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A STUDY OF ACCOUNTING SKILLS AND KNOWLEDGE NEEDED BY GRADUATES OF APPLIED SCIENCE IN ACCOUNTING PROGRAMS

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A STUDY OF ACCOUNTING SKILLS AND KNOWLEDGE

NEEDED BY GRADUATES OF APPLIED SCIENCE

IN ACCOUNTING PROGRAMS

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TABLE OF CONTENTS

TABLE OF CONTENTS--Continued

LIST OF TABLES

LIST OF TABLES--Continued

LIST OF TABLES--Continued

A STUDY OF ACCOUNTING SKILLS AND KNOWLEDGE NEEDED BY GRADUATES OF APPLIED SCIENCE IN ACCOUNTING PROGRAMS

CHAPTER I

STATEMENT OF THE PROBLEM

Introduction

The role of the junior college in higher education has been firmly established. The trend toward comprehensiveness in junior college programs has been largely in the area of occupational education, with an ever-increasing interest in continuing education and community service.[1]

Many writers have commented on the role of the junior college in occupational education. Thompson reported that the unique contribution tc post-high school education centered in the two-year college has been in the area of vocational-technical education.[2] Harris supported this feeling when he stated: The future of the publicly supported junior college is

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[1]Carnegie Commission on Higher Education, "Policies for the Community Colleges." (New York, N. Y., 1970), p. 15.

[2]Robert J. Thompson, Designed Outcomes of Education for Business in the Junior College. Edited by Doris H. Crank and Floyd L. Crank. National Business Education Association Yearbook, No. 1(Reston, Virginia: National Business Education Association, 1963), p. 373.

dependent on how successfully the junior college addresses itself to the problem of education for middle-level tasks."[1]

A report of the Carnegie Commission on Higher Education stated that "every American citizen over 18 years of age should have unlimited, easy, and lifelong access to learning programs beyond the high school level."[2]

The Executive Director of the American Association of Junior Colleges outlined the following characteristics for a junior college education:

A. A graduate can get a job that is related to his interests and training.

B. Motivation for many students is increased when they can look forward to employment and the opportunity to use what they are learning in a year or two rather than in an indefinite and somewhat hazy future.

C. A large proportion of junior college students are inclined toward the practical and applied rather than the theoretical and abstract.

D. There is another potential value in junior college education. Skill requirements not only might change, but almost surely will change.[3]

Junior colleges offer a wide variety of programs in the evening as well as day classes, including the following services:

1. Occupational education to train for jobs at the end of two years or less.

2. Retraining and upgrading for adults already employed.

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[1]Norman C. Harris, "Major Issues in Junior College Technical Education," Educational Record, Vol. XLV (Spring, 1964), p. 129.

[2]Carnegie Commission on Higher Education, p. 16.

[3]Robert R. Wiegan, General Education in Occupational Programs Offered by Junior Colleges, (Washington, D.C.: American Association of Junior Colleges, 1969), p. 4.

3. Guidance and counseling services to assist youths and adults to adjust to a constantly changing society.[1]

There are many purposes and areas of emphases attributed to the comprehensive junior college, and the following seem especially pertinent for the accounting programs:

1. The junior college places considerable emphasis on student counseling and guidance. This helps the student know himself better, choose realistic goals, and effectively grapple with problems.

2. Many semi-professional and skilled jobs require only one or two years of post-secondary school preparation. Thus, vocational training and specialization is possible for young people who do not desire or may not be capable of four or more years of college.

3. The junior college emphasizes good teaching rather than a "publish or perish" attitude. The student is less likely to be exposed to large classes, television lectures, or teaching assistants.[2]

The junior college has a primary mission to serve its community by preparing students to become useful, responsible, and more productive members of society. In justifying a two-year program in accounting, faculty members emphasize that they have a responsibility to teach accounting technicians, bookkeepers, accounting assistants. and personnel in related fields including electronic data processing. Accounting faculty resist efforts to limit students to general education. They prepare students to gain meaningful employment in accounting related positions after leaving the junior college.[3]

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[1]Ibid, p. 17.

[2]American Accounting Association, "Report of Committee on Junior College Accounting Curriculum," Accounting Review, Vol. 48, 1973, p. 39.

[3]Ibid., p. 40.

Two of the basic factors to consider when planning and developing a two-year curriculum in accounting are: (1) the projected end-state of the student and of society at some future point in time and (2) the learning skills required of the student to reach this projected end-state for themselves and for society.[1]

Need for the Study

An exhaustive search of university libraries was conducted and no published research reports were available to use in the evaluation of the effectiveness of junior college accounting degree programs. For the preparation and development of an employable graduate in accounting or related positions, the need exists for reports of conducted research. ERIC runs were made for bibliographical sources.

A professional effort was made to collect data concerning the skills and knowledge needed for entry-level employment in accounting positions in selected firms in the Oklahoma City Standard Metropolitan Statistical Area. The study should assist in the development of uniform guides for planning and implementing future accounting programs. The study should also provide the basis for modifying existing accounting programs in the junior college.

Statement of the Problem

This descriptive research study was designed to survey selected prospective accounting employers to determine the skills, knowledge,

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[1]American Accounting Association, "Report of Committee on Junior College Accounting Curriculum," Accounting Review, Supplement to Vol. 47, 1972, p. 170.

practice, and theory needed by the Applied Science in Accounting graduate of a junior college in the Oklahoma City Standard Metropolitan Statistical Area.

Specifically, the following questions were answered:

1. Is there an academic level demanded by the prospective employer for entry into selected private accounting practice?

2. Does the junior college accounting graduate have the performance skills and theory base to perform competently on entry-level accounting jobs?

3. Should the junior college accounting graduate have some form of work experience in the way of a recognized internship model?

4. Does the junior college accounting graduate need an understanding and application of accountant-machine interface in accounting practice?

5. Does the junior college accounting graduate need an understanding and application in:
   a. Elementary Accounting Principles and Concepts?
   b. Cost Accounting?
   c. Intermediate Accounting?
   d. Governmental Accounting?
   e. Managerial Accounting?
   f. Auditing?
   g. Tax?
   h. Budgeting?
   i. Financial Statement Analysis?

6. Does the junior college accounting graduate need performance skills and knowledge from the following related business core:
   a. Business Law?
   b. Management?
   c. Business Math?
   d. Data Processing?
   e. Economics?
   f. Business Communications?

7. Does the junior college accounting graduate need an understanding and application in the related support area of college algebra?

8. To what degree does the junior college accounting graduate need development in the thought processes involved in accounting performance such as:
   a. Skill in the analysis of tasks, transactions, and procedures?

b. Problem-solving techniques?
c. Communication of decision factors?

9. Do students understand the performance and employment implications of an Applied Science in Accounting Program?

Limitations

The scope of this study was limited to selected firms in the Oklahoma City Standard Metropolitan Statistical Area. The population included manufacturing firms with more than 250 employees.

Research Design

The first step in the survey was to make a comprehensive search of related literature.

The second step consisted of defining the population of firms in the Oklahoma City Standard Metropolitan Statistical Area and selecting a sample.

The third step included designing three data collection instruments. One questionnaire was designed to be used to collect data from comptrollers of manufacturing firms located in the Oklahoma City Standard Metropolitan Statistical Area. A second questionnaire was designed to collect data from personnel managers of manufacturing firms located in the Oklahoma City Standard Metropolitan Statistical Area. A student questionnaire was developed to be used to survey the students majoring in the Applied Science in Accounting programs at Oscar Rose Junior College, Midwest City, Oklahoma.

The fourth step in the survey was to conduct a pilot study of Questionnaire Number One utilizing five (5) firms.

The fifth step in the survey was to conduct a pilot study of Questionnaire Number Two utilizing five (5) firms.

The sixth step in the survey was to conduct a pilot study of Questionnaire Number Three utilizing two (2) accounting classes at Oscar Rose Junior College.

The results of the pilot studies were used to evaluate the items on the questionnaires for possible revision.

The seventh step was to distribute Questionnaire Number Three to students majoring in the Applied Science in Accounting Program at Oscar Rose Junior College.

The eighth step was to deliver Questionnaire Number One to the comptrollers and Questionnaire Number Two to the personnel managers of each firm in the randomly selected sample.

The ninth step consisted of tabulating the responses of the returned and completed questionnaires. The tabulated results were analyzed and used to answer the questions in the statement of the problem.

The last step in the study was to report the findings, analyze course offerings and objectives, formulate conclusions, and prepare recommendations for further study.

Definition of Terms

Oklahoma City SMSA - The Standard Metropolitan Statistical Area in Oklahoma consisting of the following counties: Canadian, Cleveland, McClain, Oklahoma, and Pottawatomie.

Private Accounting Prospective Employer - A manufacturing company located in the Oklahoma City SMSA.

Junior College - A comprehensive public two-year college which offers post-high school educational programs.

ORJC - Oscar Rose Junior College

Applied Science in Accounting Graduate - A graduate of Oscar Rose Junior College with a minimum of 62 hours of study including at least 15 hours in accounting.

Accountant-Machine Interface - Accounting practice utilizing electronic data processing equipment.

Entry-Level Accounting Job - Initial employment within a firm at a level of work which allows for vertical and/or horizontal mobility within the firm. This work involves collecting, recording, analyzing, and reporting accounting data.

Work Experience - On-the-job training in accounting and/or electronic data processing.

Panel of Experts - Accounting instructors at Oscar Rose Junior College, comptrollers for large manufacturing firms located in the Oklahoma City SMSA, and professors at The University of Oklahoma.

Accounting Support Courses - Non-accounting courses included as a requirement for an Applied Science in Accounting degree.

Questionnaire Number One - A questionnaire designed to collect data from comptrollers in manufacturing firms located in the Oklahoma City SMSA.

Questionnaire Number Two - A questionnaire designed to collect data from personnel managers of manufacturing firms located in the Oklahoma City SMSA.

Questionnaire Number Three - A questionnaire designed to collect data from students majoring in an Applied Science in Accounting Program.

Significance of the Study

This research has significance for accounting education in that it provides data of the current accounting skills and knowledge that selected private accounting employers are demanding from the Applied Science in Accounting graduate for entry-level accounting jobs.

By using data from this study, accounting faculty at junior colleges should be able to assess the strength and weaknesses of their accounting programs.

Organization of the Study

This study is divided into eight chapters. The first chapter contains an introduction to the problem, need for the study, the statement of the problem, questions to be answered, limitations, definition of terms, research design, significance of the study, and organization of the study.

Chapter II presents a review of related literature.

Chapter III describes the procedures followed by the investigator in identifying the problem and in securing and compiling the data.

Chapter IV presents an analysis and a discussion of the data collected from the respondents of Questionnaire Number One.

Chapter V presents an analysis and a discussion of the data collected from respondents of Questionnaire Number Two.

Chapter VI presents an analysis and a discussion of the data collected from the respondents of Questionnaire Number Three.

Chapter VII contains comparison of analyzed data to the Applied Science in Accounting degree program at Oscar Rose Junior College.

Chapter VIII presents a summary, findings, and recommendations for further research.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

A review of the literature revealed that relatively little research and writing has been done with specific concern for the junior college career accounting graduates, their vocational choices, the nature of their initial employment, and the degree of adequacy of their preparation. To develop an operational perspective, thorough investigations of related research and the functions of Oklahoma Junior Colleges were conducted.

Related Research

The American Association of Junior Colleges, in a 1965 publication, stated that follow-up research, as a tool for instructional improvement, should be concerned with the following questions:

1. Are the students receiving an education which permits them to move into their occupational endeavors with competence and assurance?
2. Are the students well received by their employers as evidenced by a higher rate of pay and rapid promotion?
3. What are the students' opinions and attitudes toward the type of education they received at college?[1]

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[1]Thomas J. O'Connor, Follow-Up Studies in Junior Colleges: A Tool for Institutional Improvement (Washington, D.C.: American Association of Junior Colleges, 1965), p. 14.

Research has been done concerning the nature and purpose of the junior college, its transfer program, problems of articulation, and its range of career programs. There were only two doctoral studies directly involved in accounting curricula development at the junior college level.

Beavers conducted a study in 1974 that involved analyzing and comparing the accounting achievement levels of junior college transfer and native students in selected institutions of Higher Education in Oklahoma. The sample consisted of students enrolled in first semester intermediate accounting during the fall semester of 1974 at five universities in Oklahoma. The study involved students at The University of Oklahoma at Norman, Oklahoma State University at Stillwater, Central State University at Edmond, Northeastern Oklahoma State University at Tahlequah, and Southwestern Oklahoma State University at Weatherford. The AICPA Level 1, Form E-S Achievement was administered to 668 students enrolled in the seventeen sections of Intermediate Accounting I taught at the five participating schools. A sample of 472 students was then selected from the student population. The findings in Beavers' study revealed "native students realize greater accounting achievement levels in both elementary accounting principles and Intermediate Accounting I.[1]

Buckley conducted a study in 1974 that involved the status, trends, and an evaluation of internships in public accounting from the view point of accounting practitioners. The major part of his study was concerned with (1) identifying the trends in accounting internship programs in four-

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[1]Lorren H. Beavers, "A Study of the Elementary Accounting Achievement of Junior College Transfer Students in Selected Institutions of Higher Education in Oklahoma." (unpublished Ed.D. dissertation, University of Oklahoma, 1974), p. 94.

year colleges and universities which offer majors in accounting or business administration and (2) determining the desirability of including accounting internship programs in the accounting curriculum based upon the viewpoint of selected CPA firm managers, partners, and sole practitioners.[1] From the findings in his study, Buckley concluded that "there appears to be a definite trend toward more public accounting internship programs being sponsored by four-year colleges and universities in the nation."[2]

Few studies, however, have specifically been involved with career studies of accounting graduates. Sharpe and Krasnegor indicated that the most serious gap in the evaluation of vocational education at the post-high school level is the lack of follow-up information about those trained in technical and junior colleges.[3]

Two important studies are available as contributions to the assessment of two-year college career accounting programs. An occupational program is designed to prepare graduates for a particular employment endeavor. These two studies which are described in the following paragraphs provides information as to the education and job functions of the two-year accounting graduate.

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[1]Charles E. Buckley, "A Study of Internships in Public Accounting: Status, Trends and an Evaluation from the Viewpoints of Practitioners." (unpublished Ph.D. dissertation, University of Oklahoma, 1974), p. 37.

[2]Ibid., p. 178.

[3]Laure Sharpe and Rebecca Krasnegor, The Use of Follow-Up Studies in the Evaluation of Vocational Education (Washington, D.C.: Bureau of Social Research, 1966), ERIC 010 072, p. 2.

Horowitz conducted an evaluation of the accounting career curriculum in a Community College in New York.[1] His study was divided into two phases. The first consisted of personal and telephone interviews. Included in this group were three employment agencies specializing in accounting-related jobs, three members of the Accounting Committee of the Business Division Advisory Board of the Borough of Manhattan Community College, Community College Division of McGraw-Hill, Inc., Office of Institutional Research at Borough of Manhattan Community College, and three employers associated with the Borough of Manhattan Community College Cooperative Education Department.

During the course of conversations with the above mentioned group, a basic question was raised, namely, "What additional accounting courses, specific accounting topics, and/or office skills do you think should be included in the curriculum so that the career student might be better prepared?"[2]

The second phase of the study consisted of a questionnaire and cover letter mailed to banks, insurance companies, department stores, publishers, financial institutions,and various industrial and service organizations in the metropolitan area. The questionnaire sought to ascertain: (1) whether the organization hired two-year college graduates and, if so, for what jobs, and (2) what accounting and business courses, specific accounting topics, and office skills were preferred in the academic backgrounds of job applicants in addition to or instead of the present accounting curricula.

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[1]Louis Horowitz, "An Evaluation of the Accounting Career Curriculum." Journal of Business Education (April, 1974), pp. 281-282.

[2]Ibid., p. 281.

The major conclusions from Horowitz's study were as follows:

1. There are few jobs available for two-year accounting degree graduates.
2. Those jobs that are offered are essentially bookkeeping or clerical in nature.
3. Continuing education towards a four-year degree is essential, if there is to be any reasonable chance for advancement.
4. There is not much future for the career accounting student without further education.
5. The present accounting curriculum, oriented in favor of the transfer student, should be left intact with the possible inclusion of a course in internal auditing.[1]

The second study which provided data for analyzing the junior college accounting programs was conducted by Schmidt. Schmidt investigated the formal education and job functions performed by two-year accounting graduates in California employed as accounting paraprofessionals.[2]

Two mail questionnaires were distributed, one to a group of recent accounting graduates, and the second to California community colleges offering accounting associate programs. Results of the surveys showed that colleges believed that graduates principally perform bookkeeping and payroll functions. The graduates indicated that a significant amount of their time on the job was spent on non-bookkeeping and non-payroll operations. An evaluation of the curriculum by the graduates found that all business courses were considered worthwhile although the introduction to business course received the lowest mark of acceptance. The surveyed

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[1]Ibid., p. 282.

[2]Richard J. Schmidt, "The Two-Year Accounting Graduate." Collegiate News and Views. Volume XXXIII., (Winter, 1979), No. 2, p. 1.

associate degree graduates reported a higher percentage of students continuing their formal education than estimated by the colleges.[1]

Functions of Oklahoma Junior Colleges

Since the origin of junior colleges writers have advocated the establishment of programs to prepare students for initial job entry. This curriculum function has been recognized by many of the states in their laws authorizing the establishment of junior colleges.

The Public Junior College in Oklahoma

The Oklahoma State System of Higher Education was established on March 11, 1941, when the people of the state adopted an amendment to the Constitution, Article XIII-A. The amendment provides "All institutions of higher education supported wholly or in part by direct legislative appropriations shall be integral parts of a unified system to be known as The Oklahoma State System of Higher Education."[2]

This Article also created the Oklahoma State Regents for Higher Education as the coordinating board of control of the State System. This board is composed of nine members, appointed by the governor and confirmed by the State Senate. They serve nine year, overlapping terms.

Recent legislation enacted by the Oklahoma Legislature provides for state aid for both operation and capital improvements at junior colleges. In this regard, the legislation vitalizes the intent of Article XIII-A and thus provides for the coordination of junior colleges under the jurisdiction of the Oklahoma State Regents for Higher Education.

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[1]Ibid., p. 5.

[2]Oklahoma State Regents for Higher Education, "Report of Junior College Education in Oklahoma," February, 1970, p. 15.

There are currently thirteen public junior colleges in Oklahoma. Seven are public state supported colleges and six are public municipal colleges. In addition to its state supported junior colleges, Oklahoma also maintains five community colleges as a part of its public system of higher education.

Occupational Education in the Junior College

At its inception, the junior college was viewed primarily as being comparable to the first two years of the four-year university. Today, the two-year college has expanded to embrace occupational education. The need for occupational education, the widespread availability of junior college programs, and lack of inflexible tradition have all contributed to a large degree to the acceptance and expansion of the occupational education function of the junior colleges of the nation.

The public junior colleges of Oklahoma have adopted the function of occupational education as an important part of their mission. This commitment to occupational education has been expressed by the Board of Regents of the State of Oklahoma and is being expressed at the local level by the widespread adoption of an open-door admissions policy with the accompanying responsibility to offer a variety of programs to meet the needs of a heterogeneous student population.[1]

Within the framework of the total mission of the comprehensive junior college, accounting education is recognized for its expanding enrollment. The expanded role of accounting education has resulted by serving the needs of the students who do not plan to continue formal

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[1]Ibid., p. 15.

education beyond the junior college level. Also responsible for expanding the role of accounting education are the requirements of industry for skilled technical and semi-professional manpower. The application of technology to all phases of economic life has advanced rapidly in recent years and with it the necessity for workers to possess scientific knowledge and concepts previously unnecessary for job success.[1]

Concern about institutional functions and the need for differentiation of functions among institutions in a state system of higher education has been gaining increasing attention since the early 1950's.

