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ALEXANDER, ARCHIBALD BOYD
THE ROLE OF OKLAHOMA AREA
VOCATIONAL-TECHNICAL SCHOOLS AND
COMMUNITY/JUNIOR COLLEGES IN OFFERING
VOCATIONAL EDUCATION SERVICES AS PERCEIVED BY
SELECTED GROUPS.

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THE ROLE OF OKLAHOMA AREA VOCATIONAL-TECHNICAL SCHOOLS AND COMMUNITY/JUNIOR COLLEGES IN OFFERING VOCATIONAL EDUCATION SERVICES AS PERCEIVED BY SELECTED GROUPS

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

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BY

ARCHIBALD B. ALEXANDER

Norman, Oklahoma

1978

THE ROLE OF OKLAHOMA AREA VOCATIONAL-TECHNICAL SCHOOLS AND COMMUNITY/JUNIOR COLLEGES IN OFFERING VOCATIONAL EDUCATION SERVICES AS PERCEIVED BY SELECTED GROUPS

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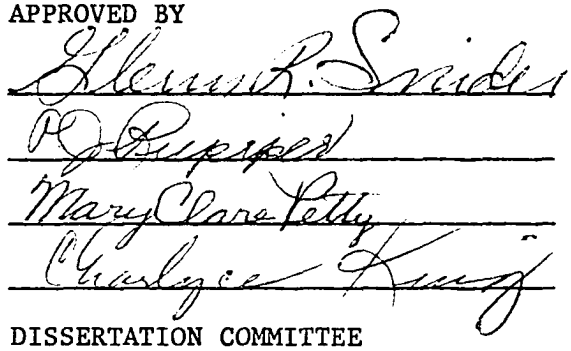

DISSERTATION COMMITTEE

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TABLE OF CONTENTS

Page

ACKNOWLEDGEMENTS iii

LIST OF TABLES vi

LIST OF ILLUSTRATIONS ix

Chapter

I. THE PROBLEM 1

Introduction 1
Purpose of the Study 10
Statement of the Problem 11
Definition of Terms 11
Organization of the Study 13

II. REVIEW OF RELATED LITERATURE 14

Introduction 14
Role of the Community/Junior College in Providing Vocational or Occupational Education Programs 14
Perceptions of Vocational and Technical Education in the Junior Colleges and Area Schools 26
Summary 33

III. METHODOLOGY 34

Introduction 34
Population 35
Questionnaire Administration 35
Instrumentation 37

IV. PRESENTATION AND ANALYSIS OF DATA 43

Introduction 43
Results of Analysis of Data Pertaining to the Research Question 43
Major Findings 81

TABLE OF CONTENTS--Continued

Chapter		Page
V.	SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	86
	Summary	86
	Conclusions	91
	Recommendations	93
BIBLIOGRAPHY		94
APPENDICES		98

LIST OF TABLES

Table		Page
1.	Percentage of Questionnaires Returned	45
2.	Sex of Respondents	45
3.	Approximate Age of Respondents	46
4.	Respondents' Years in Present Position	47
5.	Number of Respondents Who Attended Specific Types of Educational Institutions	48
6.	Number of Respondents Showing Highest Educational Level	49
7.	High School Principals' Perceptions of What Emphasis Is Given to Selected Educational Roles for Area Schools and Community/Junior Colleges	52
8.	High School Principals' Perceptions of What Emphasis Should Be Given to Selected Educational Roles for Area Schools and Community/Junior Colleges	53
9.	Superintendents' of Schools Perceptions of What Emphasis Is Given to Selected Educational Roles for Area Schools and Community/Junior Colleges	55
10.	Superintendents' of Schools Perceptions of What Emphasis Should Be Given to Selected Educational Roles for Area Schools and Community/Junior Colleges	56
11.	Chamber of Commerce Managers' Perceptions of What Emphasis Is Given to Selected Educational Roles for Area Schools and Community/Junior Colleges	58
12.	Chamber of Commerce Managers' Perceptions of What Emphasis Should Be Given to Selected Educational Roles for Area Schools and Community/Junior Colleges	59
13.	Industry Managers' Perceptions of What Emphasis Is Given to Selected Educational Roles for Area Schools and Community/Junior Colleges	61

LIST OF TABLES--Continued

Table		Page
14.	Industry Managers' Perceptions of What Emphasis Should Be Given to Selected Educational Roles for Area Schools and Community/Junior Colleges	62
15.	Perception of What Emphasis Is Given to Selected Educational Roles for Community/Junior Colleges by the Education Group and the Business Group (Commerce and Industry Managers)	64
16.	Perception of What Emphasis Should Be Given to Selected Educational Roles for Community/Junior Colleges by the Education Group and the Business Group	66
17.	Comparison of Perception of What Emphasis Is Given to Selected Educational Roles for Area Schools by the Education Group and the Business Group	67
18.	Comparison of Perception of What Emphasis Should Be Given to Selected Educational Roles for Area Schools by the Education Group and the Business Group	69
19.	Mean Difference in Emphasis Being Given Selected Educational Roles by Area Vo-Tech Schools and Community/Junior Colleges as Perceived by the Education Group Compared to the Business Group	70
20.	Mean Difference in Emphasis That Should Be Given Selected Educational Roles by Area Vo-Tech Schools and Community/Junior Colleges as Perceived by the Education Group Compared to the Business Group	72
21.	Education Group (Principal-Superintendent) Ranking of Planning Elements Regarding Area Vocational Schools	74
22.	Business Group (Commerce and Industry Managers) Ranking of Planning Elements Regarding Area Vocational Schools	75
23.	Education Group (Principal-Superintendent) Ranking of Planning Elements Regarding Community/Junior Colleges	76
24.	Business Group (Commerce and Industry Managers) Ranking of Planning Elements Regarding Community/Junior Colleges	77

LIST OF TABLES--Continued

Table		Page
25.	School Administrators' vs. Business Managers' Perception as to Priority of Planning Elements That Should Be Given by the Area Vocational-Technical Schools	78
26.	School Administrators' vs. Business Managers' Perception as to Priority of Planning Elements That Should Be Given by the Community/Junior Colleges	80

LIST OF ILLUSTRATIONS

Figure Page

1. Map of Oklahoma Area Vocational-Technical Schools and Community-Junior Colleges 36

THE ROLE OF OKLAHOMA AREA VOCATIONAL-TECHNICAL SCHOOLS AND COMMUNITY/JUNIOR COLLEGES IN OFFERING VOCATIONAL EDUCATION SERVICES AS PERCEIVED BY SELECTED GROUPS

CHAPTER I

THE PROBLEM

Introduction

Vocational education as a responsibility of public education was not common prior to the early years of the twentieth century. In the early history of the United States skills for industry were expected to be learned in the shops operated by fathers or in which the father of the family was employed. When federal funds were provided to support vocational education and training, new roles were developed for existing educational institutions; and as the demand for skilled craftsmen for business and industry continued, new institutions came into being.

Prior to 1917, the United States Congress enacted a number of laws which contributed to the financing of institutions of higher education. In 1917 the Smith-Hughes Act, which provided support for training in vocational agriculture, trades and industry, homemaking, and for teacher training in these fields, became the first federal act which made allocation of funds to vocational education in any appreciable amount. During the period of 1917-1962 the following acts were passed to provide federal monies for the support of the vocational programs in the area indicated:

A. George-Reed Act for Vocational Agriculture and Vocational Home Economics (1929-1934).

B. George-Ellzey Act--A continuation of the George-Reed Act (1935-1937).

C. George-Deen Act--Replaced George-Ellzey Act and provided funds for agriculture education, home economics education, trade and industrial education, and for administration and distributive education (1937-1946).

D. George Barden Act--An amendment to the George-Deen Act that made the use of funds more flexible and made them available to the U.S. Territories (1946-1963).

The previous mentioned acts were for the development and administration of vocational programs without provisions for funding of vocational facility construction. It was not until 1963 that PL 66-210 The Vocational Education Act of 1963 was enacted. This Act was designed to: (a) extend present programs of vocational education; (b) encourage research and experimentation; (c) provide work-study programs to enable youth to continue vocational education; and (d) amend the Smith-Hughes, George-Barden, and National Defense Education Acts.

The Act authorized 60 million dollars in Fiscal Year 1967, and after 1967, provisions were made for the extension of present programs, development of new vocational programs, and for research and experimentation.[1]

A new formula based on population ratios and per capita income was used to distribute 90 percent of the monies from the 1963 Vocational Education Act to the states. The funds were authorized to be used for: (a) Vocational education programs for persons of various levels of achievement and various occupations except those requiring the baccalaureate

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[1]Roy W. Roberts, Vocational and Practical Arts Education (New York: Harper and Row, 1965), pp. 131-137.

degree; (b) for teacher education, administration, and other ancillary services; and (c) for the construction of area vocational education school facilities. Funds were required to be matched on a statewide dollar-for-dollar basis for Fiscal Year 1965 and thereafter.

The implication of this Act was that for the first time federal monies were made available for construction purposes. The Act specified that one-third of each state's allocation, prior to July 1, 1965, and 25 percent, thereafter, must be used for youths who left school and/or for the construction of area schools.

It was the Vocational Education Act of 1963 which provided the first federal emphasis for the development of area schools, and since that date they are an integral part of the nation's vocational training programs.

Federal law required that area vocational education schools funded under the Act be available to all residents of the state or an area of the state designated or approved by the State Board of Vocational Education. A technical or vocational school or department or division of a community college, junior college, or university must admit as regular students both persons who have completed high school and those who have left high schools before graduation.

The Act provided that states have several alternative for establishing area schools. The major alternatives for establishing these were (a) an area school formed as a separate entity with its own district boundary serving both the secondary and post-secondary students within that district, and (b) a junior college or community college serving an area.

When a state considered only the two previously mentioned alternatives, then one of the following area school plans was possible:

A. All area schools located in junior colleges.

B. All area schools located in separate school districts.

C. A combination of area schools located in junior colleges and area schools as separate school districts.

The manner in which this legislation was written led to later conflict between independent area schools and junior colleges serving as area schools.

In a study entitled "The Developing Relationship between Elementary-Secondary and Higher Education in American States," the authors identified sources of conflict between elementary-secondary education and higher education institutions.[1] The study reviewed the division of responsibility for education among differing levels of government and indicated that this came about because of political, social, regional, and governmental pluralism in American life. The one dimension of the fragmentation that was of central interest to this study was that of the separation of elementary-secondary from higher education. The authors stated that although Americans assumed that there was a distinction between the two levels, there was no particular persuasive reason why elementary-secondary and higher education should be regarded as mutually exclusive compartments of the total educational effort. The authors identified three major social pressures causing more attention to be centered around the division of the two levels of education. These were:

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[1]David W. Minar, et al. The Developing Relationship between Elementary-Secondary and Higher Education in American States, paper presented at the annual meeting of American Education Research Association. (Los Angeles, California, February 8, 1969), ED 028-508.

A. The expanding cost of education of all types, the result of population growth, heightened aspirations, new technologies, and generally mounting costs.

B. The increasing tendency to question established educational forms and procedures, including obstacles to individualization and flexibility in the education process.

C. The rising demand for educational services that overlap or fall between the customary spheres of the collegiate and secondary school systems. This is often variously the product of new occupational skill needs, expanded leisure time, and demands that entry of young people into the labor market be delayed.[1]

One section of the Minar article dealing with various states' attitudes toward expanding vocational education and the conflict of interest of elementary-secondary and higher education stated that the state education leaders were aware of the situation and predicted political difficulties for efforts at accommodation.

Unfortunately, the Vocational Education Act of 1963, authorizing area schools at both the secondary and higher education level was approved in a society that generally viewed the two areas as mutually exclusive parts of the educational effort, organizationally and administratively.

Adding to this dilemma was a definition of vocational education emerging from a conference on vocational education facilities sponsored by the U.S. Office of Education and Westat Corporation of Boston, Massachusetts which stated that "vocational education is a type of education and not a level of education."

In the fall of 1975, the Oklahoma State Regents for Higher Education filed a suit with the Oklahoma Supreme Court seeking a court order directing the Oklahoma State Board of Vocational and Technical Education to cease and desist offering programs in vocational education beyond

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[1] Ibid.

the high school level in the area vocational schools. The State Board of Regents maintained that education beyond the twelth grade for adults is the sole responsibility of the State Regents for Higher Education by virtue of the Regents' constitutional authority. The Oklahoma Supreme Court in a unanimous decision announced in May, 1976, decreed that Oklahoma recognized two kinds of post-secondary education, credit and non-credit and that the Regents have responsibility for vocational education for which college credit was given and that the State Board of Vocational and Technical Education had responsibility for non-credit vocational education beyond the high school.

With the area vocational schools and the community/junior colleges both officially recognized as having authority to offer vocational education at the post-secondary level, it became increasingly important that the lay public and the local school administrators be knowledgeable about the role and function, funding, facilities, etc., of both the area vocational school and the community/junior college with regard to vocational education.

Has concern existed among the public and educators that secondary education and higher education have both been charged with the responsibility of vocational education, even though it is usually provided on different educational levels? Studies such as the Brick study in New York[1] concerning the articulation between public schools and junior colleges offering the same vocational courses suggested that educators are concerned about several points such as (a) What should the prerequisite

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[1]Michael Brick, An Analysis of Selected Business and Technology Programs in High Schools and in Two-Year Colleges and Institutions of New York State with a View toward Initiating Articulation Procedures in Counterpart Offerings. (New York: Center for Urban Education, 1967), p. 12.

be for entering such programs, (b) What type of student should be served on each level, (c) What should the student's level of training be after leaving the junior college program, and (d) How well do the two levels communicate and articulate with each other.

The results of the Brick study indicated that there was a wide disparity between the schools studied regarding their agreement with the factors previously mentioned and that there was very little communication between higher education and secondary education. With the lack of articulation between the two levels, there existed the distinct possibility of duplication of effort which can seriously overburden educational budgets.

Another study conducted in 1974[1] defined articulation as the relationships between educational programs which are designed to provide a smooth transition from one educational program to another. This movement of the student between programs can be either horizontal or vertical.

In the study of area school-junior college conflict, vertical articulation was the most relevant consideration. Vertical articulation was defined as those relationships which exist between institutions, programs, courses and/or activities which provide a coordinated program for a student moving from one educational competency level to the next.

The 1974 study listed several areas of concern in vertical articulation that were mentioned in the previously reviewed New York study but expanded on them, in that it provides recommendations for the resolving of the conflicts.

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[1]B. McKinnerney, Student Articulation between Secondary and Post-Secondary Education. (Washington, D.C.: U.S. Department of Health, Education, and Welfare), p. 1.

The recommendations include formalized communication procedures, cooperative curriculum development, coordination of secondary, post-secondary, vocational programs, counseling of students, student appraisal procedures, and development of entrance requirements compatable with the needs of students completing secondary vocational programs.

Many of the articulation problems between secondary and post-secondary education became apparent, due to the reasons stated in Leighbody's study concerning vocational education in the seventies.[1] Leighbody pointed out that in the United States there was a growing trend toward deferring specialized vocational training to the period beyond high school and establishing this type of training at the two-year college level.

The rationale for this was that, due to societal changes, 14 years of schooling was becoming the standard length of education, as emphasized by the recommendations of several studies on the subject and statistics concerning the numbers of college age youth who were enrolling in higher education, which was stated to be 45 percent and was predicted to increase to 70 percent. Leighbody continued to cite the increasing age of young workers entering the labor market indicating more emphasis on a longer period of education. The final recommendations of the study were that secondary education should provide occupational orientation, career guidance, and generalized vocational preparation, and begin to serve the disadvantaged youth in an expanded capacity, and that two-year post-secondary institutions should provide specialized vocational programs.

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[1]Gerald B. Leighbody, "Major Issues of the 1970's," Vocational Education in America's Schools. (Chicago: American Technical Society, 1972), p. 23.

The conflicts between levels of vocational education are not only known to practitioners in vocational education, but have been recognized by researchers studying the relationship between the two levels. The Carnegie Commission on Higher Education[1] reported that a major problem of vocational education was the multitude of programs offered at every level of education. As a result of the varying levels of program offerings, the Carnegie Commission recommended that each state should have a coordinating council to define the role for each level at which vocational education is offered.

Another possible conflict between secondary and post-secondary level schools providing vocational education was found to center around the matter of who should fund each level of effort. In a position statement[2] concerning this conflict, the State of Michigan said that secondary area schools should be funded on the local level with mill levies and post-secondary vocational education financed by the institution offering the vocational programs.

The 1968 and 1972 Amendments to the Vocational Education Act of 1963 and the Education Amendments of 1976 continued the principle of financial support for vocational education programs as provided under the 1963 Act. The 1968 and 1972 Amendments were, as the term amendment implies, a continuation of the 1963 Act with only minor modifications. The major change was with regard to the support of vocational

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[1] "Continuity and Discontinuity of Higher Education and the Schools," Carnegie Commission on Higher Education (New York: McGraw-Hill Book Company, 1973), p. 64.

[2] Position Statement Concerning the Development of Area Vocational and Technical Education Programs in Michigan (Lansing: Michigan State Department of Education, July, 1967), VT 004 805.

education at the post-secondary level. The amendments required that 15 percent of the federal allotment to the state be utilized to support post-secondary vocational education. This requirement further fueled the conflict between area schools and community junior colleges, both of which were offering vocational training to post-secondary students. This increased the need to determine the educators' and lay publics' interest in just what should be the role of each type of institution in Oklahoma.

Purpose of the Study

The purpose of this study was to determine the perceptions and congruencies of perceptions which selected groups had regarding vocational education in the area vocational schools and community/junior colleges.

Arnold F. Emch, a partner of Booz, Allen, and Hamilton, management consultants, speaking on Long Range Planning for Colleges and Universities, indicated that without long range planning, educational administrators can be candidly described by the comment, "We don't know where we are going but we're on our way!" Emch pointed out that in any long-range planning there are times when basic decisions must be made with regard to philosophy, objectives, programs, organizations, staff, facilities, and financing.[1]

It was believed that this proposed study would provide information that would be of value to educators and boards as they plan effective

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[1]Arnold F. Emch, Long Range Planning for Colleges and Universities (Undated and unpublished report, Chicago, Illinois: Booz, Allen, and Hamilton Management Consultants), p. 1.

vocational education programs for service to all of the people of the state.

Statement of the Problem

The problem of this investigation was therefore to determine if differences existed between the perceptions of selected groups of individuals regarding the philosophy, objectives, programs, organizations, staff, facilities, and financing of community/junior colleges and area vocational schools. The four groups were Chamber of Commerce executives, private employers, high school principals, and superintendents of basic shool districts.

The basic hypothesis to be tested in this study was that there is no significant difference between the perceptions of business managers (Chamber of Commerce executives and industry managers) and school administrators (school principals and superintendents) regarding the educational roles of community/junior colleges and area vocational-technical schools.

Definition of Terms

The terms used in the study were found for the most part to be used rather frequently in the literature and were adapted for the purpose of this study.

1. An "Area Vocational Education School" is:

> A specialized school used exclusively or principally for the provision of vocational and technical education to secondary, post-secondary, and adult students and for persons who have academic, socioeconomic, or other handicaps who are available for study in preparation for entering the labor market, or to prepare individuals for enrollment in advanced technical education programs that do not lead to a baccalaureate degree.[1]

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[1] Oklahoma State Mini-Plan for the Administration of Vocational Education (Stillwater, Oklahoma: State Department of Vocational and Technical Education, 1975-1976), p. 1.

2. Community or Junior College. A two-year community based post-secondary education institution which has authority to award an associate degree, a diploma, and/or certificate of completion, and which offers comprehensive educational services to the community. These may include occupationally oriented programs, general education, preparation for transfer to a baccalaureate degree program at a four-year institution, continuing adult education, basic development education, and community services.[1]

3. Adult Vocational Education. A course, courses, or experiences, conducted for persons who have completed or left high school to prepare them to enter, re-enter, or to progress in the work force.[2]

4. Occupational Education. Any educational program with a direct career objective or relationship. A broad generic term describing vocational education at the post-secondary level but not limited to any particular delivery system.[3]

5. Vocational Education. Organized education programs, services, and activities which are directly related to the preparation of individuals for paid or unpaid employment, or for additional preparation for a career requiring other than a baccalaureate or advanced degree.[4]

6. Planning Elements. For the purposes of this study, planning elements are those topics which must be given consideration in the development and implementation of an educational program.

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[1]National Association of State Directors of Vocational Education, Defining Critical Terms in Vocational Education (West Virginia: West Virginia Department of Education, 1976), p. 2.

[2]Ibid., p. 1.

[3]Ibid., p. 5.

[4]Ibid., p. 9.

7. Educational Roles. For the purpose of this study, educational roles are selected actions or activities that should be considered by area schools and/or community/junior colleges in implementing the planning process of the particular educational institution.

