbers.
2. Observe consensus in relation to your own rating. Consensus indicated by asterisk (*).
3. Two columns have been provided at the right. Place a check (✓) in column one if you are changing and joining the consensus. Place a check (✓) in column two only if you are sticking with your original choice. Please make a brief statement in the space provided at the left as to why.

PLANNINGPLANNING

Column

							1	2
							()	()
1.	C	H	D*	N	I	X	()	()
2.1	C	H*	D	N	I	X	()	()
2.2	C	H*	D	N	I	X	()	()
3.	C	H*	D	N	I	X	()	()
4.1	C	H*	D	N	I	X	()	()
4.2	C	H*	D	N	I	X	()	()
4.3	C	H*	D	N	I	X	()	()
4.4	C	H*	D	N	I	X	()	()
5.	C	H	D*	N	I	X	()	()
6.	C*	H	D	N	I	X	()	()
7.	C	H*	D	N	I	X	()	()
8.	C	H*	D	N	I	X	()	()

9. C H* D N I X () ()
10. C H* D N I X () ()
11. C H* D N I X () ()
12. C H D* N I X () ()
13. C H D* N I X () ()
14. C H D* N I X () ()
15. C H* D N I X () ()
16. C H* D N I X () ()
17. C H D* N I X () ()
18. C H* D N I X () ()
19. C H* D N I X () ()
20. C H D* N I X () ()
21. C H* D N I X () ()
22. C H* D N I X () ()
23. C H D* N I X () ()
24. C H* D N I X () ()
25. C H* D N I X () ()

ADMINISTRATION

ADMINISTRATION

1. C H* D N I X () ()
2. C H* D N I X () ()
3. C* H D N I X () ()
4. C H D* N I X () ()
5. C H* D N I X () ()
6. C H* D N I X () ()

7. C H* D N I X () ()
 8. C H* D N I X () ()
 9. C H* D N I X () ()

INSTRUCTIONINSTRUCTION

1. C* H D N I X () ()
 2. C H* D N I X () ()
 3. C* H D N I X () ()
 4. C H D* N I X () ()
 5. C H* D N I X () ()
 6. C H* D N I X () ()
 7. C H D* N I X () ()
 8. C H* D N I X () ()
 9. C H* D N I X () ()
 10. C* H D N I X () ()
 11.1 C H* D N I X () ()
 11.2 C H* D N I X () ()
 11.3 C H* D N I X () ()
 11.4 C H* D N I X () ()
 11.5 C* H D N I X () ()
 11.6 C H* D N I X () ()
 11.7 C H* D N I X () ()
 11.8 C H* D N I X () ()
 12. C H* D N I X () ()

CONTENTCONTENT

1. C* H D N I X () ()
2. C* H D N I X () ()
3. C* H D N I X () ()
4. C* H D N I X () ()
5. C* H D N I X () ()
6. C* H D N I X () ()
7. C* H D N I X () ()
8. C* H D N I X () ()
9. C* H D N I X () ()
10. C* H D N I X () ()
11. C* H D N I X () ()
12. C* H D N I X () ()
13. C* H D N I X () ()
14. C* H D N I X () ()
15. C* H D N I X () ()
16. C* H D N I X () ()
17. C* H D N I X () ()
18. C* H D N I X () ()
19. C* H D N I X () ()
20. C H* D N I X () ()
21. C* H D N I X () ()
22. C* H D N I X () ()

18. C* H D N I X () ()
19. C* H D N I X () ()
20. C H* D N I X () ()
21. C* H D N I X () ()
22. C* H D N I X () ()
23. C* H D N I X () ()
24. C* H D N I X () ()
25. C H* D N I X () ()
26. C* H D N I X () ()
27. C* H D N I X () ()
- 28.1 C H* D N I X () ()
- 28.2 C H* D N I X () ()
- 28.3 C H* D N I X () ()
29. C H* D N I X () ()
30. C H* D N I X () ()
- 31.1 C H* D N I X () ()
- 31.2 C H* D N I X () ()
- 31.3 C H* D N I X () ()
32. C H* D N I X () ()
33. C* H D N I X () ()
34. C* H D N I X () ()
35. C H* D N I X () ()
36. C H* D N I X () ()
37. C H* D N I X () ()

38. C H* D N I X () ()
39. C H* D N I X () ()
40. C H* D N I X () ()
41. C H* D N I X () ()
42. C H* D N I X () ()
43. C H* D N I X () ()
44. C H* D N I X () ()
45. C H* D N I X () ()
46. C H D* N I X () ()
47. C H* D N I X () ()
48. C H* D N I X () ()
49. C* H D N I X () ()
50. C* H D N I X () ()
51. C H* D N I X () ()

COMMUNICATION

COMMUNICATION

1. C H* D N I X () ()
2. C H* D N I X () ()
- 3.1 C H* D N I X () ()
- 3.2 C H* D N I X () ()
- 3.3 C H D* N I X () ()
- 3.4 C H* D N I X () ()
- 3.5 C H D* N I X () ()

- 3.6 C H* D N I X () ()
- 3.7 C H D* N I X () ()
4. C H* D N I X () ()
5. C* H D N I X () ()
6. C H* D N I X () ()
7. C H* D N I X () ()
8. C* H D N I X () ()

EVALUATIONEVALUATION

1. C H* D N I X () ()
2. C H* D N I X () ()
3. C H* D N I X () ()
4. C H* D N I X () ()
5. C H* D N I X () ()
6. C H* D N I X () ()
7. C H* D N I X () ()
8. C H* D N I X () ()
9. C H* D N I X () ()
10. C H* D N I X () ()

DEVELOPMENT OF PUPIL SELFDEVELOPMENT OF PUPIL SELF

1. C H* D N I X () ()
2. C H* D N I X () ()
3. C H* D N I X () ()
4. C H* D N I X () ()

5. C H* D N I X () ()
6. C* H D N I X () ()
7. C H* D N I X () ()
8. C H* D N I X () ()

DEVELOPMENT OF PERSONAL SKILLS

DEVELOPMENT OF PERSONAL SKILLS

1. C H* D N I X () ()
2. C H* D N I X () ()
3. C H* D N I X () ()
4. C H D N I X () ()
5. C H* D N I X () ()
6. C* H D N I X () ()
7. C* H D N I X () ()
8. C H* D N I X () ()
9. C H* D N I X () ()
10. C H* D N I X () ()
11. C H* D N I X () ()
12. C H* D N I X () ()
13. C* H D N I X () ()
14. C* H D N I X () ()
15. C* H D N I X () ()
16. C H* D N I X () ()
17. C* H D N I X () ()

18. C* H D N I X () ()
19. C* H D N I X () ()
20. C* H D N I X () ()

INFORMATION SHEET

Highest degree earned _____ Hours above last degree _____

Number of years teaching experience in: secondary schools _____

community/junior college _____ college _____

Hours of accounting at the college level _____ Years of work experience related to bookkeeping/accounting _____ Did you receive your teacher-training courses in Texas _____

Check the statement in each group that comes closest to your thinking:

- () Present certification procedures in Texas are adequate
- () Present certification procedures in Texas are inadequate
- () Teacher-training institutions are doing an adequate job in preparing business teachers for the classroom in Texas
- () Teacher-training institutions are not doing an adequate job in preparing business teachers for the classroom in Texas
- () Bookkeeping/accounting is a dying course at the secondary level
- () Bookkeeping/accounting has potential growth at the secondary level
- () Competency-based certification appeals to me
- () Competency-based certification does not appeal to me
- () I know very little about competency-based certification

Please list any additional comments that you feel would be of importance in the space below.