The functions of Oklahoma Junior Colleges relate both to levels of education and kinds of education. All junior colleges, both public and private, offer the first two years of study beyond high school, usually referred to as lower division course work. All junior colleges currently confer the associate degree for successful completion of prescribed courses for that level of study.

Functions of junior colleges related to kinds of education at the lower division or level normally include academic courses designed to:

1. Provide basic general education;
2. Provide for transfer credit to institutions offering advanced programs;
3. Provide technical-vocational education to prepare students for entry into employment after completing the junior college programs; and

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[1]National Conference on Community Colleges, "Educational Futures in a Changing Environment." (Los Angeles, California: University of California, 1975), p. 43.

4. Provide compensatory instruction for the student whose high school preparation has not qualified him for college-level work.[1]

The junior college Applied Science in Accounting programs are directed toward fulfilling function number three by providing technical-vocational education.

This search of related literature has shown a void of research on accounting curriculum in relationship to work characteristics. This study was designed and conducted to fill this void.

Summary

The viability of the junior college accounting career program rests with graduates of those programs. In order to establish and support this viability, information is needed for program evaluation and curriculum planning.

Junior college curricula has been directed toward replicating what is being offered at similar institutions in the hope that these efforts will have local applicability.

Related literature documents the need for cooperative work experience at the four year college level, advanced courses in accounting after full time employment, and that junior colleges should offer vocational-technical preparation necessary for work in accounting (or other vocations elected by students). The limited scope of related research in this area served as an impetus for this investigation.

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[1]Oklahoma State Regents for Higher Education, p. 19.

CHAPTER III

METHODS AND PROCEDURES

Introduction

The major purpose of this study was to determine the accounting skills and knowledge needed by graduates of an Applied Science in Accounting Program.

Information from the prospective employers was obtained by personal interviews and personally delivered questionnaires. Information regarding the attitudes of those students enrolled in a two-year accounting program was obtained by a personal survey of students currently enrolled in the Applied Science degree in Accounting at Oscar Rose Junior College. Permission to conduct the survey of the students enrolled in accounting courses at Oscar Rose Junior College was granted by the Business Division Chairperson (see Appendix H).

The questionnaires provided the researcher with the data base for objective and statistical analyses.

Development of Three Questionnaires

The purpose of the first two questionnaires was to obtain adequate information for objective and statistical analyses of the educational background and job characteristics accounting practitioners believe to be relevant for entry-level positions in accounting and accounting

related jobs. The purpose of the third questionnaire was to obtain information as to students' perceptions of the Applied Science in Accounting degree at Oscar Rose Junior College.

The proper design of questionnaires for scholarly research is a difficult and complex procedure. Allen lists suggestions that a person should use when developing a valid and reliable survey instrument. These include:

1. The length of the questionnaire is critical to the success of data collection.
2. Try to reduce the minimum time required to complete the form.
3. Pretest the questionnaire if at all possible.
4. Include demographic factors if appropriate and relevant to the research.
5. Relate each question on the form to the purpose of the research.
6. Anticipate uses of data once you have it in your hands.
7. Seek the advice of any of your friends who have used a questionnaire recently.
8. Place yourself in the place of the respondent.[1]

Questionnaire Number One

Questionnaire Number One was developed to collect data on worker characteristics. An exhaustive search of the literature revealed a total of ten categories which were considered important for beginning accountants in private accounting. The categories were placed one to a page so that work characteristics could be posted under the relevant category. Related literature was searched and as work characteristics

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[1]George R. Allen, The Dissertation or Thesis Process. (Washington, D. C., The American University, 1972), p. 155.

were found they were placed on the appropriate sheet. The categories and related work characteristics were typed in a questionnaire format and presented to two panels of experts for review and evaluation. One panel of experts consisted of eight comptrollers for large organizations. The other panel of experts was composed of eight accounting professors.

The members of both panels of experts were asked to evaluate each category and related work characteristics. They were asked to rate each work characteristic according to need for beginning accountants. Based on the expressed judgments of the panel members, the number of characteristics was reduced from 168 to 85.

The next step in the development of Questionnaire Number One was to retype the work characteristics in a questionnaire format and conduct a pilot study. Ten comptrollers were randomly selected from the population for the study. Appointments were made with all persons in the pilot sample and the questionnaire was delivered personally by the researcher. In all instances, the members of the sample were asked to answer the questionnaire and to give constructive criticism which would improve the validity and reliability of the items on the questionnaire.

The response to the items on the returned questionnaires were transferred to computer data cards.

The data cards were combined with the computer program cards and computer runs were made. The analyses obtained indicated that 85 of the work characteristics should be included on the final draft of Questionnaire Number One. Based on the responses, other demographic data were needed to make a total of 102 response items on the pilot study questionnaire. A copy of Questionnaire Number One can be found in Appendix A.

The design of the categories are: Preliminary Operations to be Performed; Daily Operational Tasks; Periodic Operations for Management Decisions, Fiscal Period Requirements; Operational Efficiency; Management Support Area; System Information; Accounting Curriculum; Accounting Support Curriculum; and Accounting Performance.

Instructions printed on the questionnaire indicated that each respondent was to rate each characteristic according to one of the five possible responses. The responses were: mandatory, the characteristic was considered essential or vital to adequately perform the job; very important, the characteristic was not considered essential to job performance but was considerd to be of significant value; moderately important, the characteristic was considered to be of average importance to the performance of the job; unimportant, the characteristic was considered to have minor value to job performance; not applicable, the characteristic was considered to have no value to job performance.

The researcher explained the instructions as the questionnaire was delivered to each person in the sample. Data concerning the educational background of each respondent was requested. The participant was asked to check the highest level of education completed from the following levels: high school graduate, attended college but did not graduate, two-year graduate, bachelor's degree--business major, bachelor's degree--non-business major, master's degree, or other training.

Questionnaire Number Two

The Questionnaire Number Two consisted of twelve questions designed to obtain information from the Personnel Managers as to the employability

of the two-year accounting graduate, the jobs for which they qualify, and the possible starting salary. A copy of Questionnaire Number Two is available in Appendix B.

Questionnaire Number Three

Questionnaire Number Three included fifteen questions concerning the students' perception and expectation of the Applied Science Degree in Accounting at Oscar Rose Junior College. See Appendix C for a copy of Questionnaire Number Three.

Study Samples

A selection of a pilot sample was made for each questionnaire. The purpose of the pilot study was to test the survey operations, including the questionnaires, consistent with Allen's[1] check points for preparation of a dissertation. Each questionnaire was reproduced using a method to insure neat and legible copies.

Study Sample for Questionnaire Number One

The population for this research study included comptrollers of manufacturing firms located in the Oklahoma City Standard Metropolitan Statistical Area with more than two-hundred and fifty employees. From data which were obtained from the Oklahoma City Chamber of Commerce and the Oklahoma Employment Security Commission, a list was developed containing the names of sixty-five firms in the Oklahoma City SMSA with more than two-hundred and fifty employees. Because the entire population was small numerically, the decision was made that the sample would consist of the

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[1]Ibid., p. 156.

comptroller in charge of the accounting department from each manufacturing firms located in the random sample. Hays states, "a sample distribution is but one of a vast number of mathematical functions one might invent for a distribution; it is purely theoretical.[1] Accordingly, the sample of twenty-five yielded a statistically accurate picture of the judgments of the entire population.

The persons who comprise the sample used in this study were aptly prepared to evaluate the work performed and effectively judge the educational background and job characteristics necessary to satisfactorily perform accounting related functions. The sample provided the data necessary to determine the entry-level characteristics considered important by manufacturing companies located in the Oklahoma City SMSA.

Pilot Study for Questionnaire Number One

A pilot study was conducted using a sample consisting of five firms located in the Oklahoma City SMSA. The purpose of this pilot study was to test the operations of the survey, including each section of the questionnaire to enable the researcher to make any revisions or adjustments necessary to the study design.

During October, 1979, the pilot study questionnaires were personally delivered to the members of the pilot sample. These individuals were encouraged to make notes, comments, and suggestions about the questionnaire and return them with the completed questionnaires as soon as possible. By the end of October, a 100 percent return on the pilot study had been received.

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[1]William L. Hays, Statistics, (New York: Holt, Rinehart, and Winston, 1963), p. 218.

Pilot Study for Questionnaire Number Two

The population for this research study included personnel managers of manufacturing firms located in the Oklahoma City Standard Metropolitan Statistical Area with more than two-hundred and fifty employees.

During October, 1979, the pilot study questionnaires were personally delivered to the personnel managers of five manufacturing firms located in the Oklahoma City SMSA. These individuals were encouraged to make notes, comments, and suggestions about the questionnaire and return them with the questionnaires as soon as possible. By the end of October, a 100 percent return on the pilot study had been received.

Pilot Study for Questionnaire Number Three

The population for this research study included students enrolled in the Applied Science in Accounting degree program at Oscar Rose Junior College.

During November, 1979, the pilot study questionnaires were administered to two accounting classes at Oscar Rose Junior College. The students were encouraged to make notes, comments, and suggestions about the questionnaire. A total of fifty-six (56) completed questionnaires with comments were received.

By conducting a pilot study for each Questionnaire, this enabled the researcher to make any revisions or adjustments necessary to the study design. No major revisions were made to the data collection instruments.

Questionnaire Distribution

During November and December, Questionnaire Number One and Questionnaire Number Two were personally delivered to twenty-five manufacturing firms located in the Oklahoma City SMSA.

Questionnaire Number One was personally delivered to the comptrollers of each of the randomly selected manufacturing firms. These individuals were encouraged to complete and return the Questionnaire as soon as possible. By December 15, 1979, twenty-five completed Questionnaire's Number One had been received.

Questionnaire Number Two was conducted by personal interview and/or by telephone to Personnel Managers of each of the randomly selected manufacuturing firms. These individuals were asked to complete the questionnaire during the interview. By December 15, 1979, twenty-five Questionnaire's Number Two had been completed.

Questionnaire Number Three was administered by the researcher to ten (10) accounting classes (approximately 250 students) at Oscar Rose Junior College. Each student was encouraged to complete the questionnaire and return to the administrator.

The completed questionnaire's were coded utilizing the format developed concurrently with the development of the questionnaires. The coding outline may be found in Appendices D, E, and F. Computer cards were key-punched and the programs were run.

Method of Statistical Analysis

In order to statistically analyze the cumulative responses of the sample for Questionnaire Number One it was necessary to use a technique by which the most important educational background and work characteristic could be determined. A numerical value was assigned to each of the five responses available to the participants as follows:

Mandatory	1.000
Very Important	2.000

Moderately Important	3.000
Unimportant	4.000
Not Applicable	5.000

Utilizing frequency counts and the assigned numerical values a mean response was then computed.[1] The mean was used to rate each of the eighty-five characteristics. This ranking created a continum ranging from +1.000 representing a perfect rating of essential or vital to job performance to +5.000 representing a rating of no value to job performance.

Computer Programs Utilized

The data were analyzed utilizing computer programs from the Statistical Package for the Social Sciences, second edition, (SPSS).[2] The first task of data analysis was to determine the basic distributional characteristics of each of the variables. The condescriptive SPSS subprogram provided the user with the capability of obtaining the mean, standard deviation, and other descriptive statistics for all variables. This SPSS subprogram was selected and run to provide summary statistics on each characteristic.

The second SPSS program selected was Subprogram Crosstabs.[3] Subprogram Crosstabs computes and displays contingency tables for any and all variables.

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[1] Ibid., p. 163.

[2] Norman H. Nie, C. Hadlai Hull, Jean G. Jenkins, Karen Steinbrenner, and Dale H. Brent, The Statistical Package for the Social Sciences, Second edition, (New York: McGraw-Hill Book Company, 1975), p. 181.

[3] Ibid., p. 218.

The mean score for each characteristic obtained from the condescriptive subprogram was utilized in the rating of the work characteristics judged important by the respondents.

Summary

This chapter discussed the methodology used to collect and analyze the data necessary to achieve the objectives of this study. The chapter has presented the background against which the findings and conclusions can be evaluated.

A description of the steps followed in the development selection of the survey sample was presented. A description of the research population and the sample of the study was presented. The pilot study was described and the methods used for the collection and processing of the data were reported. The methods used for the distribution and processing of the three data collection instruments were presented.

The statistical procedures to be utilized in the analysis of the data were described. The Statistical Package of the Social Sciences computer programs were discussed.

Chapter IV presents the analyses, interpretations, and discussions of the data collected from Questionnaire Number One.

CHAPTER IV

PRESENTATION OF FINDINGS

QUESTIONNAIRE NUMBER ONE

Introduction

The primary purpose of this chapter was to present an analyses of the accounting knowledge and/or skills needed for employment and advancement by entry-level employees in a manufacturing company located in the Oklahoma City Standard Metropolitan Statistical Area. Findings are based on replies to research instruments described in Chapter III. In Chapter IV, findings resulting from the analysis of Questionnaire Number One were presented.

Statistical means of the responses and percents of responses in the three highest ratings (Mandatory, Very Important, Moderately Important) for each accounting characteristics are presented.

Respondent Profile

The population for this study consisted of manufacturing firms located in the Oklahoma City SMSA with more than 250 employees. The respondents for Questionnaire Number One were comptrollers in charge of the accounting department within these manufacturing firms.

The participants were asked to respond to all questions including those requesting needed demographic data. The analysis of this

demographic data indicated the effects educational background and respondent variables might have upon the job and work characteristics.

Of the respondents who returned questionnaires, 28 percent are CPA's, 4 percent hold a Master's degree, 56 percent hold a Bachelor's degree with a business major, 4 percent graduated from a two-year college, and 8 percent attended college but did not graduate. See Appendix K for the respondents' educational background.

Twenty-eight percent of the respondents were between the ages of 25 and 34; thirty-six percent were between the ages of 35 and 44; twenty-eight percent were between the ages of 45 and 54; and eight percent of the respondents were 55 or older.

Analysis of Job and Work Characteristic Data

The respondents' judgment of the importance of each job and work characteristic for success in performing entry-level accounting tasks are reported according to accounting functional areas. The accounting functional areas were presented individually and were indicated by appropriate side headings: Preliminary Operations to be Performed; Daily Operational Tasks; Periodic Operations for Management Decisions; Fiscal Period Requirements; Operational Efficiency; Management Support Area; Systems Information; Accounting Curriculum; Accounting Support Curriculum; and Accounting Performance. Analysis of each characteristic was reported by use of a statistical mean and a percent of response in the three highest ratings--Mandatory, Very Important, and Moderately Important. The mean responses range from a +1.000 representing a rating of essential or vital to job performance to a +5.000 representing a rating of no value to job performance.

Individual tables for the accounting functional areas were developed to report the statistical means of each characteristic listed within that area. The statistical means were reported in odd-numbered Tables 1-19. Summary tables reporting percent of response in the three highest ratings for each characteristic (Mandatory, Very Important, and Moderately Important) were developed for the accounting functional areas. Even-numbered Tables 2-20 present the summary of percent of response.

For the purpose of this study, if the statistical mean of a characteristic was 3.000 or less, the characteristic was reported as important. This procedure is consistent with the instructions to the respondents who participated in the study.

Analysis of Data from Questionnaire Number One

Questionnaire Number One was designed to collect data related to eighty-five characteristics for entry-level accountants. The data collected were used to determine the skills, knowledge, practice, and theory needed by the Applied Science in Accounting graduate of a junior college in the Oklahoma City SMSA.

Comptrollers in charge of the accounting department in each manufacturing firm were asked to indicate the importance of each characteristic to the performance of entry-level accounting tasks. The participants were instructed to indicate only one response to the five possible responses for each characteristic.

For Questionnaire Number One, there were twenty-five returned completed survey instruments. The data were coded, tabulated, and analyzed. This section presents the analyses of the collected data by functional areas.

Preliminary Operations to be Performed

Ten characteristics were included on the questionnaire to obtain information from the accounting comptrollers about their judgment of the importance of the Preliminary Operations of accounting for entry-level employees. Sixty percent (6 of 10) of the characteristics in this topical area received a mean rating of less than 2.000 (see Table 1) and were thus considered mandatory to the performance of entry-level accounting tasks. These six characteristics--Analyze and classify source documents; Code source documents to chart of accounts; Check documents for common errors; Check accounts for clerical accuracy, postings, totals, and balances; Identify all revenue and expenditures; and Verify and calculate inventories--comprised 16.22 percent of the characteristics from all topical areas which received a mandatory rating.

All the characteristics listed in Preliminary Operations to be Performed received a mean rating of less than 3.000 and were considered important to task performance. The characteristics with their statistical means are presented in Table 1.

The entry-level employee should have an accounting background which enables him to analyze and classify source documents was judged mandatory by 52 percent of the respondents, very important by 20 percent of the respondents, and moderately important by 28 percent of the respondents.

The entry-level employee should be able to code source documents to chart of accounts was judged mandatory by 48 percent of the respondents, very important by 24 percent of the respondents, and moderately important by 24 percent of the respondents.

TABLE 1

PRELIMINARY OPERATIONS TO BE PERFORMED

Characteristic	Mean
Accounting function - Identification. The entry-level employee should have an accounting background which enables them to:	
Analyze and classify source documents	1.76
Code source documents to chart of accounts	1.84
Check documents for common errors	1.88
Check accounts for clerical accuracy, postings, totals, and balances	1.72
Pre-audit transaction papers involving items of obligation and/or expenditure which are complicated because of the lack of uniformity	2.32
Code departmental information (classify costs)	2.16
Post-audit accounting records	2.04
Identify all revenue and expenditures	1.76
Verify and calculate inventories	1.92
Allocate and revise depreciation	2.20

The entry-level employee should be able to check source documents for common errors was coded mandatory by 48 percent of the respondents, very important by 28 percent of the respondents, and moderately important by 12 percent of the respondents.

The entry-level employee should be able to check accounts for clerical accuracy, postings, totals, and balances was given a mandatory rating of 48 percent by the respondents, very important rating of 36 percent, and a moderately important rating of 12 percent.

The entry-level employee should be able to pre-audit transaction papers involving items of obligation and/or expenditure which are complicated because of the lack of uniformity was judged mandatory by 36 percent of the respondents, very important by 24 percent of the respondents, and moderately important by 16 percent of the respondents.

The entry-level employee should be able to code departmental information (classify costs) was rated mandatory by 16 percent of the respondents, very important by 56 percent of the respondents, and moderately important by 24 percent of the respondents.

The entry-level employee should be able to post-audit accounting records was judged to be mandatory by 40 percent of the respondents, very important by 20 percent, and moderately important by 36 percent of the respondents.

The entry-level employee should be able to identify all revenue and expenditures was judged to be mandatory by 44 percent of respondents, very important by 44 percent of the respondents, and moderately important by 8 percent of the respondents.

The entry-level employee should be able to verify and calculate inventories was rated mandatory by 40 percent of the respondents, very important by 32 percent of the respondents, and moderately important by 24 percent of the respondents.

The entry-level employee should be able to allocate and revise depreciation was judged to be mandatory by 20 percent of the respondents, very important by 40 percent of the respondents, and moderately important by 40 percent of the respondents.

The percent responses for the three highest ratings (mandatory, very important, and moderately important) for all the characteristics listed under Preliminary Operations to be Performed are reported in Table 2.