Organization of the Study

The study is presented in five chapters as follows: Chapter I, The Problem; Chapter II, Review of Literature; Chapter III, Methodology; Chapter IV, Presentation and Analysis of Data; and Chapter V, Summary, Conclusions, and Recommendations for further research.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

The following review of pertinent literature and research is presented in two sections. The first section is a review of literature relating to the role of the community/junior college in providing vocational or occupational education programs. In the second section, an attempt was made to survey some of the most current studies and literature relating to vocational and technical education at either or both the community/junior college and the area vocational school.

An ERIC search, which included a search of Current Index to Journals in Education (CIJE), Resources in Education (RIE), and Resources in Vocational Education (RIVE, formerly AIM/ARM) revealed no literature that addressed the role of area vocational-technical schools. The dissertation abstracts were also searched and no basic studies were found on the area vocational-technical schools.

Role of the Community/Junior College in Providing Vocational or Occupational Education Programs

In 1915, James R. Anzell, writing in School Review, saw vocational education as a function of the junior college. He referred to the promise of the junior college to bring opportunities for advanced vocational training to the "very doors of thousands of boys and girls previously denied them."[1]

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[1]James Rowland Anzell, "The Junior College Movement in High Schools," School Review, XXIII (May, 1915), 302.

In 1921 Koss reported studying the purposes of junior colleges as indicated in twenty-two articles and addresses and from the perusal of fifty-six junior college catalogues. Koss found many stated purposes but condensed the list to twenty-five. Among the items on the list of twenty-five stated purposes, "providing occupational training or junior college grade" ranked third.[1]

In 1922 McDowell made reference to the fact that junior college students could be divided into four types. He referred to one of these types as students who "expect to enter some definite vocational line, such as teaching." McDowell reported that as early as 1920, the junior college was seen serving four purposes: transfer, pre-professional, vocational, and terminal.[2]

Thomas, in 1926, in a doctoral study proposed the junior college as the logical institution to prepare for "the middle occupation," those between the professional and the skilled trades. He concluded that two years of training in the junior college would have been adequate for 255 of 1044 in the engineering occupations which he studied.[3]

The same investigation in 1927 developed what came to be the first list of accepted functions to be served by public junior colleges. On his list the following functions were included: ". . . preparatory,

---

[1]Leonard V. Koss, "Current Conceptions of the Special Purpose of the Junior College," School Review, XXIX (September, 1921) 8.

[2]F. M. McDowell, The Curriculum of the Junior College (Washington, D.C.: The U.S. Bureau of Education, 1922, 19), p. 38.

[3]Frank W. Thomas, "A Study of the Functions of the Public Junior Colleges and the Extent of Their Realization in California" (unpublished Ph.D. dissertation, Stanford University, 1927), p. 67.

popularizing, terminal, and guidance."[1] Thomas inferred that popularizing meant acquainting people with higher education.

In 1932 Koss reported on his study of business education in the junior college that 82 percent of the junior colleges studied offered terminal courses in the fields of business and economics. Koss' studies provided conclusive evidence that business training was one of the earliest accepted functions of the junior college.[2]

Hutchins in 1933 advocated the establishment of programs of instruction in junior colleges to prepare individuals for immediate employment. He indicated that a purely cultural education was not sufficient and that the junior college or institutions parallel with them must construct courses of study of a sub-professional, business, technical, or homemaking variety, to take care of the vast number of students who do not want and should not have a general education alone.[3]

During the years of World War II writings regarding the junior college function of vocational and technical education were scarce. One of the more significant studies of this period was one reported on by Eells in 1942 dealing with Associate Degree and Graduation Practices of Junior Colleges. One of the more significant statements made by Eells so far as vocational and technical education recognition is concerned was as follows:

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[1]Frank W. Thomas, The Junior College, Its Organization and Administration (Palo Alto: Stanford University Press, 1927), p. 25.

[2]Leonard V. Koss, "Business Education: The Present Status," Junior College Journal, II (January, 1932), 191.

[3]Robert Hutchins, "Hard Times and Higher Learning," Yale Review, XXII (June, 1933), 729.

> Popularizing of terminal curricula depends upon the extent to which these curricula actually meet the needs of students, upon suitable information and guidance, upon parental approval, upon recognition of their quality by university entrance officers and upon understanding and approval of the general public. Such courses will not become popular if individious comparisons are made between the two types of students. Nor should there be any hard and fast line drawn between them. It is a mistake to think of a terminal curriculum as exclusively vocational in character. It should contain many of the same courses taken by the Liberal Arts students. In particular, there should be no unfortunate distinction between students at graduation who have completed successfully the curriculum which in the judgment of themselves, their parents, and their academic advisors seems to be best fitted to their particular interests and abilities.[1]

In 1947, the President's Commission on Higher Education indicated its support of Community College type institutions providing for comprehensive programs enhancing educational opportunities:

> As one means of achieving the expansion of educational opportunities and the diversifications of educational offerings, it considers necessary this commission recommends that the number of community colleges be increased and their activities multiplied.[2]

In 1948 The Committee on Legislation of the American Association of Junior Colleges, in developing guidelines for state legislation pertaining to the establishment of junior colleges, supported vocational-technical education in the junior college. The committee felt that the state must clearly recognize the potential of junior college education to include "offering lower division work parallel to college and university courses, and, in addition, terminal courses should be developed in response to the needs of the community."[3]

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[1]Walter C. Eells, "Associate Degrees and Graduation Practices in Junior Colleges," American Association of Junior Colleges (1942), 53-54.

[2]Higher Education for American Democracy: A Report of the President's Commission on Higher Education (New York: Harper and Bros., 1948), p. 67.

[3]"Guiding Principles for Legislation for Establishment of Junior Colleges," Junior College Journal, XLVII (May, 1947), 386-387.

In 1947, the State Legislature of Texas clearly endorsed vocational and technical education at the junior college level by passing a statute requiring junior colleges to provide for at least 40 percent of their programs in terminal fields before qualifying for state aid.

A review of the literature of the 1950's indicated a growing awareness of the role of the two-year college with regard to vocational and technical education. The Fifty-Fifth Yearbook of the National Society for the Study of Education devoted considerable space to vocational and technical education in the junior college. The yearbook recognized the variety of vocational education problems:

> "Vocational education in the junior college does not follow a universal pattern. Rather it follows numerous patterns as the junior college adjusts its program to the needs of individuals within the community and to the general sociological and technological demands of the community.[1]

In the yearbook Johnson reported on the opinions of ten men: noted educators, labor learders, and leaders of business and industry. The concensus of their opinions was summed up by President Carmichael of the University of Alabama:

> In most two-year colleges, far too little attention has been given to developing programs for those who will not go beyond two years. The technical and vocational aspect of the curriculum will undergo the most drastic changes in order to meet community needs. Thus, the definition and expansion of terminal programs will probably constitute the second most noteworthy development in the junior college field during the next twenty-five years.[2]

Bethel, writing in the Fifty-Fifth Yearbook, saw the function of vocational education "As a rapidly growing feature of community junior

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[1] B. Lamar Johnson, "A Look to the Future," Fifty-Fifth Yearbook of the National Society for the Study of Education (Chicago: University of Chicago Press, 1956), p. 308.

[2] Ibid., p. 310.

colleges" and indicated the junior college to be "the institution to plan the types of vocational education that are most appropriate to specific communities."[1]

Martorana's report on the study of the community college in Michigan indicated that the junior colleges of the state were not providing adequate, recognized programs for organized occupational training. At the same time, he found the state's junior colleges to be one of the chief sources of supply for technicians and semi-professionals for Michigan business and industry.[2]

In the second report to the president by the Committee on Education Beyond the High School, the vocational-technical function of the junior college was emphasized. The committee described the program of the comprehensive community college to include: many kinds of programs varying in time requirements pursued by vast number of students for general education integrated with vocational-technical training for the sub-professional occupations and many kinds of short courses for upgrading employed persons and for re-training employees because of changes in business and industrial developments.[3]

This committee saw the two-year college as one of the most notable developments in post high school education in the United States in this century. It believed that the junior college was not designed

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[1]Lawrence L. Bethel, "Vocational Education," Fifty-Fifth Yearbook of the National Society for the Study of Education (Chicago: University of Chicago Press, 1956), p. 94.

[2]S. V. Martorana, The Community College in Michigan (Lansing, Michigan: Staff Study Number 1 of the Survey of Higher Education in Michigan, 1956), p. 4.

[3]President's Committee on Education Beyond the High School, "Second Report to the President" (Washington: U.S. Government Printing Office, 1957), p. 64.

merely to relieve the pressure of the vast enrollment in the senior colleges and universities but to have a role and integrity of its own.

Havighurst and Newgarten linked their idea of what they called the "opportunity college" with the junior or community college when they wrote, "opportunity college is primarily a place for youth who desire mobility. Students tend to think of mobility now by learning middle class vocational skills rather than learning middle class social skills."[1]

Thorton in his book published in 1960 saw the junior college serving five accepted purposes. Listed among these purposes was occupational education at the post-high school level. Thorton believed occupational educational programs should be of two years duration or less, complete and valuable, contain general education subjects and should be backed up by recent unemployment trends. He felt that occupational education at the junior college level should be such that it "does not close the door to an academic degree."[2]

Thorton was one of the originators of the title "occupational training" to replace the title of "terminal and vocational programs." He saw occupational training beset with such problems as lack of acceptance in American education and social thought, junior college administrators unconvinced of the propriety of collegiate occupational programs, lack of awareness on the part of the lay public of the nature and need

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[1]Robert J. Havighurst and Bernice L. Newgarten, Society and Education (Englewood Cliffs, N.J.: Allyn and Bacon, 1957), p. 255.

[2]James W. Thorton, Jr., The Community Junior College (New York: John Wiley & Sons, 1960), p. 59.

of occupational programs and the scarcity of qualified instructors in occupational areas.

The following quote from Thorton points out some of the conflicts involved in the acceptance of the vocational-technical function by junior colleges:

> Junior college administrators and theorists are in substantial agreement that occupational education is one of the functions of junior colleges. All of them tend to accept also the principle that each junior college should offer courses which are appropriate to its own constituency and community. A majority of junior college administrators, especially in public junior colleges, agree further that business education is a fully acceptable kind of junior college occupational education. At this point, any appearance of unanimity ceases. Some junior colleges resist the encroachments of 'vocationalism' upon the college curriculum, while others search aggressively for new opportunities to serve their communities through the establishment of needed occupational courses.[1]

Medsker also used the term "occupational education" to refer to offerings in vocational and technical education in the junior college. Medsker was concerned about the fact that not all occupational training in the junior college was semi-professional and that some of it "takes on the characteristics of trade training such as is frequently offered in high schools in government subsidized programs."[2]

Fields found in his study of four widely separated junior colleges, Tyler Texas Junior College, Long Beach City College, The Junior College of the University of Bridgeport, and Orange County Community College of New York, that while each institution placed great emphasis on the transfer program, they attached equal importance to the preparation

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[1] Ibid., p. 63.

[2] Leland L. Medsker, The Junior College: Progress and Prospect (New York: McGraw-Hill Book Company, 1960), p. 54.

of students for immediate entry into suitable occupations.[1] He reported in his study that in the semi-professional and vocational fields, the community colleges tried to serve the needs of their local areas thus accounting for many diversified offerings.

Fields saw the vocational and technical function being accepted by the community colleges as a result of the depression of the Thirties, World War II and its accompanying need for technical education, and the shift in occupational pattern.

In answer to the question--"What vocational education should the junior college offer?" Fields concluded that preparation for the technical and semi-professional occupations should be stressed along with continuing vocational education, and regional planning for the training for skilled and semi-skilled occupations. He stressed that general education should be an integral part of any community college's vocational program.

Harris, writing in the Junior College Journal in 1967, called the community junior college

> . . . the only publicly supported institution in America which accepts the assignment to offer specialized occupational training at the college level. Significantly enough, the occupational fields for which the community college is uniquely fitted to give training are precisely those in which employment has risen most remarkably in the past 30 years.[2]

In the 1960's the vocational-technical function of the junior college was stressed in a variety of reports published throughout the

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[1]Ralph R. Fields, The Community College Movement (New York: McGraw-Hill Book Company, 1962), pp. 55-56.

[2]Norman C. Harris, "Administrative Leadership in Vocational-Technical Education," Junior College Journal, XXXII, 7 (March, 1967), 382.

United States. One of the most prestigious of these reports was that made by the President's Panel on Vocational Education. In its report, the Panel stated that the junior colleges and other post-secondary vocational and technical schools must "expand their output--a national need of urgent importance; the Federal Government must increase its support of full-time, post high school vocational and technical training.[1] In Education for a Changing World of Work, the Panel stated that the junior college or community college is becoming an important factor in program development in vocational and technical fields.[2]

One of the most concise statements of the vocational-technical function of the junior college was attributed to the National Advisory Council on the Junior College and reported in the annual report of the American Association of Junior Colleges for 1964.[3] This statement called for renewed and vigorous development of programs in occupational education and outlined ways in which the nation should respond to this need. The committee acknowledged that the junior college was the logical institution for meeting new manpower needs and expanding opportunity for education. The Advisory Committee made its report after a year of study with major emphasis on job education and the junior college.

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[1] Summary Report of the Panel of Consultants on Vocational Education (Washington, D.C.: U.S. Government Printing Office, 1963), p. 19.

[2] Education for a Changing World of Work: A Report of the Panel of Consultants on Vocational Education (Washington, D.C.: U.S. Department of Health, Education, and Welfare; U.S. Office of Education; U.S. Government Printing Office, 1963), p. 135.

[3] People, Progress, Programs: Annual Report of the American Association of Junior Colleges (Washington, D.C.: American Association of Junior Colleges, 1964), p. 22.

A research report on junior colleges issued by the Chamber of Commerce of the United States in mid-1964 opened with the following tribute to the occupational training function of the junior college:

> Businessmen seeking skilled manpower are hiring students trained at American junior/community colleges. Why? More and more, these two-year community colleges provide terminal training for those not planning to attend four-year colleges. They are geared to the needs of the community and provide programs adapted to individual capacities, interests, and aptitudes.[1]

In an article written by Harris[2] the term "middle manpower" is used to describe that portion of the total manpower spectrum which is concerned with jobs with a balanced cognitive-manipulative content. Harris indicated that the people who fit into the middle manpower spectrum are provided by junior colleges offering associate degrees. He listed the following six fields of occupational education as those most often encountered in the associate degree programs of community/junior colleges: agriculture, business, health, engineering/industry, science research, and service occupations. He estimated that there were 10 million persons in the middle manpower segment of the labor force and that by the mid-seventies one out of every five would be engaged in work within the middle manpower spectrum.

Concerning junior colleges, Harris made the following predictions:

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[1] Research: Two-Year Colleges Education Projects for Business Organization (Washington, D.C.: Education Department of the Chamber of Commerce of the United States, 1964), p. 1.

[2] Norman C. Harris, "Occupational Education: Middle Manpower and the Junior College," Compact, II, 3 (Denver, Colorado: Education Commission of the States, June, 1968), p. 23.

1. The 1970's would see the associate degree firmly established and by 1975 most states would have half of their high school graduates attending two-year colleges, and perhaps half of these would be in occupational programs.

2. Every state would have one or more junior colleges in operation, and by 1972 there would probably be 1,000 junior colleges in operation enrolling approximately 2.5 million students.

3. In the two-year associate degree, where job training is the goal, the general curriculum may not be necessary; however, it is felt by most junior college administrators that the general curriculum is vital to the students' contributions to society.[1]

Harris went on to say that junior college graduates would outnumber four-year college graduates three to one and that it would be necessary for the junior college to continually upgrade both their academic and occupational programs. This indicated that the junior college was stressing the training of people for the two-year terminal degree.

The occupational education boom experienced by junior colleges has not been completely a successful expansion according to Skaggs.[2] At the beginning of 1966, 13 percent of all students entering junior colleges were enrolling in occupational education courses, but by 1972 this percentage had changed to 80 percent of the total junior college students enrolled. Some of the problems encountered by the junior colleges due to this rapid expansion included recruitment problems, overspecialization of curriculum, difficulties in obtaining staff, saturation

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[1] Ibid., p. 25.

[2] K. B. Skaggs, "Occupational Education: The Program Crisis," Community and Junior College Journal, XLIII (May, 1973), 33.

of the job market in some areas and ineffective evaluation and follow-up procedures. The junior colleges recognized those problems and worked to eliminate them.

In an article by Hoenninger and Skovholt[1] it was emphasized that there is no specific time in a person's life when he enters an occupation and no specific time when he sees a need for further education. The article pointed out the role of the junior college in providing for the special needs of adults in the work force or those who need retraining due to the loss of jobs caused by technological development or for other reasons.

Perceptions of Vocational and Technical Education in the Junior Colleges and Area Schools

The author made four different computer searches for recent studies relating to vocational education in the area schools and community colleges, each time broadening the scope in order to secure more hits. No recent study came close to coinciding with or paralleling this study.

The search revealed that limited research had been done in this area although some studies were located which dealt specifically with the attitude of school board members and administrators toward vocational education in the secondary schools. Gardner, in a dissertation completed at Oklahoma State University in 1972, studied the attitudes of administrators and counselors toward vocational education compared to the attitudes of high school students toward vocational education and

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[1]Ronald W. Hoenninger and Thomas M. Skovholt, "Recycling Career: A Community Service Response," Community and Junior College Journal, XLIII (May, 1973), 22-23.

their scores on the occupational patterns for the vocational program in which they were enrolled. Gardner found a positive correlation. The better the administrators' and counselors' attitude was toward vocational education, the better the students' attitude, and the more they passed the occupational pattern test.[1]

Milam, in a dissertation completed in 1968 at Auburn University, studied the perceptions of secondary school principals toward vocational education in 29 high schools in the South: Alabama, Arkansas, Louisiana, and Mississippi. Milam's study found that principals perceived the qualifications of vocational teachers as strong points and the physical facilities for vocational education programs as weak in such areas as equipment, curriculum, and instructional materials and laboratories or shops. Principals recommended increased vocational offerings, particularly in the areas of distributive and trade and industrial education.[2]

Krepel, in a dissertation published in 1967 by the University of Nebraska, found in a study of 51 selected principals and 31 superintendents that the superintendents had a much more positive attitude toward vocational education than did the principals. He found that in the two groups, over 75 percent had no experience teaching vocational subjects.[3] The author of this study felt that this was not significant,

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[1]Glen M. Gardner, "The Association between Local School Administrators and Counselors Attitudes toward Vocational Education and Selected Characteristics of Their Students Attending a Vocational Technical School" (unpublished Ed.D. dissertation, Oklahoma State University, 1972), pp. 42-78.

[2]Thomas R. Milam, "Vocational Education in Selected High Schools" (unpublished Ed.D. dissertation, Auburn University, 1968), 300-312.

[3]Wayne J. Krepel, "An Examination of Selected Salient Correlates of Nebraska School Administrators as Related to Vocational Education" (unpublished Ed.D. dissertation, University of Nebraska, 1967), pp. 170-173.

as the source from which school administrators come is so broad based that most administrators could be expected to have not taught a vocational education program. Of concern in the study was the lower ranking given to attitudes toward the apprentice, the journeyman, and labor unions. The concept of apprentice to journeyman is a key philosophical concept in vocational education.

Spooner studied the attitudes of two groups of school superintendents toward vocational education in Ohio. The two groups of superintendents were those that contracted their vocational education programs to other districts and those who conducted their own vocational education programs. The study concluded that the views of the two groups were not significantly different toward the value of or the cost of conducting vocational programs for students of different scholastic aptitudes. There was found to be a significant difference in the priority assigned vocational education, with the do-it-themselves administrators according vocational education a higher priority.[1]

Heathman investigated the attitudes of educational decision makers toward vocational education. Included in this study were high school principals, public school superintendents, school board members, New Mexico state education officials, and others identified as influential in making educational decisions. Heathman found that all groups had a positive attitude toward vocational education, but that education professionals tended to respond more positively than did school board members and the group identified as other influentials. State officials

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[1] Kendrick L. Spooner, "Attitudes toward Vocational Education: A Comparison" (unpublished Master's thesis, Ohio State University, 1971), p. 71.

had a significantly more positive attitude toward vocational education than lay school board members.[1]

Schmidt and Stafford, in a study supported by vocational education funds in the State of Washington in 1976, found that only approximately 7 percent of the administrators surveyed thoroughly understood vocational education. Only about 10 percent of the administrators were found to have a really positive attitude toward vocational education. Only about 35 percent of the administrators surveyed were interested in seeing secondary vocational education expanded. It was also found that there were no significant differences in the attitudes of superintendents and principals toward vocational education.[2]

In a related study in Washington the State Advisory Council for Vocational Education conducted a study to check the public's attitude toward vocational education. After surveying some 2,200 randomly selected individuals representing the users of the products of vocational education, it was found that there were seldom any differences in the image of vocational education, as perceived by such diverse groups as students, teachers, and administrators of public schools, community colleges, and vocational-technical institutes. The study showed that the positive influence held of vocational education as a whole was proportional to the familiarities of groups and individuals with specific

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[1]James E. Heathman, "An Investigation of Attitudes of New Mexico Educational Decision-Makers toward Vocational Education" (unpublished Ed.D dissertation, New Mexico State University, 1972), p. 70.