RETURN BOTH QUESTIONNAIRE AND CONSENSUS

QUESTIONNAIRE II (TEACHER)

COMPETENCIES NEEDED BY THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL

Charles T. Norton
University of Houston

Please return by December 5, 1974
Advisor: Dr. W. Arthur Allee

DIRECTIONS: Within each of the 6 columns at the right, please react to each competency in terms of:

C = Crucial	N = Nonimportant
H = Highly desirable	I = Incorrectly stated; needs revision
D = Desirable but not absolutely necessary	X = Do not use; concept inappropriate

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Planning

- | | |
|--|-----------------|
| 1. Planning how the bookkeeping/
accounting course fits into the total
school program and its relationship to
other courses | 1. C H D N I X |
| 2. Preparing over-all objectives of the
bookkeeping/accounting course | |
| 2.1 Unit objectives in behavioral
terms | 2.1 C H D N I X |
| 2.2 Objectives of individual lessons
in behavioral terms | 2.2 C H D N I X |
| 3. Preparing a course of study for the
beginning bookkeeping/accounting
course for long-range planning | 3. C H D N I X |
| 4. Planning the teaching approach to use | |
| 4.1 Developmental approach (from
common experience of the learner
to uncommon experience of the
learner) | 4.1 C H D N I X |
| 4.2 Journal approach (using book of
original entry) | 4.2 C H D N I X |

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

4.3	Ledger approach (sequence of events to the effect on individual accounts)	4.3	C	H	D	N	I	X
4.4	Balance sheet approach (showing student where he is going)	4.4	C	H	D	N	I	X
5.	Planning pre-testing procedures	5.	C	H	D	N	I	X
6.	Selecting textbooks	6	C	H	D	N	I	X
7.	Selecting supplementary materials (practice sets etc.)	7.	C	H	D	N	I	X
8.	Establishing a system of performance (grading technique)	8.	C	H	D	N	I	X
9.	Selecting equipment for bookkeeping/accounting classroom	9.	C	H	D	N	I	X
10.	Providing for use of multi-media equipment	10.	C	H	D	N	I	X
11.	Planning with other bookkeeping/accounting faculty	11.	C	H	D	N	I	X
12.	Planning a simulated office environment	12.	C	H	D	N	I	X
13.	Surveying community to determine kinds of jobs available	13.	C	H	D	N	I	X
14.	Developing a follow-up program of former students	14.	C	H	D	N	I	X
15.	Assessing community resources (speakers, field trips)	15.	C	H	D	N	I	X
16.	Acquainting administrators, counselors, and other teachers with the need for bookkeepers/accountants	16.	C	H	D	N	I	X
17.	Planning for work experience for the student	17.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

18. Planning for teaching late entrants (example 5 days)	18.	C	H	D	N	I	X
19. Developing individualized instruction	19.	C	H	D	N	I	X
20. Planning grouping of students (buddy system)	20.	C	H	D	N	I	X
21. Planning for development of minimal students	21.	C	H	D	N	I	X
22. Planning standards of acceptable per- formance	22.	C	H	D	N	I	X
23. Planning before and after school help for students	23.	C	H	D	N	I	X
24. Planning for presenting career information in the bookkeeping/ accounting field	24.	C	H	D	N	I	X
25. Planning for the development of good work habits and attitudes	25.	C	H	D	N	I	X

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Administration

1. Organizing classroom for maximum efficiency	1.	C	H	D	N	I	X
2. Conducting conferences (students, parents, teachers)	2.	C	H	D	N	I	X
3. Observing work being done and helping if needed	3.	C	H	D	N	I	X
4. Preparing yearly budgets	4.	C	H	D	N	I	X
5. Explaining safety precautions in use of equipment	5.	C	H	D	N	I	X
6. Seeing that students share equipment	6.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

- | | | | | | | | |
|--|----|---|---|---|---|---|---|
| 7. Developing in student respect and responsibility for making proper use of equipment | 7. | C | H | D | N | I | X |
| 8. Explaining in detail the grading system used | 8. | C | H | D | N | I | X |
| 9. Utilizing methods that will simplify grading | 9. | C | H | D | N | I | X |

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Instruction

Methods/Techniques

- | | | | | | | | |
|---|-----|---|---|---|---|---|---|
| 1. Teaching for understanding | 1. | C | H | D | N | I | X |
| 2. Making materials used as realistic as possible | 2. | C | H | D | N | I | X |
| 3. Teaching so as to challenge and motivate the learner | 3. | C | H | D | N | I | X |
| 4. Presenting principles in proper sequence to avoid relearning situations | 4. | C | H | D | N | I | X |
| 5. Teaching for concepts | 5. | C | H | D | N | I | X |
| 6. Providing balance among theory, drill, and practice | 6. | C | H | D | N | I | X |
| 7. Keeping class together | 7. | C | H | D | N | I | X |
| 8. Providing for student learning through reading, visual examples, discussion, demonstration, and review | 8. | C | H | D | N | I | X |
| 9. Stressing proper work habits | 9. | C | H | D | N | I | X |
| 10. Teaching for application rather than for rote learning | 10. | C | H | D | N | I | X |

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

11. Using psychological guides

11.1 Using planned, purposeful, and repetitive practice	11.1	C	H	D	N	I	X
11.2 Preparing learner for learning	11.2	C	H	D	N	I	X
11.3 Providing for individual differences	11.3	C	H	D	N	I	X
11.4 Providing for successes and motivation	11.4	C	H	D	N	I	X
11.5 Helping learner to relate parts to whole	11.5	C	H	D	N	I	X
11.6 Encouraging participation to enhance learning	11.6	C	H	D	N	I	X
11.7 Taking the student from where he or she is and move forward	11.7	C	H	D	N	I	X
11.8 Reinforcing student participation through reward	11.8	C	H	D	N	I	X
12. Providing short review of previous day's work	12.	C	H	D	N	I	X

Content

1. Knowing and identifying source documents	1.	C	H	D	N	I	X
2. Knowing correct journalizing techniques for all journals	2.	C	H	D	N	I	X
3. Knowing correct posting procedures	3.	C	H	D	N	I	X
4. Knowing way to determine if ledger is in balance	4.	C	H	D	N	I	X
5. Showing how to solve the bookkeeping/ accounting equation with one part missing	5.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

6. Explaining the difference between assets, liability, and capital accounts	6.	C	H	D	N	I	X
7. Explaining the effects revenue and expense accounts have on the capital account	7.	C	H	D	N	I	X
8. Explaining how to increase and decrease asset, liability, and capital accounts	8.	C	H	D	N	I	X
9. Explaining "temporary" accounts	9.	C	H	D	N	I	X
10. Explaining basic math computations (fundamental processes)	10.	C	H	D	N	I	X
11. Explaining steps in finding errors	11.	C	H	D	N	I	X
12. Explaining vocabulary of frequently used bookkeeping/accounting terms	12.	C	H	D	N	I	X
13. Showing how to prepare work sheet	13.	C	H	D	N	I	X
14. Showing how to prepare financial statements in various forms and styles	14.	C	H	D	N	I	X
15. Showing how to record adjusting entries	15.	C	H	D	N	I	X
16. Showing how to close accounts and transfer balances	16.	C	H	D	N	I	X
17. Showing how to analyze the financial statements	17.	C	H	D	N	I	X
18. Showing how to take a post-closing trial balance	18.	C	H	D	N	I	X
19. Showing how to make reversing entries	19.	C	H	D	N	I	X
20. Explaining the use of statements once they are prepared	20.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