TABLE 2

SUMMARY OF PRELIMINARY OPERATIONS TO BE PERFORMED

Characteristic	Response %			
	Mandatory	Very Important	Moderately Important	Total
Accounting function - Identification. The entry-level employee should have an accounting background which enables them to:				
Analyze and classify source documents	52	20	28	100
Code source documents to chart of accounts	48	24	24	96
Check documents for common errors	48	28	12	88
Check accounts for clerical accuracy, postings, totals, and balances	48	36	12	96
Pre-audit transaction papers involving items of obligation and/or expenditure which are complicated because of the lack of uniformity	36	24	16	76
Code departmental information (classify costs)	16	56	24	96
Post-audit accounting records	40	20	36	96
Identify all revenue and expenditures	44	44	8	96
Verify and Calculate inventories	40	32	24	96
Allocate and revise depreciation	20	40	40	100

Daily Operational Tasks

Ten characteristics were included on Questionnaire Number One to obtain information from the accounting comptrollers about their judgments of the importance of the daily operational tasks for entry-level accounting employees. Ten percent (1 of 10) of the characteristics in this topical area received a mean rating of less than 2.000 and thus was considered mandatory to the performance of entry-level accounting tasks. This one characteristic (maintain journals) comprised 2.70 percent of the characteristics from all topical areas which received a mandatory rating.

All except one of the characteristics listed in the daily operational tasks received a mean rating of less than 3.000 and were considered important to task performance. The characteristics with their statistical means are presented in Table 3, page 38.

The entry-level employee should be able to maintain journals (journalize) was judged mandatory by 64 percent of the respondents, very important by 20 percent of the respondents, and moderately important by 12 percent of the respondents.

The entry-level employee should be able to perform routine posting was rated mandatory by 28 percent, very important by 40 percent, and moderately important by 20 percent of the respondents.

The entry-level employee should be able to prepare bank deposits and bank reconcilation was judged mandatory by 20 percent, very important by 36 percent, and moderately important by 40 percent of the respondents.

The entry-level employee should be able to maintain accounts receivable and accounts payable ledgers was scored mandatory by 20 percent of the respondents, very important by 52 percent of the respondents, and moderately important by 20 percent of the respondents.

TABLE 3

DAILY OPERATIONAL TASKS

Characteristic	Mean
Accounting function - Recording (manual system). The entry-level employee should have an accounting background which enables them to:	
Maintain journals (journalize)	1.56
Perform routine posting	2.16
Prepare bank deposits and bank reconcilations	2.28
Maintain Accounts Receivable and Accounts Payable ledgers	2.20
Prepare requisitions	2.96
Account for all expenditures and disbursements	2.04
Account for spoilage, defective units, and scrap	2.48
Compute payroll	2.12
Maintain tax records and obligations	2.64
Account for Federal Income Tax Obligations	3.00

The entry-level employee should be able to prepare requisitions was determined to be mandatory by 8 percent of the respondents, very important by 24 percent of the respondents, and moderately important by 40 percent of the respondents.

The entry-level employee should be able to account for all expenditures and disbursements was checked mandatory by 28 percent of the respondents, very important by 44 percent of the respondents, and moderately important by 24 percent of the respondents.

The entry-level employee should be able to account for spoilage, defective units, and scrap scored only 20 percent in each of the first two ratings, mandatory and very important, but scored 52 percent in the moderately important rating by the respondents.

The entry-level employee should be able to compute payroll was judged mandatory by 32 percent of the respondents, very important by 40 percent of the respondents, and 16 percent of the respondents rated this characteristic as moderately important.

The entry-level employee should be able to maintain tax records and obligations was judged to be mandatory by 24 percent of the respondents, very important by 24 percent of the respondents, and moderately important by 16 percent of the respondents.

The entry-level employee should be able to account for Federal Income Tax obligations was judged mandatory by 24 percent of the respondents, very important by 12 percent of the respondents, and moderately important by 20 percent of the respondents.

The percent responses in the three highest ratings to all the characteristics (mandatory, very important, and moderately important) listed under Daily Operational Tasks are reported in Table 4, page 40.

Periodic Operations for Management Decisions

Four characteristics were included on Questionnaire Number One to obtain information from the accounting comptrollers about their judgments of the importance of the Periodic Operations for Management Decisions for entry-level accounting employees. All characteristics in this topical area received a mean rating of less than 2.000 and were considered mandatory to the performance of entry-level tasks. These four characteristics comprised 10.81 percent of the characteristics from all topical areas which received a mandatory rating. The characteristics with their statistical means are presented in Table 5, page 41.

TABLE 4

SUMMARY OF DAILY OPERATIONAL TASKS

Characteristic	Response %			
	Mandatory	Very Important	Moderately Important	Total
Accounting function - Recording (manual system). The entry-level employee should have an accounting background which enables them to:				
Maintain journals (journalize)	64	20	12	96
Perform routine posting	28	40	20	88
Prepare bank deposits and bank reconcilations	20	36	40	96
Maintain Accounts Receivable and Accounts Payable ledgers	20	52	20	92
Prepare requisitions	8	24	40	72
Account for all expenditures and disbursements	28	44	24	96
Account for spoilage, defective units and scrap	20	20	52	92
Compute payroll	32	40	16	88
Maintain tax records and obligations	24	24	16	64
Account for Federal Income Tax Obligations	24	12	20	56

The entry-level employee should have an accounting background which enables him to prepare an analysis worksheet (general ledger, aging receivables, etc.) was judged mandatory by 32 percent of the respondents, very important by 56 percent of the respondents, and moderately important by 12 percent of the respondents.

TABLE 5

PERIODIC OPERATIONS FOR MANAGEMENT DECISIONS

Characteristic	Mean
Accounting function - Summation of records and daily procedures. The entry-level employee should have an accounting background which enables them to prepare:	
An analysis worksheet (general ledger, aging receivables)	1.80
Interim statements (weekly and/or upon request	1.88
Analysis of expenditures (upon request)	1.88
Fundamental cost reports and analysis (daily, etc.)	1.76

The entry-level employee should have an accounting background which enables him to prepare interim statements (weekly and/or upon request) was judged mandatory by 32 percent of the respondents, very important by 52 percent of the respondents, and moderately important by 12 percent of the respondents.

The entry-level employee should have an accounting background which enables him to prepare an analysis of expenditures (upon request) was judged mandatory by 24 percent of the respondents, very important by 64 percent of the respondents, and moderately important carried a 12 percent rating by the respondents.

The entry-level employee should have an accounting background which enables him to prepare fundamental cost reports and analysis (daily, etc.) received a mandatory rating of 36 percent by the respondents, a very

important rating of 52 percent, and a 12 percent moderately important rating by the respondents.

The percent responses in the three highest ratings (mandatory, very important, and moderately important) to all four characteristics listed under Periodic Operations for Management Decisions were reported in Table 6.

TABLE 6

SUMMARY OF PERIODIC OPERATIONS FOR MANAGEMENT DECISIONS

Characteristic	Response %			
	Mandatory	Very Important	Moderately Important	Total
Accounting function - Summation of records and daily procedures. The entry-level employee should have an accounting background which enables them to prepare:				
An analysis worksheet (gen. ledger, aging receivables)	32	56	12	100
Interim statements (weekly and/or upon request)	32	52	12	96
Analysis of expenditures (upon request)	24	64	12	100
Fundamental cost reports and analysis (daily)	36	52	12	100

Fiscal Period Requirements

Six characteristics were included on Questionnaire Number One to obtain information from the accounting comptrollers about their judgment of the importance of the Fiscal Period Requirements for entry-level

accounting employees. One characteristic (see Table 7) in this topical area received a mean rating of less than 2.000 and was considered mandatory to the performance of entry-level accounting tasks. This characteristic comprised 2.70 percent of the characteristics from all topical areas which received a mandatory rating in this study.

All the characteristics listed in Fiscal Period Requirements received a mean rating of less than 3.000 and were considered important to task performance. The characteristics with their statistical means were presented in Table 7.

TABLE 7

FISCAL PERIOD REQUIREMENTS

Characteristic	Mean
Accounting function - Interpretation. The entry-level employee should have an accounting background which enables them to prepare:	
Fiscal period support documents	1.92
Financial statements and schedules	2.04
Cash flow statements	2.32
Funds flow statements	2.32
Interim and end-of period statements for funds	2.24
Tax returns and accompanying schedules	2.56

The entry-level employee should have an accounting background which enables him to prepare Fiscal Period Support documents was rated mandatory by 40 percent of the respondents, very important by 28 percent of the respondents, and moderately important by 32 percent of the respondents.

The entry-level employee should have an accounting background which enables him to prepare financial statements and schedules was judged mandatory by 36 percent of the respondents, very important by 24 percent of the respondents, and moderately important by 40 percent of the respondents.

The entry-level employee should have an accounting background which enables him to prepare cash flow statements was rated mandatory by 32 percent of the respondents, very important by 16 percent of the respondents, and moderately important by 44 percent of the respondents.

The entry-level employee should have an accounting background which enables him to prepare funds flow statements was judged mandatory by 36 percent of the respondents, very important by 8 percent of the respondents, and moderately important by 48 percent of the respondents.

The entry-level employee should have an accounting background which enables him to prepare interim and end-of-the-period statements for funds was judged mandatory by 32 percent of the respondents, very important by 20 percent of the respondents, and moderately important by 40 percent of the respondents.

The entry-level employee should have an accounting background which enables him to prepare tax returns and accompanying schedules was rated mandatory by 32 percent of the respondents, very important by 8 percent of the respondents, and moderately important by 40 percent of the respondents.

The percent responses in the three highest ratings to all the characteristics listed under Fiscal Period Requirements are reported in Table 8.

TABLE 8

SUMMARY OF FISCAL PERIOD REQUIREMENTS

Characteristic	Response %			
	Mandatory	Very Important	Moderately Important	Total
Accounting function - Interpretation. The entry-level employee should have an accounting background which enables them to prepare:				
Fiscal period support documents	40	28	32	100
Financial statements and schedules	36	24	40	100
Cash flow statements	32	16	44	92
Funds flow statements	36	8	48	92
Interim and end-of-period statements for funds	32	20	40	92
Tax returns and accompanying schedules	32	8	40	80

Operational Efficiency

Seven characteristics were included on Questionnaire Number One to obtain information from the accounting comptrollers about their judgment of the importance of the Operational Efficiency function for entry-level accounting employees. Twenty-eight and six-tenths percent (2 of 7) of the characteristics in this topical area received a mean rating of less than 2.000 and were considered mandatory to the performance of entry-level accounting tasks. This characteristic comprised 5.41 percent of the characteristics from all topical areas which received a mandatory rating.

All except one of these characteristics listed in Operational Efficiency tasks received a mean rating of less than 3.000 and were

considered important to accounting performance. The characteristics with their statistical means are presented in Table 9.

TABLE 9

OPERATIONAL EFFICIENCY

Characteristic	Mean
Accounting function - Evaluation. The entry-level employee should have an accounting background which enables them to:	
Measure cost efficiency	1.68
Determine profitability ratios	2.20
Determine short-term solvency ratios	2.44
Determine long-term solvency ratios	2.40
Compute efficiency ratios (turnover)	2.44
Analyze and interpret comparative statements	1.88
Account for price level changes	3.08

The entry-level employee should have an accounting background which enables him to measure cost efficiency was judged mandatory by 48 percent of the respondents, very important by 36 percent of the respondents, and moderately important by 16 percent of the respondents.

The entry-level employee should have an accounting background which enables him to determine profitability ratios was judged mandatory by 24 percent of the respondents, very important by 40 percent of the respondents, and moderately important by 32 percent of the respondents.

The entry-level employee should have an accounting background which enables him to determine short-term solvency ratios received a mandatory rate of 20 percent by the respondents, a very important rate of 40 percent by the respondents, and a moderately important rate of 28 percent by the respondents.

The entry-level employee should have an accounting background which enables him to determine long-term solvency ratios was rated mandatory by 24 percent of the respondents, very important by 36 percent of the respondents, and moderately important by 28 percent of the respondents.

The entry-level employee should have an accounting background which enables him to compute efficiency ratios (turnover) was judged mandatory by 20 percent of the respondents, very important by 32 percent of the respondents, and moderately important by 40 percent of the respondents.

The entry-level employee should have an accounting background which enables him to analyze and interpret comparative statements was judged mandatory by 48 percent of the respondents, very important by 24 percent of the respondents, and moderately important by 24 percent of the respondents.

The entry-level employee should have an accounting background which enables him to account for price level changes did not receive a very high rating with the accounting comptrollers. They scored this characteristic by giving a rating of only 12 percent to mandatory, 28 percent to very important, and 20 percent to moderately important.

The percent responses in the three highest ratings to all the characteristics listed under Operational Efficiency are reported in Table 10.

TABLE 10

SUMMARY OF OPERATIONAL EFFICIENCY

Characteristic	Response %			
	Mandatory	Very Important	Moderately Important	Total
Accounting function - Evaluation. The entry-level employee should have an accounting background which enables them to:				
Measure cost efficiency	48	36	16	100
Determine profitability ratios	24	40	32	96
Determine short-term solvency ratios	20	40	28	88
Determine long-term solvency ratios	24	36	28	88
Compute efficiency ratios (turnover)	20	32	40	92
Analyze and interpret comparative statements	48	24	24	96
Account for price level changes	12	28	20	60

Management Support Area

Thirteen characteristics were included on Questionnaire Number One to obtain information from the accounting comptrollers about their judgment of the importance of the Management Support Area for entry-level accounting employees. Twenty-three and one-tenth percent (3 of 13) of the characteristics in this topical area received a mean rating of less than 2.000 and were considered mandatory to the performance of entry-level accounting tasks. These three characteristics comprised 8.11 percent of the characteristics from all topical areas which received a mandatory rating.

All the characteristics listed in the Management Support Area received a mean rating of less than 3.000 and were considered important to task performance. The characteristics with their statistical means are reported in Table 11.

The entry-level employee should have an accounting background which enables him to calculate and prepare schedules to support the master budget was judged mandatory by 36 percent of the respondents, very important by 56 percent of the respondents, and moderately important by 8 percent of the respondents.

The entry-level employee should have an accounting background which enables him to compute unit costs (material, labor, and overhead) was judged mandatory by 56 percent, very important by 28 percent, and moderately important by 16 percent of the respondents.

The entry-level employee should have an accounting background which enables him to determine and assign inventory costs was judged mandatory by 40 percent of the respondents, very important by 36 percent of the respondents, and moderately important by 24 percent of the respondents.

The entry-level employee should have an accounting background which enables him to allocate overhead for product costing was judged mandatory by 24 percent of the respondents, very important by 40 percent of the respondents, and moderately important by 28 percent of the respondents.

The entry-level employee should have an accounting background which enables him to calculate and compare capital investment opportunities was scored mandatory by 24 percent of the respondents, very important by 44 percent of the respondents, and moderately important by 28 percent of the respondents.

TABLE 11

MANAGEMENT SUPPORT AREA

Characteristic	Mean
Accounting function - Planning and Control. The entry-level employee should have an accounting background which enables them to:	
Calculate and prepare schedules to support the master budget	1.72
Compute unit costs (material, labor, and overhead)	1.60
Determine and assign inventory costs	1.84
Allocate overhead for product costing	2.24
Calculate and compare capital investment opportunities	2.12
Assist in establishing and revising standard costs	2.12
Prepare cost-volume-profit analysis	2.20
Assist in the following Internal Audit procedures:	
A. Preparation of working papers	2.32
B. Compliance test	2.44
C. Tests of transactions	2.32
D. Test of account balances	2.08
E. Review of operations	2.28
F. Reports to management	2.00

The entry-level employee should have an accounting background which enables him to assist in establishing and revising standard costs was judged mandatory by 24 percent of the respondents, very important by 52 percent of the respondents, and moderately important by 16 percent of the respondents.

The entry-level employee should have an accounting background which enables him to prepare cost-volume-profit analysis was judged mandatory by

32 percent of the respondents, very important by 28 percent of the respondents, and moderately important by 32 percent of the respondents.

The entry-level employee should have an accounting background which enables him to assist in the preparation of working papers for internal audit procedures was evaluated to be mandatory by 28 percent of the respondents, very important by 28 percent of the respondents, and moderately important by 32 percent of the respondents.

The entry-level employee should have an accounting background which enables him to assist with the compliance test for internal audit procedures was scored mandatory by 20 percent of the respondents, very important by 36 percent of the respondents, and moderately important by 32 percent of the respondents.

The entry-level employee should have an accounting background which enables him to assist with tests of transactions for internal audit procedures was judged mandatory by 24 percent of the respondents, very important by 40 percent of the respondents, and moderately important by 24 percent of the respondents.

The entry-level employee should have an accounting background which enables him to assist with the test of account balances for internal audit procedures was evaluated to be mandatory by 32 percent, very important by 40 percent, and 20 percent of the respondents scored this characteristic to be moderately important.

The entry-level employee should have an accounting background which enables him to assist the review of operations for internal audit procedures was judged to be mandatory by 24 percent of the respondents, very important by 36 percent of the respondents, and moderately important by 32 percent of the respondents.

The entry-level employee should have an accounting background which enables him to assist with reports to management for internal audit procedures was judged mandatory by 32 percent of the respondents, very important by 48 percent of the respondents, and moderately important by 12 percent of the respondents.

The percent responses in the three highest ratings to all the characteristics listed under Management Support Area were reported in Table 12, page 53.

Systems Information

Twelve characteristics were included on Questionnaire Number One to obtain information from the accounting comptrollers about their judgment of the importance of the Systems Information section for entry-level accounting employees. This section of Questionnaire Number One was designed to answer the specific question, "Does the junior college accounting graduate need an understanding and application of accountant-machine interface in accounting practice?"

Fifty-eight and three-tenths percent (7 of 12) of the characteristics in this topical area received a mean rating of less than 2.000 and were considered mandatory to the performance of entry-level accounting tasks. These characteristics comprised 18.9 percent of the characteristics from all the topical areas which received a mandatory rating.

All of the characteristics listed in Systems Information received a mean rating of less than 3.000 and were considered important to accounting task performance. The characteristics with their statistical means are reported in Table 13, page 54.

TABLE 12

SUMMARY OF MANAGEMENT SUPPORT AREA

Characteristic	Response %			
	Mandatory	Very Important	Moderately Important	Total
Accounting function - Planning and Control. The entry-level employee should have an accounting background which enables them to:				
Calculate and prepare schedules to support the master budget	36	56	8	100
Compute unit costs (mat., labor, and overhead)	56	28	16	100
Determine and assign inventory costs	40	36	24	100
Allocate overhead for product costing	24	40	28	92
Calculate and compare capital investment opportunities	24	44	28	96
Assist in establishing and revising standard costs	24	52	16	92
Prepare cost-volume-profit analysi	32	28	32	92
Assist in the following Internal Audit Procedures:				
A. Preparation of working papers	28	28	36	92
B. Compliance test	20	36	32	88
C. Tests of transactions	24	40	24	88
D. Test of account balances	32	40	20	92
E. Review of operations	24	36	32	92
F. Reports to management	32	48	12	92

The entry-level employee should have an accounting background which enables him to analyze the needs of accounting tasks in order to prepare

TABLE 13

SYSTEMS INFORMATION

Characteristic	Mean
Accounting function - Accounting information and reports from system (EDP). The entry-level employee should have an accounting background which enables them to:	
Analyze the needs of accounting tasks in order to prepare reports electronically	1.64
Understand concepts of programming including how to organize problems to be programmed	1.72
Flowchart solutions to problems	2.04
Understand at least one programming language	2.20
Use a terminal for data input	1.72
Use a terminal to retrieve information and reports	1.80
Have a general understanding of the concepts of a data base organization	2.20
Be aware of the process and the ability to modify a data base organization	2.36
Understand the need for and the use of a data base dictionary	2.48
Determine the needs for daily and/or weekly reports related to the accounting tasks assigned	1.64
Discuss computer uses with programmers	1.76
Interpret documentation of a software package	1.96

reports electronically was judged mandatory by 52 percent of the respondents, very important by 32 percent of the respondents, and moderately important by 16 percent of the respondents.