[2]Roy L. Schmidt and David P. Stafford, Attitudes of Secondary School Principals and Superintendents in the State of Washington toward Vocational Education, Report to the Washington State Association for Vocational Education (Olympia, Washington: Washington State Association for Vocational Education, 1976), p. 7.

vocational programs. Other factors found to influence the image of vocational education were the quality of vocational program instructors, the physical plant, and the degree of commitment various levels of government had toward vocational education.[1]

Banta's study in Tennessee asked lay citizens to identify what they believed to be critical issues in education in the state. From a small sampling responses were analyzed and organized into ten most frequently stated critical issues. The data was then submitted to a much larger population. There were no significant differences in the responses of both the larger group and the initial group surveyed. In both groups vocational education was rated as the third most critical issue facing public education in the state.[2]

An institutional goals study conducted by the staff of the Allegany Community College at Cumberland, Maryland, utilized a survey technique similar to that employed by the author of this research document. An institutional goals inventory was submitted to college faculty, a random sampling of high school juniors in the college's drawing area, and an equal sampling of the high school students' parents. Also surveyed was a group of lay individuals identified as leaders of the college's surrounding community. Those surveyed were asked to respond to ninety questions relative to how well the college was currently emphasizing its specific function and how the institution should be

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[1]"Second Report of the Washington State Advisory Council on Vocational Education" (Olympia, Washington: Washington State Advisory Council, 1971), p. 64.

[2]Trudy W. Banta, "Critical Issues in Tennessee Education" (unpublished report, Tennessee University, Knoxville, 1974), p. 76.

emphasizing its function. All of the groups felt that the institution should be giving greater emphasis to function than was the case. The average mean difference between the "what is" and "what should be" was greatest for goal areas of intellectual orientation, personal development, humanism-altruism, and vocational preparation.[1]

Deguglielmo, Frazier, and Stevenson in 1973 conducted a study for the Oklahoma State Department of Vocational and Technical Education. The study was designed to determine what the public wanted and needed to know about vocational education. Representatives of forty-one Chambers of Commerce from throughout the state were asked to suggest representatives of occupational categories to participate in the study as a task force. A group of 16 was selected for the task force and met four times at six-week intervals. The task force reached three major conclusions: (1) vocational and technical education did not have a positive image; (2) the public knew very little about vocational education; and (3) the public was interested in vocational education at the local level.[2]

Two recent doctoral studies at Oklahoma State University dealt in depth with vocational education. Ballard in 1973 studied the role and function of public junior colleges in Oklahoma as perceived by public citizens, students, faculties, administrators, and board members. Ballard found that in the majority of Oklahoma junior colleges studied

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[1]"Institutional Goals Study" (Cumberland, Maryland: Allegany Community College, 1974), p. 73.

[2]Bob Deguglielmo, Don Frazier, and Bill Stevenson, "A Study of the Needs of Oklahoma Citizens for Information About Vocational-Technical Education" (Stillwater, Oklahoma: Oklahoma State Department of Vocational and Technical Education, 1975), p. 27.

there were significant differences between the public as to the institution's role with regard to occupational education. Ballard's study hypothesized that there were no differences among the public's perceptions of the extent of the public junior colleges involvement in occupational education. Ballard was forced to reject the null hypothesis in this regard 24 of 28 times because of the wide variation of the various publics' responses.[1]

Another Oklahoma State University doctoral study conducted by Brooks in 1974 utilized the Delphi technique to study students', counselors', administrators', board members', teachers', and parent's perceptions as to the roles of vocational education in Oklahoma. Brooks found that all groups studied equated vocational education with teaching occupational skills and work values. He also found that overall there were no significant differences between the various groups' perceptions of the role of vocational and technical education. In the study, board members were found to rate the roles of vocational education with regard to work values higher than any other group. Counselors consistently perceived occupational training as being an important role of vocational education. Brooks stated that parents and students rated the statements differently than the other groups, perhaps implying that vocational education is for someone else.[2]

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[1]James B. Ballard, "The Role and Function of Public Junior Colleges in Oklahoma as Perceived by Citizens, Students, Faculty, Administrators, and Trustees" (unpublished Ed.D. dissertation, Oklahoma State University, 1973), p. 64.

[2]Ricky J. Brooks, "A Delphi Study of Parents', Teachers', School Board Members', School Administrators', School Counselors', and Students', Perceptions of the Roles of Vocational and Technical Education in Oklahoma" (unpublished Ed.D. dissertation, Oklahoma State University, 1974), p. 101.

Summary

A review of the literature revealed that authorities and writers in the field of junior colleges have consistently seen occupational training as one of the institution's roles. The occupational training referred to included initial skill training, technical training, upgrade skill training, and retraining for adults.

The dissertations and other research studies reviewed revealed that vocational education is often not understood by either the lay public or educators. Several of the studies showed vocational education to have a relatively low image in the eyes of the public. Superintendents of schools generally have a more positive attitude toward vocational education than do secondary principals.

Numerous inconsistencies were found in the studies with regard to various publics' attitudes toward vocational education. With regard to the role of the junior college in occupational training, there was wide disagreement.

In a study with a similar design to this study, the author found that the various publics of a specific college, Allegany Community College, perceived the institution's role in vocational preparation to be significantly greater than they believed it currently was.

In general, the literature showed a need and a desire of various publics to have more knowledge and understanding of the total program of vocational education.

CHAPTER III

METHODOLOGY

Introduction

Only community/junior colleges and area vocational schools in Oklahoma were used in this investigation. A detailed description of the junior college-area vocational school situation functioning in the state at the time of the study should be of significant value to other investigators who might be interested in utilizing the data collected for other reasons.

In 1977 Oklahoma had fourteen public institutions known either as community or junior colleges. The community/junior colleges were found throughout the state with the exception of the northwest section which was generally sparsely populated. The community colleges established ranged from Eastern Oklahoma State College at Wilburton, established in 1909, to the decade of the 70's when colleges were approved for Tulsa and Oklahoma City.

The area vocational school system began with the opening of the Tulsa Area School in 1965 and at the time of this study consisted of 20 districts with 28 separate campuses.

The geographic distribution of the area vocational schools and junior colleges in the State of Oklahoma is illustrated on page 36.

At the time of the study all of Oklahoma's community/junior colleges offered occupational training to students who were interested in enrolling in such courses. Concurrently, all area vocational schools offered a variety of occupational training programs for adults in addition to extensive vocational training for secondary students.

Population

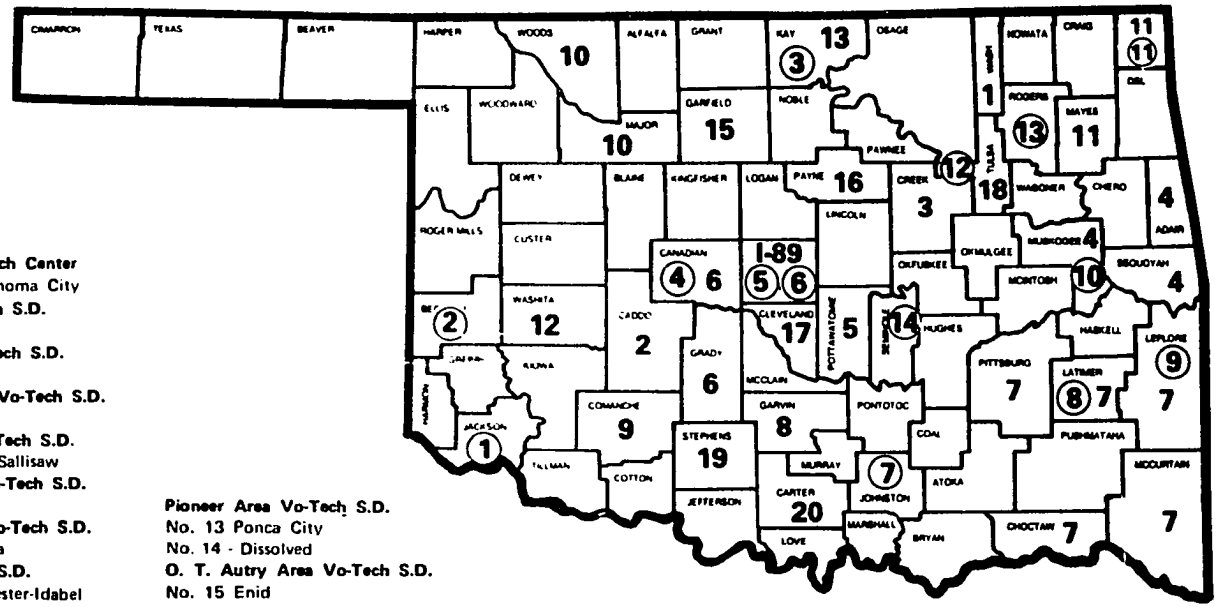
Subjects. The population of this study consisted of the four selected publics. These were: (1) high school principals of the school having the largest student enrollment in each of the 77 counties; (2) school superintendents from school systems having the largest teaching staff in each of the counties; (3) managers of the Chamber of Commerce of the largest city in each county; and (4) the owner or manager of the largest private employer in each county. No sampling techniques were utilized as the entire population for each category was used. The particular population was chosen because represented within the population were superintendents and principals of schools--the suppliers of the vocational education raw material, the students; and the Chamber of Commerce Executives and business-industry owners or managers--chief users of the vocational education product, skilled workers.

Questionnaire Administration

Members of the staff of the State Department of Vocational and Technical Education hand carried the questionnaires to those being surveyed. This method was utilized in an effort to gain a greater

Oklahoma Area Vocational-Technical Schools
And
Community-Junior Colleges

May 1, 1977



AREA SCHOOLS

Foster Estes Area Vo-Tech Center
Ind. S.D. No. I-89 Oklahoma City
Tri-County Area Vo-Tech S.D.
No. 1 Bartlesville
Caddo-Kiowa Area Vo-Tech S.D.
No. 2 Ft. Cobb
Central Oklahoma Area Vo-Tech S.D.
No. 3 Drumright
Indian Capital Area Vo-Tech S.D.
No. 4 Muskogee-Stilwell-Sallisaw
Gordon Cooper Area Vo-Tech S.D.
No. 5 Shawnee
Canadian Valley Area Vo-Tech S.D.
No. 6 El Reno-Chickasha
Kiamichi Area Vo-Tech S.D.
No. 7 Poteau-Hugo-McAlester-Idabel
Mid-America Area Vo-Tech S.D.
No. 8 Wayne
Great Plains Area Vo-Tech S.D.
No. 9 Lawton
Oklahoma Northwest Area Vo-Tech S.D.
No. 10 Alva-Fairview
Northeast Oklahoma Area Vo-Tech S.D.
No. 11 Afton-Pryor
Western Oklahoma Area Vo-Tech S.D.
No. 12 Burns Flat
Pioneer Area Vo-Tech S.D.
No. 13 Ponca City
No. 14 - Dissolved
O. T. Autry Area Vo-Tech S.D.
No. 15 Enid
Indian Meridian Area Vo-Tech S.D.
No. 16 Stillwater
Moore-Norman Area Vo-Tech S.D.
No. 17 Norman
Tulsa County Area Vo-Tech S.D.
No. 18 Tulsa
Red River Area Vo-Tech S.D.
No. 19 Duncan
Southern Oklahoma Area Vo-Tech S.D.
No. 20 Ardmore

COMMUNITY JUNIOR COLLEGES

1. Western Oklahoma College
2. Sayre Junior College
3. Northern Oklahoma College
4. El Reno College
5. South Oklahoma City Junior College
6. Oscar Rose Junior College
7. Murray State College
8. Eastern Oklahoma State College
9. Carl Albert Junior College
10. Connors State College
11. Northeastern Oklahoma A&M College
12. Tulsa Junior College
13. Claremore Junior College
14. Seminole Junior College

Figure 1

percentage return of the questionnaires. The staff members were already familiar with the group involved and had an interest in the study.

Prior to distribution of the questionnaire, the investigator met with the State Department of Vocational and Technical Education staff members who volunteered to assist in the study. The purpose of the meeting was to brief the staff on the survey instrument, the purpose of the study and to answer questions that were generated. The questionnaires were then distributed to the respondents over a ten-day period. In a concerted effort to further standardize the results of the study, the staff members agreed to make no explanation of the contents of the questionnaire or of any individual items.

The State staff members presented a letter of instructions along with the questionnaire from the investigator and asked that each questionnaire be completed at once or returned to the staff member by mail or at a future visit or mailed directly to the investigator. Confidentiality of the responses was protected.

Instrumentation

Questionnaire Construction. The content of the questionnaire was based on Emch's Long Range-Planning for Colleges and Universities.[1] Emch stated that the seven broad categories to be considered in any long-range educational planning were: (1) philosophy, (2) objectives, (3) programs, (4) organization, (5) staffing, (6) facilities, and (7) financing.[2]

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[1] Emch, op. cit., p. 7.

[2] Ibid.

A panel of persons knowledgeable of vocational education in Oklahoma was established to assist in the development of the instrument. The panel of ten persons was assembled from the staff of the Colleges of Education at Oklahoma State University, Central State University, Kansas State University, the Texas Education Consortium D, and the State Department of Vocational and Technical Education.

Selected from the staff of Oklahoma State University were Donald Phillips, Charles Hopkins, Don Frazier, and Richard Tinnell.

Phillips was Professor and Head of Technical Education and was a former secondary technical education teacher. He had served as a vocational-technical education consultant to many national activities and programs. He was a consultant on accreditation of junior colleges to the North Central Association of Colleges and Secondary Schools.

Hopkins was Coordinator of Planning in the School of Occupational and Adult Education and had responsibility for planning all types and levels of vocational education programs in Oklahoma. He had been a former vocational teacher in Oklahoma. Hopkins had served as a consultant on several national training activities in the field of vocational education. In addition, he had served as project director of two national projects in training state vocational staffs in management by objectives.

Don Frazier was an Associate Professor and Head of the Research Coordinating Unit in the School of Occupational and Adult Education. He had responsibility for coordinating relevant vocational education research activities for the Oklahoma State Department of Vocational and Technical Education and Oklahoma State University. He was a former secondary school instructor and administrator.

Richard Tinnell was an Assistant Professor of Technical and Adult Education and was a former technician for Texas Instruments, a major industry. He was author or co-author of numerous publications in the field of technical education and also served as a consultant to the Government of Thailand in the planning and establishment of vocational-technical schools.

The two persons selected to serve on the panel from Central State University were Lucille Patton and Joe Kinzer.

Patton was Dean of the School of Special Arts and Sciences and was a former Associate Professor and Chairperson of the Department of Vocational-Technical Teacher Education. Patton had served as a vocational teacher at both the secondary and university levels. Patton was recognized nationally for her expertise in vocational-technical education and had served as consultant in that capacity to numerous state and educational institutions.

Kinzer was Assistant Professor of Vocational-Technical Teacher Education. He was a former technical education teacher at Cameron University while it was a junior college. He had directed two vocational in-service training projects and served as consultant to several national activities of vocational-technical education concern. He had national recognition as a consultant in the area of Vocational Education for Native Americans.

Panel members representing the State Department of Vocational and Technical Education were Francis Tuttle and Zed DeVaughan.

Tuttle was State Director of Vocational Education and had the responsibility for providing leadership to more than 2,000 vocational

teachers and some 1,500 vocational programs in 425 high schools and 24 area vocational-technical schools in Oklahoma. Tuttle was a former high school vocational instructor, principal, and school superintendent. He has served the last ten years as State Director of Vocational Education and was recognized nationally as an outstanding educational leader. He had served as President of the National Association of State Directors of Vocational Education and as an education consultant to many states and to such foreign nations as Sweden, Thailand, and the USSR.

DeVaughan was coordinator of Staff Development and In-Service Education for the State Department of Vocational Education and was a former vocational teacher and secondary school administrator. He had co-directed two national vocational education leadership projects and had served as consultant to numerous national education activities. He had particular expertise in the field of Competency-Based Teacher Education.

Billy Pope was Coordinator of the Texas Educational Personnel Development Consortium D, and served on the panel. Pope was a former secondary school teacher and superintendent of a large Texas school district with direct supervision of 20 vocational programs. For ten years he had directed more than three-hundred state and national personnel development training activities. He had also served as director of the graduate vocational-technical leadership development program in three Texas universities participating in a consortium. He was recognized nationally as a leader in vocational-technical education.

Gary Green was Assistant Professor of Vocational-Technical Education at Kansas State University and served on the panel. He was a former

secondary vocational teacher and junior college instructor. He had served as coordinator of a National Career Education project which had the responsibility for training more than five hundred college and university teachers and deans in the career education concept. He had a national reputation for expertise in the field of career education and its relationship to vocational education. In addition to his expertise in vocational education, Green was widely recognized as an able economist.

The instrument used in this study was developed in two parts. Part I consisted of a Likert type scale for respondents to record the degree of emphasis that was being given or should be given to each of the 35 items by area schools and community/junior colleges. The thirty-five items consisted of five in each of the seven broad categories listed above. The five items selected for each of the seven categories suggested by Emch and the panel were chosen for depicting specifics believed to have implications for planning and administering vocational programs in area schools and community/junior colleges. The questionnaire was so designed that some of the 35 items related most particularly to one type of institution, either the area school or community/junior college. This was designed to test the knowledge that respondents had of vocational education in Oklahoma. Items for the questionnaire were determined after surveying the literature, conferring with practicing school administrators, vocational teachers, and representatives of the lay public knowledgeable about vocational education.

Part II of the questionnaire asked that the respondents rank in order the seven categories of planning according to the importance

believed placed on each category by officials of area schools and community/junior colleges. The respondents were also asked to rank in order the seven categories of planning in the order of importance they believed should be placed on each item in the planning process.

Questionnaire Validation. The investigator developed a tentative questionnaire based on Emch's outline of planning elements. The investigator then presented a draft copy of the questionnaire to each member of the jury of experts which had been impaneled. Each juror was asked to review and refine the questionnaire by adding, deleting, or changing it in any way that he/she believed would improve it. This procedure resulted in some alterations in the document.

After the review and revisions suggested by the jury had been accomplished, it was field tested by administering it to a random sampling of vocational educators, school administrators, and representatives of the Stillwater, Oklahoma, business community. None of those with whom the questionnaire was field tested took part as a respondent in the completion of the questionnaire to be used in the study. After the questionnaire had been administered as a field test, respondents were interviewed to determine if any items had been misunderstood. Some minor changes were then made in the questionnaire. The results of the field test were that the questionnaire was understandable, offered a wide choice of responses, and provided adequate opportunity to differentiate between what was believed to be specific functions of each type of institution. The questionnaire was then submitted to Omer J. Rupiper, co-chairman of the investigator's committee, who approved it before it was utilized to collect the data.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

The purpose of this study was to determine the perceptions of public school superintendents, high school principals, chamber of commerce executives, and industry managers with regard to selected educational roles within the seven planning elements for area schools and community/junior colleges. This was accomplished by the administration of a questionnaire. The questionnaire afforded the four above-mentioned groups the opportunity to respond to the degree of emphasis they perceived was being placed on the selected educational roles. Respondents were also given the opportunity to respond as to the degree of emphasis they perceived should be placed on each of the roles by area schools and community/junior colleges. Degrees of emphasis which respondents could check ranged from no emphasis to very much emphasis over a five point Likert-type scale.

Results of Analysis of Data Pertaining to the Research Question

The data presented in this section are directed toward the analysis of sub-questions and to answering the basic research question of the study.

Respondents

The study initially involved 308 persons: the superintendent of the largest public school system, the principal of the high school with the largest enrollment, the manager or the president of the Chamber of Commerce in the largest city, and the manager of the private industry with the largest number of employees in each of the 77 counties of Oklahoma.

Table 1 gives the number of respondents from each of the groups who completed and returned the questionnaire and the overall percentage of returns. Overall, 87.3 percent returned the questionnaire. The greatest percentage of returns (95 percent) came from secondary school principals. Chamber of Commerce executives had the least returns with 62 of 77, or approximately 80 percent responding.

Due to the confidentiality promised the respondents, it was not possible to send follow-up letters to those who did not return their questionnaire. State Department of Vocational and Technical Education staff members who delivered the questionnaires did "jog" the memories of the individuals with whom questionnaires had been left reminding them (by telephone or on subsequent visits) to return the questionnaires if they had not already done so.