21. Knowing proper banking procedures (checks, deposits, etc.)	21.	C	H	D	N	I	X
22. Showing how to reconcile the bank statement	22.	C	H	D	N	I	X
23. Knowing procedures for handling petty cash	23.	C	H	D	N	I	X
24. Knowing purchasing and purchase return procedures (requisitions, purchase order, memorandums)	24.	C	H	D	N	I	X
25. Explaining different methods of sales (cash, charge, c.o.d, will-call)	25.	C	H	D	N	I	X
26. Knowing sales and sales returns procedures	26.	C	H	D	N	I	X
27. Showing how to prove cash	27.	C	H	D	N	I	X
28. Showing how to figure depreciation							
28.1 Sum-of-the years digits	28.1	C	H	D	N	I	X
28.2 Straight line	28.2	C	H	D	N	I	X
28.3 Declining balance	28.3	C	H	D	N	I	X
29. Knowing how to take an inventory	29.	C	H	D	N	I	X
30. Explaining periodic and perpetual inventory	30.	C	H	D	N	I	X
31. Showing how to determine value of merchandise on hand							
31.1 FIFO (Last in first out)	31.1	C	H	D	N	I	X
31.2 FIFO (First in first out)	31.2	C	H	D	N	I	X
31.3 Cost or Market, the lower	31.3	C	H	D	N	I	X
32. Explaining full payroll procedures, including income tax information	32.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

33. Knowing how to keep subsidiary ledgers	33.	C	H	D	N	I	X
34. Explaining how to use control accounts	34.	C	H	D	N	I	X
35. Showing how to do a credit check (for accounts receivable)	35.	C	H	D	N	I	X
36. Explaining procedures for control of cash on hand	36.	C	H	D	N	I	X
37. Showing how to use 10-key, electronic printer, and posting machine properly	37.	C	H	D	N	I	X
38. Showing how to prepare invoices and customer statements	38.	C	H	D	N	I	X
39. Showing how to compute and record bad debts	39.	C	H	D	N	I	X
40. Showing how to compute and record prepaid expenses	40.	C	H	D	N	I	X
41. Showing how to compute and record accrued expenses, interests, and income	41.	C	H	D	N	I	X
42. Explaining importance of bookkeeping/ accounting for tax purposes	42.	C	H	D	N	I	X
43. Showing procedures for disposition of assets	43.	C	H	D	N	I	X
44. Showing how to prepare a notes receivable and notes payable ledger	44.	C	H	D	N	I	X
45. Explaining accruals	45.	C	H	D	N	I	X
46. Explaining basic data processing procedures as applied to bookkeeping/ accounting (manual and punched card)	46.	C	H	D	N	I	X
47. Showing how to compute and record interest earned or owed up to a certain date	47.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

48. Showing how to compute and record discounts on notes and invoices	48.	C	H	D	N	I	X
49. Showing how to correct errors through correcting entries	49.	C	H	D	N	I	X
50. Showing how to correct an account without erasing	50.	C	H	D	N	I	X
51. Explaining difference between bookkeeping, record keeping, and accounting	51.	C	H	D	N	I	X

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Communication

1. Using correct speaking skills	1.	C	H	D	N	I	X
2. Using proper questioning techniques	2.	C	H	D	N	I	X
3. Demonstrating proficiency in							
3.1 Using overhead projector	3.1	C	H	D	N	I	X
3.2 Using chalkboard	3.2	C	H	D	N	I	X
3.3 Using movies and movie projectors	3.3	C	H	D	N	I	X
3.4 Using bulletin boards	3.4	C	H	D	N	I	X
3.5 Using felt boards	3.5	C	H	D	N	I	X
3.6 Using bookkeeping/accounting charts	3.6	C	H	D	N	I	X
3.7 Closed-circuit television	3.7	C	H	D	N	I	X
4. Allowing for pupil/teacher and pupil/pupil interaction	4.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

- | | | | | | | | |
|--|----|---|---|---|---|---|---|
| 5. Writing easily understood tests, working guides, and instructions | 5. | C | H | D | N | I | X |
| 6. Teaching listening skills | 6. | C | H | D | N | I | X |
| 7. Developing ability to work from verbal and written directions | 7. | C | H | D | N | I | X |
| 8. Recognizing situations when student or class is lost or not understanding | 8. | C | H | D | N | I | X |

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Evaluation

- | | | | | | | | |
|---|-----|---|---|---|---|---|---|
| 1. Evaluating through pre-test, practice, and post-test | 1. | C | H | D | N | I | X |
| 2. Evaluating oral feed back | 2. | C | H | D | N | I | X |
| 3. Evaluating seriousness of errors | 3. | C | H | D | N | I | X |
| 4. Evaluating projects (problems and practive sets) | 4. | C | H | D | N | I | X |
| 5. Evaluating workbooks | 5. | C | H | D | N | I | X |
| 6. Evaluating neatness of work | 6. | C | H | D | N | I | X |
| 7. Accepting only work completed satisfactorily | 7. | C | H | D | N | I | X |
| 8. Evaluating students on individual basis | 8. | C | H | D | N | I | X |
| 9. Evaluating students work based on predetermined objectives | 9. | C | H | D | N | I | X |
| 10. Evaluating attitudes and personal characteristics | 10. | C | H | D | N | I | X |

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Development of Pupil Self

- | | | | | | | | |
|--|----|---|---|---|---|---|---|
| 1. Assisting student in identification of life goals | 1. | C | H | D | N | I | X |
| 2. Assisting student in critical examination of self to develop self-esteem and ability to succeed | 2. | C | H | D | N | I | X |
| 3. Assisting student in developing ability to follow instructions | 3. | C | H | D | N | I | X |
| 4. Encouraging students to deal with each other as human beings of intrinsic worth | 4. | C | H | D | N | I | X |
| 5. Stressing the understanding of group processes (group decision-making, leadership skills, peer relationships) | 5. | C | H | D | N | I | X |
| 6. Participating in community and school activities | 6. | C | H | D | N | I | X |
| 7. Encouraging career exploration | 7. | C | H | D | N | I | X |
| 8. Giving self-direction through indirect guidance and good work habits | 8. | C | H | D | N | I | X |

Development of Personal Skills

- | | | | | | | | |
|---|----|---|---|---|---|---|---|
| 1. Working with student as a peer, not as a person with extreme authority | 1. | C | H | D | N | I | X |
| 2. Updating skills through work experience and schooling | 2. | C | H | D | N | I | X |
| 3. Identifying with the student | 3. | C | H | D | N | I | X |
| 4. Setting an example for students | 4. | C | H | D | N | I | X |
| 5. Participating in the community served | 5. | C | H | D | N | I | X |