The entry-level employee should have an accounting background which enables him to understand concepts of programming including how to

organize problems to be programmed was scored mandatory by 48 percent of the respondents, very important by 36 percent of the respondents, and moderately important by 12 percent of the respondents.

The entry-level employee should have an accounting background which enables him to flowchart solutions to problems was evaluated mandatory by 32 percent of the respondents, very important by 40 percent of the respondents, and moderately important by 20 percent of the respondents.

The entry-level employee should have an accounting background which enables him to understand at least one programming language was judged to be mandatory by 36 percent of the respondents, very important by 28 percent of the respondents, and moderately important by 24 percent of the respondents.

The entry-level employee should have an accounting background which enables him to use a terminal for data input was judged to be mandatory by 56 percent of the respondents, very important by 24 percent of the respondents, and moderately important by 12 percent of the respondents.

The entry-level employee should have an accounting background which enables him to use a terminal to retrieve reports and other information was scored to be mandatory by 52 percent of the respondents, very important by 24 percent of the respondents, and moderately important by 16 percent of the respondents.

The entry-level employee should have an accounting background which enables him to have a general understanding of the concepts of a data base organization was judged mandatory by 12 percent of the respondents, very important by 56 percent of the respondents, and moderately important by 32 percent of the respondents.

The entry-level employee should have an accounting background which enables him to be aware of the process and the ability to modify a data base dictionary was judged mandatory by 8 percent of the respondents, very important by 52 percent of the respondents, and moderately important by 36 percent of the respondents.

The entry-level employee should have an accounting background which enables him to understand the need for and the use of a data base dictionary was scored mandatory by 8 percent of the respondents, very important by 44 percent of the respondents, and moderately important carried a 44 percent rating from the respondents.

The entry-level employee should have an accounting background which enables him to determine the needs for daily or weekly reports related to the accounting tasks assigned was judged mandatory by 56 percent of the respondents, very important by 24 percent of the respondents, and moderately important by 20 percent of the respondents.

The entry-level employee should have an accounting background which enables him to discuss computer uses with the programmers was judged mandatory by 44 percent of the respondents, very important by 40 percent of the respondents, and moderately important by 12 percent of the respondents.

The entry-level employee should have an accounting background which enables him to interpret documentation of a software package was given a mandatory rating of 40 percent by the respondents, a very important rating of 36 percent by the respondents, and a moderately important rating of 16 percent by the respondents.

The percent responses in the three highest ratings to all the characteristics listed under Systems Information are reported in Table 14.

TABLE 14

SUMMARY OF SYSTEMS INFORMATION

Characteristic	Response % Mandatory	Very Important	Moderately Important	Total
Accounting function - Accounting information and reports from system (EDP). The entry-level employee should have an accounting background which enables them to:				
Analyze the needs of accounting tasks in order to prepare reports electronically	52	32	16	100
Understand concepts of programming including how to organize problems to be programmed	48	36	12	96
Flowchart solutions to problems	32	40	20	92
Understand at least one programming language	36	28	24	88
Use a terminal for data input	56	24	12	92
Use a terminal to retrieve info & reports	52	24	16	92
Have a general understanding of the concepts of a data base organization	12	56	32	100
Be aware of the process and the ability to modify a data base organization	8	52	36	96
Understand the need for and the use of a data base dictionary	8	44	44	96
Determine the needs for daily and/or weekly reports related to the acct. tasks assigned	56	24	20	100
Discuss computer uses with programmers	44	40	12	96
Interpret documentation of a software package	40	36	16	92

Accounting Curriculum

Eleven courses were included on Questionnaire Number One to obtain information from the accounting comptrollers about their judgment of the

importance of the accounting courses for entry-level accounting employees. This section of Questionnaire Number One was designed to answer the specific question, "Does the junior college accounting graduate need an understanding and application in the eleven accounting courses?"

Thirty-six and four-tenths percent (4 of 11) of the accounting courses listed in this topical area received a mean rating of less than 2.000 and were considered mandatory to the performance of entry-level accounting tasks. These four accounting courses comprised 10.8 percent of the courses and/or characteristics from all topical areas which received a mandatory rating. The four accounting courses that the respondents rated as mandatory were: Elementary Accounting Principles and Concepts, Cost Accounting, Intermediate Accounting, and Accounting Simulation.

Eighty-one and eight-tenths percent (9 of 11) of the accounting courses listed in this topical area received a mean rating of less than 3.000 and were considered important to accounting task performance. The eleven accounting courses with their statistical means were reported in Table 15, page 59.

The entry-level employee should have an understanding and application in Elementary Accounting Principles and Concepts scored a perfect 100 percent mandatory rating by the respondents in this study. This is the only course and/or characteristic in the topical areas to score such a rating.

The entry-level employee should have an understanding and application in Cost Accounting was judged mandatory by 76 percent of the respondents and very important by 24 percent of the respondents.

TABLE 15

ACCOUNTING COURSES INCLUDED IN AN APPLIED SCIENCE IN ACCOUNTING PROGRAM

Accounting Curriculum	Mean
Accounting courses offered in an Applied Science in Accounting Program. The entry-level employee should have an understanding and application in:	
A. Elementary Accounting Principles and Concepts	1.00
B. Cost Accounting	1.24
C. Intermediate Accounting	1.40
D. Governmental Accounting	4.00
E. Managerial Accounting	2.92
F. Auditing	2.32
G. Tax	3.20
H. Budgeting	2.24
I. Financial Statement Analysis	2.04
J. Accounting Simulation (using a computer)	1.92
K. Accounting with a Small Computer	2.08

The entry-level employee should have an understanding and application in Intermediate Accounting was judged mandatory by 68 percent of the respondents, very important by 24 percent of the respondents, and moderately important by 8 percent of the respondents.

The entry-level employee should have an understanding and application in Governmental Accounting was judged to be mandatory by 8 percent of the respondents, very important by 4 percent of the respondents, and moderately important by 24 percent of the respondents.

The entry-level employee should have an understanding and application in Managerial Accounting was judged mandatory by 20 percent of the

respondents, very important by 16 percent of the respondents, and moderately important by 20 percent of the respondents.

The entry-level employee should have an understanding and application in Auditing was scored mandatory by 16 percent of the respondents, very important by 44 percent of the respondents, and moderately important by 32 percent of the respondents.

The entry-level employee should have an understanding and application in Tax was given a mandatory rating of 24 percent by the respondents, a very important rating of 4 percent, and a moderately important rating of 20 percent by the respondents.

The entry-level employee should have an understanding and application in Budgeting received a mandatory rating of 16 percent by the respondents, a very important rating of 52 percent, and a moderately important rating of 28 percent by the respondents.

The entry-level employee should have an understanding and application in Financial Statement Analysis was judged mandatory by 44 percent of the respondents, very important by 16 percent of the respondents, and moderately important by 32 percent of the respondents.

The entry-level employee should have an understanding and application in Accounting Simulation (using a computer) received a mandatory rating of 40 percent from the respondents, a very important rating of 36 percent from the respondents, and a moderately important rating of 16 percent from the respondents.

The entry-level employee should have an understanding and application in Accounting with a Small Computer was judged mandatory by 44 percent of the respondents, very important by 24 percent of the respondents, and moderately important by 20 percent of the respondents.

The percent responses in the three highest ratings to all the accounting courses listed under Accounting Curriculum are reported in Table 16.

TABLE 16

SUMMARY OF COURSES LISTED UNDER ACCOUNTING CURRICULUM

Accounting Curriculum	Response %			
	Mandatory	Very Important	Moderately Important	Total
Accounting courses offered in an Applied Science in Accounting program. The entry-level employee should have an understanding and application in:				
Elementary Accounting Principles and Concepts	100	--	--	100
Cost Accounting	76	24	--	100
Intermediate Accounting	68	24	8	100
Governmental Accounting	8	4	24	36
Managerial Accounting	20	16	20	56
Auditing	16	44	32	92
Tax	24	4	20	48
Budgeting	16	52	28	96
Financial Statement Analysis	44	16	32	92
Accounting Simulation (using a computer)	40	36	16	92
Accounting with a Small Computer	44	24	20	88

Accounting Support Curriculum

Eight accounting support courses were included on Questionnaire Number One to obtain information from the accounting comptrollers about their judgment of the importance of accounting support courses for

entry-level accounting employees. This section of Questionnaire Number One was designed to answer the specific question, "Does the junior college accounting graduate need performance skills and knowledge from the eight related business core courses?"

Sixty-two and five-tenths percent (5 of 8) of the accounting support courses in this topical area received a mean rating of less than 2.000 and were considered mandatory to the performance of entry-level accounting tasks. These five accounting support courses comprised 13.51 percent of the courses and/or characteristics from all topical areas which received a mandatory rating.

All of the accounting support courses listed in Accounting Support Curriculum received a mean rating of 3.000 or less and were considered important to entry-level accounting task performance. The accounting support courses with their statistical means were reported in Table 17.

TABLE 17

ACCOUNTING SUPPORT COURSES INCLUDED IN AN APPLIED SCIENCE IN ACCOUNTING PROGRAM

Accounting Support Courses	Mean
Courses from the related business core that help to develop the student. The entry-level employee should have performance skills and knowledge from:	
A. Business Law	1.92
B. Management	2.32
C. Business Math	1.72
D. Computer Programming I	1.92
E. Computer Programming II	2.80
F. Economics	3.00
G. Business Communications	1.76
H. Business Report Writing	1.60

The entry-level employee should have performance skills and knowledge from Business Law was judged mandatory by 44 percent of the respondents, very important by 20 percent of the respondents, and moderately important by 36 percent of the respondents.

The entry-level employee should have performance skills and knowledge from Management was judged mandatory by 20 percent of the respondents, very important by 36 percent of the respondents, and moderately important by 40 percent of the respondents.

The entry-level employee should have performance skills and knowledge from Business Math was judged mandatory by 52 percent of the respondents, very important by 28 percent of the respondents, and moderately important by 16 percent of the respondents.

The entry-level employee should have performance skills and knowledge from Computer Programming I was judged mandatory by 40 percent of the respondents, very important by 32 percent of the respondents, and moderately important by 24 percent of the respondents.

The entry-level employee should have performance skills and knowledge from Computer Programming II was judged mandatory by 8 percent of the respondents, very important by 24 percent of the respondents, and moderately important by 52 percent of the respondents.

The entry-level employee should have performance skills and knowledge from Economics was judged mandatory by 12 percent of the respondents, very important by 16 percent of the respondents, and moderately important by 36 percent of the respondents.

The entry-level employee should have performance skills and knowledge from Business Communications was judged mandatory by 40 percent

of the respondents, very important by 44 percent of the respondents, and moderately important by 16 percent of the respondents.

The entry-level employee should have performance skills and knowledge from Business Report Writing was judged mandatory by 52 percent of the respondents, very important by 36 percent of the respondents, and moderately important by 12 percent of the respondents.

The percent responses in the three highest ratings to all the characteristics listed in Accounting Support Curriculum were reported in Table 18.

TABLE 18

SUMMARY OF COURSES LISTED UNDER ACCOUNTING SUPPORT CURRICULUM

Accounting Support Curriculum	Response %			
	Mandatory	Very Important	Moderately Important	Total
Courses from the related business core that help to develop the student. The entry-level employee should have performance skills and knowledge from:				
Business Law	44	20	36	100
Management	20	36	40	96
Business Math	52	28	16	96
Computer Programming I	40	32	24	96
Computer Programming II	8	24	52	84
Economics	12	16	36	64
Business Communications	40	44	16	100
Business Report Writing	52	36	12	100

Accounting Performance

Four characteristics were included on Questionnaire Number One to obtain information from the accounting comptrollers about their judgment of the importance of the thought processes involved in accounting performance for entry-level accounting emloyees. This section of Questionnaire Number One was designed to answer the specific question, "To what degree does the junior college accounting graduate need development in the thought processes involved in accounting performance?"

One hundred percent (4 of 4) of the characteristics in this topical area received a mean rating of less than 2.000 and were considered mandatory to the performance of entry-level accounting tasks. These four characteristics comprised 10.8 percent of the characteristics from all topical areas which received a mandatory rating. The four characteristics with their statistical means were reported in Table 19.

TABLE 19

ACCOUNTING PERFORMANCE

Characteristic	Mean
Thought processes involved in accounting performance. The entry-level employee should have developed their:	
Skill in the analysis of tasks, transactions, and procedures	1.52
Problem-solving techniques	1.56
Communication of factors for decisions	1.60
Ability to compare possible alternative decisions for cost effectiveness	1.60

The entry-level employee should have developed his skill in the analysis of tasks, transactions, and procedures was considered mandatory by 56 percent of the respondents, very important by 36 percent of the respondents, and moderately important by 8 percent of the respondents.

The entry-level employee should have developed his problem-solving techniques was judged mandatory by 52 percent of the respondents, very important by 40 percent of the respondents, and moderately important by 8 percent of the respondents.

The entry-level employee should have developed his communication of factors for decisions received a mandatory rating of 56 percent, a very important rating of 28 percent, and a moderately important rating of 16 percent from the respondents.

The entry-level employee should have developed his ability to compare possible alternative decisions was judged mandatory by 52 percent of the respondents, very important by 36 percent of the respondents, and moderately important by 12 percent of the respondents. The percent responses in the three highest ratings to all the characteristics listed under Accounting Performance are reported in Table 20.

Summary

This chapter has provided an analyses of the accounting knowledge and/or skills needed for emloyment and advancement by entry-level accounting employees. The accounting knowledge and/or skills were identified by using a computer program designed to tabulate each questionnaire response (shown in Appendix D). Each characteristic on the questionnaire that received a population mean rating below three-point-zero (3.0) should be considered in planning junior college accounting curriculum.

TABLE 20

SUMMARY OF ACCOUNTING PERFORMANCE

Characteristic	Response %			
	Mandatory	Very Important	Moderately Important	Total
Thought processes involved in accounting performance. The entry-level employee should have developed their:				
Skill in the analysis of tasks, transactions, and procedures	65	36	8	100
Problem-solving techniques	52	40	8	100
Communication of factors for decisions	56	28	16	100
Ability to compare possible alternative decisions for cost effectiveness	52	36	12	100

The accounting knowledge and/or skills needed by entry-level employees were divided into eleven (11) major areas. The data in Table 1, page 34, identifies the competency needed in the area of Preliminary Operations to be Performed. The information was then presented in ten (10) characteristics. The data in Table 3, page 38, identifies the competency needed in the area of Daily Operational Tasks. This information was then presented in ten (10) characteristics. The data in Table 5, page 41, identifies the competency needed in the area of Periodic Operations for Management Decisions. This information was then presented in four (4) characteristics. The data in Table 7, page 43, identifies the competency needed in the area of Fiscal Period Requirements. This information was then presented in six (6) characteristics. The data in Table 9, page 46,

identifies the competency needed in the area of Operational Efficiency. This information was presented in seven (7) characteristics. The data in Table 11, page 50, identifies the competency needed in the area of Management Support. This information was presented in thirteen (13) characteristics. The data in Table 13, page 54, identifies the competency needed in the area of Systems Information. This information was then presented in twelve (12) characteristics. The data in Table 15, page 59, identifies the competency needed in the area of Accounting Curriculum. Eleven (11) courses were included in the Accounting Curriculum. The data in Table 17, page 62, identifies the competency needed in the area of Accounting Support Courses. Eight (8) courses were included in the Accounting Support Curriculum. The data in Table 19, page 65, identifies the competency needed in the area of Accounting Performance. This information was presented in four (4) characteristics.

The analysis of the data collected from Questionnaire Number One was used to determine the accounting knowledge and/or skills needed by entry-level accounting employees. The analysis was also used to answer the following specific questions included in the Statement of the Problem of this study:

(2) Does the junior college accounting graduate have the performance skills and theory base to perform competently on entry-level accountng jobs?

(4) Does the junior college accounting graduate need an understanding and application of accountant-machine interface in accounting practice?

(5) Does the junior college accounting graduate need an understanding and application in:

A. Elementary Accounting Principles?
B. Cost Accounting?

C. Intermediate Accounting?
D. Governmental Accounting?
E. Managerial Accounting?
F. Auditing?
G. Tax?
H. Budgeting?
I. Financial Statement Analysis?

(6) Does the junior college accounting graduate need performance skills and knowledge from the following related business core:

A. Business Law?
B. Management?
C. Business Math?
D. Data Processing?
E. Economics?
F. Business Communications?

(8) To what degree does the junior college graduate need development in the thought process involved in accounting performance such as:

A. Skill in the Analysis of tasks, transactions, and procedures?
B. Problem-solving techniques?
C. Communication of decision factors?

The major results of this analysis was presented in Chapter VIII.

Chapter V presents the Findings of Questionnaire Number Two.

CHAPTER V

PRESENTATION OF FINDINGS

QUESTIONNAIRE NUMBER TWO

Introduction

The purpose of this chapter was to present an analyses of the academic level demanded by the prospective employer for entry into selected private accounting practice in a manufacturing company located in the Oklahoma City Standard Metropolitan Statistical Area. Findings are based on replies to research instruments described in Chapter III. In Chapter V, findings resulting from the analysis of Questionnaire Number Two were presented.

Respondent Profile

The population for this study consisted of manufacturing firms located in the Oklahoma City SMSA with more than 250 employees. The respondents for Questionnaire Number Two were personnel managers within these manufacturing firms.

Analysis of Data from Questionnaire Number Two

Questionnaire Number Two was designed to collect data from personnel managers concerning the employability of two-year accounting graduates, the accounting jobs for which they might qualify, and the

starting annual salary. The data collection instrument was divided into three parts: (1) Respondent Background Information, (2) Type of Cost System Utilized, and (3) Entry-Level Accounting Personnel Information.

Personnel managers within each manufacturing firm were encouraged to complete and return Questionnaire Number Two.

For Questionnaire Number Two, there were twenty-five returned completed survey instruments. The data were coded, tabulated, and analyzed. This section presents the analyses of the collected data by the three parts.

Respondent Background Information

Seven educational levels were included on Questionnaire Number Two to obtain information from the personnel managers about their educational background. Eighty percent (20 of 25) of the respondents had completed a Bachelor's degree or more. Other training most frequently mentioned was that provided by a business school or vocational school, see Table 21, page 72. Eighty percent (20 of 25) of the respondents were between the ages of 35 and 54, see Table 22, page 72.

Type of Cost System Utilized

An analysis of the data collected indicated that ninety-six percent (24 of 25) of the firms use the Process Cost System for determining costs. Eighty-eight percent (22 of 25) of the firms use a Standard Cost System for efficiency measurement.

Entry-Level Accounting Personnel Information

Eight items were included on Questionnaire Number Two to obtain entry-level accounting personnel information from the personnel managers.