TABLE 1

PERCENTAGE OF QUESTIONNAIRES RETURNED

Respondents	Number Distributed	Number Returned	Percent Returned
Superintendents	77	70	90.0%
Principals	77	74	96.0
Chambers of Commerce	77	63	82.0
Industry Managers	77	62	80.0
Total	308	269	87.3%

Demographic Data. In Tables 2 through 6, demographic data are presented concerning the respondents.

The respondents were predominantly male. Table 2 shows that 247 of the 269 who completed the questionnaire checked their sex as male, 19 checked their sex as female, and three did not indicate their sex.

TABLE 2

SEX OF RESPONDENTS

Respondents	Male No.	Female No.	Incomplete No.	Total No.
Chambers of Commerce	49	13	0	62
Industry Managers	56	6	1	63
Principals	73	0	1	74
Superintendents	69	0	1	70
Total	247	19	3	269

Table 3 depicts the ages of the various respondents. Respondents were typically over 40 years of age with 97 checking the 40-49 age group and 77 checking over 50 as their age group. Ten respondents did not check an age group.

TABLE 3

APPROXIMATE AGE OF RESPONDENTS

Respondents	Approximate Age				Incomplete	Total
	20-29 Years	30-39 Years	40-49 Years	50 or Over		
Chambers of Commerce	4	20	13	21	4	62
Industry Managers	7	21	19	14	2	63
Principals	3	23	31	15	2	74
Superintendents	0	7	34	27	2	70
Total	14	71	97	77	10	269

Table 4 gives the years in present position as reported on the questionnaire. It is noteworthy that over 50 percent of the respondents, 135 in number, had been in their present position five years or less. Only nine indicated they had held their present position 20 or more years. Of the nine, four were superintendents, three were principals, and two were industry managers.

TABLE 4

RESPONDENTS' YEARS IN PRESENT POSITION

Respondents	0-1 Year	1-5 Years	6-10 Years	11-15 Years	16-20 Years	Over 20 Years	Incomplete	Total
Chambers of Commerce	7	37	10	2	6	0	0	62
Industry Managers	5	31	14	7	3	2	1	63
Principals	1	43	15	6	6	3	0	74
Superintendents	3	24	32	3	3	4	1	70
Total	16	135	71	18	18	9	2	269

Table 5 indicates the type of educational or training institution attended by the respondents. The change in title from colleges to regional universities is believed to have skewed the results in the four-year college and university columns. Only six indicated they had ever attended an area school, and only 21 of 269 indicated they had attended a community or junior college.

TABLE 5

NUMBER OF RESPONDENTS WHO ATTENDED SPECIFIC TYPES OF EDUCATIONAL INSTITUTIONS

Respondents	Area School	2-Year College	4-Year College	University	Other
Chambers of Commerce	4	4	19	36	3
Industry Managers	2	2	13	29	6
Principals	0	8	40	60	0
Superintendents	0	7	33	56	1
Total	6	21	105	181	10

Table 6 shows the highest educational level of respondents. As could be expected in a study involving respondents from the education community and the business community of Oklahoma's mostly agrarian counties, the education group had by far the highest level of educational attainment. Due to the fact that there is no relationship between the numbers reported by the different groups, no attempt was made to depict the results in the report of this study.

TABLE 6

NUMBER OF RESPONDENTS SHOWING HIGHEST EDUCATIONAL LEVEL

Respondents	High School	High School +1 yr.	Junior College Grad.	3 Years College	B.S.	Master's	Doctorate	Incomplete	Total
Chambers of Commerce	6	9	4	9	25	8	1	0	62
Industry Managers	10	4	2	7	20	13	0	7	63
Principals	n/a	n/a	0	n/a	2	68	1	3	74
Superintendents	n/a	n/a	0	n/a	n/a	45	22	3	70
Total	16	13	6	16	47	134	24	13	269

Hypothesis Tested

The basic hypothesis tested in this study was "There is no significant difference between the perceptions of school administrators (school principals and superintendents) and business managers (Chamber of Commerce executives and industry managers) regarding the educational roles of community/junior colleges and area vocational schools."

In order to amplify information related to the basic research question, analyses were made of the mean response of each of the four groups of respondents as to their perceptions of emphasis being given and emphasis that should be given to each of 35 specific educational roles within the seven planning elements. The responses were tested against the null hypothesis that "There is no significant difference between the perceptions for selected groups as to the degree of emphasis that is given each specific role by area vocational-technical schools and community/junior colleges." This null hypothesis was applied to the perceptions of principals, superintendents, Chamber of Commerce executives, and industry managers.

The null hypothesis was tested and analyses were based on the t-test to determine if there were significant differences in how each group perceived what degree of emphasis was placed on each of the 35 specific roles.

Table 7 depicts the perceptions of the secondary principals surveyed as to the emphasis given the selected educational roles by area vocational schools and community/junior colleges. The null hypothesis was rejected at the .01 level of confidence for Items 1, 2, 3, 4, 7, 11, 14, 15, 19, 22, 29, 32, and 34. The null hypothesis was rejected at the .05 level of confidence for Items 10, 12, and 21. The principals perceived the area schools as giving significantly greater emphasis to Items 1, 3, 7, 10, 11, 14, 19, 21, 29, and 34 than do the community/junior colleges. They perceived the community/junior colleges as giving significantly greater emphasis to Items 2, 4, 12, 15, 22, and 32.

Table 8 shows the principals' perceptions of emphasis that should be given selected educational roles by area schools and community/junior colleges. The null hypothesis was rejected at the .01 level of confidence for Items 1, 3, 4, 7, 11, 14, 15, 18, 19, and 22, and at the .05 level for Items 2, 21, 27, and 29. The principals perceived that the area schools should give significantly more emphasis to Items 1, 3, 7, 11, 14, 18, 19, 21, 27, and 29 than should the community/junior colleges. In turn they perceived that community/junior colleges should give significantly greater emphasis to Items 2, 4, 15, and 22.

TABLE 7

HIGH SCHOOL PRINCIPALS' PERCEPTIONS OF WHAT EMPHASIS IS GIVEN TO EDUCATIONAL ROLES FOR AREA SCHOOLS AND COMMUNITY/JUNIOR COLLE

Educational Roles
Philosophy
1. No person denied enrollment because of low family income.
2. General education an important component of the vocational program.
3. Vocational programs offered closely geared to the manpower needs of the state.
4. Institutions provide programs appropriate for students with above average academic ability.
5. Vocational programs developed to meet the specific needs of both sexes.
Objectives
6. Vocational programs provided for students of all academic abilities.
7. Training for entry level employment a primary objective of the institution.
8. Vocational programs offered within commuting distance for all citizens.
9. Vocational programs offered to meet the special needs of handicapped students.
10. Retraining to meet changing business and industry needs, an important objective of the institutio
Programs
11. Each institution develops vocational programs based on its assessment of area needs.
12. Vocational education opportunities offered to adult students on a full-time basis.
13. Vocational education opportunities offered to adult students on a part-time basis.
14. Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.
15. Theory oriented programs with a mathematics and science base offered.
Organization
16. Formal school credit granted for on-the-job experience.
17. Transferable school credit granted.
18. Each institution serves only citizens of its immediate community.
19. Principal administrative control rests with the local community.
20. Advisory committees assist with curriculum development.
Staffing
21. All vocational teachers have appropriate business or industrial experience in their speciality.
22. All vocational teachers have a minimum of the bachelor's degree.
23. All vocational teachers certified by the state.
24. A state salary schedule for vocational teachers.
25. Teachers of a skilled trade subject maintain affiliation with the appropriate journeyman organizat
Facilities
26. Training facilities shared with other types of institutions.
27. Physical facilities for vocational programs primarily financed at the local level.
28. Training facilities duplicate those found in business and industry.
29. Training facilities and equipment provided and owned by the State Dept. of Vocational and Technica
30. Adequate vocational program facilities to serve the needs of the State of Oklahoma.
Finance
31. The Oklahoma Legislature provides adequate state financial support for programs.
32. As educational costs rise, student tuition and fees rise proportionately.
33. Training institutions financed at a level to offer programs in equal quality to those in neighbori
34. Training programs primarily financed by local taxes.
35. The five-mill levy to support vocational education provides adequate local funding for support of programs.

*Denotes .05 level of confidence.
**Denotes .01 level of confidence.

TABLE 7

'RINCIPALS' PERCEPTIONS OF WHAT EMPHASIS IS GIVEN TO SELECTED
'AL ROLES FOR AREA SCHOOLS AND COMMUNITY/JUNIOR COLLEGES

lucational Roles	AVTS Mean Response	C/JC Mean Response	Mean Diff.	SE Diff.	t
Philosophy					
ımily income.	3.75	3.33	0.42	.137	3.07**
:he vocational program.	3.05	3.67	-0.62	.175	-3.54**
) the manpower needs of the state.	3.52	3.05	0.47	.146	3.26**
: students with above average academic ability.	3.26	3.71	-0.45	.105	-4.28**
ecific needs of both sexes.	3.80	3.64	0.15	.115	1.32
Objectives					
all academic abilities.	3.17	3.14	0.03	.137	0.25
y objective of the institution.	3.81	3.22	0.59	.145	4.08**
distance for all citizens.	3.08	3.02	0.06	.163	0.41
ial needs of handicapped students.	2.60	2.67	-0.07	.098	-0.70
ustry needs, an important objective of the institution.	3.19	2.88	0.31	.133	2.29*
Programs					
s based on its assessment of area needs.	3.48	3.07	0.41	.137	3.02**
o adult students on a full-time basis.	3.15	3.54	-0.39	.157	-2.49*
o adult students on a part-time basis.	3.54	3.61	-0.07	.134	-0.50
areas as machine tool, printing, carpentry, welding.	3.72	2.76	0.97	.195	4.95**
and science base offered.	2.37	3.51	-1.14	.170	-6.68**
Organization					
experience.	3.04	2.74	0.30	.166	1.80
	3.57	3.66	-0.09	.124	-0.70
immediate community.	2.92	2.68	0.24	.144	1.65
the local community.	3.40	2.95	0.46	.172	2.66**
evelopment.	3.12	2.95	0.17	.126	1.32
Staffing					
iness or industrial experience in their speciality.	3.75	3.45	0.30	.122	2.46*
ıe bachelor's degree.	2.55	4.05	-1.50	.176	-8.52**
ıte.	4.07	4.18	-0.11	.152	-0.69
ıers.	3.53	3.73	-0.20	.167	-1.20
ı affiliation with the appropriate journeyman organization.	3.00	3.04	-0.04	.072	-0.50
Facilities					
of institutions.	2.78	2.98	-0.20	.143	-1.45
primarily financed at the local level.	3.14	2.79	0.35	.183	1.92
ı business and industry.	3.30	3.20	0.10	.091	1.18
ınd owned by the State Dept. of Vocational and Technical Education.	3.47	2.98	0.49	.135	3.63**
erve the needs of the State of Oklahoma.	3.15	3.05	0.10	.118	0.85
Finance					
tate financial support for programs.	2.93	2.88	0.05	.093	0.54
ınd fees rise proportionately.	2.90	3.27	-0.37	.128	-2.87**
) offer programs in equal quality to those in neighboring states.	3.23	3.14	0.09	.101	0.87
ıl taxes.	3.13	2.60	0.53	.164	3.26**
ıcation provides adequate local funding for support of training	2.89	2.75	0.13	.137	0.96

TABLE 8

HIGH SCHOOL PRINCIPALS' PERCEPTIONS OF WHAT EMPHASIS SHOULD BE GIVEN
EDUCATIONAL ROLES FOR AREA SCHOOLS AND COMMUNITY/JUNIOR COLL

Educational Roles

Philosophy

1. No person denied enrollment because of low family income.
2. General education an important component of the vocational program.
3. Vocational programs offered closely geared to the manpower needs of the state.
4. Institutions provide programs appropriate for students with above average academic ability.
5. Vocational programs developed to meet the specific needs of both sexes.

Objectives

6. Vocational programs provided for students of all academic abilities
7. Training for entry level employment a primary objective of the institution.
8. Vocational programs offered within commuting distance for all citizens.
9. Vocational programs offered to meet the special needs of handicapped students.
10. Retraining to meet changing business and industry needs, an important objective of the institution.

Programs

11. Each institution develops vocational programs based on its assessment of area needs.
12. Vocational education opportunities offered to adult students on a full-time basis.
13. Vocational education opportunities offered to adult students on a part-time basis.
14. Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.
15. Theory oriented programs with a mathematics and science base offered.

Organization

16. Formal school credit granted for on-the-job experience.
17. Transferable school credit granted.
18. Each institution serves only citizens of its immediate community.
19. Principal administrative control rests with the local community.
20. Advisory committees assist with curriculum development.

Staffing

21. All vocational teachers have appropriate business or industrial experience in their speciality.
22. All vocational teachers have a minimum of the bachelor's degree.
23. All vocational teachers certified by the state.
24. A state salary schedule for vocational teachers.
25. Teachers of a skilled trade subject maintain affiliation with the appropriate journeyman organizatic

Facilities

26. Training facilities shared with other types of institutions.
27. Physical facilities for vocational programs primarily financed at the local level.
28. Training facilities duplicate those found in business and industry.
29. Training facilities and equipment provided and owned by the State Dept. of Vocational and Technical
30. Adequate vocational program facilities to serve the needs of the State of Oklahoma.

Finance

31. The Oklahoma Legislature provides adequate state financial support for programs.
32. As educational costs rise, student tuition and fees rise proportionately.
33. Training institutions financed at a level to offer programs in equal quality to those in neighborin
34. Training programs primarily financed by local taxes.
35. The five-mill levy to support vocational education provides adequate local funding for support of t programs.

*Denotes .05 level of confidence.
**Denotes .01 level of confidence.

TABLE 8

INCIPALS' PERCEPTIONS OF WHAT EMPHASIS SHOULD BE GIVEN TO SELECTED
IONAL ROLES FOR AREA SCHOOLS AND COMMUNITY/JUNIOR COLLEGES

ucational Roles	AVTS Mean Response	C/JC Mean Response	Mean Diff.	SE Diff.	t
Philosophy					
mily income.	4.33	3.89	0.44	.137	3.20**
he vocational program.	3.88	4.21	-0.33	.138	-2.38*
the manpower needs of the state.	4.45	4.07	0.38	.089	4.30**
students with above average academic ability.	4.08	4.42	-0.34	.075	-4.52**
cific needs of both sexes.	4.34	4.22	0.12	.119	1.00
Objectives					
all academic abilities	4.39	4.25	0.15	.146	1.01
objective of the institution.	4.50	4.05	0.46	.137	3.34**
distance for all citizens.	4.25	4.08	0.16	.139	1.18
tal needs of handicapped students.	4.32	4.30	0.02	.084	0.20
stry needs, an important objective of the institution.	4.38	4.15	0.23	.124	1.88
Programs					
s based on its assessment of area needs.	4.50	4.14	0.36	.132	2.75**
adult students on a full-time basis.	4.22	4.34	-0.12	.137	-0.87
adult students on a part-time basis.	4.59	4.46	0.13	.098	1.38
areas as machine tool, printing, carpentry, welding.	4.56	3.68	0.88	.187	4.70**
and science base offered.	3.56	4.38	-0.82	.156	-5.25**
Organization					
experience.	3.92	3.83	0.08	.177	0.47
	4.42	4.45	0.03	.067	-0.50
immediate community.	3.33	2.86	0.44	.139	3.18**
the local community.	3.98	3.47	0.51	.148	3.44**
evelopment.	4.23	4.13	0.10	.087	1.14
Staffing					
iness or industrial experience in their speciality.	4.43	4.22	0.21	.098	2.20*
e bachelor's degree.	3.88	4.47	-0.58	.139	-4.19**
te.	4.61	4.51	0.10	.089	1.14
ers.	4.17	4.22	-0.05	.129	-0.40
affiliation with the appropriate journeyman organization.	4.03	3.84	0.19	.129	1.47
Facilities					
of institutions.	3.62	3.87	-0.25	.142	-1.76
primarily financed at the local level.	3.25	2.88	0.37	.164	2.28*
business and industry.	4.03	4.02	0.01	.087	0.20
nd owned by the State Dept. of Vocational and Technical Education.	3.98	3.66	0.32	.122	2.64*
rve the needs of the State of Oklahoma.	4.48	4.25	0.23	.125	1.84
Finance					
tate financial support for programs.	4.43	4.44	-0.01	.064	-0.25
nd fees rise proportionately.	3.28	3.49	-0.21	.128	-1.66
offer programs in equal quality to those in neighboring states.	4.25	4.42	-0.17	.093	-1.80
l taxes.	3.30	3.03	0.27	.142	1.87
cation provides adequate local funding for support of training	3.78	3.50	0.27	.141	1.94

Table 9 analyzes the superintendents' perceptions as to emphasis being given to selected educational roles by area schools compared to community/junior colleges. The null hypothesis is rejected for Items 2, 3, 7, 8, 10, 11, 14, 15, 16, 18, 19, 20, 21, 22, 28, 29, 32, and 34 at the .01 level of confidence and at the .05 level of confidence for Items 1, 4, 6, 9, 17, 25, 27, and 35. The analysis indicates that superintendents perceived significantly more emphasis given Items 1, 3, 6, 7, 8, 9, 10, 11, 14, 16, 18, 19, 20, 21, 25, 27, 28, 29, 34, and 35 by the area schools while the community/junior colleges were seen as giving significantly more emphasis to Items 2, 4, 15, 17, 22, and 32.

Table 10 depicts the emphasis superintendents perceived should be given to selected educational roles by area schools and community/junior colleges. The null hypothesis was rejected at the .01 level of confidence for Items 2, 3, 4, 6, 7, 8, 9, 11, 14, 15, 18, 19, 22, 27, 32, and 35. The null hypothesis was rejected at the .05 level of confidence for Items 1, 10, 17, 20, 21, 26, 28, and 30. The superintendents perceived that the community/junior colleges should be giving significantly more emphasis to Items 2, 4, 15, 17, 22, 26, and 32 than should area schools. They also perceived that area schools should be giving significantly more emphasis to Items 1, 3, 6, 7, 8, 9, 10, 11, 14, 18, 19, 20, 21, 27, 28, 30, and 35 than should community/junior colleges.

TABLE 9

SUPERINTENDENTS' OF SCHOOLS PERCEPTIONS OF WHAT EMPHASIS IS GIVI
EDUCATIONAL ROLES FOR AREA SCHOOLS AND COMMUNITY/JUNIOR C

Educational Roles	
Philosophy	
1. No person denied enrollment because of low family income.	
2. General education an important component of the vocational program.	
3. Vocational programs offered closely geared to the manpower needs of the state.	
4. Institutions provide programs appropriate for students with above average academic ability.	
5. Vocational programs developed to meet the specific needs of both sexes.	
Objectives	
6. Vocational programs provided for students of all academic abilities.	
7. Training for entry level employment a primary objective of the institution.	
8. Vocational programs offered within commuting distance for all citizens.	
9. Vocational programs offered to meet the special needs of handicapped students.	
10. Retraining to meet changing business and industry needs, an important objective of the institutio	
Programs	
11. Each institution develops vocational programs based on its assessment of area needs.	
12. Vocational education opportunities offered to adult students on a full-time basis.	
13. Vocational education opportunities offered to adult students on a part-time basis.	
14. Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.	
15. Theory oriented programs with a mathematics and science base offered.	
Organization	
16. Formal school credit granted for on-the-job experience.	
17. Transferable school credit granted.	
18. Each institution serves only citizens of its immediate community.	
19. Principal administrative control rests with the local community.	
20. Advisory committees assist with curriculum development.	
Staffing	
21. All vocational teachers have appropriate business or industrial experience in their speciality.	
22. All vocational teachers have a minimum of the bachelor's degree.	
23. All vocational teachers certified by the state.	
24. A state salary schedule for vocational teachers.	
25. Teachers of a skilled trade subject maintain affiliation with the appropriate journeyman organizat	
Facilities	
26. Training facilities shared with other types of institutions.	
27. Physical facilities for vocational programs primarily financed at the local level.	
28. Training facilities duplicate those found in business and industry.	
29. Training facilities and equipment provided and owned by the State Dept. of Vocational and Technic	
30. Adequate vocational program facilities to serve the needs of the State of Oklahoma.	
Finance	
31. The Oklahoma Legislature provides adequate state financial support for programs.	
32. As educational costs rise, student tuition and fees rise proportionately.	
33. Training institutions financed at a level to offer programs in equal quality to those in neighbor	
34. Training programs primarily financed by local taxes.	
35. The five-mill levy to support vocational education provides adequate local funding for support of programs.	

*Denotes .05 level of confidence.
**Denotes .01 level of confidence.