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

- | | |
|--|-----------------|
| 6. Being committed to your job and profession | 6. C H D N I X |
| 7. Being cooperative in teaching situations with other teachers, paraprofessionals, and resource persons | 7. C H D N I X |
| 8. Accepting responsibility of multidisciplinary instruction (spelling, grammar, etc.) | 8. C H D N I X |
| 9. Identifying personal strengths in teaching and the ability to evaluate yourself effectively | 9. C H D N I X |
| 10. Recognizing own values of beliefs and the incompatibilities between yours and others | 10. C H D N I X |
| 11. Being able to explain own instructional strategy in terms of learning theory | 11. C H D N I X |
| 12. Solving problems in a decisive manner | 12. C H D N I X |
| 13. Revising methods and materials in keeping with the times | 13. C H D N I X |
| 14. Giving extra time and help to students willingly | 14. C H D N I X |
| 15. Seeking better ways and methods for improving teaching | 15. C H D N I X |
| 16. Setting high standards of scholarship for self and for students | 16. C H D N I X |
| 17. Demonstrating the ability to perform the skills he is teaching | 17. C H D N I X |
| 18. Teaching with confidence | 18. C H D N I X |
| 19. Avoiding false pretense (hypocrisy) | 19. C H D N I X |
| 20. Working toward set goals at all times | 20. C H D N I X |

TO: PARTICIPANTS DATE: JANUARY 7, 1975

FROM: CHARLES NORTON SUBJECT: QUESTIONNAIRE III
DOCTORAL STUDENT (II) BOOKKEEPING/
UNIVERSITY OF HOUSTON ACCOUNTING TEACHER
 COMPETENCY

This is the last one! I hope that one day you will give me an opportunity to repay your generous help. You are great!--to be concerned enough about your profession to participate.

The purpose of Questionnaire III is to inform you how you responded in relation to the group and to give you an opportunity to reevaluate your response to each statement with which you do not agree. If you choose not to join the modal consensus (majority) will you please make a brief statement as to why. I am enclosing a consensus sheet for use in responding.

Please notice that some of the statements show two consensus ratings. This is because that particular statement had an equal number of ratings. If you are outside of either of these and desire to change, please circle on the consensus sheet the one you plan to move to. Otherwise follow the instructions on the consensus sheet.

Please remember that we are looking at what a beginning teacher needs to know before being certified to teach. I shall mail you the results as soon as the study is completed. Thanks again for helping.

INSTRUCTIONS

1. Be sure to put your name at the top of the Consensus Sheet and to read the instructions on the first page of that sheet.
2. When you have completed the Consensus Sheet, please put BOTH the Questionnaire and the Consensus Sheet in the envelope and return to me.
3. Please complete bottom page 7 of the Consensus Sheet.
4. Please return by February 1, 1975.

Name _____

(Consensus Sheet Authority)

1. Place right edge of questionnaire next to the line at the left, then align numbers.
2. Observe consensus in relation to your own rating--Consensus indicated by asterisk (*). In case of tie both are given.
3. Two columns have been provided at the right. Place a check (✓) in column one if you are changing and joining the consensus. Place a check (✓) in column two only if you are sticking with your original choice. Please make a brief statement in the space provided at the left as to why you do not wish to change.

PLANNINGPLANNING

Column

1 2

- | | | | | | | | | |
|-----|----|----|----|---|---|---|-----|-----|
| 1. | C | H* | D | N | I | X | () | () |
| 2.1 | C | H* | D | N | I | X | () | () |
| 2.2 | C | H* | D | N | I | X | () | () |
| 3. | C | H* | D | N | I | X | () | () |
| 4.1 | C* | H | D | N | I | X | () | () |
| 4.2 | C | H | D* | N | I | X | () | () |
| 4.3 | C | H | D* | N | I | X | () | () |
| 4.4 | C | H* | D | N | I | X | () | () |
| 5. | C | H | D* | N | I | X | () | () |
| 6. | C | H* | D | N | I | X | () | () |
| 7. | C | H* | D | N | I | X | () | () |

8. C H* D N I X () ()
9. C H* D N I X () ()
10. C H D* N I X () ()
11. C H* D N I X () ()
12. C H D* N I X () ()
13. C H D* N I X () ()
14. C H D* N I X () ()
15. C H* D N I X () ()
16. C H* D N I X () ()
17. C H D* N I X () ()
18. C H* D* N I X () ()
19. C H* D N I X () ()
20. C H D* N I X () ()
21. C H* D N I X () ()
22. C H* D N I X () ()
23. C H* D N I X () ()
24. C H* D N I X () ()
25. C* H D N I X () ()

ADMINISTRATIONADMINISTRATION

1. C H* D N I X () ()
2. C H* D N I X () ()
3. C* H D N I X () ()
4. C H D* N I X () ()
5. C H* D N I X () ()
6. C H D* N I X () ()

7. C H* D N I X () ()
 8. C H* D N I X () ()
 9. C H* D N I X () ()

INSTRUCTIONINSTRUCTION

1. C* H D N I X () ()
 2. C H* D N I X () ()
 3. C* H D N I X () ()
 4. C* H D N I X () ()
 5. C* H D N I X () ()
 6. C* H D N I X () ()
 7. C H D* N I X () ()
 8. C* H D N I X () ()
 9. C H* D N I X () ()
 10. C* H D N I X () ()
 11.1 C H* D N I X () ()
 11.2 C H* D N I X () ()
 11.3 C* H D N I X () ()
 11.4 C* H D N I X () ()
 11.5 C* H* D N I X () ()
 11.6 C H* D N I X () ()
 11.7 C* H D N I X () ()
 11.8 C H* D N I X () ()
 12. C H* D N I X () ()

CONTENTCONTENT

1.	C* H D N I X	() ()
2.	C* H D N I X	() ()
3.	C* H D N I X	() ()
4.	C* H D N I X	() ()
5.	C* H D N I X	() ()
6.	C* H D N I X	() ()
7.	C* H D N I X	() ()
8.	C* H D N I X	() ()
9.	C* H D N I X	() ()
10.	C H* D N I X	() ()
11.	C H* D N I X	() ()
12.	C* H D N I X	() ()
13.	C H* D N I X	() ()
14.	C H* D N I X	() ()
15.	C H* D N I X	() ()
16.	C* H D N I X	() ()
17.	C H* D N I X	() ()
18.	C* H D N I X	() ()
19.	C H* D N I X	() ()
20.	C H* D N I X	() ()
21.	C* H D N I X	() ()
22.	C* H D N I X	() ()

23. C* H D N I X () ()
24. C* H D N I X () ()
25. C H* D N I X () ()
26. C* H D N I X () ()
27. C* H D N I X () ()
- 28.1 C H* D N I X () ()
- 28.2 C H* D N I X () ()
- 28.3 C H* D* N I X () ()
29. C H* D N I X () ()
30. C H* D N I X () ()
- 31.1 C H D* N I X () ()
- 31.2 C H* D N I X () ()
- 31.3 C H D* N I X () ()
32. C* H D N I X () ()
33. C* H D N I X () ()
34. C* H D N I X () ()
35. C H D* N I X () ()
36. C H* D N I X () ()
37. C H D* N I X () ()
38. C H* D N I X () ()
39. C H* D N I X () ()
40. C H* D N I X () ()
41. C H* D N I X () ()