TABLE 21

EDUCATIONAL BACKGROUND OF RESPONDENTS
(Personnel Managers)

Degree Attained	Total of 25 responses	
	Number	Percent
High School graduate	1	4%
Attendent college but did not graduate	3	12%
Two-year college graduate	1	4%
Bachelor's degree--business major	15	60%
Bachelor's degree--non-business major	1	4%
Master's degree	1	4%
Other training	3	12%

TABLE 22

AGE OF RESPONDENTS
(Personnel Managers)

Age	Total of 25 responses	
	Number	Percent
25 - 34	2	8%
35 - 44	12	48%
45 - 54	8	32%
55 and over	3	12%

One of the major questions that the study was attempting to answer (Statement of the Problem--question number one) was as follows:

> "Is there an academic level demanded by the prospective employer for entry into selected private accounting practice?"

One hundred percent (25 of 25) of the participants responded to the affirmative (see Table 23) when asked if they would hire the two-year Applied Science in Accounting graduate.

The present number of accounting personnel in all twenty-five manufacturing firms total six hundred and forty-eight. Seventy-seven percent (500 of 648) of the present accounting personnel had less than a four-year degree. The projected need for entry-level accounting personnel by 1985 was estimated by the personnel managers to be ninety (90) employees (see Table 23).

TABLE 23

ENTRY-LEVEL ACCOUNTING PERSONNEL INFORMATION

Selected Accounting Personnel Information	Total of 25 responses	
	Number	Percent
Would you hire a two-year Applied Science in Accounting graduate - YES	25	100%
Present number of accounting personnel	648	100%
Present number of accounting personnel with less than a four-year degree	500	77%
Projected need for entry-level accounting personnel by 1985	90	----

Other pertinent questions that were answered by the personnel managers were as follows:

(1) What areas of accounting do you think the two-year Applied Science in Accounting graduate might be placed?

(2) What beginning annual salary should the two-year Applied Science in Accounting graduate expect?

(3) Should the two-year Applied Science in Accounting graduate have some form of work experience in the way of a recognized internship model? (Statement of the Problem--question number 3)

(4) Does the two-year Applied Science in Accounting graduate need an understanding and application in the related support area of college algebra? (Statement of the Problem--question number 7)

Sixty-eight percent (17 of 25) of the personnel managers indicated the Cost area of accounting for which the two-year Applied Science in Accounting graduate might be placed. Twenty-four percent (6 of 25) of the personnel managers listed the Other Areas, which included payroll and accounts payable, and eight percent (2 of 25) of the personnel managers indicated the General Ledger area of accounting for which the two-year Applied Science in Accounting graduate might be placed (see Table 24, page 75).

Fifty-two percent (13 of 25) of the personnel managers placed the beginning annual salary for the two-year Applied Science in Accounting graduate in the "Open" catagory, thirty-two percent (8 of 25) indicated the $10,000- $10,999 range, twelve percent (3 of 25) listed the $9,000 - $9,999 range, and four percent (1 of 25) reported the $8,000 - $8,999 range (see Table 25, page 75).

Eighty-eight percent (22 of 25) of the personnel managers reported that the two-year Applied Science in Accounting graduate <u>should</u> have some

TABLE 24

AREAS FOR WHICH THE TWO-YEAR
ACCOUNTING GRADUATE MIGHT QUALIFY

Areas of Accounting	Total of 25 responses	
	Number	Percent
General Ledger	2	8.0%
Management	0	0.0%
Assets	0	0.0%
Cost	17	68.0%
Tax	0	0.0%
Budgeting	0	0.0%
Auditing	0	0.0%
Other (please specify)	6	24.0%

TABLE 25

BEGINNING ANNUAL SALARY FOR
THE TWO-YEAR ACCOUNTING GRADUATE

Annual Salary Range	Total of 25 responses	
	Number	Percent
8,000 - 8,999	1	4.0%
9,000 - 9,999	3	12.0%
10,000 - 10,999	8	32.0%
Open	13	52.0%

form of work experience in the way of a recognized internship model (see Table 26).

Sixty-four percent (17 of 25) of the personnel managers reported that the two-year Applied Science in Accounting graduate does not need an understanding and application in the related support area of college algebra (see Table 26).

TABLE 26

WORK EXPERIENCE AND COLLEGE ALGEBRA
FOR THE TWO-YEAR ACCOUNTING GRADUATE

Work Experience/College Algebra	Total of 25 responses	
	Number	Percent
Should the two-year accounting graduate have some form of work experience?		
YES	22	88.0%
NO	3	12.0%
Should the two-year accounting graduate have an understanding in college algebra		
YES	8	32.0%
NO	17	68.0%

Summary

This chapter has provided an analyses of the employability of two-year accounting graduates, the accounting jobs for which they might qualify, and the starting annual salary. The data collected were identified by using a computer program designed to tabulate each questionnaire response (shown in Appendix E).

Questionnaire Number Two was divided into three parts: (1) Respondent Background Information, (2) Type of Cost System Utilized, and (3) Entry-Level Accounting Personnel Information. The data in Table 21, page 72, identifies the Educational Background of the respondents. The data in Table 22, page 72, identifies the Age of the respondents. The data in in Table 23, page 73, identifies possible employment. The data in Table 24, page 75, identifies the areas for which a two-year Applied Science in Accounting graduate might be placed. The data in Table 25, page 75, reports the beginning annual salary for the two-year Applied Science in Accounting graduate. The data in Table 26, page 76, reports other pertinent information.

The analysis of the data collected from Questionnaire Number Two was used to determine if there is a market for the two-year Applied Science in Accounting graduate in the Oklahoma City SMSA. The analysis was also used to answer the following specific questions included in the Statement of the Problem of this study:

(1) Is there an academic level demanded by the prospective employer for entry into selected private accounting practice?

(3) Should the junior college accounting graduate have some form of work experience in the way of a recognized internship model?

(7) Does the junior college accounting graduate need an understanding and application in the related support area of college algebra?

The major results of this analysis was presented in Chapter VIII. Chapter VI presents the Findings of Questionnaire Number Three.

CHAPTER VI

PRESENTATION OF FINDINGS

QUESTIONNAIRE NUMBER THREE

Introduction

The purpose of this chapter was to present an analyses of the students' expectations of the Applied Science in Accounting degree program at Oscar Rose Junior College. Findings are based on replies to research instruments described in Chapter III. In Chapter VI, findings resulting from the analysis of Questionnaire Number Three were presented.

Respondent Profile

The sample for Questionnaire Number Three consisted of students currently enrolled in the Applied Science in Accounting program at Oscar Rose Junior College.

Analysis of Data from Questionnaire Number Three

Questionnaire Number Three was designed to collect data from students enrolled in a two-year accounting program. The data collection instrument was divided into three parts: (1) Student Classification, (2) Student Background Information, and (3) Expectations from the Applied Science Degree in Accounting. See Appendix F for a copy of this questionnaire.

A total of eighty-two completed questionnaires were received, coded and analyzed. This section presents the analysis of the collected data by the three parts.

Student Classification

Fifty-six and one-tenth percent (46 of 82) of the respondents had earned less than 24 hours of college credit. Six and one-tenth percent (5 of 82) had earned more than 60 hours of college credit (see Table 27).

TABLE 27

COLLEGE CREDIT HOURS EARNED

College Credit Hours (excluding this semester)	Total of 82 Responses	
	Number	Percent
Less than 12 hours	25	30.5%
12 hours but less than 24	21	25.6%
24 hours but less than 36	12	14.6%
36 hours but less than 48	11	13.4%
48 hours but less than 60	8	9.8%
60 hours or more	5	6.1%

Student Background Information

Seventy-four and four-tenths percent (61 of 82) of the students participating in this study were under 35 years of age. Four and nine-tenths percent (4 of 82) of the respondents were 45 years of age or older (see Table 28).

Seventy-eight percent (64 of 82) of the respondents were working while attending college. Thirty-four and four-tenths percent (22 of 64) of the respondents were employed in the Governmental area. Twenty-three and

TABLE 28

STUDENT AGE

Age of Student	Total of 82 responses Number	Percent
Under 25	39	47.6%
25 - 34	22	26.8%
35 - 44	17	20.7%
45 - 54	4	4.9%
55 and over	0	0.0%

four-tenths percent (15 of 64) of the respondents reported the "Other" area which included teachers, private business, hospital workers, etc. (See Table 29).

TABLE 29

STUDENT EMPLOYMENT INFORMATION

Type of Employment	Total of 64 responses Number	Percent
Financial	8	12.5%
Governmental	22	34.4%
Manufacturing	8	12.5%
Retail	11	17.2%
Other (please specify)	15	23.4%

Twenty-three and four-tenths percent (15 of 64) of the respondents reported Accounting Work as the type of duties that they were

presently performing. Twenty-one and nine-tenths percent (14 of 64) reported "Other" which included a waitress, janitor, teacher, mechanic, etc. as the type of duties that they were presently performing (see Table 30).

TABLE 30

STUDENTS' PRESENT EMPLOYMENT

Type of duties presently performing	Total of 64 responses	
	Number	Percent
General Office Work	8	12.5%
Clerical Work	8	12.5%
Accounting Work	15	23.4%
Sales Office Work	4	6.3%
Production Work	10	15.6%
Administrative Work	5	7.8%
Other (please specify)	14	21.9%

Expectations from the Applied Science Accounting Degree

Thirty-six and six-tenths percent (30 of 82) of the respondents listed "Other" which included employer as the primary source which helped them become interested in the Applied Science Degree in Accounting at Oscar Rose Junior College. Twenty and seven-tenths percent (17 of 82) of the respondents listed Friend as their motivating source which helped them become interested in the Applied Science Degree in Accounting. Two and four-tenths percent (2 of 82) of the respondents reported Counselor (high school) or Counselor (this school) as their primary source which helped them become interested in the Applied Science Degree in Accounting (see Table 31).

TABLE 31

MOTIVATION SOURCE FOR THE APPLIED SCIENCE DEGREE IN ACCOUNTING

Source which interested you in accounting	Total of 82 responses	
	Number	Percent
Parents	7	8.5%
Brother or Sister	4	4.9%
Other relative (please specify)	3	3.7%
Counselor (this school)	2	2.4%
Counselor (high school)	2	2.4%
Instructor (this school)	9	11.0%
Instructor (high school)	8	9.8%
Friend	17	20.7%
Other (please specify)	30	36.6%

Forty-three and nine-tenths percent (36 of 82) of the respondents reported Seek Employment as their purpose for enrolling in the Applied Science Degree in Accounting. Thirty-nine and one-tenth percent (32 of 82) reported Vertical or Horizontal promotion as their purpose for enrolling in the Applied Science Degree in Accounting (see Table 32).

TABLE 32

STUDENTS' PURPOSES FROM THE APPLIED SCIENCE DEGREE IN ACCOUNTING

Purpose for the degree in accounting	Total of 82 responses	
	Number	Percent
Seek employment	36	43.9%
Vertical or horizontal promotion	32	39.1%
Change of firm	7	8.5%
Other (please specify)	7	8.5%

Forty-seven and six-tenths percent (39 of 82) of the respondents did not know what type of job to expect upon completion of the Applied Science Degree in Accounting. Twenty-six and eight-tenths percent (22 of 82) listed Accountant I as the type of job to expect upon completion of the Applied Science Degree in Accounting (see Table 33).

TABLE 33

STUDENTS' JOB EXPECTATIONS FROM THE APPLIED SCIENCE DEGREE IN ACCOUNTING

Type of job expected upon completion of degree	Total of 82 responses	
	Number	Percent
Bookkeeper	4	4.9%
Accounting Clerk I	7	8.5%
Accounting Clerk II	8	9.8%
Accounting Clerk III	2	2.4%
Accountant I	22	26.8%
Do not know	39	47.6%

Forty-eight and eight-tenths percent (40 of 82) of the respondents indicated $12,000 and over as the annual salary expected upon completion of the Applied Science Degree in Accounting (see Table 34, page 84).

Twenty-nine and three-tenths percent (24 of 82) of the respondents indicated Financial as the type of employment expected upon completion of the Applied Science Degree in Accounting. Twenty-five and six-tenths percent (21 of 82) listed Governmental, eighteen and three-tenths percent (15 of 82) reported Manufacturing, seventeen and nine-tenths percent

TABLE 34

STUDENTS' SALARY EXPECTATIONS FROM THE APPLIED SCIENCE DEGREE IN ACCOUNTING

Salary expected from completion of degree	Total of 82 responses	
	Number	Percent
Below 8000	6	7.3%
8,000 - 8,999	4	4.9%
9,000 - 9,999	13	15.9%
10,000 - 10,999	12	14.6%
11,000 - 11,999	7	8.5%
12,000 and over	40	48.8%

(14 of 82) indicated Other, and nine and eight-tenths percent (8 of 82) listed Retail as the type of employment expected upon completion of the Applied Science Degree in Accounting (see Table 35).

TABLE 35

STUDENTS' JOB EXPECTATIONS FROM THE APPLIED SCIENCE DEGREE IN ACCOUNTING

Type of employment expected upon completion of degree	Total of 82 responses	
	Number	Percent
Financial	24	29.3%
Governmental	21	25.6%
Manufacturing	15	18.3%
Retail	8	9.8%
Other (please specify)	14	17.9%

Fifty-three and seven-tenths percent (44 of 82) of the respondents reported a Very Strong commitment to the Applied Science Degree in Accounting program. Eleven percent (9 of 82) of the respondents marked the Does not Apply category for their commitment to completing the degree program (see Table 36).

TABLE 36

STUDENTS' COMMITMENT TO THE APPLIED SCIENCE DEGREE IN ACCOUNTING

Commitment to completing the Applied Science in Accounting program	Total of 82 responses	
	Number	Percent
Weak	7	8.5%
Moderate	22	26.8%
Very Strong	44	53.7%
Does not apply	9	11.0%

The degree to which the respondents understand the accounting skills demanded by prospective employers for entry-level employment in accounting was considered one of the major questions to be answered by this study (Statement of the Problem--question number 9). Sixty-eight and three-tenths percent (56 of 82) of the respondents reported they do not understand or have limited understanding of the accounting skills expected by prospective employers, see Table 37, page 86.

Sixty-five and eight-tenths percent (54 of 82) of the respondents reported they do not understand or have limited understanding of other competencies demanded by prospective employers, see Table 38, page 86.

Fifty-four and nine-tenths percent (45 of 82) of the respondents indicated the Applied Science Degree in Accounting would meet their Long

TABLE 37

STUDENTS' UNDERSTANDING OF ACCOUNTING SKILLS DEMANDED BY PROSPECTIVE EMPLOYERS

Degree to which students understand accounting skills demanded by prospective employers	Total of 82 responses	
	Number	Percent
Do not understand	30	36.6%
Limited understanding	26	31.7%
Reasonable understanding	25	30.5%
Fully understand	1	1.2%

TABLE 38

STUDENTS' UNDERSTANDING OF OTHER COMPETENCIES DEMANDED BY PROSPECTIVE EMPLOYERS

Degree to which students understand other competencies demanded by prospective employers	Total of 82 responses	
	Number	Percent
Do not understand	31	37.8%
Limited understanding	23	28.0%
Reasonable understanding	27	32.9%
Fully understand	1	1.2%

Range Objective. Twenty and seven-tenths percent (17 of 82) listed Intermediate Objective, twelve and two-tenths percent (10 of 82) listed Short Range Objective, and twelve and two-tenths percent (10 of 82) listed Does not apply for me as the objective for enrolling in the Applied Science in Accounting degree program (see Table 39, page 87).

TABLE 39

STUDENTS' OBJECTIVE FOR MAJORING IN THE APPLIED SCIENCE DEGREE IN ACCOUNTING

Objective for enrolling in the Applied Science in Accounting degree program	Total of 82 responses	
	Number	Percent
Short range objective	10	12.2%
Intermediate objective	17	20.7%
Long range objective	45	54.9%
Does not apply for me	10	12.2%

Summary

This chapter has provided an analyses of the students' expectations of the Applied Science in Accounting Degree program. The data collected were identified by using a computer program designed to tabulate each questionnaire responses (shown in Appendix F).

Questionnaire Number Three was divided into three parts: (1) Student Classification, (2) Student Background Information, and (3) Expectations from the Applied Science in Accounting Degree program. The data in Table 27, page 79, identifies the college credit hours earned. The data in Table 28, page 80, identifies the Age of the respondent. The data in Table 29, page 80, identifies type of employment. The data in Table 30, page 81, identifies type of duties presently performing. The data in Table 31, page 82, identifies source which helped the respondent become interested in accounting. The data in Table 32, page 82, identifies the purpose for the degree in accounting. The data in Table 33, page 83,

identifies the type of job expected upon completion of the accounting degree. The data in Table 34, page 84, identifies the annual salary expected upon completion of the accounting degree. The data in Table 35, page 84, identifies the type of employment expected upon completion of the accounting degree. The data in Table 36, page 85, identifies how strong the respondents were to completing the Applied Science in Accounting program. The data in Table 37, page 86, identifies to what degree the respondents understand accounting skills demanded by prospective employers. The data in Table 38, page 86, identifies to what degree the respondents understand other competencies demanded by prospective employers. The data in Table 39, page 87, identifies the objective for enrolling in the Applied Science in Accounting degree program.

The analysis of the data collected from Questionnaire Number Three was used to answer the following specific question included in the Statement of the Problem of this study:

(9) Do students understand the performance and employment implications of an Applied Science in Accounting Program?

The major results of this analysis was presented in Chapter VIII. Chapter VII presents a Comparison of Selected Data.

CHAPTER VII

CURRICULAR IMPLICATIONS

Introduction

In order to ascertain the relevancy of the educational preparation of the two-year accounting graduate for entry-level employment, it was necessary to compare the responses to selected questions from the participants and the current Applied Science in Accounting degree program at Oscar Rose Junior College. Reference will be made to the results of the responses of questionnaires analyzed in Chapters IV, V, & VI.

Comparison of Participants' Responses and the Applied Science in Accounting Program at Oscar Rose Junior College

Other than the general education requirements, there are fifteen hours of required accounting courses and twenty-four hours of additional support courses required to complete the Applied Science in Accounting degree program at Oscar Rose Junior College. See Appendix I for a copy of the degree program. These courses are discussed in the pages to follow.

Required Accounting Courses

The fifteen hours of accounting necessary to meet the requirements for the Applied Science in Accounting degree are as follows: Principles of Accounting I, Principles of Accounting II, Intermediate Accounting I, Cost Accounting I, and Personal Income Tax. Table 40 contains the accounting

courses currently required and the ratings of importance by the respondents of Questionnaire Number One reported in Chapter IV. The ratings of the respondents are reported using statistical means. The mean responses range from a +1.000 representing a rating of essential or vital to job performance to a +5.000 representing a rating of no value to job performance. A reminder of the rating scale--if the course of job characteristic was considered to be important to job performance the statistical mean was 3.000 or less. See page 27 for a review of the rating scale.

TABLE 40

RATINGS OF IMPORTANCE OF REQUIRED ACCOUNTING COURSES INCLUDED IN THE APPLIED SCIENCE IN ACCOUNTING PROGRAM AT ORJC

Accounting courses required in current program	*Mean
Principles of Accounting I	1.00
Principles of Accounting II	1.00
Cost Accounting I	1.24
Intermediate Accounting I	1.40
Personal Income Tax	3.20

*For results of the survey, see table 16.

With the exception of Personal Income Tax, the respondents rated the accounting courses required in the current program at Oscar Rose Junior College to be mandatory. It is pertinent at this point to include additional accounting courses that the respondents rated as important to the development of the two-year accounting student. These additional accounting courses are not included as part of the course requirements to

complete the Applied Science in Accounting degree at Oscar Rose Junior College. Table 41 contains a list of these additional accounting courses that the respondents reported as having important value to job performance.