TABLE 9

ENTS' OF SCHOOLS PERCEPTIONS OF WHAT EMPHASIS IS GIVEN TO SELECTED
TIONAL ROLES FOR AREA SCHOOLS AND COMMUNITY/JUNIOR COLLEGES

ıcational Roles	AVTS Mean Response	C/JC Mean Response	Mean Diff.	SE Diff.	t
Philosophy					
nily income.	3.59	3.22	0.37	.176	2.11*
he vocational program.	2.79	3.64	-0.85	.141	-6.02**
the manpower needs of the state.	3.67	2.73	0.94	.156	6.03**
students with above average academic ability.	3.08	3.37	-0.29	.121	-2.39*
cific needs of both sexes.	3.36	3.43	-0.07	.142	-0.53
Objectives					
all academic abilities.	3.17	2.74	0.43	.154	2.83*
objective of the institution.	3.98	2.97	1.04	.190	5.45**
distance for all citizens.	3.33	2.72	0.61	.172	3.55**
al needs of handicapped students.	2.56	2.31	0.25	.106	2.28*
stry needs, an important objective of the institution.	3.21	2.46	0.75	.173	4.32**
Programs					
based on its assessment of area needs.	3.35	2.74	0.61	.119	5.12**
adult students on a full-time basis.	2.83	3.11	0.28	.184	-1.51
adult students on a part-time basis.	3.69	3.46	0.22	.156	1.43
reas as machine tool, printing, carpentry, welding.	3.80	2.39	1.41	.207	6.79**
nd science base offered.	2.15	3.52	-1.37	.168	-8.17**
Organization					
xperience.	2.85	2.29	0.56	.185	3.01**
	3.30	3.74	0.44	.169	-2.56*
immediate community.	3.00	2.37	0.63	.192	3.30**
he local community.	3.42	2.79	0.63	.230	2.76**
velopment.	3.33	2.46	0.87	.184	4.70**
Staffing					
ness or industrial experience in their speciality.	3.65	2.94	0.71	.185	3.85**
bachelor's degree.	2.78	3.80	-1.02	.191	-5.34**
e.	4.29	3.96	0.33	.171	1.91
rs.	3.39	3.04	0.35	.183	1.89
affiliation with the appropriate journeyman organization.	2.98	2.67	0.31	.147	2.14*
Facilities					
f institutions.	2.40	2.69	-0.29	.156	-1.85
rimarily financed at the local level.	3.17	2.62	0.55	.210	2.61*
business and industry.	3.33	2.82	0.51	.149	3.42**
d owned by the State Dept. of Vocational and Technical Education.	3.24	2.56	0.68	.190	3.57**
ve the needs of the State of Oklahoma.	3.04	2.89	0.15	.158	0.96
Finance					
ate financial support for programs.	2.78	2.72	0.06	.113	0.49
d fees rise proportionately.	2.69	3.27	-0.58	.151	-3.86**
offer programs in equal quality to those in neighboring states.	3.04	3.17	-0.13	.126	-1.04
. taxes.	3.02	2.55	0.47	.170	2.78**
ation provides adequate local funding for support of training	2.98	2.48	0.50	1.194	2.57*

TABLE 10

SUPERINTENDENTS' OF SCHOOLS PERCEPTIONS OF WHAT EMPHASIS SHOULD BE
EDUCATIONAL ROLES FOR AREA SCHOOLS AND COMMUNITY/JUNIOR C

	Educational Roles
	Philosophy
1.	No person denied enrollment because of low family income.
2.	General education an important component of the vocational program.
3.	Vocational programs offered closely geared to the manpower needs of the state.
4.	Institutions provide programs appropriate for students with above average academic ability.
5.	Vocational programs developed to meet the specific needs of both sexes.
	Objectives
6.	Vocational programs provided for students of all academic abilities.
7.	Training for entry level employment a primary objective of the institution.
8.	Vocational programs offered within commuting distance for all citizens.
9.	Vocational programs offered to meet the special needs of handicapped students.
10.	Retraining to meet changing business and industry needs, an important objective of the instituti
	Programs
11.	Each institution develops vocational programs based on its assessment of area needs.
12.	Vocational education opportunities offered to adult students on a full-time basis.
13.	Vocational education opportunities offered to adult students on a part-time basis.
14.	Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.
15.	Theory oriented programs with a mathematics and science base offered.
	Organization
16.	Formal school credit granted for on-the-job experience.
17.	Transferable school credit granted.
18.	Each institution serves only citizens of its immediate community.
19.	Principal administrative control rests with the local community.
20.	Advisory committees assist with curriculum development.
	Staffing
21.	All vocational teachers have appropriate business or industrial experience in their speciality.
22.	All vocational teachers have a minimum of the bachelor's degree.
23.	All vocational teachers certified by the state.
24.	A state salary schedule for vocational teachers.
25.	Teachers of a skilled trade subject maintain affiliation with the appropriate journeyman organiz
	Facilities
26.	Training facilities shared with other types of institutions.
27.	Physical facilities for vocational programs primarily financed at the local level.
28.	Training facilities duplicate those found in business and industry.
29.	Training facilities and equipment provided and owned by the State Dept. of Vocational and Techni
30.	Adequate vocational program facilities to serve the needs of the State of Oklahoma.
	Finance
31.	The Oklahoma Legislature provides adequate state financial support for programs.
32.	As educational costs rise, student tuition and fees rise proportionately.
33.	Training institutions financed at a level to offer programs in equal quality to those in neighbo
34.	Training programs primarily financed by local taxes.
35.	The five-mill levy to support vocational education provides adequate local funding for support o programs.

*Denotes .05 level of confidence.
**Denotes .01 level of confidence.

TABLE 10

TS' OF SCHOOLS PERCEPTIONS OF WHAT EMPHASIS SHOULD BE GIVEN TO SELECTED
'CATIONAL ROLES FOR AREA SCHOOLS AND COMMUNITY/JUNIOR COLLEGES

Educational Roles	AVTS Mean Response	C/JC Mean Response	Mean Diff.	SE Diff.	t
Philosophy					
w family income.	4.02	3.68	0.34	.145	2.34*
of the vocational program.	3.68	4.04	-0.36	.131	-2.73**
d to the manpower needs of the state.	4.39	3.89	0.50	.137	3.66**
for students with above average academic ability.	3.69	4.24	-0.55	.127	-4.31**
specific needs of both sexes.	4.36	4.20	0.16	.112	1.46
Objectives					
of all academic abilities.	4.37	3.84	0.53	.148	3.55**
nary objective of the institution.	4.52	4.00	0.52	.137	3.77**
ing distance for all citizens.	4.46	3.68	0.78	.150	5.23**
pecial needs of handicapped students.	4.05	3.51	0.54	.106	5.11**
industry needs, an important objective of the institution.	4.31	3.98	0.33	.120	2.68*
Programs					
rams based on its assessment of area needs.	4.18	3.79	0.39	.093	4.16**
l to adult students on a full-time basis.	3.96	4.00	-0.04	.164	-0.22
l to adult students on a part-time basis.	4.30	4.07	0.23	.153	1.52
h areas as machine tool, printing, carpentry, welding.	4.56	3.58	0.98	.203	4.82**
s and science base offered.	3.02	4.13	-1.11	.161	-6.87**
Organization					
b experience.	3.59	3.20	.039	.215	1.81
	4.14	4.39	-0.25	.109	-2.30*
ts immediate community.	3.02	2.54	0.48	.171	2.82**
h the local community.	4.00	3.36	0.64	.147	4.36**
l development.	3.93	3.59	0.34	.133	2.55*
Staffing					
usiness or industrial experience in their speciality.	4.28	4.02	0.26	.126	2.08*
the bachelor's degree.	3.50	4.26	-0.86	.154	-5.57**
tate.	4.61	4.52	0.09	.096	0.93
chers.	3.68	3.70	-0.02	.104	-0.18
in affiliation with the appropriate journeyman organization.	3.55	3.38	0.17	.121	1.35
Facilities					
s of institutions.	3.41	3.73	-0.32	.140	-2.30*
s primarily financed at the local level.	3.21	2.64	0.57	.163	3.51**
in business and industry.	3.72	3.44	0.28	.116	2.38*
and owned by the State Dept. of Vocational and Technical Education.	3.22	3.04	0.18	.173	1.07
serve the needs of the State of Oklahoma.	4.50	4.04	0.46	.184	2.53*
Finance					
state financial support for programs.	4.23	4.09	0.14	.126	1.13
and fees rise proportionately.	3.09	3.47	-0.38	.119	-3.23**
to offer programs in equal quality to those in neighboring states.	4.23	4.25	-0.02	.097	-0.20
cal taxes.	2.98	2.76	0.22	.144	1.52
ducation provides adequate local funding for support of training	3.89	3.08	0.81	.184	4.38**

Table 11 shows the perceptions of Chamber of Commerce managers as to the emphasis given selected educational roles for area schools and community/junior colleges. The null hypothesis was rejected at the .01 level of confidence for Items 2, 3, 4, 7, 10, 11, 14, 15, 21, 22, and 32. In addition, the null hypothesis was rejected at the .05 level of confidence for Items 6, 8, 16, 19, and 20. The rejection of the null hypothesis for Items 3, 6, 7, 8, 10, 11, 14, 16, 19, 20, and 21 indicated that Chamber of Commerce managers perceived that greater emphasis was given these educational roles by area schools than by community/junior colleges. When the null hypothesis was rejected for Items 2, 4, 15, 22, and 32, it was indicated that greater emphasis was given these educational roles by community/junior colleges than by area schools.

Table 12 depicts the perceptions of the Chamber of Commerce managers as to the degree of emphasis that should be given selected educational roles by area schools as compared to community/junior colleges. The null hypothesis was rejected for 19 of the 35 items. The null hypothesis was rejected at the .01 level of confidence for Items 1, 4, 5, 7, 8, 10, 11, 14, 15, 22, 30, 32, and 34. The null hypothesis was rejected at the .05 level of confidence for Items 2, 3, 6, 19, 29, and 31. Rejection of the null hypothesis indicated Chamber of Commerce managers perceived community/junior colleges should be giving more emphasis to Items 2, 4, 15, 22, and 32 while area schools should be giving greater emphasis to Items 1, 3, 5, 6, 7, 8, 10, 11, 14, 19, 29, 30, 31, and 34 than should community/junior colleges.

TABLE 11

CHAMBER OF COMMERCE MANAGERS' PERCEPTIONS OF WHAT EMPHASIS IS G
EDUCATIONAL ROLES FOR AREA SCHOOLS AND COMMUNITY/JUNIOR

	Educational Roles
	Philosophy
1.	No person denied enrollment because of low family income.
2.	General education an important component of the vocational program.
3.	Vocational programs offered closely geared to the manpower needs of the state.
4.	Institutions provide programs appropriate for students with above average academic ability.
5.	Vocational programs developed to meet the specific needs of both sexes.
	Objectives
6.	Vocational programs provided for students of all academic abilities.
7.	Training for entry level employment a primary objective of the institution.
8.	Vocational programs offered within commuting distance for all citizens.
9.	Vocational programs offered to meet the special needs of handicapped students.
10.	Retraining to meet changing business and industry needs, an important objective of the instituti
	Programs
11.	Each institution develops vocational programs based on its assessment of area needs.
12.	Vocational education opportunities offered to adult students on a full-time basis.
13.	Vocational education opportunities offered to adult students on a part-time basis.
14.	Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.
15.	Theory oriented programs with a mathematics and science base offered.
	Organization
16.	Formal school credit granted for on-the-job experience.
17.	Transferable school credit granted.
18.	Each institution serves only citizens of its immediate community.
19.	Principal administrative control rests with the local community.
20.	Advisory committees assist with curriculum development.
	Staffing
21.	All vocational teachers have appropriate business or industrial experience in their speciality.
22.	All vocational teachers have a minimum of the bachelor's degree.
23.	All vocational teachers certified by the state.
24.	A state salary schedule for vocational teachers.
25.	Teachers of a skilled trade subject maintain affiliation with the appropriate journeyman organiz
	Facilities
26.	Training facilities shared with other types of institutions.
27.	Physical facilities for vocational programs primarily financed at the local level.
28.	Training facilities duplicate those found in business and industry.
29.	Training facilities and equipment provided and owned by the State Dept. of Vocational and Techni
30.	Adequate vocational program facilities to serve the needs of the State of Oklahoma.
	Finance
31.	The Oklahoma Legislature provides adequate state financial support for programs.
32.	As educational costs rise, student tuition and fees rise proportionately.
33.	Training institutions financed at a level to offer programs in equal quality to those in neighbo
34.	Training programs primarily financed by local taxes.
35.	The five-mill levy to support vocational education provides adequate local funding for support o programs.

*Denotes .05 level of confidence.
**Denotes .01 level of confidence.

TABLE 11

MMERCE MANAGERS' PERCEPTIONS OF WHAT EMPHASIS IS GIVEN TO SELECTED
TIONAL ROLES FOR AREA SCHOOLS AND COMMUNITY/JUNIOR COLLEGES

cational Roles	AVTS Mean Response	C/JC Mean Response	Mean Diff.	SE Diff.	t
Philosophy					
ily income.	3.28	3.04	0.24	.226	1.04
e vocational program.	2.94	3.60	-0.66	.200	-3.33**
the manpower needs of the state.	3.20	2.64	0.56	.146	3.83**
students with above average academic ability.	2.70	3.22	-0.52	.157	-3.31**
ific needs of both sexes.	3.34	3.24	0.16	.149	0.67
Objectives					
ll academic abilities.	3.12	2.80	0.32	.147	2.18*
objective of the institution.	3.80	2.78	1.02	.178	5.72**
istance for all citizens.	3.25	2.80	0.45	.184	2.45*
l needs of handicapped students.	2.71	2.71	0.00	.168	0.00
try needs, an important objective of the institution.	2.96	2.44	0.52	.165	3.16**
Programs					
based on its assessment of area needs.	3.22	2.73	0.49	.173	2.83**
adult students on a full-time basis.	2.81	3.00	-0.19	.247	-0.76
adult students on a part-time basis.	3.43	3.30	0.13	.171	0.75
eas as machine tool, printing, carpentry, welding.	3.69	2.15	1.54	.195	7.90**
d science base offered.	2.34	3.38	-1.04	.155	-6.73**
rganization					
perience.	2.79	2.40	0.39	.157	2.44*
	3.23	3.32	-0.09	.174	-0.49
mmediate community.	2.90	2.76	0.14	.140	1.02
e local community.	3.31	2.88	0.43	.168	2.60*
elopment.	3.17	2.71	0.46	.197	2.32*
Staffing					
ess or industrial experience in their speciality.	3.63	3.15	0.48	.168	2.85**
bachelor's degree.	3.04	3.85	-0.81	.175	-4.64**
.	3.89	4.07	-0.18	.132	-1.35
s.	3.23	3.39	-0.16	.108	-1.48
ffiliation with the appropriate journeyman organization.	2.90	3.02	-0.12	.114	-1.10
Facilities					
institutions.	2.87	2.87	0.00	.149	0.00
imarily financed at the local level.	3.16	3.02	0.14	.154	0.93
usiness and industry.	3.06	2.85	0.21	.158	1.35
owned by the State Dept. of Vocational and Technical Education.	3.41	3.18	0.23	.158	1.42
e the needs of the State of Oklahoma.	3.17	2.90	0.27	.183	1.48
Finance					
te financial support for programs.	3.00	3.18	-0.18	.092	-1.93
fees rise proportionately.	3.20	3.46	-0.26	.094	-2.77**
ffer programs in equal quality to those in neighboring states.	3.08	3.12	-0.04	.116	-0.35
taxes.	2.75	2.52	0.23	.140	1.63
tion provides adequate local funding for support of training	2.82	2.66	0.16	.121	1.31

TABLE 12

CHAMBER OF COMMERCE MANAGERS' PERCEPTIONS OF WHAT EMPHASIS SHOULD BE
EDUCATIONAL ROLES FOR AREA SCHOOLS AND COMMUNITY/JUNIOR (

Educational Roles	
Philosophy	
1. No person denied enrollment because of low family income.	
2. General education an important component of the vocational program.	
3. Vocational programs offered closely geared to the manpower needs of the state.	
4. Institutions provide programs appropriate for students with above average academic ability.	
5. Vocational programs developed to meet the specific needs of both sexes.	
Objectives	
6. Vocational programs provided for students of all academic abilities.	
7. Training for entry level employment a primary objective of the institution.	
8. Vocational programs offered within commuting distance for all citizens.	
9. Vocational programs offered to meet the special needs of handicapped students.	
10. Retraining to meet changing business and industry needs, an important objective of the institutic	
Programs	
11. Each institution develops vocational programs based on its assessment of area needs.	
12. Vocational education opportunities offered to adult students on a full-time basis.	
13. Vocational education opportunities offered to adult students on a part-time basis.	
14. Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.	
15. Theory oriented programs with a mathematics and science base offered.	
Organization	
16. Formal school credit granted for on-the-job experience.	
17. Transferable school credit granted.	
18. Each institution serves only citizens of its immediate community.	
19. Principal administrative control rests with the local community.	
20. Advisory committees assist with curriculum development.	
Staffing	
21. All vocational teachers have appropriate business or industrial experience in their speciality.	
22. All vocational teachers have a minimum of the bachelor's degree.	
23. All vocational teachers certified by the state.	
24. A state salary schedule for vocational teachers.	
25. Teachers of a skilled trade subject maintain affiliation with the appropriate journeyman organiza	
Facilities	
26. Training facilities shared with other types of institutions.	
27. Physical facilities for vocational programs primarily financed at the local level.	
28. Training facilities duplicate those found in business and industry.	
29. Training facilities and equipment provided and owned by the State Dept. of Vocational and Technic	
30. Adequate vocational program facilities to serve the needs of the State of Oklahoma.	
Finance	
31. The Oklahoma Legislature provides adequate state financial support for programs.	
32. As educational costs rise, student tuition and fees rise proportionately.	
33. Training institutions financed at a level to offer programs in equal quality to those in neighbor	
34. Training programs primarily financed by local taxes.	
35. The five-mill levy to support vocational education provides adequate local funding for support of programs.	

*Denotes .05 level of confidence.
**Denotes .01 level of confidence.

TABLE 12

ERCE MANAGERS' PERCEPTIONS OF WHAT EMPHASIS SHOULD BE GIVEN TO SELECTED
ATIONAL ROLES FOR AREA SCHOOLS AND COMMUNITY/JUNIOR COLLEGES

ducational Roles	AVTS Mean Response	C/JC Mean Response	Mean Diff.	SE Diff.	t
Philosophy					
amily income.	4.00	3.57	0.43	.114	3.74**
he vocational program.	3.79	4.21	-0.42	.170	-2.49*
the manpower needs of the state.	4.37	4.00	0.37	.140	2.61*
students with above average academic ability.	3.70	4.20	-0.50	.120	-4.15**
ecific needs of both sexes.	4.35	3.98	0.37	.110	3.32**
Objectives					
all academic abilities.	4.24	3.87	0.37	.148	2.50*
objective of the institution.	4.50	3.85	0.65	.135	4.79**
distance for all citizens.	4.50	3.98	0.52	.167	3.11**
ial needs of handicapped students.	3.94	3.75	0.21	.138	1.50
istry needs, an important objective of the institution.	4.30	3.91	0.39	.136	2.86**
Programs					
based on its assessment of area needs.	4.38	3.87	0.51	.139	3.67**
adult students on a full-time basis.	4.02	3.94	0.08	.196	0.40
adult students on a part-time basis.	4.24	4.00	0.24	.133	1.81
ireas as machine tool, printing, carpentry, welding.	4.42	3.12	1.30	.184	7.08**
nd science base offered.	3.43	4.16	-0.73	.119	-6.15**
Organization					
xperience.	3.50	3.40	0.10	.205	0.49
	4.10	4.35	-0.25	.132	-1.85
immediate community.	2.90	2.78	0.12	.145	0.83
he local community.	3.78	3.45	0.33	.147	2.26*
evelopment.	4.12	3.88	0.24	.144	1.63
Staffing					
ness or industrial experience in their speciality.	4.56	4.42	0.14	.083	1.63
bachelor's degree.	3.48	4.08	-0.60	.130	-4.60**
e.	4.16	4.20	-0.04	.088	-0.44
rs.	3.81	3.81	0.00	.066	0.00
affiliation with the appropriate journeyman organization.	3.75	3.69	0.06	.103	0.57
Facilities					
f institutions.	3.83	3.96	-0.13	.150	-0.88
rimarily financed at the local level.	3.22	3.24	-0.02	.171	-0.11
business and industry.	3.96	3.82	0.14	.097	1.41
d owned by the State Dept. of Vocational and Technical Education	4.10	3.71	0.39	.154	2.52*
ve the needs of the State of Oklahoma.	4.52	4.10	0.42	.159	2.67**
Finance					
ate financial support for programs.	4.48	4.24	0.24	.118	2.04*
d fees rise proportionately.	3.43	3.72	-0.29	.087	-3.62**
offer programs in equal quality to those in neighboring states.	4.15	4.08	0.07	.109	0.70
L taxes.	3.40	3.04	0.36	.130	2.77**
ation provides adequate local funding for support of training	3.85	3.61	0.24	.171	1.40

Table 13 indicates industry managers' perceptions as to the degree of emphasis given selected educational roles for area schools and community/junior colleges. The null hypothesis was rejected at the .01 level of confidence for Items 2, 7, 11, 12, 14, 15, 17, 21, and 32. At the .05 level of confidence, the null hypothesis was rejected for Items 4, 22, and 23. When the null hypothesis was rejected, then area vocational and technical schools were seen as giving more emphasis to Items 7, 11, and 14, while community/junior colleges were seen as giving more emphasis to Items 2, 4, 12, 15, 17, 21, 22, 23, and 32.