42. C H* D N I X () ()
43. C H D* N I X () ()
44. C H D* N I X () ()
45. C H* D N I X () ()
46. C H* D N I X () ()
47. C H* D N I X () ()
48. C H* D N I X () ()
49. C* H D N I X () ()
50. C H* D N I X () ()
51. C H* D N I X () ()

COMMUNICATION

COMMUNICATION

1. C H* D N I X () ()
2. C* H D N I X () ()
- 3.1 C H* D N I X () ()
- 3.2 C* H D N I X () ()
- 3.3 C H D* N I X () ()
- 3.4 C H D* N I X () ()
- 3.5 C H D* N I X () ()
- 3.6 C H D* N I X () ()
- 3.7 C H D* N I X () ()
4. C* H D N I X () ()
5. C* H D N I X () ()
6. C H* D N I X () ()

7. C H* D N I X () ()

8. C* H D N I X () ()

EVALUATION

EVALUATION

1. C* H D N I X () ()

2. C H* D N I X () ()

3. C H* D N I X () ()

4. C H* D N I X () ()

5. C H D* N I X () ()

6. C H D* N I X () ()

7. C H D* N I X Q () ()

8. C* H `D N I X () ()

9. C H* D N I X () ()

10. C H* D N I X () ()

DEVELOPMENT OF PUPIL SELF

DEVELOPMENT OF PUPIL SELF

1. C H* D N I X () ()

2. C H* D N I X () ()

3. C H* D N I X () ()

4. C H* D N I X () ()

5. C H* D N I X () ()

6. C H D* N I X () ()

7. C H* D N I X () ()

8. C H* D N I X () ()

DEVELOPMENT OF PERSONAL SKILLSDEVELOPMENT OF PERSONAL SKILLS

1. C H* D N I X () ()
2. C H* D N I X () ()
3. C* H* D N I X () ()
4. C* H D N I X () ()
5. C H D* N I X () ()
6. C* H D N I X () ()
7. C H* D N I X () ()
8. C H* D N I X () ()
9. C* H D N I X () ()
10. C H* D N I X () ()
11. C H* D N I X () ()
12. C H* D N I X () ()
13. C* H D N I X () ()
14. C* H D N I X () ()
15. C* H D N I X () ()
16. C* H D N I X () ()
17. C* H D N I X () ()
18. C* H D N I X () ()
19. C* H D N I X () ()
20. C H* D N I X () ()

INFORMATION SHEET

Highest degree earned _____ Number of years of teaching
experience in: secondary schools _____ community/junior college
_____ college/university _____ Hours of accounting earned at
the college level _____ Years of work experience related to
Bookkeeping/Accounting in business or industry _____ Have you been
certified to teach at the high school level in any state _____
Number of articles you have published _____

Check the statements that come closest to your thinking:

- () Present certification procedures across the nation need revising
- () Present certification procedures across the nation do not need revising
- () Teacher-training institutions in general are not doing an adequate job
- () Teacher-training institutions in general are doing an adequate job
- () I favor a competency-based approach to teacher certification
- () I do not favor a competency-based approach to teacher certification
- () I know very little about the competency-based movement

Please list additional comments that you feel would be of value in my study.

RETURN BOTH QUESTIONNAIRE AND CONSENSUS

(FOLLOW-UP TO TEACHERS)

TO: PARTICIPANTS DATE: JANUARY 14, 1975

FROM: CHARLES NORTON SUBJECT: QUESTIONNAIRE III (II)
DOCTORAL STUDENT BOOKKEEPING/ACCOUNTING
UNIVERSITY OF HOUSTON COMPETENCY (TEACHER)

You have in your possession Questionnaire II and a Consensus Sheet. The Consensus Sheet is Questionnaire III. It is important that I have these returned to me by January 27. If I am to graduate this Spring, I must have my study completed by March 26.

Will you please take a moment and complete the Consensus Sheet? It is not absolutely necessary for you to justify why you are not joining the consensus; however, it is hoped that you will make a brief statement as it is these statements which will be used to generate discussion in the findings and conclusions. In any case, please return Questionnaire II and the Consensus Sheet.

Thank you again for helping.

(FOLLOW-UP TO AUTHORITIES)

TO: PARTICIPANTS DATE: JANUARY 25, 1975

FROM: CHARLES NORTON SUBJECT: QUESTIONNAIRE III (II)
DOCTORAL STUDENT BOOKKEEPING/ACCOUNTING
UNIVERSITY OF HOUSTON TEACHER COMPETENCY

You have in your possession Questionnaire II and a Consensus Sheet. The Consensus Sheet is Questionnaire III. It is important that I have these returned by February 5. If I am to graduate this Spring, I must have my study completed by March 26. Will you please take a moment and complete the Consensus Sheet?

Thank you again for helping ,

QUESTIONNAIRE II (AUTHORITY)

COMPETENCIES NEEDED BY THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE
SECONDARY LEVEL

Charles T. Norton
University of Houston

Please return by December 5, 1974
Advisor: Dr. W. Arthur Allee

DIRECTIONS: Within each of the 6 columns at the right, please react to each competency in terms of:

C = Crucial	N = Nonimportant
H = Highly desirable	I = Incorrectly stated; needs revision
D = Desirable but not absolutely necessary	X = Do not use; concept inappropriate

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD
UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Planning

- | | | | | | | | |
|--|-----|---|---|---|---|---|---|
| 1. Planning how the bookkeeping/
accounting course fits into the total
school program and its relationship
to other courses | 1. | C | H | D | N | I | X |
| 2. Preparing over-all objectives of the
bookkeeping/accounting course | | | | | | | |
| 2.1 Unit objectives in behavioral terms | 2.1 | C | H | D | N | I | X |
| 2.2 Objectives of individual lessons
in behavioral terms | 2.2 | C | H | D | N | I | X |
| 3. Preparing a course of study for the
beginning bookkeeping/accounting course
for long-range planning | 3. | C | H | D | N | I | X |
| 4. Planning the teaching approach to use | | | | | | | |
| 4.1 Developmental approach (from
common experience of the learner to
uncommon experience of the learner) | 4.1 | C | H | D | N | I | X |
| 4.2 Journal approach (using book of
original entry) | 4.2 | C | H | D | N | I | X |
| 4.3 Balance sheet approach (showing
student where he is going) | 4.3 | C | H | D | N | I | X |
| 5. Planning pre-testing procedures | 5. | C | H | D | N | I | X |

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

6. Selecting textbooks	6. C H D N I X
7. Selecting supplementary materials (practice sets etc.)	7. C H D N I X
8. Establishing a system of performance (grading technique)	8. C H D N I X
9. Selecting equipment for bookkeeping/ accounting classroom	9. C H D N I X
10. Providing for use of multi-media equipment	10. C H D N I X
11. Planning with other bookkeeping/ accounting faculty	11. C H D N I X
12. Planning a simulated office environment	12. C H D N I X
13. Surveying community to determine kinds of jobs available	13. C H D N I X
14. Developing a follow-up program of former students	14. C H D N I X
15. Assessing community resources (speakers, field trips)	15. C H D N I X
16. Acquainting administrators, counselors, and other teachers with the need for bookkeepers/accountants	16. C H D N I X
17. Planning for work experience for the student	17. C H D N I X
18. Planning for teaching late entrants (example 5 days)	18. C H D N I X
19. Developing individualized instruction	19. C H D N I X
20. Planning grouping of students (buddy system)	20. C H D N I X
21. Planning for development of minimal students	21. C H D N I X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