TABLE 41

RATINGS OF IMPORTANCE OF ACCOUNTING COURSES THAT ARE NOT INCLUDED APPLIED SCIENCE IN ACCOUNTING PROGRAM AT ORJC

Additional accounting courses	*Mean
Accounting Simulation (using a computer)	1.92
Accounting with a Small Computer	2.08
Financial Statement Analysis	2.04
Budgeting	2.24
Auditing	2.32
Managerial Accounting	2.92

*For results of the survey, see Table 16.

Accounting Simulation (using a computer) received a mandatory rating by the respondents in the survey.

Accounting Course Objectives

The objectives of each accounting course required by the Applied Science in Accounting degree graduate are also compared with the responses reported in Chapter IV. Appendix J contains the course objectives taken from the courses syllabi at Oscar Rose Junior College.

Table 42 contains a list of the objectives of Principles of Accounting I and the level of importance reported by the respondents in

TABLE 42

RATINGS OF IMPORTANCE OF COURSE OBJECTIVES
AT ORJC FOR THE COURSE
PRINCIPLES OF ACCOUNTING I

Accounting Course Objectives (Principles of Accounting I)	Mean	*Page Number
Students should be able to:		
Define the basic accounting Principles and Concepts	1.00	59
Identify the additional accounts for different types of enterprises	1.84	34
Appraise decision-making processes	1.60	65
Recognize the advantages and disadvantages of buying and selling on extended time	2.32	34
Compare the methods for handling bad debts	1.76	38
Apply the different methods of inventory cost	1.92	42
Analyze the application of the matching principle	1.88	41
Compare the advantages and disadvantages of Lifo, Fifo, and weighted average in costing inventories	1.92	41
Compare and contrast the periodic and perpetual inventory systems	2.24	42
Compare the retail and gross profit methods of estimating inventories	1.84	52
Recognize the significance of depreciation	2.20	34
Identify the characteristics of natural resources and intangible assets	2.32	38
Apply and evaluate the most common methods of allocating and revising depreciation	2.20	34
Distinguish between a capital expenditure and a revenue expenditure	2.12	43
Recognize the income tax law for exchanging plant assets	2.64	42
Distinguish among an ordinary repair, and extra-ordinary repair, and a betterment	2.04	50
Apply the laws and procedures of payroll accounting	2.12	38

*For tabulated results of survey for each course objective, see page number reference.

Chapter IV. The ratings are reported using statistical means. All of the course objectives of Principles of Accounting I were classified as important by the respondents. Page numbers are listed in Table 42 as cross references to the results of the survey as presented in Chapter IV.

Principles of Accounting II course objectives are listed in Table 43, page 94, with the respondents' ratings of importance. Only one of the objectives for the Principles of Accounting II course was indicated to be of little value to job performance. Accounting for price level changes did not rate to be important with the respondents as the statistical mean was reported to be 3.08. All the other course objectives were considered to be important.

Table 44, page 95 includes the objectives for the course Cost Accounting I, the response ratings of importance, and the page reference for survey results. All the course objectives of Cost Accounting I were rated very important to mandatory by the respondents. Only the course objective--list and define the uses and classification of costs received a rating of more than 2.000.

Intermediate Accounting I course objectives are listed with the ratings of importance of these objectives by the respondents in this study and the page number references in Table 45, page 96. All of the Intermediate I course objectives were determined to be very important for the two-year accounting degree graduate.

The last required accounting course to be rated by the respondents in this survey is Personal Income Tax. The tax course received a level of importance rating by the respondents of more than 3.000.

TABLE 43

RATINGS OF IMPORTANCE OF COURSE OBJECTIVES
AT ORJC FOR THE COURSE
PRINCIPLES OF ACCOUNTING II

Accounting Course Objectives (Principles of Accounting II)	Mean	*Page Number
Students should be able to:		
List and identify the characteristics of corporation accounting	1.00	59
Analyze transactions involving stock	2.12	50
Recognize the significance of retained earnings	2.04	43
Analyze transactions involving long-term liabilities and investments	2.12	50
Identify the nature of cash and funds flow	2.32	43
Analyze and compare financial statements	1.88	43
Account for price level changes	3.08	46
Identify the purposes of departmentalization	2.16	34
List and identify the characteristics of a manufacturing concern	2.16	34
Recognize the nature of the cost principle which underlies accounting records and reports	1.68	46
Prepare a master budget	1.72	50
Analyze the effect of changes in cost and sales levels on the income of a business	1.88	41
Prepare fixed and flexible budgets and analyze their relationship to a standard cost system	2.20	50
Recognize the importance of accounting in management decision-making	1.60	65

*For tabulated results of the survey for each course objective, see page number reference.

TABLE 44

RATINGS OF IMPORTANCE OF COURSE OBJECTIVES
AT ORJC FOR THE COURSE
COST ACCOUNTING I

Accounting Course Objectives (Cost Accounting I)	Mean	*Page Number
Students should be able to:		
Identify the two basic management functions	1.24	59
Identify the tasks of a cost accounting system	1.60	50
Define the cost concept	1.24	59
List and define the uses and classifications of costs	2.16	34
Recognize the significance and analyze the design and operation of a cost accounting information system	1.68	46
Apply the mechanics of the job order and process cost system	1.60	50
Recognize the need for proper planning and control of material, labor, and factory overhead costs	1.60	50

*For results of survey see page number reference.

Additional Objectives

By comparing the objectives of the accounting courses currently included in the Applied Science in Accounting degree program at Oscar Rose Junior College with the courses and job characteristics the respondents rated important, the results indicate that there are additional objectives that should be incorporated into course offerings. The job characteristics that the respondents rated as mandatory--a statistical mean rating of 2.000--are listed in Table 46, page 97 with the corresponding reference page number.

TABLE 45

RATINGS OF IMPORTANCE OF COURSE OBJECTIVES
AT ORJC FOR THE COURSE
INTERMEDIATE ACCOUNTING I

Accounting Course Objectives (Intermediate Accounting I)	Mean	*Page Number
Students should be able to:		
Identify the general and qualitative objectives of financial accounting	1.40	59
Identify the accounting concepts and principles which govern the professions' practices	1.40	59
Apply the accounting concepts and principles to the accounting process including the preparation of various financial statements	2.04	43
Apply the accounting concepts and principles as appropriate for the determination of asset and liability account balances	2.04	43

*Results of survey

Accounting Support Curriculum

From the Accounting Support Curriculum area, Business Report Writing was the only course that the respondents rated mandatory (mean rating of 1.60) that is not included in the present Applied Science in Accounting degree program at Oscar Rose Junior College. Other questions included in the questionnaires for this study that were compared are discussed in the following paragraphs.

To the question concerning the areas for which a two-year accounting graduate would qualify (Appendix E), the personnel managers indicated that they would place the two-year accounting graduate in the cost, payroll, and/or accounts payable area. See page 75 for results of the survey.

TABLE 46

RATINGS OF IMPORTANCE OF ADDITIONAL OBJECTIVES FOR ACCOUNTING CURRICULUM DEVELOPMENT

Job Characteristics Rated Mandatory	Mean	*Page Number
Skill in the analysis of tasks, transactions, and procedures	1.52	59
Problem-solving techniques	1.56	65
Communication of factors for decisions	1.60	65
Analyze the needs of accounting tasks in order to prepare reports electronically	1.64	57
Determine the needs for daily and/or weekly reports related to the accounting tasks assigned	1.64	57
Understand concepts of programming including how to organize problems to be programmed	1.72	57
Use a terminal for data input	1.72	57
Discuss computer uses with programmers	1.76	57
Use a terminal to retrieve information and reports	1.80	57
Interpret documentation of a software package	1.96	57

*For results of survey, see page reference number.

Forty-seven and six-tenths percent of the students reported they did not know what type of jobs to expect upon completion of their Applied Science in Accounting degree program. Results of the survey are listed on page 83.

The annual salary expected by the students upon graduation and employment was in agreement with what the personnel managers reported that they would be willing to pay. The average salary was reported to be from $11,500 to $12,000 a year. Results of the survey are listed on pages 75 and 84.

To the specific question, "The degree to which I understand the accounting skills demanded by prospective employers for entry-level employment," sixty-eight percent of the students indicated a very limited understanding. See page 86 for the results of the survey.

Summary

This chapter presented an analysis and comparisons of selected data received from the respondents to the current Applied Science in Accounting degree program at Oscar Rose Junior College.

The most significant factors in comparing the respondents' demands and the course offerings in accounting at Oscar Rose Junior College are in the following areas:

1. Additional accounting courses are needed.
2. Additonal knowledge and skill in the Electronic Data Processing field are required.
3. Development in the thought and communicative processes in accounting are needed.
4. Development of an awareness by the student body of the purposes of the Applied Science in Accounting program is needed.

The summary, findings, and recommendations of this study are presented in Chapter VIII.

CHAPTER VIII

SUMMARY, FINDINGS, AND RECOMMENDATIONS

Introduction

This study was conducted to determine the skills, knowledge, practice, and theory needed by the Applied Science in Accounting graduate for entry-level employment in the Oklahoma City SMSA. This was accomplished by (1) determining the accounting skills and knowledge demanded by comptrollers of manufacturing firms, (2) determining the academic level demanded by personnel managers of manufacturing firms, and (3) determining the students' perception of the Applied Science in Accounting degree program at Oscar Rose Junior College.

An analysis of information from a review of the literature produced a minute amount of data pertaining to Applied Science in Accounting curriculum development. Although reports concerned themselves with the effect of rapid change, due to the Electronic Data Processing Age on current and prospective academic demands, none offered positive solutions.

The procedure in this study included the development of three collection instruments which provided the framework for determining the accounting skills, knowledge, practice, and theory needed by Applied Science in Accounting graduates in the Oklahoma City SMSA.

Questionnaire Number One included sixty-five (65) manufacturing firms as the population of this study. These firms were chosen because

they were the total population of the manufacturing firms within the Oklahoma City SMSA with a minimum of two hundred and fifty (250) employees. The data collection instrument was personally delivered to twenty-five (25) manufacturing firms. A total of twenty-five (25) completed questionnaires were returned. Analysis and interpretation of the data collected from Questionnaire Number One was through the use of a mean rating. Any question (characteristic) which received a mean rating of the respondents of three-point-zero (3.0) or less was considered to be important for Applied Science in Accounting curriculum development.

Questionnaire Number Two included sixty-five (65) manufacturing firms as the population of this study. These firms were chosen because they were a total population of manufacturing firms in the Oklahoma City SMSA with more than two hundred and fifty (250) employees. These firms would include more than five (5) persons within their accounting department. The data collection instrument was completed by personal interview and telephone. A total of twenty-five (25) questionnaires were completed. Analysis and interpretation of Questionnaire Number Two was through a computer program designed to tabulate responses for evaluation.

Questionnaire Number Three included students enrolled in accounting classes at Oscar Rose Junior College as the population of this study. The data collection instruments was personally administered to ten (10) accounting classes (250 students) at Oscar Rose Junior College. Eighty-two (82) completed questionnaires, representing the students that were currently enrolled in the Applied Science in Accounting degree program, were coded and analyzed. Analysis and interpretation of the data collected was through a computer program designed to tabulate the responses for evaluation.

Findings

Applied Science in Accounting curriculum requirements were identified from the information collected from the survey respondents. This information was used to develop a comprehensive Applied Science in Accounting degree program at Oscar Rose Junior College.

Questionnaire Number One

Tabulation of the data collected from Questionnaire Number One were prepared to give the mean of the average ratings, by the educational level of the respondents, of the characteristics demanded by entry-level accounting employment. Of the eighty-five (85) characteristics on Questionnaire Number One, ninety-four percent (80 of 85) had a mean rating of three-point-zero (3.0) or less. According to the selection criteria, each characteristic should be a part of a planned Applied Science in Accounting curriculum.

The findings of Questionnaire Number One have led to the following:

1. The junior college accounting degree graduate does have, in most areas, the performance skills and theory to perform competently on entry-level accounting jobs.

2. The junior college accounting graduate absolutely needs to understand and have an application of accountant-machine interface in accounting practice. The Electronic Data Processing Era is upon us.

3. The present Applied Science in Accounting degree program needs to be revised to include courses in Budgeting, Electronic Data Processing, Financial Statement Analysis, Business Report Writing, and Accounting thought processes.

Questionnaire Number Two

Tabulation of the data collected from Questionnaire Number Two were prepared to determine the academic level demanded by prospective employers

in the Oklahoma City SMSA. According to the results of the data collected, there is a market for the Applied Science in Accounting graduate in the Oklahoma City SMSA.

The findings of Questionnaire Number Two have led to the following:

1. The two-year accounting graduate does meet the academic level demanded by prospective employers for entry-level employment.

2. The junior college accounting graduate does need some form of work experience in the way of a recognized internship model.

3. There is another population other than CPA's.

4. The junior college accounting graduate does not need an understanding and application in the related support area of college algebra.

Questionnaire Number Three

Tabulation of the data collected from Questionnaire Number Three were presented to determine the students' perception of the two-year Applied Science in Accounting degree program. According to the results of the data collected, the students at Oscar Rose Junior College do not understand the performance and employment implications of an Applied Science in Accounting program.

Implications for Curriculum Planning

The findings of this study have major implications for accounting curriculum development at Oscar Rose Junior College. The implications are:

A. The present evaluation of the adequacy of the educational training for the two-year accounting graduate has revealed a need to consider major restructuring of the accounting curriculum.

B. Consideration should be given to the inclusion of increased instruction in Electronic Data Processing.

C. Consideration should be given to the prospective employers' demands of developing the students ability in the thought processes in accounting.

D. Consideration should be given for the inclusion of an accounting field experience requirement.

Recommendations

The findings of this study indicate there is a job market for the two-year accounting graduate in manufacturing firms located in the Oklahoma City Standard Metropolitan Statistical Area. This researcher is recommending that several related topics for research be studied. These topics include:

1. Follow-up research be conducted of the Applied Science in Accounting graduate.

2. A study be made emphasizing the demands for accounting knowledge and skills by governmental agencies and financial institutions.

3. A study to examine the attitudes and perceptions of practitioners in the Oklahoma City SMSA toward the relevance of the Applied Science in Accounting programs for the next decade.

4. Replicate this study five years from the present to determine the changes.

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APPENDICES

APPENDIX A

PILOT STUDY

QUESTIONNAIRE NUMBER ONE

ACCOUNTING KNOWLEDGE AND/OR SKILLS NEEDED FOR

EMPLOYMENT AND ADVANCEMENT THEREIN

BY ENTRY-LEVEL EMPLOYERS IN ACCOUNTING RELATED JOBS

Research Questionnaire

DEFINITION: Entry-Level Employee - a person assuming initial employment in an accounting related job within a firm at a level of work which allows for vertical and/or horizontal mobility.

DIRECTIONS: Please place a check mark within the parentheses to indicate your position for the following statements. Please do not fill in the Card Code blank.

INDUSTRIAL CALSSIFICATION — CARD CODE

Financial ( )
Governmental ( ) 1.____
Manufacturing ( )

Number of employees within the firm _____ 2.____

RESPONDENT BACKGROUND INFORMATION

Educational Background (check highest level completed)

High School graduate ( )
Attended college but did not graduate ( )
Two-year college graduate ( )
Bachelor's degree-- business major ( )
Bachelor's degree-- non-business major ( ) 3.____
Master's degree ( )
Other training ( ) please specify_____

Age of respondent

25 - 34 ( )
35 - 44 ( )
45 - 54 ( ) 4.____
55 and over ( )

DIRECTIONS FOR COMPLETION OF QUESTIONNAIRE

Please consider the accounting knowledge and/or skills needed for employment and advancement therein by entry-level employees in accounting related jobs and the importance of the accounting knowledge and/or skills as a part of formal educational development. Place an "X" over the number within the parentheses to indicate whether you think the accounting knowledge and/or skill is (1) mandatory, (2) very important, (3) moderately important, (4) unimportant, or (5) not applicable. Please place only one "X" for each accounting knowledge and/or skill, but please respond to each statement. Do not fill in Card Code blank.

(1) Mandatory - accounting knowledge and/or skill is considered vital as it interrelates to the total accounting program and job performance.
(2) Very Important - accounting knowledge and/or skill is not considered vital but is considered to be of significant value as it interrelates to the total accounting program and job performance.
(3) Moderately Important - accounting knowledge and/or skill is considered to be of average importance as it interrelates to the total accounting program and job performance.
(4) Unimportant - accounting knowledge and/or skill is considered to have minor value as it interrelates to the total accounting program and job performance.
(5) Not Applicable - accounting knowledge and/or skill is considered to have no value as it interrelates to the total accounting program and job performance.