Table 14 is an interrelated table to Table 13. Table 14 compares the degree of emphasis that should be given selected educational roles by area vocational-technical schools and community/junior colleges as seen by industry managers. In analyzing the results of the t-test, the null hypothesis of no significant difference was rejected for Items 2, 3, 4, 6, 7, 11, 13, 14, 15, 17, 19, 22, and 30 at the .01 level of confidence. The null hypothesis was rejected for Items 10 and 32 at the .05 level of confidence. When the null hypothesis was rejected for the items indicated above, then the table indicated industry managers perceived that greater emphasis should be given Items 3, 6, 7, 10, 11, 13, 14, 19, and 30 by area vocational-technical schools than by community/junior colleges. When the null hypothesis was rejected for Items 2, 4, 15, 17, 22, and 32, the community/junior colleges were perceived by industry managers as needing to give greater emphasis to these selected educational roles than should area vocational-technical schools.

TABLE 13

INDUSTRY MANAGERS' PERCEPTIONS OF WHAT EMPHASIS IS GIVEN TO
EDUCATIONAL ROLES FOR AREA SCHOOLS AND COMMUNITY/JUNIOR C

	Educational Roles
	Philosophy
1.	No person denied enrollment because of low family income.
2.	General education an important component of the vocational program.
3.	Vocational programs offered closely geared to the manpower needs of the state.
4.	Institutions provide programs appropriate for students with above average academic ability.
5.	Vocational programs developed to meet the specific needs of both sexes.
	Objectives
6.	Vocational programs provided for students of all academic abilities.
7.	Training for entry level employment a primary objective of the institution.
8.	Vocational programs offered within commuting distance for all citizens.
9.	Vocational programs offered to meet the special needs of handicapped students.
10.	Retraining to meet changing business and industry needs, an important objective of the institutio
	Programs
11.	Each institution develops vocational programs based on its assessment of area needs.
12.	Vocational education opportunities offered to adult students on a full-time basis.
13.	Vocational education opportunities offered to adult students on a part-time basis.
14.	Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.
15.	Theory oriented programs with a mathematics and science base offered.
	Organization
16.	Formal school credit granted for on-the-job experience.
17.	Transferable school credit granted.
18.	Each institution serves only citizens of its immediate community.
19.	Principal administrative control rests with the local community.
20.	Advisory committees assist with curriculum development.
	Staffing
21.	All vocational teachers have appropriate business or industrial experience in their speciality.
22.	All vocational teachers have a minimum of the bachelor's degree.
23.	All vocational teachers certified by the state.
24.	A state salary schedule for vocational teachers.
25.	Teachers of a skilled trade subject maintain affiliation with the appropriate journeyman organiza
	Facilities
26.	Training facilities shared with other types of institutions.
27.	Physical facilities for vocational programs primarily financed at the local level.
28.	Training facilities duplicate those found in business and industry.
29.	Training facilities and equipment provided and owned by the State Dept. of Vocational and Technic
30.	Adequate vocational program facilities to serve the needs of the State of Oklahoma.
	Finance
31.	The Oklahoma Legislature provides adequate state financial support for programs.
32.	As educational costs rise, student tuition and fees rise proportionately.
33.	Training institutions financed at a level to offer programs in equal quality to those in neighbor
34.	Training programs primarily financed by local taxes.
35.	The five-mill levy to support vocational education provides adequate local funding for support of programs.

*Denotes .05 level of confidence.
**Denotes .01 level of confidence.

TABLE 13

RY MANAGERS' PERCEPTIONS OF WHAT EMPHASIS IS GIVEN TO SELECTED
ATIONAL ROLES FOR AREA SCHOOLS AND COMMUNITY/JUNIOR COLLEGES

ducational Roles	AVTS Mean Response	C/JC Mean Response	Mean Diff.	SE Diff.	t
Philosophy					
amily income.	3.13	3.07	0.06	.164	0.39
he vocational program.	2.69	3.36	-0.67	.165	-4.04**
) the manpower needs of the state.	2.96	2.69	0.27	.142	1.87
: students with above average academic ability.	2.78	3.08	-0.30	.146	-2.09*
ecific needs of both sexes.	3.16	3.33	-0.17	.132	-1.24
Objectives					
all academic abilities.	3.23	3.10	0.13	.125	1.00
/ objective of the institution.	3.43	2.83	0.60	.145	4.11**
distance for all citizens.	3.35	3.16	0.19	.148	1.24
lal needs of handicapped students.	2.47	2.45	0.02	.120	0.18
istry needs, an important objective of the institution.	2.57	2.49	0.08	.100	0.85
Programs					
s based on its assessment of area needs.	3.02	2.65	0.37	.118	3.19**
) adult students on a full-time basis.	2.85	3.46	-0.61	.183	-3.30**
) adult students on a part-time basis.	3.63	3.41	0.22	.160	1.40
ireas as machine tool, printing, carpentry, welding.	3.51	2.29	1.23	.168	7.28**
ind science base offered.	2.16	3.29	-1.13	.142	-7.92**
Organization					
experience.	2.61	2.52	0.09	.158	0.55
	2.78	3.71	-0.93	.172	-5.42**
immediate community.	2.78	2.53	0.25	.188	1.30
he local community.	2.85	2.66	0.19	.194	0.99
evelopment.	2.70	2.91	-0.21	.123	1.70
Staffing					
ness or industrial experience in their speciality.	2.50	3.63	-1.13	.180	-6.27**
a bachelor's degree.	3.66	3.93	-0.27	.132	-2.07*
e.	3.66	3.93	-0.27	.132	-2.07*
rs.	3.22	3.40	0.18	.107	-1.66
affiliation with the appropriate journeyman organization.	2.64	2.62	0.02	.138	0.15
Facilities					
f institutions.	2.62	2.57	0.05	.164	0.26
rimarily financed at the local level.	2.82	2.80	0.02	.175	0.13
business and industry.	2.85	2.57	0.28	.157	1.76
id owned by the State Dept. of Vocational and Technical Education.	3.15	3.00	0.15	.139	1.07
ve the needs of the State of Oklahoma.	3.25	3.35	-0.10	.155	-0.67
Finance					
ate financial support for programs.	2.79	2.94	-0.15	.118	-1.27
id fees rise proportionately.	2.89	3.22	-0.33	.094	-3.49**
offer programs in equal quality to those in neighboring states.	2.91	3.03	-0.12	.139	-0.82
. taxes.	2.80	2.64	0.16	.135	1.16
ation provides adequate local funding for support of training	2.84	2.71	0.13	.164	0.81

TABLE 14

INDUSTRY MANAGERS' PERCEPTIONS OF WHAT EMPHASIS SHOULD BE GIVE
EDUCATIONAL ROLES FOR AREA SCHOOLS AND COMMUNITY/JUNIOR C

	Educational Roles
	Philosophy
1.	No person denied enrollment because of low family income.
2.	General education an important component of the vocational program.
3.	Vocational programs offered closely geared to the manpower needs of the state.
4.	Institutions provide programs appropriate for students with above average academic ability.
5.	Vocational programs developed to meet the specific needs of both sexes.
	Objectives
6.	Vocational programs provided for students of all academic abilities.
7.	Training for entry level employment a primary objective of the institution.
8.	Vocational programs offered within commuting distance for all citizens.
9.	Vocational programs offered to meet the special needs of handicapped students.
10.	Retraining to meet changing business and industry needs, an important objective of the institutic
	Programs
11.	Each institution develops vocational programs based on its assessment of area needs.
12.	Vocational education opportunities offered to adult students on a full-time basis.
13.	Vocational education opportunities offered to adult students on a part-time basis.
14.	Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.
15.	Theory oriented programs with a mathematics and science base offered.
	Organization
16.	Formal school credit granted for on-the-job experience.
17.	Transferable school credit granted.
18.	Each institution serves only citizens of its immediate community.
19.	Principal administrative control rests with the local community.
20.	Advisory committees assist with curriculum development.
	Staffing
21.	All vocational teachers have appropriate business or industrial experience in their speciality.
22.	All vocational teachers have a minimum of the bachelor's degree.
23.	All vocational teachers certified by the state.
24.	A state salary schedule for vocational teachers.
25.	Teachers of a skilled trade subject maintain affiliation with the appropriate journeyman organiza
	Facilities
26.	Training facilities shared with other types of institutions.
27.	Physical facilities for vocational programs primarily financed at the local level.
28.	Training facilities duplicate those found in business and industry.
29.	Training facilities and equipment provided and owned by the State Dept. of Vocational and Technic
30.	Adequate vocational program facilities to serve the needs of the State of Oklahoma.
	Finance
31.	The Oklahoma Legislature provides adequate state financial support for programs.
32.	As educational costs rise, student tuition and fees rise proportionately.
33.	Training institutions financed at a level to offer programs in equal quality to those in neighbo
34.	Training programs primarily financed by local taxes.
35.	The five-mill levy to support vocational education provides adequate local funding for support o programs.

*Denotes .05 level of confidence.
**Denotes .01 level of confidence.

TABLE 14

NAGERS' PERCEPTIONS OF WHAT EMPHASIS SHOULD BE GIVEN TO SELECTED
IONAL ROLES FOR AREA SCHOOLS AND COMMUNITY/JUNIOR COLLEGES

cational Roles	AVTS Mean Response	C/JC Mean Response	Mean Diff.	SE Diff.	t
Philosophy					
ily income.	3.92	3.87	0.05	.153	0.37
e vocational program.	3.58	4.23	-0.65	.155	-4.14**
the manpower needs of the state.	4.26	3.68	0.58	.158	3.70**
students with above average academic ability.	3.63	4.17	-0.54	.131	-4.09**
ific needs of both sexes.	4.13	4.09	0.04	.113	0.32
Objectives					
ll academic abilities.	4.19	3.76	0.54	.153	2.78**
objective of the institution.	4.47	3.79	0.68	.145	4.70**
istance for all citizens.	4.22	3.91	0.31	.165	1.91
l needs of handicapped students.	4.08	3.83	0.25	.128	1.95
try needs, an important objective of the institution.	4.06	3.81	0.25	.120	2.04*
Programs					
based on its assessment of area needs.	4.28	3.91	0.37	.116	3.19**
adult students on a full-time basis.	3.87	3.96	-0.09	.130	-0.70
adult students on a part-time basis.	4.47	3.98	0.49	.124	3.96**
eas as machine tool, printing, carpentry, welding.	4.33	3.22	1.11	.214	5.19**
d science base offered.	3.04	4.02	-0.98	.164	-5.98**
rganization					
perience.	3.44	3.56	-0.11	.194	-0.57
	3.75	4.40	-0.65	.156	-4.19**
mmediate community.	3.04	2.76	0.28	.163	1.67
e local community.	4.06	3.43	0.63	.191	3.29**
elopment.	4.19	4.11	0.08	.087	0.85
Staffing					
ess or industrial experience in their speciality.	4.43	4.39	0.04	.079	0.47
bachelor's degree.	3.24	4.16	-0.92	.178	-5.22**
.	4.13	4.22	-0.09	.125	-0.74
s.	3.74	3.80	-0.06	.093	-0.60
ffiliation with the appropriate journeyman organization.	3.53	3.55	-0.02	.087	-0.22
Facilities					
institutions.	3.45	3.52	-0.07	.140	-0.54
imarily financed at the local level.	2.96	2.98	-0.02	.158	-0.12
usiness and industry.	3.70	3.65	0.05	.113	0.49
l owned by the State Dept. of Vocational and Technical Education.	3.57	3.44	0.13	.137	0.94
e the needs of the State of Oklahoma.	4.56	4.18	0.38	.126	3.04**
Finance					
te financial support for programs.	4.11	4.07	0.04	.088	0.42
l fees rise proportionately.	3.18	3.38	-0.19	.079	-2.47*
ffer programs in equal quality to those in neighboring states.	3.89	3.94	0.05	.073	-0.77
taxes.	2.89	2.78	0.11	.144	0.77
tion provides adequate local funding for support of training	3.55	3.33	0.22	.144	1.56

Table 15 is the first table that presents data dealing specifically with the basic research question of this study, "There is no significant difference between the perceptions of school administrators and business managers regarding selected educational roles of community/junior colleges and area vocational-technical schools." Previously presented tables dealt either with demographic data on the respondents or an analysis of the mean response of each basic group as to what emphasis was being given selected educational roles by area vocational-technical schools as compared to community/junior colleges.

Table 15 is an analysis of the perceptions of school administrators compared with the perceptions of business managers as to what emphasis is being given selected educational roles by community/junior colleges. The null hypothesis of no significant difference was rejected at the .01 level of confidence for Item 4 and at the .05 level of confidence for Item 7. When the null hypothesis was rejected for Item 4, then the education administrators perceived greater emphasis of this item by community/junior colleges than did the business managers. When the null hypothesis was rejected for Item 7, then again the school administrators perceived greater emphasis of this educational role by community/junior colleges than did the business managers.

TABLE 15

PERCEPTION OF WHAT EMPHASIS IS GIVEN TO SELECTED EDUCATIONAL ROLES FOR C
BY THE EDUCATION GROUP AND THE BUSINESS GROUP (COMMERCE AND IN

Educational Roles
Philosophy
1. No person denied enrollment because of low family income.
2. General education an important component of the vocational program.
3. Vocational programs offered closely geared to the manpower needs of the state.
4. Institutions provide programs appropriate for students with above average academic ability.
5. Vocational programs developed to meet the specific needs of both sexes.
Objectives
6. Vocational programs provided for students of all academic abilities.
7. Training for entry level employment a primary objective of the institution.
8. Vocational programs offered within commuting distance for all citizens.
9. Vocational programs offered to meet the special needs of handicapped students.
10. Retraining to meet changing business and industry needs, an important objective of the institutio
Programs
11. Each institution develops vocational programs based on its assessment of area needs.
12. Vocational education opportunities offered to adult students on a full-time basis.
13. Vocational education opportunities offered to adult students on a part-time basis.
14. Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.
15. Theory oriented programs with a mathematics and science base offered.
Organization
16. Formal school credit granted for on-the-job experience.
17. Transferable school credit granted.
18. Each institution serves only citizens of its immediate community.
19. Principal administrative control rests with the local community.
20. Advisory committees assist with curriculum development.
Staffing
21. All vocational teachers have appropriate business or industrial experience in their speciality.
22. All vocational teachers have a minimum of the bachelor's degree.
23. All vocational teachers certified by the state.
24. A state salary schedule for vocational teachers.
25. Teachers of a skilled trade subject maintain affiliation with the appropriate journeyman organizat
Facilities
26. Training facilities shared with other types of institutions.
27. Physical facilities for vocational programs primarily financed at the local level.
28. Training facilities duplicate those found in business and industry.
29. Training facilities and equipment provided and owned by the State Dept. of Vocational and Technic
30. Adequate vocational program facilities to serve the needs of the State of Oklahoma.
Finance
31. The Oklahoma Legislature provides adequate state financial support for programs.
32. As educational costs rise, student tuition and fees rise proportionately.
33. Training institutions financed at a level to offer programs in equal quality to those in neighbor
34. Training programs primarily financed by local taxes.
35. The five-mill levy to support vocational education provides adequate local funding for support of programs.

*Denotes .05 level of confidence.
**Denotes .01 level of confidence.

TABLE 15

EMPHASIS IS GIVEN TO SELECTED EDUCATIONAL ROLES FOR COMMUNITY/JUNIOR COLLEGES
UCATION GROUP AND THE BUSINESS GROUP (COMMERCE AND INDUSTRY MANAGERS)

ducational Roles	Education Mean Response	Business Mean Response	Mean Diff.	SE Diff.	t
Philosophy					
amily income.	3.35	3.13	0.22	.197	1.11
the vocational program.	3.62	3.49	0.12	.140	0.88
o the manpower needs of the state.	2.85	2.80	0.05	.147	0.33
r students with above average academic ability.	3.54	3.12	0.42	.147	2.88**
ecific needs of both sexes.	3.60	3.34	0.27	.167	1.60
Objectives					
all academic abilities.	3.02	2.93	0.09	.147	0.64
y objective of the institution.	3.16	2.82	0.34	.140	2.44*
distance for all citizens.	2.88	3.02	-0.14	.189	-0.74
ial needs of handicapped students.	2.61	2.62	-0.01	.168	-0.07
ustry needs, an important objective of the institution.	2.70	2.49	0.20	.152	1.35
Programs					
s based on its assessment of area needs.	2.94	2.66	0.28	.163	1.72
o adult students on a full-time basis.	3.22	3.28	-0.06	.175	-0.34
o adult students on a part-time basis.	3.55	3.34	0.22	.188	1.15
areas as machine tool, printing, carpentry, welding.	2.52	2.25	0.27	.159	1.67
and science base offered.	3.54	3.33	0.21	.145	1.39
Organization					
experience.	2.49	2.43	0.06	.199	0.30
	3.65	3.50	0.15	.165	0.88
immediate community.	2.62	2.75	-0.13	.186	-0.69
the local community.	2.87	2.71	0.16	.186	0.84
evelopment.	2.74	2.74	0.00	.188	0.00
Staffing					
iness or industrial experience in their speciality.	3.15	2.94	0.21	.191	1.12
e bachelor's degree.	3.99	3.67	0.32	.176	1.80
te.	4.00	3.91	0.09	.205	0.43
ers.	3.27	3.40	0.13	.207	-0.64
affiliation with the appropriate journeyman organization.	2.85	2.85	0.00	.192	0.00
Facilities					
of institutions.	2.83	2.67	0.16	.182	0.87
primarily financed at the local level.	2.79	2.93	-0.14	.199	-0.69
business and industry.	3.00	2.71	0.29	.185	1.56
nd owned by the State Dept. of Vocational and Technical Education.	2.81	3.06	0.25	.161	-1.54
rve the needs of the State of Oklahoma.	3.08	3.19	-0.11	.178	-0.60
Finance					
tate financial support for programs.	2.80	3.10	-0.30	.174	-1.74
nd fees rise proportionately.	3.36	3.27	0.09	.146	0.65
offer programs in equal quality to those in neighboring states.	3.12	3.15	-0.04	.170	-0.23
l taxes.	2.63	2.59	0.04	.180	0.21
cation provides adequate local funding for support of training	2.71	2.65	0.06	.206	0.29

Table 16 is a companion table to Table 15 in that it compares the perceptions of school administrators to business managers with regard to emphasis that should be given selected educational roles by community/junior colleges. The t-test suggests that the null hypothesis be rejected at the .01 level of confidence for Item 22 and at the .05 level for Items 14, 21, and 33. When the null hypothesis was rejected, the school administrators perceived significantly more emphasis should be given Items 14, 22, and 33 by community/junior colleges than did business managers. Rejecting the null hypothesis of Item 21 indicated business managers perceived more emphasis should be given to this item by community/junior colleges than did school administrators.

Table 17 shows a comparison of emphasis perceived by school administrators and business managers as being given by area vocational-technical schools to selected educational roles. The null hypothesis was rejected at the .01 level of confidence for Items 3, 4, 5, 10, 17, 23, and 28, and for Items 11, 21, 25, and 34 at the .05 level of confidence. When the null hypothesis was rejected, then the school administrators' group perceived greater emphasis by the area vocational-technical schools on Items 3, 4, 5, 10, 11, 17, 21, 23, 25, 28, and 34. In no instance was there an indication that the business group perceived greater emphasis being given any of the educational roles than did the school administrators' group.

TABLE 16

PERCEPTION OF WHAT EMPHASIS SHOULD BE GIVEN TO SELECTED ED
COMMUNITY/JUNIOR COLLEGES BY THE EDUCATION GROUP AND TH

Educational Roles

Philosophy

1. No person denied enrollment because of low family income.
2. General education an important component of the vocational program.
3. Vocational programs offered closely geared to the manpower needs of the state.
4. Institutions provide programs appropriate for students with above average academic ability.
5. Vocational programs developed to meet the specific needs of both sexes.

Objectives

6. Vocational programs provided for students of all academic abilities.
7. Training for entry level employment a primary objective of the institution.
8. Vocational programs offered within commuting distance for all citizens.
9. Vocational programs offered to meet the special needs of handicapped students.
10. Retraining to meet changing business and industry needs, an important objective of the institutio

Programs

11. Each institution develops vocational programs based on its assessment of area needs.
12. Vocational education opportunities offered to adult students on a full-time basis.
13. Vocational education opportunities offered to adult students on a part-time basis.
14. Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.
15. Theory oriented programs with a mathematics and science base offered.