- | | | | | | | | |
|--|-----|---|---|---|---|---|---|
| 22. Planning standards of acceptable performance | 22. | C | H | D | N | I | X |
| 23. Planning before and after school help for students | 23. | C | H | D | N | I | X |
| 24. Planning for presenting career information in the bookkeeping/accounting field | 24. | C | H | D | N | I | X |
| 25. Planning for the development of good work habits and attitudes | 25. | C | H | D | N | I | X |

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Administration

- | | | | | | | | |
|--|----|---|---|---|---|---|---|
| 1. Organizing classroom for maximum efficiency | 1. | C | H | D | N | I | X |
| 2. Conducting conferences (students, parents, teachers) | 2. | C | H | D | N | I | X |
| 3. Observing work being done and helping if needed | 3. | C | H | D | N | I | X |
| 4. Preparing yearly budgets | 4. | C | H | D | N | I | X |
| 5. Explaining safety precautions in use of equipment | 5. | C | H | D | N | I | X |
| 6. Seeing that students share equipment | 6. | C | H | D | N | I | X |
| 7. Developing in student respect and responsibility for making proper use of equipment | 7. | C | H | D | N | I | X |
| 8. Explaining in detail the grading system used | 8. | C | H | D | N | I | X |
| 9. Utilizing methods that will simplify grading | 9. | C | H | D | N | I | X |

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Instruction

Methods/Techniques

1. Teaching for understanding	1.	C	H	D	N	I	X
2. Making materials used as realistic as possible	2.	C	H	D	N	I	X
3. Teaching so as to challenge and motivate the learner	3.	C	H	D	N	I	X
4. Presenting principles in proper sequence to avoid relearning situations	4.	C	H	D	N	I	X
5. Teaching for concepts	5.	C	H	D	N	I	X
6. Providing balance among theory, drill, and practice	6.	C	H	D	N	I	X
7. Keeping class together	7.	C	H	D	N	I	X
8. Providing for student learning through reading, visual examples, discussion, demonstration, and review	8.	C	H	D	N	I	X
9. Stressing proper work habits	9.	C	H	D	N	I	X
10. Teaching for application rather than for rote learning	10.	C	H	D	N	I	X
11. Using psychological guides							
11.1 Using planned, purposeful, and repetitive practice	11.1	C	H	D	N	I	X
11.2 Preparing learner for learning	11.2	C	H	D	N	I	X
11.3 Providing for individual differences	11.3	C	H	D	N	I	X
11.4 Providing for successes and motivation	11.4	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated
 needs revision
 X = Do not use; concept
 inappropriate

11.5	Helping learner to relate parts to whole	11.5	C	H	D	N	I	X
11.6	Encouraging participation to enhance learning	11.6	C	H	D	N	I	X
11.7	Taking the student from where he or she is and move forward	11.7	C	H	D	N	I	X
11.8	Reinforcing student participation through reward	11.8	C	H	D	N	I	X
12.	Providing short review of previous day's work	12.	C	H	D	N	I	X

Content

1.	Knowing and identifying source documents	1.	C	H	D	N	I	X
2.	Knowing correct journalizing techniques for all journals	2.	C	H	D	N	I	X
3.	Knowing correct posting procedures	3.	C	H	D	N	I	X
4.	Knowing way to determine if ledger is in balance	4.	C	H	D	N	I	X
5.	Showing how to solve the bookkeeping/ accounting equation with one part missing	5.	C	H	D	N	I	X
6.	Explaining the difference between assets, liability, and capital accounts	6.	C	H	D	N	I	X
7.	Explaining the effects revenue and expense accounts have on the capital account	7.	C	H	D	N	I	X
8.	Explaining how to increase and decrease asset, liability, and capital accounts	8.	C	H	D	N	I	X
9.	Explaining "temporary" accounts	9.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated
 needs revision
 X = Do not use; concept
 inappropriate

10. Explaining basic math computations (fundamental processes)	10.	C	H	D	N	I	X
11. Explaining steps in finding errors	11.	C	H	D	N	I	X
12. Explaining vocabulary of frequently used bookkeeping/accounting terms	12.	C	H	D	N	I	X
13. Showing how to prepare work sheet	13.	C	H	D	N	I	X
14. Showing how to prepare financial statements in various forms and styles	14.	C	H	D	N	I	X
15. Showing how to record adjusting entries	15.	C	H	D	N	I	X
16. Showing how to close accounts and transfer balances	16.	C	H	D	N	I	X
17. Showing how to analyze the financial statements	17.	C	H	D	N	I	X
18. Showing how to take a post-closing trial balance	18.	C	H	D	N	I	X
19. Showing how to make reversing entries	19.	C	H	D	N	I	X
20. Explaining the use of statements once they are prepared	20.	C	H	D	N	I	X
21. Knowing proper banking procedures (checks, deposits, etc.)	21.	C	H	D	N	I	X
22. Showing how to reconcile the bank statement	22.	C	H	D	N	I	X
23. Knowing procedures for handling petty cash	23.	C	H	D	N	I	X
24. Knowing purchasing and purchase return procedures (requisitions, purchase order, memorandums)	24.	C	H	D	N	I	X
25. Explaining different methods of sales (cash, charge, c.o.d., will-call)	25.	C	H	D	N	I	X
26. Knowing sales and sales returns procedures	26.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

27. Showing how to prove cash	27.	C	H	D	N	I	X
28. Showing how to figure depreciation							
28.1 Sum-of-the years digits	28.1	C	H	D	N	I	X
28.2 Straight line	28.2	C	H	D	N	I	X
28.3 Declining balance	28.3	C	H	D	N	I	X
29. Knowing how to take an inventory	29.	C	H	D	N	I	X
30. Explaining periodic and perpetual inventory	30.	C	H	D	N	I	X
31. Showing how to determine value of merchandise on hand							
31.1 FIFO (Last in first out)	31.1	C	H	D	N	I	X
31.2 FIFO (First in first out)	31.2	C	H	D	N	I	X
31.3 Cost or Market, the lower	31.3	C	H	D	N	I	X
32. Explaining full payroll procedures, including income tax information	32.	C	H	D	N	I	X
33. Knowing how to keep subsidiary ledgers	33.	C	H	D	N	I	X
34. Explaining how to use control accounts	34.	C	H	D	N	I	X
35. Showing how to do a credit check (for accounts receivable)	35.	C	H	D	N	I	X
36. Explaining procedures for control of cash on hand	36.	C	H	D	N	I	X
37. Showing how to use 10-key, electronic printer, and posting machine properly	37.	C	H	D	N	I	X
38. Showing how to prepare invoices and customer statements	38.	C	H	D	N	I	X
39. Showing how to compute and record bad debts	39.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