PRELIMINARY OPERATIONS TO BE PERFORMED: Accounting function - Identification. The entry-level employee should have an accounting background which enables them to:						Card Code
Analyze and classify source documents	(1)	(2)	(3)	(4)	(5)	5.___
Code source documents to chart of accounts	(1)	(2)	(3)	(4)	(5)	6.___
Check documents for common errors	(1)	(2)	(3)	(4)	(5)	7.___
Check accounts for clerical accuracy, postings, totals, and balances	(1)	(2)	(3)	(4)	(5)	8.___
Pre-audit transactions involving items of obligation and/or expenditure which are complicated because of the lack of uniformity	(1)	(2)	(3)	(4)	(5)	9.___
Code departmental information(classify costs)	(1)	(2)	(3)	(4)	(5)	10.___
Post-audit accounting records	(1)	(2)	(3)	(4)	(5)	11.___
Identify all revenue and expenditures	(1)	(2)	(3)	(4)	(5)	12.___
Verify and calculate inventories	(1)	(2)	(3)	(4)	(5)	13.___
Allocate and revise depreciation	(1)	(2)	(3)	(4)	(5)	14.___

DAILY OPERATIONAL TASKS: Accounting function - Recording(manual system.) The entry-level employee should have an accounting background which enables them to:						
Maintain journals(journalize)	(1)	(2)	(3)	(4)	(5)	15.___
Perform routine posting	(1)	(2)	(3)	(4)	(5)	16.___
Prepare bank deposits and bank reconciliations	(1)	(2)	(3)	(4)	(5)	17.___
Maintain Accounts Receivable & Accounts Payable ledgers	(1)	(2)	(3)	(4)	(5)	18.___
Prepare requisitions	(1)	(2)	(3)	(4)	(5)	19.___
Account for all encumbrances, expenditures, & disbursements	(1)	(2)	(3)	(4)	(5)	20.___
Account for spoilage, waste, defective units, and scrap	(1)	(2)	(3)	(4)	(5)	21.___
Compute payroll	(1)	(2)	(3)	(4)	(5)	22.___
Maintain tax records and obligations	(1)	(2)	(3)	(4)	(5)	23.___
Account for Federal Income Tax Obligations	(1)	(2)	(3)	(4)	(5)	24.___

PERIODIC OPERATIONS FOR MANAGEMENT DECISIONS: Accounting function - Summation of records and daily procedures. The entry-level employee should have an accounting background which enables them to prepare:						
An analysis worksheet(general ledger, aging receivables)	(1)	(2)	(3)	(4)	(5)	25.___
Interim statements(weekly and/or upon request)	(1)	(2)	(3)	(4)	(5)	26.___

Rate: (1) Mandatory, (2) Very Important, (3) Moderately Important, (4) Unimportant, or (5) Not Applicable

Analysis of expenditures (upon request) . . . . . (1) (2) (3) (4) (5) 27.___

Fundamental cost reports & analysis(weekly or upon request) . (1) (2) (3) (4) (5) 28.___

FISCAL PERIOD REQUIREMENTS: Accounting function - Interpretation. The entry-level employee should have an accounting background which enables them to prepare:

Fiscal period analysis papers (support documents) . . . . . (1) (2) (3) (4) (5) 29.___

Financial statements and schedules . . . . . (1) (2) (3) (4) (5) 30.___

Cash flow statements . . . . . (1) (2) (3) (4) (5) 31.___

Funds flow statements . . . . . (1) (2) (3) (4) (5) 32.___

Interim and end-of-period statements for funds . . . . . (1) (2) (3) (4) (5) 33.___

Tax returns and accompanying schedules . . . . . (1) (2) (3) (4) (5) 34.___

OPERATIONAL EFFICIENCY: Accounting function - Evaluation. The entry-level employee should have an accounting background which enables them to:

Measure cost efficiency . . . . . (1) (2) (3) (4) (5) 35.___

Determine profitability ratios (operational performance) . . (1) (2) (3) (4) (5) 36.___

Determine short-term solvency ratios . . . . . (1) (2) (3) (4) (5) 37.___

Determine long-term solvency ratios . . . . . (1) (2) (3) (4) (5) 38.___

Compute efficiency ratios (turnover) . . . . . (1) (2) (3) (4) (5) 39.___

Analyize and interpret comparative statements . . . . . (1) (2) (3) (4) (5) 40.___

Account for price level changes . . . . . (1) (2) (3) (4) (5) 41.___

MANAGEMENT SUPPORT AREA: Accounting function - Planning and Control. The entry-level employee should have an accounting background which enables them to:

Calculate & prepare schedules to support the master budget . (1) (2) (3) (4) (5) 42.___

Compute unit costs (material, labor, & overhead) . . . . . (1) (2) (3) (4) (5) 43.___

Determine and assign inventory costs . . . . . (1) (2) (3) (4) (5) 44.___

Allocate overhead for product costing . . . . . (1) (2) (3) (4) (5) 45.___

Calculate and compare capital investment opportunities . . . (1) (2) (3) (4) (5) 46.___

Assist in establishing & revising standard costs . . . . . (1) (2) (3) (4) (5) 47.___

Prepare cost-volume-profit analysis . . . . . (1) (2) (3) (4) (5) 48.___

Assist in the following Audit procedures:

A. Preparation of working papers . . . . . (1) (2) (3) (4) (5) 49.___

B. Compliance test . . . . . (1) (2) (3) (4) (5) 50.___

C. Tests of transactions . . . . . (1) (2) (3) (4) (5) 51.___

D. Test of account balances . . . . . (1) (2) (3) (4) (5) 52.___

E. Review of operations . . . . . (1) (2) (3) (4) (5) 53.___

F. Reports to management . . . . . (1) (2) (3) (4) (5) 54.___

SYSTEMS INFORMATION: Accounting function - Accounting information and reports from system(EDP.) The entry-level employee should have an accounting background which enables them to:

Analyize the needs of accounting tasks in order to prepare reports electronically . . . . . (1) (2) (3) (4) (5) 55.___

Understand concepts of programming including how to organize problems to be programmed . . . . . (1) (2) (3) (4) (5) 56.___

Flowchart solutions to problems . . . . . (1) (2) (3) (4) (5) 57.___

Understand at least one programming language . . . . . (1) (2) (3) (4) (5) 58.___

Rate: (1) Mandatory, (2) Very Important, (3) Moderately Important, (4) Unimportant, or (5) Not Applicable

Use a terminal for data input . . . . . (1) (2) (3) (4) (5) 59.___

Use a terminal to retrieve information and reports . . . . . (1) (2) (3) (4) (5) 60.___

Have a general understanding of the concepts of a data base organization . . . . . (1) (2) (3) (4) (5) 61.___

Be aware of the process and the ability to modify a data base organization . . . . . (1) (2) (3) (4) (5) 62.___

Understand the need for and the use of a data base dictionary . . . . . (1) (2) (3) (4) (5) 63.___

Determine the needs for daily and/or weekly reports related to the accounting tasks assigned . . . . . (1) (2) (3) (4) (5) 64.___

Discuss computer uses with programmers . . . . . (1) (2) (3) (4) (5) 65.___

Interpret documentation of a software package . . . . . (1) (2) (3) (4) (5) 66.___

ACCOUNTING CURRICULUM: Accounting courses offered in an Applied Science in Accounting program. The entry-level employee should have an understanding and application in:

A. Elementary Accounting Principles & Concepts . . . . (1) (2) (3) (4) (5) 67.___

B. Cost Accounting . . . . . (1) (2) (3) (4) (5) 68.___

C. Intermediate Accounting . . . . . (1) (2) (3) (4) (5) 69.___

D. Governmental Accounting . . . . . (1) (2) (3) (4) (5) 70.___

E. Managerial Accounting . . . . . (1) (2) (3) (4) (5) 71.___

F. Auditing . . . . . (1) (2) (3) (4) (5) 72.___

G. Tax . . . . . (1) (2) (3) (4) (5) 73.___

H. Budgeting . . . . . (1) (2) (3) (4) (5) 74.___

I. Financial Statement Analysis . . . . . (1) (2) (3) (4) (5) 75.___

J. Other accounting courses(please specify)_____

_____

ACCOUNTING SUPPORT CURRICULUM: Courses from the related business core that help to develop the student. The entry-level employee should have performance skills and knowledge from:

A. Business Law . . . . . (1) (2) (3) (4) (5) 76.___

B. Management . . . . . (1) (2) (3) (4) (5) 77.___

C. Business Math . . . . . (1) (2) (3) (4) (5) 78.___

D. Data Processing . . . . . (1) (2) (3) (4) (5) 79.___

E. Economics . . . . . (1) (2) (3) (4) (5) 80.___

F. Business Communications . . . . . (1) (2) (3) (4) (5) 81.___

G. Other related business core courses(please specify)

_____

ACCOUNTING PERFORMANCE: Thought processes involved in accounting performance. The entry-level employee should have developed their:

Skill in the analysis of tasks, transactions, & procedures . (1) (2) (3) (4) (5) 82.___

Problem-solving techniques . . . . . (1) (2) (3) (4) (5) 83.___

Communication of decision factors . . . . . (1) (2) (3) (4) (5) 84.___

Other thought processes(please specify)_____

APPENDIX B

PILOT STUDY

QUESTIONNAIRE NUMBER TWO

ACCOUNTING KNOWLEDGE AND/OR SKILLS NEEDED FOR

EMPLOYMENT AND ADVANCEMENT THEREIN

BY ENTRY-LEVEL EMPLOYEES IN ACCOUNTING RELATED JOBS

Research Questionnaire

METHOD OF DATA COLLECTION: Personal Interview with Personnel Managers

DEFINITION: Entry-Level Employee - a person assuming initial employment in an accounting related job within a manufacturing firm at a level of work which allows for vertical and/or horizontal mobility.

RESPONDENT BACKGROUND INFORMATION — Card Code

Educational Background (highest level completed)

High School graduate ( )
Attended college but did not graduate ( )
Two-year college graduate ( )
Bachelor's degree--business major ( )
Bachelor's degree--non-business major ( )
Master's degree ( )
Other training ( )
please specify_____

103.____

Age of Respondent

25 - 34 ( )
35 - 44 ( )
45 - 54 ( )
55 and over ( )

104.____

TYPE OF COST SYSTEM UTILIZED

Job Order Cost ( )
Process Cost ( )

105.____

Does your firm use a Standard Cost System? Yes ( ) No ( ) 106.____

ENTRY-LEVEL ACCOUNTING PERSONNEL INFORMATION

Present number of accounting personnel_____ 107.____

Present number of accounting personnel with less than a four-year degree_____ 108.____

Projected need for entry-level accounting personnel by 1985_____ 109.____

Would you hire a two-year Applied Science in Accounting graduate? Yes ( ) No ( ) Undecided ( ) 110.____

If so, please check as many of the areas for which they qualify and are most often placed:

General Ledger	( )	Budget	( )	111.____
Management	( )	Auditing	( )	
Assets	( )	Other Areas	( )	
Cost	( )	please specify		
Tax	( )	_____		

What beginning annual salary should be two-year Applied Science in Accounting graduate expect? $_____to $_____ 112.____

Should the two-year Applied Science in Accounting graduate have some form of work experience in the way of a recognized internship model? Yes ( ) No ( ) Undecided ( ) 113.____

Does the two-year Applied Science in Accounting graduate need an understanding and application in the related support area of college algebra? Yes ( ) No ( ) Undecided ( ) 114.____

APPENDIX C

PILOT STUDY

QUESTIONNAIRE NUMBER THREE

STUDENTS' PERCEPTIONS OF AN

APPLIED SCIENCE DEGREE IN ACCOUNTING

Research Questionnaire

DEFINITION: Applied Science Degree in Accounting - A planned two-year accounting program designed for 62 hours of study of which 15 hours are in accounting.

DIRECTIONS: Please place a check mark within the parentheses indicating your position for the following statements. Place only one check mark for each statement. Do not fill in the Card Code blank.

STUDENT CLASSIFICATION — Card Code

Credit Hours(excluding this semester)

Less than 12 hours ( )
12 hours but less than 24 ( )
24 hours but less than 36 ( )
36 hours but less than 48 ( )
48 hours but less than 60 ( )
60 hours or more ( )

1.____

Degree Program

Associate of Applied Science in Accounting ( )
Associate of Arts (transfer program) ( )
Certificate program ( )
Other(please specify)_____( )

2.____

STUDENT BACKGROUND INFORMATION

Age of Student

Under 25 ( )
25 - 34 ( )
35 - 44 ( )
45 - 54 ( )
55 and over ( )

3.____

Are you employed? Part time ( ) Full time ( ) Not employed ( )

4.____

If employed, please check the type of firm:

Financial ( )
Governmental ( )
Manufacturing ( )
Retail ( )
Other(please specify)_____( )

5.____

If employed, type of duties that you are presently performing:

General office work ( )
Clerical work ( )
Accounting work ( )
Sales office work ( )
Production work ( )
Administrative work ( )
Other(please specify)_____( )

6.____

EXPECTATIONS FROM THE APPLIED SCIENCE DEGREE IN ACCOUNTING

Primary source which helped you become interested in accounting:

Parents ( )
Brother or sister ( )
Other relative(please specify)_____( )
Counselor(this school) ( )
Counselor(high school) ( )
Instructor(this school) ( )
Instructor(high school) ( )
Friend ( )
Other(please specify)_____( )
_____ 7.___

The Applied Science Degree in Accounting will be used for the following:

Seek employment ( )
Vertical or horizontal promotion ( )
Change of firm ( )
Other(please specify)_____( ) 8.___

The type of job I expect after I complete the degree is:

Bookkeeper ( )
Accounting clerk I ( )
Accounting clerk II ( )
Accounting clerk III ( )
Accountant I ( )
Do not know ( ) 9.___

The annual salary I expect from my first job after I complete the degree is:

Below 8000 ( )
8000 - 8999 ( )
9000 - 9999 ( )
10,000 - 10,999 ( )
11,000 - 11,999 ( )
12,000 and over ( ) 10.___

The type of employment I plan to seek after I complete the degree is:

Financial ( )
Governmental ( )
Manufacturing ( )
Retail ( )
Other(please specify)_____( ) 11.___

My commitment to completing the Applied Science in Accounting program is:

Weak ( )
Moderate ( )
Very strong ( )
Does not apply ( ) 12.___

The degree to which I understand the accounting skills demanded by prospective employers for entry-level employment in accounting:

Do not understand ( )
Limited Understanding ( )
Reasonable Understanding ( )
Fully understand ( ) 13.___

The degree to which I understand other competencies demanded by prospective employers for entry-level employment in accounting:

Do not understand ( )
Limited Understanding ( )
Reasonable Understanding ( )
Fully understand ( ) 14.___

The Applied Science Degree in Accounting will fulfill:

Short range objective ( )
Intermediate objective ( )
Long range objective ( )
Does not apply for me ( ) 15.___

APPENDIX D

QUESTIONNAIRE NUMBER ONE

ACCOUNTING KNOWLEDGE AND/OR SKILLS NEEDED FOR EMPLOYMENT AND ADVANCEMENT THEREIN BY ENTRY-LEVEL EMPLOYEES IN ACCOUNTING RELATED JOBS

Research Questionnaire

DEFINITION: Entry-Level Employee - a person assuming initial employment in an accounting related job within a manufacturing firm at a level of work which allows for vertical and/or horizontal mobility.

DIRECTIONS: Please place a check mark within the parentheses to indicate your position for the following statements. Please do not fill in the Card Code blank.

RESPONDENT BACKGROUND INFORMATION — Card Code

Educational Background (check highest level completed)

High School graduate ( )
Attended college but did not graduate ( )
Two-year college graduate ( )
Bachelor's degree--business major ( )
Bachelor's degree--non-business major ( )
Master's degree ( )
Other training ( )
please specify_____

1.___

Age of Respondent

25 - 34 ( )
35 - 44 ( )
45 - 54 ( )
55 and over ( )

2.___

TYPE OF COST SYSTEM UTILIZED

Job Order Cost ( ) Process Cost ( ) 3.___

Does your firm use a Standard Cost System? Yes ( ) No ( ) 4.___

ENTRY-LEVEL ACCOUNTING PERSONNEL INFORMATION

Would you hire a two-year Applied Science in Accounting graduate?

Yes ( ) No ( ) Undecided ( ) 5.___

If so, please check as many of the areas for which they qualify and are most often placed:

General Ledger ( )
Management ( )
Assets ( )
Cost ( )
Tax ( )
Budget ( )
Auditing ( )
Other areas ( )
please specify_____

6.___

DIRECTIONS FOR COMPLETION OF QUESTIONNAIRE

Please consider the accounting knowledge and/or skills needed for employment and advancement therein by entry-level employees in accounting related jobs and the importance of the accounting knowledge and/or skills as a part of formal educational development. Place an "X" over the number within the parentheses to indicate whether you think the accounting knowledge and/or skill is (1) mandatory, (2) very important, (3) moderately important, (4) unimportant, or (5) not applicable. Please place only one "X" for each accounting knowledge and/or skill, but please respond to each statement. Do not fill in the Card Code blank.

(1)	Mandatory	- accounting knowledge and/or skill is considered vital as it interrelates to the total accounting program and job performance.
(2)	Very Important	- accounting knowledge and/or skill is not considered vital but is considered to be of significant value as it interrelates to the total accounting program and job performance.
(3)	Moderately Important	- accounting knowledge and/or skill is considered to be of average importance as it interrelates to the total accounting program and job performance.
(4)	Unimportant	- accounting knowledge and/or skill is considered to have minor value as it interrelates to the total accounting program & job performance.
(5)	Not Applicable	- accounting knowledge and/or skill is considered to have no value as interrelates to the total accounting program and job performance.

PRELIMINARY OPERATIONS TO BE PERFORMED: Accounting function - Identification. The entry-level employee should have an accounting background which enables them to:						Card Code
Analyze and classify source documents	(1)	(2)	(3)	(4)	(5)	7.___
Code source documents to chart of accounts	(1)	(2)	(3)	(4)	(5)	8.___
Check documents for common errors	(1)	(2)	(3)	(4)	(5)	9.___
Check accounts for clerical accuracy, postings, totals, and balances	(1)	(2)	(3)	(4)	(5)	10.___
Pre-audit transaction papers involving items of obligation and/or expenditure which are complicated because of the lack of uniformity	(1)	(2)	(3)	(4)	(5)	11.___
Code departmental information(classify costs)	(1)	(2)	(3)	(4)	(5)	12.___
Post-audit accounting records	(1)	(2)	(3)	(4)	(5)	13.___
Identify all revenue and expenditures	(1)	(2)	(3)	(4)	(5)	14.___
Verify and calculate inventories	(1)	(2)	(3)	(4)	(5)	15.___
Allocate and revise depreciation	(1)	(2)	(3)	(4)	(5)	16.___
Other preliminary operations(please specify)_____						17.___

DAILY OPERATIONAL TASKS: Accounting function - Recording(manual system.) The entry-level employee should have an accounting background which enables them to:						
Maintain journals (journalize)	(1)	(2)	(3)	(4)	(5)	18.___
Perform routine posting	(1)	(2)	(3)	(4)	(5)	19.___
Prepare bank deposits & bank reconcilations	(1)	(2)	(3)	(4)	(5)	20.___
Maintain Accounts Receivable & Accounts Payable ledgers	(1)	(2)	(3)	(4)	(5)	21.___
Prepare requisitions	(1)	(2)	(3)	(4)	(5)	22.___

DAILY OPERATIONAL TASKS (continued) Rate: (1) Mandatory, (2) Very Important, (3) Moderately Important, (4) Unimportant, or (5) Not Applicable

Account for all expenditures and disbursements	(1)	(2)	(3)	(4)	(5)	23.___
Account for spoilage, defective units, & scrap	(1)	(2)	(3)	(4)	(5)	24.___
Compute payroll	(1)	(2)	(3)	(4)	(5)	25.___
Maintain tax records and obligations	(1)	(2)	(3)	(4)	(5)	26.___
Account for Federal Income Tax Obligations	(1)	(2)	(3)	(4)	(5)	27.___
Other Daily Operational tasks(please specify)_____						28.___

PERIODIC OPERATIONS FOR MANAGEMENT DECISIONS: Accounting function - Summation of records and daily procedures. The entry-level employee should have an accounting background which enables them to prepare:

An analysis worksheet (gen. ledger, aging receivables)	(1)	(2)	(3)	(4)	(5)	29.___
Interim statements (weekly and/or upon request)	(1)	(2)	(3)	(4)	(5)	30.___
Analysis of expenditures (upon request)	(1)	(2)	(3)	(4)	(5)	31.___
Fundamental cost reports & analysis (daily, etc.)	(1)	(2)	(3)	(4)	(5)	32.___
Other periodic operations(please specify)_____						33.___

FISCAL PERIOD REQUIREMENTS: Accounting function - Interpretation. The entry-level employee should have an accounting background which enables them to prepare:

Fiscal period support documents	(1)	(2)	(3)	(4)	(5)	34.___
Financial statements and schedules	(1)	(2)	(3)	(4)	(5)	35.___
Cash flow statements	(1)	(2)	(3)	(4)	(5)	36.___
Funds flow statements	(1)	(2)	(3)	(4)	(5)	37.___
Interim & end-of-period statements for funds	(1)	(2)	(3)	(4)	(5)	38.___
Tax returns and accompanying schedules	(1)	(2)	(3)	(4)	(5)	39.___
Other fiscal period requirements(please specify)_____						40.___

OPERATIONAL EFFICIENCY: Accounting function - Evaluation. The entry-level employee should have an accounting background which enables them to:

Measure cost efficiency	(1)	(2)	(3)	(4)	(5)	41.___
Determine profitability ratios	(1)	(2)	(3)	(4)	(5)	42.___
Determine short-term solvency ratios	(1)	(2)	(3)	(4)	(5)	43.___
Determine long-term solvency ratios	(1)	(2)	(3)	(4)	(5)	44.___
Compute efficiency ratios (turnover)	(1)	(2)	(3)	(4)	(5)	45.___
Analyze and interpret comparative statements	(1)	(2)	(3)	(4)	(5)	46.___
Account for price level changes	(1)	(2)	(3)	(4)	(5)	47.___
Other operational efficiency tasks(please specify)_____						48.___

MANAGEMENT SUPPORT AREA: Accounting function - Planning and Control. The entry-level employee should have an accounting background which enables them to:

Calculate and prepare schedules to support the master budget	(1)	(2)	(3)	(4)	(5)	49.___
Compute unit costs (material, labor, & overhead)	(1)	(2)	(3)	(4)	(5)	50.___
Determine and assign inventory costs	(1)	(2)	(3)	(4)	(5)	51.___
Allocate overhead for product costing	(1)	(2)	(3)	(4)	(5)	52.___
Calculate & compare capital investment opportunities	(1)	(2)	(3)	(4)	(5)	53.___
Assist in establishing & revising standard costs	(1)	(2)	(3)	(4)	(5)	54.___
Prepare cost-volume-profit analysis	(1)	(2)	(3)	(4)	(5)	55.___

Assist in the following Internal Audit procedures:

A. Preparation of working papers	(1)	(2)	(3)	(4)	(5)	56.___
B. Compliance test	(1)	(2)	(3)	(4)	(5)	57.___
C. Tests of transactions	(1)	(2)	(3)	(4)	(5)	58.___
D. Test of account balances	(1)	(2)	(3)	(4)	(5)	59.___
E. Review of operations	(1)	(2)	(3)	(4)	(5)	60.___
F. Reports to management	(1)	(2)	(3)	(4)	(5)	61.___

Other Management Support Area tasks(please specify)_____ 62.___

SYSTEMS INFORMATION: Accounting function - Accounting information and reports from system(EDP.) The entry-level employee should have an accounting background which enables them to:

Analyze the needs of accounting tasks in order to prepare reports electronically	(1)	(2)	(3)	(4)	(5)	63.___
Understand concepts of programming including how to organize problems to be programmed	(1)	(2)	(3)	(4)	(5)	64.___
Flowchart solutions to problems	(1)	(2)	(3)	(4)	(5)	65.___
Understand at least one programming language	(1)	(2)	(3)	(4)	(5)	66.___
Use a terminal for data input	(1)	(2)	(3)	(4)	(5)	67.___
Use a terminal to retrieve information and reports	(1)	(2)	(3)	(4)	(5)	68.___
Have a general understanding of the concepts of a data base organization	(1)	(2)	(3)	(4)	(5)	69.___
Be aware of the process and the ability to modify a data base organization	(1)	(2)	(3)	(4)	(5)	70.___
Understand the need for and the use of a data base dictionary	(1)	(2)	(3)	(4)	(5)	71.___
Determine the needs for daily and/or weekly reports related to the accounting tasks assigned	(1)	(2)	(3)	(4)	(5)	72.___
Discuss computer uses with programmers	(1)	(2)	(3)	(4)	(5)	73.___
Interpret documentation of a software package	(1)	(2)	(3)	(4)	(5)	74.___

Other systems information tasks(please specify)_____ 75.___

ACCOUNTING CURRICULUM: Accounting courses offered in an Applied Science in Accounting program. The entry-level employee should have an understanding and application in:

A.	Elementary Accounting Principles & Concepts	(1)	(2)	(3)	(4)	(5)	76.___
B.	Cost Accounting	(1)	(2)	(3)	(4)	(5)	77.___
C.	Intermediate Accounting	(1)	(2)	(3)	(4)	(5)	78.___
D.	Governmental Accounting	(1)	(2)	(3)	(4)	(5)	79.___
E.	Managerial Accounting	(1)	(2)	(3)	(4)	(5)	80.___
F.	Auditing	(1)	(2)	(3)	(4)	(5)	81.___
G.	Tax	(1)	(2)	(3)	(4)	(5)	82.___
H.	Budgeting	(1)	(2)	(3)	(4)	(5)	83.___
I.	Financial Statement Analysis	(1)	(2)	(3)	(4)	(5)	84.___
J.	Accounting Simulation (using a computer)	(1)	(2)	(3)	(4)	(5)	85.___
K.	Accounting with a Small Computer	(1)	(2)	(3)	(4)	(5)	86.___
L.	Other Accounting Courses(please specify)_____						87.___

ACCOUNTING SUPPORT CURRICULUM: Courses from the related business core that help to develop the student. The entry-level employee should have performance skills and knowledge from:

A.	Business Law	(1)	(2)	(3)	(4)	(5)	88.___
B.	Management	(1)	(2)	(3)	(4)	(5)	89.___
C.	Business Math	(1)	(2)	(3)	(4)	(5)	90.___
D.	Computer Programming I	(1)	(2)	(3)	(4)	(5)	91.___
E.	Computer Programming II	(1)	(2)	(3)	(4)	(5)	92.___
F.	Economics	(1)	(2)	(3)	(4)	(5)	93.___
G.	Business Communications	(1)	(2)	(3)	(4)	(5)	94.___
H.	Business Report Writing	(1)	(2)	(3)	(4)	(5)	95.___
I.	Other related business core courses(please specify)_____						96.___

ACCOUNTING PERFORMANCE: Thought processes involved in accounting performance. The entry-level employee should have developed their:

Skill in the analysis of tasks, transactions, and procedures	(1)	(2)	(3)	(4)	(5)	97.___
Problem-solving techniques	(1)	(2)	(3)	(4)	(5)	98.___
Communication of factors for decisions	(1)	(2)	(3)	(4)	(5)	99.___
Ability to compare possible alternative decisions for cost effectiveness	(1)	(2)	(3)	(4)	(5)	100.___
Other thought processes(please specify)_____						101.___

GENERAL REMARKS ABOUT QUESTIONNAIRE_____ 102.____

THANK YOU FOR YOUR EXPERTISE.

Please return questionnaire
to: Earl L. Smith
2701 Briarcliff
Norman, Oklahoma 73071

APPENDIX E

QUESTIONNAIRE NUMBER TWO

ACCOUNTING KNOWLEDGE AND/OR SKILLS NEEDED FOR

EMPLOYMENT AND ADVANCEMENT THEREIN

BY ENTRY-LEVEL EMPLOYEES IN ACCOUNTING RELATED JOBS

Research Questionnaire

METHOD OF DATA COLLECTION: Personal Interview with Personnel Managers

DEFINITION: Entry-Level Employee - a person assuming initial employment in an accounting related job within a manufacturing firm at a level of work which allows for vertical and/or horizontal mobility.

RESPONDENT BACKGROUND INFORMATION — Card Code

Educational Background (highest level completed)

High School graduate ( )
Attended college but did not graduate ( )
Two-year college graduate ( )
Bachelor's degree--business major ( )
Bachelor's degree--non-business major ( )
Master's degree ( )
Other training ( )
please specify_____

101.____

Age of Respondent

25 - 34 ( )
35 - 44 ( )
45 - 54 ( )
55 and over ( )

104.____

TYPE OF COST SYSTEM UTILIZED

Job Order Cost ( ) Process Cost ( ) 105.____

Does your firm use a Standard Cost System? Yes ( ) No ( ) 106.____

ENTRY-LEVEL ACCOUNTING PERSONNEL INFORMATION

Present number of accounting personnel_____ 107.____

Present number of accounting personnel with less than a four-year degree_____ 108.____

Projected need for entry-level accounting personnel by 1985_____ 109.____

Would you hire a two-year Applied Science in Accounting graduate? Yes ( ) No ( ) Undecided ( ) 110.____

If so, please check as many of the areas for which they qualify and are most often placed:

General Ledger	( )	Budget	( )	111.____
Management	( )	Auditing	( )	
Assets	( )	Other Areas	( )	
Cost	( )	please specify	_____	
Tax	( )	_____		

What beginning annual salary should be two-year Applied Science in Accounting graduate expect? $_____to $_____ 112.____

Should the two-year Applied Science in Accounting graduate have some form of work experience in the way of a recognized internship model? Yes ( ) No ( ) Undecided ( ) 113.____

Does the two-year Applied Science in Accounting graduate need an understanding and application in the related support area of college algebra? Yes ( ) No ( ) Undecided ( ) 114.____

APPENDIX F

QUESTIONNAIRE NUMBER THREE

STUDENTS' PERCEPTIONS OF AN

APPLIED SCIENCE DEGREE IN ACCOUNTING

Research Questionnaire

DEFINITION: Applied Science Degree in Accounting - A planned two-year accounting program designed for 62 hours of study of which 15 hours are in accounting.

DIRECTIONS: Please place a check mark within the parentheses indicating your position for the following statements. Place only one check mark for each statement. Do not fill in the Card Code blank.

STUDENT CLASSIFICATION — Card Code

Credit Hours(excluding this semester)

Less than 12 hours ( )
12 hours but less than 24 ( )
24 hours but less than 36 ( )
36 hours but less than 48 ( )
48 hours but less than 60 ( )
60 hours or more ( )

1.____

Degree Program

Associate of Applied Science in Accounting ( )
Associate of Arts (transfer program) ( )
Certificate program ( )
Other(please specify)_____( )

2.____

STUDENT BACKGROUND INFORMATION

Age of Student

Under 25 ( )
25 - 34 ( )
35 - 44 ( )
45 - 54 ( )
55 and over ( )

3.____

Are you employed? Part time ( ) Full time ( ) Not employed ( )

4.____

If employed, please check the type of firm:

Financial ( )
Governmental ( )
Manufacturing ( )
Retail ( )
Other(please specify)_____( )

5.____

If employed, type of duties that you are presently performing:

General office work ( )
Clerical work ( )
Accounting work ( )
Sales office work ( )
Production work ( )
Administrative work ( )
Other(please specify)_____( )

6.____

EXPECTATIONS FROM THE APPLIED SCIENCE DEGREE IN ACCOUNTING

Primary source which helped you become interested in accounting:

Parents ( )
Brother or sister ( )
Other relative(please specify)_____( )
Counselor(this school) ( )
Counselor(high school) ( )
Instructor(this school) ( )
Instructor(high school) ( )
Friend ( )
Other(please specify)_____( )
_____ 7.____

The Applied Science Degree in Accounting will be used for the following:

Seek employment ( )
Vertical or horizontal promotion ( )
Change of firm ( )
Other(please specify)_____( ) 8.____

The type of job I expect after I complete the degree is:

Bookkeeper ( )
Accounting clerk I ( )
Accounting clerk II ( )
Accounting clerk III ( )
Accountant I ( )
Do not know ( ) 9.____

The annual salary I expect from my first job after I complete the degree is:

Below 8000 ( )
8000 - 8999 ( )
9000 - 9999 ( )
10,000 - 10,999 ( )
11,000 - 11,999 ( )
12,000 and over ( ) 10.____

The type of employment I plan to seek after I complete the degree is:

Financial ( )
Governmental ( )
Manufacturing ( )
Retail ( )
Other(please specify)_____( ) 11.____

My commitment to completing the Applied Science in Accounting program is:

Weak ( )
Moderate ( )
Very strong ( )
Does not apply ( ) 12.____

The degree to which I understand the accounting skills demanded by prospective employers for entry-level employment in accounting:

Do not understand ( )
Limited Understanding ( )
Reasonable Understanding ( )
Fully understand ( ) 13.____

The degree to which I understand other competencies demanded by prospective employers for entry-level employment in accounting:

Do not understand ( )
Limited Understanding ( )
Reasonable Understanding ( )
Fully understand ( ) 14.____

The Applied Science Degree in Accounting will fulfill:

Short range objective ( )
Intermediate objective ( )
Long range objective ( )
Does not apply for me ( ) 15.____

APPENDIX G

COVER LETTER ACCOMPANYING

QUESTIONNAIRE NUMBER ONE

COVER LETTER ACCOMPANYING QUESTIONNAIRE TO PERSONS IN CHARGE OF THE ACCOUNTING DEPARTMENT

We have a problem here at Oscar Rose Junior College in our Accounting Department and we think you can help solve it. As a community college, we have essentially two types of students: those who transfer to a four-year university after they complete their studies here, and those who wish to enter the employment market immediately upon receiving their two-year Applied Science in Accounting degree from us.

The study that I am conducting, which is the reason for this letter, has a two-fold purpose: to ascertain what prospective employers of two-year college graduates require or prefer in the academic accounting background and to recommend revisions in the accounting curriculum in light of those requirements.

As one of the more important employers in the Oklahoma City Standard Metropolitan Statistical Area, your ideas and opinions would be invaluable in helping us better prepare our students for the realities of the business world. It would be most appreciated if you or someone in your organization would take a few minutes to answer the questions on the attached sheet.

Thank you for your cooperation.

Respectfully,

Earl L. Smith
Accounting Dept.

Enclosures (3)

APPENDIX H

LETTER REQUESTING PERMISSION TO CONDUCT SURVEY

AT OSCAR ROSE JUNIOR COLLEGE

OSCAR ROSE JUNIOR COLLEGE

Interoffice Communication

LETTER REQUESTING PERMISSION TO CONDUCT STUDY

TO: Joy Rapp, Division Chairperson DATE: 11/8/79

FROM: Earl L. Smith SUBJECT: Survey

This letter is to request permission to conduct a survey of the Applied Science in Accounting candidates at Oscar Rose Junior College for the Fall semester, of the 1979-80 school year.

The survey will be used to collect data for a research study by the undersigned, a doctoral candidate at the University of Oklahoma. The results from this research project should be useful for junior college accounting curriculum development.

I have visited with the Oscar Rose accounting faculty and with your approval they have given me permission to schedule the survey.

Respectfully,

Earl L. Smith

Earl L. Smith
Research Assistant

APPENDIX I

APPLIED SCIENCE IN ACCOUNTING

DEGREE WORKSHEET

OSCAR ROSE JUNIOR COLLEGE
Business Division

ASSOCIATE IN APPLIED SCIENCE
Degree Worksheet
EMPHASIS IN ACCOUNTING

				Semester Taken	Grade	Hours
I.	General Education Requirements - 23-24 Hours					
	ENGL	1313	English Composition			
	ENGL	1403	Communications OR ENGL 1323			
	HIST	1213	U.S. History to 1877 OR HIST 1223			
	POLS	2303	American National Government			
	BA	1103	Business Math			
	MATH/ SCIENCE	3-4	(3-4 Hours Math or Science)			
	PSYC	1203	Personal Adjustment OR PSYC 2203, General Psychology			
	PE	2				
			(May be Activity or other PE)			
II.	Program Requirements - 15 Hours					
	ACCT	2103	Principles of Accounting I			
	ACCT	2203	Principles of Accounting II			
	ACCT	2313	Intermediate Accounting I			
	ACCT	2323	Cost Accounting			
	ACCT	2403	Personal Income Tax			
III.	Other Requirements - 23-24 Hours Must be selected from the following:					
	BA	2203	Business Law I			
	BA	2503	Business Communications			
	DP	1103	Introduction to Data Processing			
	DP	1133	Programming Fundamentals OR DP 1203 OR DP 2103			
	ECON	2303	Economics I (Micro)			
	*MATH	1153	College Algebra			
	*MATH	2144	Elementary Statistics			
	MM	2103	Principles of Management			

*Satisfies the Math/Science requirement

Fall, 1978

APPENDIX J

COURSE OBJECTIVES

COURSE OBJECTIVES TAKEN FROM OSCAR ROSE JUNIOR COLLEGE COURSE SYLLABI

Course Objectives for Accounting I - 2103. Upon completion of the course, students should be able to:

1. List and define the basic accounting concepts and principles.
2. Identify the additional accounts for different types of enterprises.
3. Appraise decision-making processes.
4. Recognize the advantages and disadvantages of buying and selling on extended time by analyzing interest payments.
5. Compare the methods for handling bad debts.
6. Apply the different methods of inventory cost.
7. Analyze the application of the matching principle.
8. Compare the advantages and disadvantages of Lifo, Fifo, and weighted average in costing inventories.
9. Compare and contrast the periodic and perpetual inventory system.
10. Compare the retail and gross profit methods of estimating inventories.
11. Recognize the significance of depreciation.
12. Identify the characteristics of natural resorces & intangible assets.
13. Apply and evaluate the most common methods of allocating and revising depreciation.
14. Distinguish between a capital expenditure and a revenue expenditure.
15. Recognize the income tax law for exchanging plant assets.
16. Distinguish among an ordinary repair, an extraordinary repair, and a betterment.
17. Apply the laws, programs, and procedures of payroll accounting.
18. Identify the characteristics of a partnership.
19. Recognize the nature of partnership earnings.
20. Apply the mechanics of the dissolution & liquidation of a partnership.

Course Objectives for Accounting II - 2203. Upon completion of the course, students should be able to:

1. List and identify the characteristics of corporation accounting.
2. Analyze transactions involving stock.
3. Recognize the significance of retained earnings.
4. Analyze transactions involving long-term liabilities & investments.
5. Identify the nature of cash and fund flows.
6. Analyze and compare financial statements.
7. Account for price level changes.
8. Identify the purposes of departmentalization.
9. List and identify the characteristics of a manufacturing concern.
10. Recognize the nature of the cost principle which underlies accounting records and reports.
11. Prepare a master budget.
12. Analyze the effect of changes in cost and sales levels on the income of a business.
13. Prepare fixed and flexible budgets and analyze their relationship to a standard cost system.
14. Recognize the importance of accounting in management decicion-making.

Course Objectives for Cost Accounting I - 2323. Upon completion of the course, students should be able to:

1. Identify the two basic management functions.
2. Identify the tasks of a cost accounting system.
3. Define the cost concept.
4. List and define the uses and classifications of costs.
5. Recognize the significance and analyze the design and operation of a cost accounting information system through an understanding of: A) the organizational structure of a company; B) the manufacturing procedure and processes; and C) the type of cost information desired and required by all levels of management.

Course Objectives for Cost Accounting I (continued)

6. Apply the mechanics of double-entry accounting through analyzing and journalizing transactions dealing with a job order cost system and a process cost system.

7. Recognize the need for proper planning and control of: A) Factory Overhead; B) Labor Costs; and C) Material Costs.

Course Objectives for Intermediate Accounting I - 2313. Upon completion of the course, students should be able to:

1. Identify the general and qualitative objectives of financial accounting.

2. Identify the accounting concepts and principles which govern the profession's practices.

3. Apply the accounting concepts and principles to the accounting process including the preparation of the various financial statements.

4. Apply the accounting concepts and principles as appropriate for the determination of the following asset and liability account balances:

   A. Cash
   B. Temporary Investments
   C. Accounts & Notes Receivable
   D. Inventories
   E. Land, Buildings, and Equipment
   F. Intangible Assets
   G. Current Liabilities
   H. Long-Term Liabilities

Course Objectives for Personal Income Tax - 2403. Upon completion of the course, students should be able to:

1. Identify which individuals must file a return.

2. Identify which individuals qualify as dependents for person exemption.

3. Identify by income source that income which is taxable and must be included as such and that income which is not taxable and can be excluded.

4. Identify income which is a result of transactions involving capital assets and investments.

Course Objectives for Personal Income Tax (continued)

5. Identify personal expenses which can be used to reduce (deducted from) reported gross income.

6. Identify revenue and expenses which are related to business activities and the determination of business income and special situations with regards to owning and operating a business.

7. Identify some special tax situations involving individuals.

8. Combine the objectives of 1 through 7 to arrive at the amount of the individual's income tax liability.

APPENDIX K

RESPONDENT'S EDUCATIONAL BACKGROUND

RESPONDENT'S EDUCATIONAL BACKGROUND

QUESTIONNAIRE NUMBER ONE

Educational Background	Number	Percent
High School Graduate	0	00
Attended College but did not Graduate	4	08
Two-year College Graduate	2	04
Bachelor's Degree--Business Major	28	56
Bachelor's Degree-non-business major	0	00
Master's Degree	2	04
Other training--please specify CPA	14	28
Total	25	100