Organization

16. Formal school credit granted for on-the-job experience.
17. Transferable school credit granted.
18. Each institution serves only citizens of its immediate community.
19. Principal administrative control rests with the local community.
20. Advisory committees assist with curriculum development.

Staffing

21. All vocational teachers have appropriate business or industrial experience in their speciality.
22. All vocational teachers have a minimum of the bachelor's degree.
23. All vocational teachers certified by the state.
24. A state salary schedule for vocational teachers.
25. Teachers of a skilled trade subject maintain affiliation with the appropriate journeyman organiza

Facilities

26. Training facilities shared with other types of institutions.
27. Physical facilities for vocational programs primarily financed at the local level.
28. Training facilities duplicate those found in business and industry.
29. Training facilities and equipment provided and owned by the State Dept. of Vocational and Technic
30. Adequate vocational program facilities to serve the needs of the State of Oklahoma.

Finance

31. The Oklahoma Legislature provides adequate state financial support for programs.
32. As educational costs rise, student tuition and fees rise proportionately.
33. Training institutions financed at a level to offer programs in equal quality to those in neighbor
34. Training programs primarily financed by local taxes
35. The five-mill levy to support vocational education provides adequate local funding for support of programs.

*Denotes .05 level of confidence.
**Denotes .01 level of confidence.

TABLE 16

TION OF WHAT EMPHASIS SHOULD BE GIVEN TO SELECTED EDUCATIONAL ROLES FOR
MUNITY/JUNIOR COLLEGES BY THE EDUCATION GROUP AND THE BUSINESS GROUP

ucational Roles	Education Mean Response	Business Mean Response	Mean Diff.	SE Diff.	t
Philosophy					
mily income.	3.85	3.74	0.11	.210	0.51
he vocational program.	4.09	4.22	-0.13	.113	-1.17
the manpower needs of the state.	4.02	3.89	0.13	.143	0.94
students with above average academic ability.	4.37	4.18	0.18	.114	1.60
cific needs of both sexes.	4.19	3.99	0.20	.148	1.38
Objectives					
all academic abilities.	4.05	3.74	0.31	.164	1.91
objective of the institution.	3.99	3.81	0.18	.128	1.38
distance for all citizens.	3.87	3.88	-0.01	.190	-0.06
al needs of handicapped students.	3.93	3.78	0.16	.154	1.04
stry needs, an important objective of the institution.	4.05	3.88	0.17	.137	1.24
Programs					
based on its assessment of area needs.	4.01	3.83	0.18	.153	1.20
adult students on a full-time basis.	4.12	3.95	0.18	.155	1.13
adult students on a part-time basis.	4.23	3.96	0.27	.165	1.65
reas as machine tool, printing, carpentry, welding.	3.64	3.19	0.46	.183	2.49*
nd science base offered.	4.27	4.07	0.21	.140	1.48
Organization					
xperience.	3.54	3.44	0.10	.186	0.53
	4.40	4.34	0.07	.141	0.46
immediate community.	2.81	?.92	-0.12	.230	-0.51
he local community.	3.50	3.45	0.05	.195	0.28
velopment.	3.84	3.97	-0.13	.168	-0.77
Staffing					
ness or industrial experience in their speciality.	4.06	4.37	-0.30	.130	-2.31*
bachelor's degree.	4.50	4.05	0.45	.160	2.80**
e.	4.48	4.20	0.28	.178	1.57
rs.	3.91	3.79	0.12	.187	0.64
affiliation with the appropriate journeyman organization.	3.54	3.66	-0.11	.203	-0.56
Facilities					
f institutions.	3.78	3.71	0.06	.192	0.33
rimarily financed at the local level.	2.78	3.14	-0.37	.183	-2.00
business and industry.	3.66	3.78	-0.13	.185	-0.68
d owned by the State Dept. of Vocational and Technical Education.	3.34	3.53	-0.18	.191	-0.96
ve the needs of the State of Oklahoma.	4.12	4.08	0.04	.174	0.25
Finance					
ate financial support for programs.	4.29	4.15	0.15	.139	1.06
d fees rise proportionately.	3.47	3.60	-0.13	.180	-0.72
offer programs in equal quality to those in neighboring states.	4.32	4.02	0.30	.141	2.09*
taxes	2.94	2.98	-0.03	.190	-0.18
ation provides adequate local funding for support of training	3.32	3.55	-0.23	.216	-1.00

TABLE 17

COMPARISON OF PERCEPTION OF WHAT EMPHASIS IS GIVEN TO SELECTED EDU
AREA SCHOOLS BY THE EDUCATION GROUP AND THE BUSINESS

	Educational Roles
	Philosophy
1.	No person denied enrollment because of low family income.
2.	General education an important component of the vocational program.
3.	Vocational programs offered closely geared to the manpower needs of the state.
4.	Institutions provide programs appropriate for students with above average academic ability.
5.	Vocational programs developed to meet the specific needs of both sexes.
	Objectives
6.	Vocational programs provided for students of all academic abilities.
7.	Training for entry level employment a primary objective of the institution.
8.	Vocational programs offered within commuting distance for all citizens.
9.	Vocational programs offered to meet the special needs of handicapped students.
10.	Retraining to meet changing business and industry needs, an important objective of the institutio
	Programs
11.	Each institution develops vocational programs based on its assessment of area needs.
12.	Vocational education opportunities offered to adult students on a full-time basis.
13.	Vocational education opportunities offered to adult students on a part-time basis.
14.	Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.
15.	Theory oriented programs with a mathematics and science base offered.
	Organization
16.	Formal school credit granted for on-the-job experience.
17.	Transferable school credit granted.
18.	Each institution serves only citizens of its immediate community.
19.	Principal administrative control rests with the local community.
20.	Advisory committees assist with curriculum development.
	Staffing
21.	All vocational teachers have appropriate business or industrial experience in their speciality.
22.	All vocational teachers have a minimum of the bachelor's degree.
23.	All vocational teachers certified by the state.
24.	A state salary schedule for vocational teachers.
25.	Teachers of a skilled trade subject maintain affiliation with the appropriate journeyman organiza
	Facilities
26.	Training facilities shared with other types of institutions.
27.	Physical facilities for vocational programs primarily financed at the local level.
28.	Training facilities duplicate those found in business and industry.
29.	Training facilities and equipment provided and owned by the State Dept. of Vocational and Technic
30.	Adequate vocational program facilities to serve the needs of the State of Oklahoma.
	Finance
31.	The Oklahoma Legislature provides adequate state financial support for programs.
32.	As educational costs rise, student tuition and fees rise proportionately.
33.	Training institutions financed at a level to offer programs in equal quality to those in neighbor
34.	Training programs primarily financed by local taxes.
35.	The five-mill levy to support vocational education provides adequate local funding for support of programs.

*Denotes .05 level of confidence.
**Denotes .01 level of confidence.

TABLE 17

ERCEPTION OF WHAT EMPHASIS IS GIVEN TO SELECTED EDUCATIONAL ROLES FOR
EA SCHOOLS BY THE EDUCATION GROUP AND THE BUSINESS GROUP

cational Roles	Education Mean Response	Business Mean Response	Mean Diff.	SE Diff.	t
Philosophy					
ily income.	3.65	3.26	0.39	.205	1.90
e vocational program.	3.02	2.87	0.15	.148	1.01
the manpower needs of the state.	3.62	3.16	0.46	.136	3.38**
students with above average academic ability.	3.17	2.75	0.42	.147	2.82**
ific needs of both sexes.	3.67	3.28	0.39	.143	2.69**
Objectives					
ll academic abilities.	3.19	3.18	0.01	.134	0.07
objective of the institution.	3.85	3.57	0.28	.145	1.93
istance for all citizens.	3.30	3.32	-0.02	.190	-0.10
l needs of handicapped students.	2.56	2.55	0.02	.146	0.13
try needs, an important objective of the institution.	3.26	2.82	0.44	.146	3.00**
Programs					
based on its assessment of area needs.	3.42	3.10	0.32	.127	2.53*
adult students on a full-time basis.	2.85	2.86	-0.01	.165	-0.06
adult students on a part-time basis.	3.62	3.49	0.13	.158	0.83
eas as machine tool, printing, carpentry, welding.	3.79	3.55	0.24	.146	1.63
d science base offered.	2.25	2.30	-0.05	.137	-0.34
rganization					
perience.	3.05	2.78	0.27	.183	1.46
	3.55	2.96	0.59	.173	3.38**
mmediate community.	2.93	2.78	0.15	.166	0.93
e local community.	3.38	3.05	0.33	.201	1.66
elopment.	3.19	2.93	0.26	.156	1.65
Staffing					
ess or industrial experience in their speciality.	3.67	3.36	0.31	.156	1.98*
bachelor's degree.	2.70	2.74	-0.04	.170	-0.24
.	4.13	3.68	0.45	.167	2.67**
s.	3.52	3.24	0.27	.175	1.57
ffiliation with the appropriate journeyman organization.	3.07	2.65	0.43	.176	2.42*
Facilities					
institutions.	2.66	2.82	-0.17	.175	-0.95
imarily financed at the local level.	3.26	2.99	0.27	.165	1.61
usiness and industry.	3.31	2.86	0.46	.154	2.96**
owned by the State Dept. of Vocational and Technical Education.	3.40	3.31	0.08	.148	0.58
e the needs of the State of Oklahoma.	3.09	3.21	-0.12	.160	-0.75
Finance					
te financial support for programs.	2.87	2.89	-0.02	.150	-0.12
fees rise proportionately.	2.83	3.03	-0.20	.154	-1.31
ffer programs in equal quality to those in neighboring states.	3.16	3.02	0.14	.166	0.86
taxes.	3.12	2.80	0.32	.147	2.18*
tion provides adequate local funding for support of training	3.03	2.87	0.16	.164	0.99

Table 18 analyzed the perceptions of school administrators compared to the perceptions of business managers as to what emphasis should be given selected educational roles by area vocational-technical schools. The value of "t" in five of the 35 selected items revealed that the null hypothesis could be rejected at the .01 level of confidence for Item 17 and at the .05 level for Items 4, 6, 9, and 23. When the null hypothesis was rejected, then it could be stated that school administrators perceived greater emphasis should be given to Items 4, 6, 9, 17, and 23 than did the business managers. In none of the items did the business group favor more emphasis than did the school administrators' group.

Tables 19 and 20 are markedly different than Tables 7 through 18. Previous tables dealt with the mean response while Tables 19 and 20 show the mean difference in response as to perceptions regarding emphasis given or that should be given selected educational roles by area vocational-technical schools and community/junior colleges.

In Table 19 the value of "t" indicated that the null hypothesis could be rejected at the .05 level of confidence for planning Items 24 and 27. There were no items where the null hypothesis could be rejected at the .01 level of confidence. When the null hypothesis was rejected for Items 24 and 27, it was shown that the school administrators' group perceived significant difference in emphasis given these items by area schools than community/junior colleges while the business group perceived the difference in emphasis as not significant.

TABLE 18

COMPARISON OF PERCEPTION OF WHAT EMPHASIS SHOULD BE GIVEN TO SELECTEI
FOR AREA SCHOOLS BY THE EDUCATION GROUP AND THE BUSINESS

Educational Roles

Philosophy

1. No person denied enrollment because of low family income.
2. General education an important component of the vocational program.
3. Vocational programs offered closely geared to the manpower needs of the state.
4. Institutions provide programs appropriate for students with above average academic ability.
5. Vocational programs developed to meet the specific needs of both sexes.

Objectives

6. Vocational programs provided for students of all academic abilities.
7. Training for entry level employment a primary objective of the institution.
8. Vocational programs offered within commuting distance for all citizens.
9. Vocational programs offered to meet the special needs of handicapped students.
10. Retraining to meet changing business and industry needs, an important objective of the institutior

Programs

11. Each institution develops vocational programs based on its assessment of area needs.
12. Vocational education opportunities offered to adult students on a full-time basis.
13. Vocational education opportunities offered to adult students on a part-time basis.
14. Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.
15. Theory oriented programs with a mathematics and science base offered.

Organization

16. Formal school credit granted for on-the-job experience.
17. Transferable school credit granted.
18. Each institution serves only citizens of its immediate community.
19. Principal administrative control rests with the local community.
20. Advisory committees assist with curriculum development.

Staffing

21. All vocational teachers have appropriate business or industrial experience in their speciality.
22. All vocational teachers have a minimum of the bachelor's degree.
23. All vocational teachers certified by the state.
24. A state salary schedule for vocational teachers.
25. Teachers of a skilled trade subject maintain affiliation with the appropriate journeyman organizat

Facilities

26. Training facilities shared with other types of institutions.
27. Physical facilities for vocational programs primarily financed at the local level.
28. Training facilities duplicate those found in business and industry.
29. Training facilities and equipment provided and owned by the State Dept. of Vocational and Technica
30. Adequate vocational program facilities to serve the needs of the State of Oklahoma.

Finance

31. The Oklahoma Legislature provides adequate state financial support for programs.
32. As educational costs rise, student tuition and fees rise proportionately.
33. Training institutions financed at a level to offer programs in equal quality to those in neighbor
34. Training programs primarily financed by local taxes.
35. The five-mill levy to support vocational education provides adequate local funding for support of programs.

*Denotes .05 level of confidence.
**Denotes .01 level of confidence.

TABLE 18

CEPTION OF WHAT EMPHASIS SHOULD BE GIVEN TO SELECTED EDUCATIONAL ROLES
AREA SCHOOLS BY THE EDUCATION GROUP AND THE BUSINESS GROUP

cational Roles	Education Mean Response	Business Mean Response	Mean Diff.	SE Diff.	t
Philosophy					
ily income.	4.13	3.94	0.19	.203	0.94
e vocational program.	3.82	3.72	0.10	.140	0.71
the manpower needs of the state.	4.38	4.33	0.04	.105	0.40
students with above average academic ability.	3.98	3.66	0.32	.133	2.44*
ific needs of both sexes.	4.41	4.27	0.14	.113	1.27
Objectives					
ll academic abilities.	4.41	4.19	0.22	.110	2.02*
objective of the institution.	4.53	4.46	0.07	.091	0.74
istance for all citizens.	4.41	4.38	0.03	.120	0.21
l needs of handicapped students.	4.26	4.03	0.23	.111	2.09*
try needs, an important objective of the institution.	4.37	4.19	0.18	.109	1.62
Programs					
based on its assessment of area needs.	4.33	4.31	0.02	.100	0.17
adult students on a full-time basis.	4.06	3.94	0.12	.134	0.90
adult students on a part-time basis.	4.38	4.35	0.03	.109	0.24
eas as machine tool, printing, carpentry, welding.	4.53	4.37	0.17	.111	1.49
d science base offered.	3.34	3.30	0.04	.135	0.32
rganization					
perience.	3.75	3.53	0.23	.162	1.39
	4.31	3.92	0.40	.128	3.11**
mmediate community.	3.14	3.00	0.14	.186	0.77
e local community.	3.98	3.86	0.12	.148	0.80
elopment.	4.10	4.17	-0.07	.113	-0.60
Staffing					
ess or industrial experience in their speciality.	4.36	4.52	-0.16	.106	-1.48
bachelor's degree.	3.74	3.40	0.34	.171	1.96
.	4.54	4.18	0.36	.140	2.59*
s.	3.97	3.82	0.16	.165	0.94
ffiliation with the appropriate journeyman organization.	3.72	3.60	0.12	.176	0.69
Facilities					
institutions.	3.61	3.67	-0.06	.169	-0.35
imarily financed at the local level.	3.25	3.08	0.16	.166	0.97
usiness and industry.	3.81	3.78	0.03	.164	0.21
owned by the State Dept. of Vocational and Technical Education.	3.71	3.85	-0.14	.150	-0.90
e the needs of the State of Oklahoma.	4.50	4.54	-0.04	.093	-0.44
Finance					
te financial support for programs.	4.38	4.31	0.07	.108	0.62
fees rise proportionately.	3.15	3.35	-0.20	.162	-1.22
ffer programs in equal quality to those in neighboring states.	4.19	4.02	0.17	.147	1.16
taxes.	3.14	3.13	0.01	.159	0.05
tion provides adequate local funding for support of training	3.74	3.66	0.08	.159	0.52

TABLE 19

MEAN DIFFERENCE IN EMPHASIS BEING GIVEN SELECTED EDUCATIONAL ROLES BY AREA VO-
COLLEGES AS PERCEIVED BY THE EDUCATION GROUP COMPARED TO THE BI

	Educational Roles
	Philosophy
1.	No person denied enrollment because of low family income.
2.	General education an important component of the vocational program.
3.	Vocational programs offered closely geared to the manpower needs of the state.
4.	Institutions provide programs appropriate for students with above average academic ability.
5.	Vocational programs developed to meet the specific needs of both sexes.
	Objectives
6.	Vocational programs provided for students of all academic abilities.
7.	Training for entry level employment a primary objective of the institution.
8.	Vocational programs offered within commuting distance for all citizens.
9.	Vocational programs offered to meet the special needs of handicapped students.
10.	Retraining to meet changing business and industry needs, an important objective of the institutior
	Programs
11.	Each institution develops vocational programs based on its assessment of area needs.
12.	Vocational education opportunities offered to adult students on a full-time basis.
13.	Vocational education opportunities offered to adult students on a part-time basis.
14.	Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.
15.	Theory oriented programs with a mathematics and science base offered.
	Organization
16.	Formal school credit granted for on-the-job experience.
17.	Transferable school credit granted.
18.	Each institution serves only citizens of its immediate community.
19.	Principal administrative control rests with the local community.
20.	Advisory committees assist with curriculum development.
	Staffing
21.	All vocational teachers have appropriate business or industrial experience in their speciality.
22.	All vocational teachers have a minimum of the bachelor's degree.
23.	All vocational teachers certified by the state.
24.	A state salary schedule for vocational teachers.
25.	Teachers of a skilled trade subject maintain affiliation with the appropriate journeyman organizat
	Facilities
26.	Training facilities shared with other types of institutions.
27.	Physical facilities for vocational programs primarily financed at the local level.
28.	Training facilities duplicate those found in business and industry.
29.	Training facilities and equipment provided and owned by the State Dept. of Vocational and Technica
30.	Adequate vocational program facilities to serve the needs of the State of Oklahoma.
	Finance
31.	The Oklahoma Legislature provides adequate state financial support for programs.
32.	As educational costs rise, student tuition and fees rise proportionately.
33.	Training institutions financed at a level to offer programs in equal quality to those in neighbori
34.	Training programs primarily financed by local taxes.
35.	The five-mill levy to support vocational education provides adequate local funding for support of programs.

*Denotes .05 level of confidence.

TABLE 19

IS BEING GIVEN SELECTED EDUCATIONAL ROLES BY AREA VO-TECH SCHOOLS AND COMMUNITY/JUNIOR
AS PERCEIVED BY THE EDUCATION GROUP COMPARED TO THE BUSINESS GROUP

ducational Roles	Education Mean Diff. in Response	Business Mean Diff. in Response	Mean Diff.	SE Diff.	t
Philosophy					
amily income.	.431	.330	0.10	.188	0.54
the vocational program.	.437	.219	-0.22	.210	-1.04
) the manpowpr needs of the state.	.915	.695	0.22	.173	1.28
r students with above average academic ability.	.116	.099	-0.02	.166	-0.10
ecific needs of both sexes.	.248	.222	0.03	.183	0.14
Objectives					
all academic abilities.	.442	.417	0.03	.173	0.14
r objective of the institution.	.975	.008	-0.03	.167	-0.20
distance for all citizens.	.504	.540	0.03	.181	-0.19
tal needs of handicapped students.	.309	.203	0.11	.134	0.79
istry needs, an important objective of the institution.	.732	.488	0.24	.156	1.56
Programs					
s based on its assessment of area needs.	.743	.587	0.16	.145	1.09
) adult students on a full-time basis.	-.132	-.083	-0.05	.201	-0.25
) adult students on a part-time basis.	.319	.471	-0.15	.169	-0.89
ireas as machine tool, printing, carpentry, welding.	1.356	1.390	-0.03	.193	-0.18
ind science base offered.	-.855	-.637	-0.22	.189	-1.15
Organization					
experience.	.595	.504	0.09	.193	0.47
	-.033	-.208	0.18	.194	0.90
immediate community.	.603	.430	0.17	.177	0.98
he local community.	.683	.480	0.20	.192	1.06
velopment.	.567	.267	0.30	.182	1.64
Staffing					
ness or industrial experience in their speciality.	.659	.564	0.09	.172	0.55
bachelor's degree.	-.892	-.583	-0.31	.185	-1.67
e.	.271	-.060	0.33	.184	1.84
rs.	.303	-.034	0.34	.168	2.00*
affiliation with the appropriate journeyman organization.	.279	.148	0.13	.143	0.92
Facilities					
f institutions.	-.025	.164	-0.19	.163	-1.16
rimarily financed at the local level.	.650	.250	0.40	.198	2.02*
business and industry.	.565	.427	0.14	.172	0.80
d owned by the State Dept. of Vocational and Technical Education.	.720	.407	0.31	.161	1.94
ve the needs of the State of Oklahoma.	.372	.397	-0.02	.165	-0.15
Finance					
ate financial support for programs.	.295	.115	0.18	.129	1.40
d fees rise proportionately.	-.203	-.033	-0.17	.152	-1.12
offer programs in equal quality to those in neighboring states.	.217	.025	0.19	.167	1.14
taxes.	.656	.361	0.30	.169	1.75
ation provides adequate local funding for support of training	.496	.373	0.12	.161	0.76

In Table 20 the data relates to the mean difference in perception of the emphasis that should be given to selected educational roles by area vocational-technical schools and community/junior colleges by the school administrators' group as compared to the business managers' group.