40. Showing how to compute and record prepaid expenses	40.	C	H	D	N	I	X
41. Showing how to compute and record accrued expenses, interest, and income	41.	C	H	D	N	I	X
42. Explaining importance of bookkeeping/accounting for tax purposes	42.	C	H	D	N	I	X
43. Showing procedures for disposition of assets	43.	C	H	D	N	I	X
44. Showing how to prepare a notes receivable and notes payable ledger	44.	C	H	D	N	I	X
45. Explaining accruals	45.	C	H	D	N	I	X
46. Explaining basic data processing procedures as applied to bookkeeping/accounting (manual and punched card)	46.	C	H	D	N	I	X
47. Showing how to compute and record interest earned or owed up to a certain date	47.	C	H	D	N	I	X
48. Showing how to compute and record discounts on notes and invoices	48.	C	H	D	N	I	X
49. Showing how to correct errors through correcting entries	49.	C	H	D	N	I	X
50. Showing how to correct an account without erasing	50.	C	H	D	N	I	X
51. Explaining difference between bookkeeping, record keeping, and accounting	51.	C	H	D	N	I	X

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Communication

1. Using correct speaking skills	1.	C	H	D	N	I	X
----------------------------------	----	---	---	---	---	---	---

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

2. Using proper questioning techniques	2.	C	H	D	N	I	X
3. Demonstrating proficiency in							
3.1 Using overhead projector	3.1	C	H	D	N	I	X
3.2 Using chalkboard	3.2	C	H	D	N	I	X
3.3 Using movies and movie projectors	3.3	C	H	D	N	I	X
3.4 Using bulletin boards	3.4	C	H	D	N	I	X
3.5 Using felt boards	3.5	C	H	D	N	I	X
3.6 Using bookkeeping/accounting charts	3.6	C	H	D	N	I	X
3.7 Closed-circuit television	3.7	C	H	D	N	I	X
4. Allowing for pupil/teacher and pupil/pupil interaction	4.	C	H	D	N	I	X
5. Writing easily understood tests, working guides, and instructions	5.	C	H	D	N	I	X
6. Teaching listening skills	6.	C	H	D	N	I	X
7. Developing ability to work from verbal and written directions	7.	C	H	D	N	I	X
8. Recognizing situations when student or class is lost or not understanding	8.	C	H	D	N	I	X

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD
 UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Evaluation

1. Evaluating through pre-test, practice, and post-test	1.	C	H	D	N	I	X
2. Evaluating oral feed back	2.	C	H	D	N	I	X
3. Evaluating seriousness of errors	3.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

4. Evaluating projects (problems and practice sets)	4.	C	H	D	N	I	X
5. Evaluating workbooks	5.	C	H	D	N	I	X
6. Evaluating neatness of work	6.	C	H	D	N	I	X
7. Accepting only work completed satisfactorily	7.	C	H	D	N	I	X
8. Evaluating students on individual basis	8.	C	H	D	N	I	X
9. Evaluating students work based on predetermined objectives	9.	C	H	D	N	I	X
10. Evaluating attitudes and personal characteristics	10.	C	H	D	N	I	X

THE TEACHER OF BOOKKEEPING/ACCOUNTING ON THE SECONDARY LEVEL SHOULD UNDERSTAND, DEMONSTRATE, AND EFFECT THE FOLLOWING:

Development of Pupil Self

1. Assisting student in identification of life goals	1.	C	H	D	N	I	X
2. Assisting student in critical examination of self to develop self-esteem and ability to succeed	2.	C	H	D	N	I	X
3. Assisting student in developing ability to follow instructions	3.	C	H	D	N	I	X
4. Encouraging students to deal with each other as human beings of intrinsic worth	4.	C	H	D	N	I	X
5. Stressing the understanding of group processes (group decision-making, leadership skills, peer relationships)	5.	C	H	D	N	I	X
6. Participating in community and school activities	6.	C	H	D	N	I	X

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

- | | | | | | | | |
|---|----|---|---|---|---|---|---|
| 7. Encouraging career exploration | 7. | C | H | D | N | I | X |
| 8. Giving self-direction through indirect guidance and good work habits | 8. | C | H | D | N | I | X |

Development of Personal Skills

- | | | | | | | | |
|--|-----|---|---|---|---|---|---|
| 1. Working with student as a peer, not as a person with extreme authority | 1. | C | H | D | N | I | X |
| 2. Updating skills through work experience and schooling | 2. | C | H | D | N | I | X |
| 3. Identifying with the student | 3. | C | H | D | N | I | X |
| 4. Setting an example for students | 4. | C | H | D | N | I | X |
| 5. Participating in the community served | 5. | C | H | D | N | I | X |
| 6. Being committed to your job and profession | 6. | C | H | D | N | I | X |
| 7. Being cooperative in teaching situations with other teachers, paraprofessionals, and resource persons | 7. | C | H | D | N | I | X |
| 8. Accepting responsibility of multi-disciplinary instruction (spelling, grammar, etc.) | 8. | C | H | D | N | I | X |
| 9. Identifying personal strengths in teaching and the ability to evaluate yourself effectively | 9. | C | H | D | N | I | X |
| 10. Recognizing own values or beliefs and the incompatibilities between yours and others | 10. | C | H | D | N | I | X |
| 11. Being able to explain own instructional strategy in terms of learning theory | 11. | C | H | D | N | I | X |
| 12. Solving problems in a decisive manner | 12. | C | H | D | N | I | X |
| 13. Revising methods and materials in keeping with the times | 13. | C | H | D | N | I | X |

C = Crucial
 H = Highly desirable
 D = Desirable but not
 absolutely necessary

N = Nonimportant
 I = Incorrectly stated;
 needs revision
 X = Do not use; concept
 inappropriate

14. Giving extra time and help to students willingly	14.	C	H	D	N	I	X
15. Seeking better ways and methods for improving teaching	15.	C	H	D	N	I	X
16. Setting high standards of scholarship for self and for students	16.	C	H	D	N	I	X
17. Demonstrating the ability to perform the skills he is teaching	17.	C	H	D	N	I	X
18. Teaching with confidence	18.	C	H	D	N	I	X
19. Avoiding false pretense (hypocrisy)	19.	C	H	D	N	I	X
20. Working toward set goals at all times	20.	C	H	D	N	I	X

APPENDIX F

Personal Information Sheet on Teachers and Authorities

INFORMATION SHEET (TEACHERS)

Highest degree earned_____ Hours above last degree_____

Number of years teaching experience in: Secondary schools
 _____ community/junior college_____ college_____ Hours of
 accounting at the college level_____ Years of work ex-
 perience related to bookkeeping/accounting_____ Did you
 receive your teacher-training courses in Texas_____ Check
 the statement in each group that comes closest to your
 thinking:

- () Present certification procedures in Texas are adequate
- () Present certification procedures in Texas are inadequate
- () Teacher-training institutions are doing an adequate job
 in preparing business teachers for the classroom in
 Texas
- () Teacher-training institutions are not doing an adequate
 job in preparing business teachers for the classroom in
 Texas
- () Bookkeeping/accounting is a dying course at the
 secondary level
- () Bookkeeping/accounting has potential growth at the
 secondary level
- () Competency-based certification appeals to me
- () Competency-based certification does not appeal to me
- () I know very little about competency-based certification

Please list any additional comments that you feel would be
 of importance in the space below.

RETURN BOTH QUESTIONNAIRE AND CONSENSUS

INFORMATION SHEET (AUTHORITY)

Highest degree earned_____ Number of years of teaching
 experience in: secondary schools_____ community/junior
 college_____ college/university_____ Hours of accounting
 earned at the college level_____ Years of work experience
 related to Bookkeeping/Accounting in business or industry
 _____ Have you been certified to teach at the high school
 level in any state_____ Number of articles you have
 published_____ Check the statements that come closest to
 your thinking:

- () Present certification procedures across the nation
 need revising
- () Present certification procedures across the nation do
 not need revising
- () Teacher training institutions in general are not doing
 an adequate job
- () Teacher training institutions in general are doing an
 adequate job
- () I favor a competency-based approach to teacher
 certification
- () I do not favor a competency-based approach to teacher
 certification
- () I know very little about the competency-based movement

Please list additional comments that you feel would be of
 value in my study.

RETURN BOTH QUESTIONNAIRE AND CONSENSUS

APPENDIX G

Competencies Crucial and Highly Desirable
As Perceived by the Majority
of the Respondents

COMPETENCIES SEEN AS CRUCIAL BY AUTHORITIES AND TEACHERS
AS PERCEIVED BY THE MAJORITY OF THE RESPONDENTS

Planning

None

Administration

Observing work being done and helping if needed

Instruction (Methods/Techniques)

Teaching for understanding

Teaching so as to challenge and motivate the learner

Teaching for application rather than for rote learning

Instruction (Content)

Knowing and identifying source documents

Knowing correct journalizing techniques for all journals

Knowing correct posting procedures

Knowing way to determine if ledger is in balance

Showing how to solve the bookkeeping/accounting equation with one part missing

Explaining the difference between assets, liability, and capital accounts

Explaining the effects revenue and expense accounts have on the capital account

Explaining how to increase and decrease asset, liability, and capital accounts

Explaining "temporary" accounts

Explaining vocabulary of frequently used bookkeeping/accounting terms

Showing how to close accounts and transfer balances

Showing how to take a post-closing trial balance

Knowing proper banking procedures

Showing how to reconcile the bank statement

Knowing procedures for handling petty cash

Knowing purchasing and purchase return procedures

Knowing sales and sales return procedures

Showing how to prove cash

Knowing how to keep subsidiary ledgers

Explaining how to use control accounts

Showing how to correct errors through correcting entries

Communication

Writing easily understood tests, working guides, and instructions

Recognizing situations when student or class is lost or not understanding

Evaluation

None

Development of Pupil Self

None

Development of Personal Skills

Setting an example for students

Being committed to your job and profession

Revising methods and materials in keeping with the times

Giving extra time and help to students willingly

Seeking better ways and methods for improving teaching

Demonstrating the ability to perform the skill he is teaching

Teaching with confidence

Avoiding false pretense

COMPETENCIES SEEN AS CRUCIAL BY TEACHERS AND HIGHLY DESIRABLE
BY AUTHORITIES AS PERCEIVED BY THE MAJORITY
OF THE RESPONDENTS

Planning

Selecting textbooks

Administration

None listed

Instruction (Methods/Techniques)

Helping learner to relate parts to whole

Instruction (Content)

Explaining basic math computations (fundamental processes)

Explaining steps in finding errors

Showing how to prepare a work sheet

Showing how to prepare financial statements in various forms and styles

Showing how to record adjusting entries

Showing how to analyze the financial statements

Showing how to make reversing entries

Showing how to correct an account without erasing

Communication

None listed

Evaluation

None listed

Pupil Self

None listed

Personal Skill

Being cooperative in teaching situations with other teachers, paraprofessionals, and resource persons

Working toward set goals at all times

COMPETENCIES SEEN AS CRUCIAL BY AUTHORITIES AND HIGHLY
DESIRABLE BY TEACHERS AS PERCEIVED BY THE MAJORITY
OF THE RESPONDENTS

Planning

Developmental approach (from common experience of the learner to uncommon experience of the learner)

Planning for the development of good work habits and attitudes

Administration

None listed

Instruction (Methods/Techniques)

Presenting principles in proper sequence to avoid relearning situations

Teaching for concepts

Providing balance among theory, drill, and practice

Providing for student learning through reading, visual examples, discussion, demonstration, and review

Providing for individual differences

Providing for success and motivation

Taking the student from where he or she is and move forward

Instruction (Content)

Explaining full payroll procedures, including income tax information

Communication

Using proper questioning techniques

Using movies and movie projectors

Allowing for pupil/teacher and pupil/pupil interaction

Evaluation

Evaluating through pre-test, practice, and post-test

Evaluating student on individual basis

Pupil Self

None listed

Personal Skills

Identifying personal strengths in teaching and the ability to evaluate yourself effectively

Setting high standards of scholarship for self and students

COMPETENCIES SEEN AS HIGHLY DESIRABLE BY AUTHORITIES AND
TEACHERS AS PERCEIVED BY THE MAJORITY OF RESPONDENTS

Planning

Preparing unit objectives in behavioral terms

Determining objectives of individual lessons in behavioral terms

Preparing a course of study for the beginning bookkeeping/accounting course for long-range planning

Using the balance sheet approach

Selecting supplementary materials

Establishing a system of performance

Selecting equipment for bookkeeping/accounting classroom

Planning with other bookkeeping/accounting faculty

Assessing community resources

Acquainting administrators, counselors, and other teachers with the need for bookkeepers/accountants

Planning for teaching late entrants

Developing individualized instruction

Planning for development of minimal students

Planning standards of acceptable performance

Planning for presenting career information in the bookkeeping/accounting field

Administration

Organizing classroom for maximum efficiency

Conducting conferences

Explaining safety precautions in use of equipment

Developing in student respect and responsibility for making proper use of equipment

Explaining in detail the grading system used

Utilizing methods that will simplify grading

Instruction (Method/Techniques)

Making materials used as realistic as possible

Stressing proper work habits

Using planned, purposeful, and repetitive practice

Preparing learner for learning

Encouraging participation to enhance learning

Reinforcing student participation through reward

Providing short review of previous day's work

Instruction (Content)

Explaining the use of statements once they are prepared

Explaining different methods of sales

Showing how to figure depreciation by sum-of-the years digits

Showing how to figure depreciation by straight line

Knowing how to take an inventory

Explaining periodic and perpetual inventory

Showing how to determine value of merchandise on hand of FIFO

Explaining procedures for control of cash on hand

Showing how to prepare invoices and customer statements

Showing how to compute and record bad debts

Showing how to compute and record prepaid expenses

Showing how to compute and record accrued expenses, interest, and income

Explaining importance of bookkeeping/accounting for tax purposes

Explaining accruals

Showing how to compute and record discounts on notes and invoices

Explaining difference between bookkeeping, record keeping, and accounting

Communication

Using correct speaking skills

Using overhead projector

Teaching listening skills

Developing ability to work from verbal and written directions

Evaluation

Evaluating oral feedback

Evaluating seriousness of errors

Evaluating projects

Evaluating students' work based on predetermined objectives

Evaluating attitudes and personal characteristics

Development of Pupil Self

Assisting student in identification of life goals

Assisting student in critical examination of self to develop self-esteem and ability to succeed

Assisting student in developing ability to follow instructions

Encouraging students to deal with each other as human beings of intrinsic worth

Stressing the understanding of group processes

Encouraging career exploration

Giving self-direction through indirect guidance and good work habits

Development of Personal Skills

Working with student as a peer, not as a person with extreme authority

Updating skills through work experience and schooling

Identifying with the student

Accepting responsibility of multidisciplinary instruction

Recognizing own values of beliefs and the incompatibilities between yours and others

Being able to explain own instructional strategy in terms of learning theory

Solving problems in a decisive manner