Analysis of the value of "t" in Table 20 allowed the null hypothesis to be rejected at the .05 level of confidence for Item 6. When the null hypothesis was rejected for Item 6, the business group perceived that a significantly greater emphasis should be given by area schools to this item than by community/junior colleges. School administrators thought otherwise.

TABLE 20

MEAN DIFFERENCE IN EMPHASIS THAT SHOULD BE GIVEN SELECTED EDUCATIONAL ROLES BY A
JUNIOR COLLEGES AS PERCEIVED BY THE EDUCATION GROUP COMPARED TO T

Educational Roles	
Philosophy	
1. No person denied enrollment because of low family income.	
2. General education an important component of the vocational program.	
3. Vocational programs offered closely geared to the manpower needs of the state.	
4. Institutions provide programs appropriate for students with above average academic ability.	
5. Vocational programs developed to meet the specific needs of both sexes.	
Objectives	
6. Vocational programs provided for students of all academic abilities.	
7. Training for entry level employment a primary objective of the institution.	
8. Vocational programs offered within commuting distance for all citizens.	
9. Vocational programs offered to meet the special needs of handicapped students.	
10. Retraining to meet changing business and industry needs, an important objective of the institutio	
Programs	
11. Each institution develops vocational programs based on its assessment of area needs.	
12. Vocational education opportunities offered to adult students on a full-time basis.	
13. Vocational education opportunities offered to adult students on a part-time basis.	
14. Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.	
15. Theory oriented programs with a mathematics and science base offered.	
Organization	
16. Formal school credit granted for on-the-job experience.	
17. Transferable school credit granted.	
18. Each institution serves only citizens of its immediate community.	
19. Principal administrative control rests with the local community.	
20. Advisory committees assist with curriculum development.	
Staffing	
21. All vocational teachers have appropriate business or industrial experience in their speciality.	
22. All vocational teachers have a minimum of the bachelor's degree.	
23. All vocational teachers certified by the state.	
24. A state salary schedule for vocational teachers.	
25. Teachers of a skilled trade subject maintain affiliation with the appropriate journeyman organiza	
Facilities	
26. Training facilities shared with other types of institutions.	
27. Physical facilities for vocational programs primarily financed at the local level.	
28. Training facilities duplicate those found in business and industry.	
29. Training facilities and equipment provided and owned by the State Dept. of Vocational and Technic	
30. Adequate vocational program facilities to serve the needs of the State of Oklahoma.	
Finance	
31. The Oklahoma Legislature provides adequate state financial support for programs.	
32. As educational costs rise, student tuition and fees rise proportionately.	
33. Training institutions financed at a level to offer programs in equal quality to those in neighbor	
34. Training programs primarily financed by local taxes.	
35. The five-mill levy to support vocational education provides adequate local funding for support of programs.	

*Denotes .05 level of confidence.

TABLE 20

THAT SHOULD BE GIVEN SELECTED EDUCATIONAL ROLES BY AREA VO-TECH SCHOOLS AND COMMUNITY/
ES AS PERCEIVED BY THE EDUCATION GROUP COMPARED TO THE BUSINESS GROUP

ucational Roles	Education Mean Diff. in Response	Business Mean Diff. in Response	Mean Diff.	SE Diff.	t
Philosophy					
mily income.	.415	.350	0.07	.148	0.45
he vocational program.	-.165	-.230	0.06	.202	0.32
the manpower needs of the state.	.594	.613	-0.02	.174	-0.11
students with above average academic ability.	-.307	-.228	-0.08	.187	-0.42
cific needs of both sexes.	.245	.396	-0.15	.169	-0.89
Objectives					
all academic abilities.	.360	.748	-0.39	.180	-2.16*
objective of the institution.	.538	.821	-0.28	.160	-1.77
distance for all citizens.	.509	.500	0.01	.188	0.05
al needs of handicapped students.	.393	.411	-0.02	.150	-0.12
stry needs, an important objective of the institution.	.514	.459	0.06	.160	0.35
Programs					
based on its assessment of area needs.	.500	.593	-0.09	.151	-0.61
adult students on a full-time basis.	.114	.167	-0.05	.183	-0.29
adult students on a part-time basis.	.355	.536	-0.18	.165	-1.10
reas as machine tool, printing, carpentry, welding.	1.107	1.286	-0.18	.208	-0.86
nd science base offered.	-.521	-.455	-0.07	.221	-0.30
Organization					
xperience.	.439	.316	0.12	.218	0.56
	.125	-.125	0.25	.166	1.51
immediate community.	.610	.500	0.11	.182	0.61
he local community.	.757	.748	0.01	.177	0.05
velopment.	.351	.396	-0.05	.167	-0.27
Staffing					
ness or industrial experience in their speciality.	.346	.168	0.18	.139	1.28
bachelor's degree.	-.411	-.509	0.10	.184	0.53
e.	.273	.164	0.11	.138	0.79
rs.	.102	.157	-0.05	.137	-0.41
affiliation with the appropriate journeyman organization.	.457	.259	0.20	.163	1.22
Facilities					
f institutions.	-.104	.165	-0.27	.170	-1.59
rimarily financed at the local level.	.633	.265	0.37	.200	1.84
business and industry.	.298	.290	0.01	.152	0.06
d owned by the State Dept. of Vocational and Technical Education.	.432	.523	-0.09	.189	-0.48
ve the needs of the State of Oklahoma.	.491	.446	0.05	.172	0.26
Finance					
ate financial support for programs.	.167	.278	-0.11	.143	-0.78
d fees rise proportionately.	-.077	.000	-0.08	.154	-0.50
offer programs in equal quality to those in neighboring states.	.183	.200	-0.02	.157	-0.11
taxes.	.475	.500	-0.03	.162	-0.15
ation provides adequate local funding for support of training	.774	.574	0.20	.180	1.11

Table 21 depicts the comparison of the school administrators' group's (principals and superintendents) perceptions as to the priorities that were given and that should be given by area vocational-technical schools to seven distinct elements of an educational institution's planning process. The items were ranked by weighing the elements rated first with a seven and the elements rated seventh with a one and the point total used to determine standing in the ranking.

The investigator believed that the information depicted in Table 21 had implications for those administrators, board members and teachers associated with area schools. It was obvious to the investigator that the education group (principals and superintendents) perceived area schools as being overly concerned with finance while they should have given greater priority to planning the programs and objectives of the institution.

This perception could have developed as the result of lack of involvement of members of the education group in the early stages of area school development. A more positive perception could have been developed through greater involvement of the education group by area schools in their planning process.

TABLE 21

EDUCATION GROUP (PRINCIPAL-SUPERINTENDENT) RANKING OF PLANNING ELEMENTS REGARDING AREA VOCATIONAL SCHOOLS

Perception of What Is Given Priority	Perception of What Should Be Given Priority
1. Finance	1. Programs
2. Programs	2. Objectives
3. Facilities	3. Finance
4. Staffing	4. Staffing
5. Organization	5. Philosophy
6. Objectives	6. Organization
7. Philosophy	7. Facilities

Table 22 is a representation of the perceptions of the business managers' group (Chamber of Commerce executives and industry managers) as to priorities given compared to priorities that should be given distinct educational planning elements by area vocational-technical schools.

Implications drawn from Table 22 were that the business group, Chamber of Commerce and industry managers, perceived as did the education group that area schools placed finance (the ability to pay for the educational programs) above the institutions' priorities for objectives and programs. Here again it was believed that lack of understanding might have led to this perception. Had there been greater involvement in the planning process of area schools by more community leaders, any misconception might have been corrected. Greater involvement by community leaders in the area school planning process would have allowed them to affect priorities.

TABLE 22

BUSINESS GROUP (COMMERCE AND INDUSTRY MANAGERS) RANKING OF PLANNING ELEMENTS REGARDING AREA VOCATIONAL SCHOOLS

Perception of What Is Given Priority	Perception of What Should Be Given Priority
1. Finance	1. Objectives
2. Facilities	2. Programs
3. Programs	3. Finance
4. Staffing	4. Staffing
5. Objectives	5. Facilities
6. Organization	6. Organization
7. Philosophy	7. Philosophy

Table 23 compares the perceptions of the school administrators' group regarding priorities of planning elements by community/junior colleges to order of priority that they perceived should be given these planning elements.

Table 23 shows that the education group held basically the same perceptions as to the priorities that should be given planning elements by community/junior colleges as they did regarding area schools. Here again it was believed that lack of involvement led to this somewhat negative perception with regard to over prioritizing finance in the planning process engaged in by community/junior colleges.

TABLE 23

EDUCATION GROUP (PRINCIPAL-SUPERINTENDENT) RANKING OF PLANNING ELEMENTS REGARDING COMMUNITY/JUNIOR COLLEGES

Perception of What Is Given Priority	Perception of What Should Be Given Priority
1. Finance	1. Programs
2. Programs	2. Objectives
3. Staffing	3. Finance
4. Objectives	4. Philosophy
5. Facilities	5. Staffing
6. Organization	6. Organization
7. Philosophy	7. Facilities

Table 24 presents the perceptions of business managers as to priorities given seven distinct planning elements by community/junior colleges compared to their perceptions as to the priority that should be given each of the planning elements.

Conclusions were drawn from the information depicted in Table 24 that the business group had perceived that finance was the top priority in the planning process of community/junior colleges while objectives and programs should have been given higher priority. Future planning by community/junior colleges might more nearly be tuned to the feelings of the business community by studying in detail the implications of the priority order expressed by the business group. Greater involvement of the business group in the planning process was seen to have potential for minimizing the difference in perceptions as to what is and what should be given priority.

TABLE 24

BUSINESS GROUP (COMMERCE AND INDUSTRY MANAGERS) RANKING OF PLANNING ELEMENTS REGARDING COMMUNITY/JUNIOR COLLEGES

Perception of What Is Given Priority	Perception of What Should Be Given Priority
1. Finance	1. Objectives
2. Philosophy	2. Programs
3. Objectives	3. Finance
4. Facilities	4. Staffing
5. Programs	5. Philosophy
6. Staffing	6. Facilities
7. Organization	7. Organization

Table 25 compares the difference in priorities assigned to seven distinct planning elements by area vocational-technical schools perceived by school administrators and business managers. In analyzing the difference in perceptions, the t-test for significance was again utilized. The null hypothesis was rejected for the elements of philosophy and finance at the .05 level of confidence. School administrators perceived philosophy as having been given lesser priority than it should have been given. Business managers, however, perceived philosophy as having been given greater priority than it should have been given resulting in a significant difference in perception between the two groups. Both groups perceived finance as having been given a higher priority by the area vocational-technical school than it should have been given. The business managers' perceptions of what is and what should be the difference in priority was significantly greater than the school administrators' perceptions.

TABLE 25

SCHOOL ADMINISTRATORS' VS. BUSINESS MANAGERS' PERCEPTION AS TO PRIORITY OF PLANNING ELEMENTS THAT SHOULD BE GIVEN BY THE AREA VOCATIONAL-TECHNICAL SCHOOLS

Planning Element	School Administrators Mean Difference What is/What should be	Business Managers Mean Difference What is/What should be	Mean Difference	SE Difference	t
Philosophy	0.46	-0.49	0.95	.394	2.42*
Objectives	0.89	1.05	-0.16	.288	-0.56
Programs	0.18	0.18	0.00	.267	0.00
Organization	-0.70	-0.55	-0.14	.291	-0.49
Staffing	-0.06	-0.36	0.30	.293	1.01
Facilities	-1.13	-1.14	0.00	.306	0.03
Finance	-0.64	-1.40	0.76	.340	2.23*

*Denotes .05 level of confidence.

Table 26 compares the perceptions of school administrators and business managers as to priorities given related to priorities that should be given planning elements by community/junior colleges.

The null hypothesis was rejected with regard to philosophy at the .01 level of confidence. School administrators perceived the community/junior colleges as having given lesser priority to philosophy than should have been given. The business managers perceived the community/junior colleges as having given greater priority to philosophy than should have been given. The difference between the two was significant at the .01 level of confidence.

TABLE 26

SCHOOL ADMINISTRATORS' VS. BUSINESS MANAGERS' PERCEPTION AS TO PRIORITY OF PLANNING ELEMENTS THAT SHOULD BE GIVEN BY THE COMMUNITY/JUNIOR COLLEGES

Planning Element	School Administrators Mean Difference What is/What should be	Business Managers Mean Difference What is/What should be	Mean Difference	SE Difference	t
Philosophy	0.42	-0.75	1.17	.346	3.38*
Objectives	0.45	0.52	-0.07	.273	-0.26
Programs	0.31	0.44	-0.13	.245	-0.52
Organization	-0.33	-0.66	0.33	.265	1.24
Staffing	-0.41	-0.26	-0.15	.228	-0.67
Facilities	-0.98	-0.73	-0.26	.282	-0.91
Finance	-0.58	-0.85	0.27	.320	0.85

*Denotes .01 level of confidence.

Major Findings

1. All four groups--superintendents, principals, Chamber of Commerce executives, and industry managers--perceived area vocational-technical schools as giving more emphasis to the following educational roles than did community/junior colleges:

   Item (7) Training for entry level employment, a primary function of the institution.

   Item (11) Each institution develops vocational programs based on its assessment of area needs.

   Item (14) Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.

2. All four groups--superintendents, principals, Chamber of Commerce executives, and industry managers--perceived community/junior colleges as giving greater emphasis to the following educational roles than did area vocational-technical schools:

   Item (2) General education an important component of the vocational program.

   Item (4) Institutions provide programs appropriate for students with above average academic ability.

   Item (22) All vocational teachers have a minimum of a bachelor's degree.

3. All four groups--superintendents, principals, Chamber of Commerce executives, and industry managers--perceived that area vocational-technical schools should give more emphasis to the following selected educational roles than should community/junior colleges:

   Item (3) Vocational programs offered closely geared to the manpower needs of the state.

Item (7) Training for entry level employment a primary objective of the institution.

Item (11) Each institution develops vocational programs based on its assessment of area needs.

Item (14) Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.

Item (19) Principal administrative control rests with the local community.

4. All four groups--superintendents, principals, Chamber of Commerce executives, and industry managers--perceived that community/junior colleges should give more emphasis to the following selected educational roles than should area vocational-technical schools:

Item (2) General education an important component of the vocational program.

Item (4) Institutions provide programs appropriate for students with above average academic ability.

Item (15) Theory oriented programs with a mathematics and science base offered.

Item (22) All vocational teachers have a minimum of a bachelor's degree.

5. There was a significant difference in the degree of emphasis that school administrators perceived educational roles 4 and 7 by community/junior colleges than was perceived by business managers.

Item (4) Institutions provide programs appropriate for students with above average academic ability.

Item (7) Training for entry level employment a primary objective of the institution.

6. There was a significant difference in the degree of emphasis that school administrators perceived should be given educational roles 14, 22, and 33 by community/junior colleges than was perceived by business managers.

Item (14) Manipulative skill programs offered in such areas as machine tool, printing, carpentry, and welding.

Item (22) All vocational teachers have a minimum of the bachelor's degree.

Item (33) Training institutions financed at a level to offer programs in equal quality to those in neighboring states.

7. There was a significant difference in the degree of emphasis business managers perceived should be given educational role 21 by community/junior colleges than was perceived by school administrators.

Item (21) All vocational teachers have appropriate business or industrial experience in their speciality.

8. There was a significant difference in the degree of emphasis perceived by school administrators and business managers being given educational roles 3, 4, 5, 10, 11, 17, 21, 23, 25, 28, and 34 by area vocational-technical schools.

Item (3) Vocational programs offered are closely geared to the manpower needs of the state.

Item (4) Institutions provide programs appropriate for students with above average academic ability.

Item (5) Vocational programs developed to meet the specific needs of both sexes.

Item (10) Retraining to meet changing business and industry needs, an important objective of the institution.

Item (11) Each institution develops vocational programs based on its assessment of area needs.

Item (17) Transferable school credit granted.

Item (21) All vocational teachers have appropriate business or industrial experience in their speciality.

Item (23) All vocational teachers certified by the state.

Item (25) Teachers of skilled trade subject maintain affiliation with appropriate journeyman organization.

Item (28) Training facilities duplicate those found in business and industry.

Item (34) Training programs primarily financed by local taxes.

9. School administrators thought significantly greater emphasis should be given educational roles 4, 6, 9, 17, 23, by area vocational-technical schools than was perceived by business managers.

Item (4) Institutions provide programs appropriate for students with above average academic ability.

Item (6) Vocational programs provided for students of all academic abilities.

Item (9) Vocational programs offered to meet the special needs of handicapped students.

Item (17) Transferable school credit granted.

Item (23) All vocational teachers certified by the state.

10. School administrators thought significantly greater emphasis was being given educational roles 24 and 27 by the area vocational-technical schools compared to the community/junior colleges than did the business managers.

Item (24) A state salary schedule for vocational teachers.

Item (27) Physical facilities for vocational programs primarily financed at the local level.

11. Business managers thought that significantly more emphasis should be given to educational role 6 by community/junior colleges than area vocational-technical schools as compared to school administrators.

Item (6) Vocational programs provided for students of all academic abilities.

12. Both school administrators and business managers perceived that the order of priorities given planning elements by area vocational and technical schools and community/junior colleges was different than what they thought the rank order of priorities should be.

13. School administrators perceived area vocational-technical schools giving lesser priority to philosophy than should be given while business managers perceived philosophy given less priority than it should be. The difference in their perceptions was significant at the .05 level of confidence. Business managers perceived area vocational-technical schools as giving significantly higher priority to finance than should be given as compared to what the business managers thought.

14. School administrators perceived that community/junior colleges were giving lesser priority to philosophy than they should. Business managers perceived that community/junior colleges gave greater priority to philosophy than they should. The perceptions of the two groups were significantly different at the .01 level of confidence regarding the priority given philosophy in the planning process.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to investigate the differences between the perceptions of selected groups of individuals regarding the philosophy, objectives, programs, organization, staff, facilities, and financing of community/junior colleges and area vocational schools. The four groups were school superintendents, secondary school principals, chamber of commerce executives, and industry managers.

The method of determining differences was the survey instrument, "What Is and What Should Be the Emphasis of Planning Elements for Vocational Education in Area Vocational-Technical Schools and Community/Junior Colleges?" The instrument was developed specifically for this study.

The data of this study was collected by surveying selected superintendents, secondary principals, chamber of commerce executives, and business managers from each of the 77 counties in Oklahoma. The instrument was prepared and the data so arranged that statistical treatment could be provided. This questionnaire was validated for this study by submitting it to the critical approval of a jury of experts in the field of vocational education. After validation the questionnaire was field tested with vocational educators, school administrators, and representatives of business and industry in the Stillwater, Oklahoma

community and area. No individual was used in the field test of the questionnaire who was later to take part in the formal study.

The sample in the survey consisted of 70 superintendents, 74 secondary principals, 63 chamber of commerce executives, and 62 industry managers for a total of 269. The questionnaire was hand carried by members of the staff of the State Department of Vocational and Technical Education to the respondents who were asked to complete the form and return it to the researcher. The questionnaire was explained but in no instance was assistance provided to complete the questionnaire.

The data were analyzed by use of the "t" test for significance. Significance was determined at the .01 and .05 level of probability.

Data were gathered and null hypotheses were tested as to significant differences in perceptions of school superintendents, secondary principals, chamber of commerce executives, and industry managers regarding the degree of emphasis given and that should be given each of 35 selected educational roles by area vocational-technical schools and community/junior colleges.

The null hypotheses were tested as to significant differences in perceptions of the school administrators group (superintendents and principals) and the business managers group (chamber of commerce executives and industry managers) as to the degree of emphasis being given and that should be given the 35 selected educational roles by area vocational-technical schools and community/junior colleges.

Following are the major findings of the study:

1. School administrators and business managers perceived differences in the role of community/junior colleges and area vocational-technical

schools in providing vocational education to the state of Oklahoma. School administrators perceive more differences in the two types of institutions than do business managers.

2. There was a significant difference between the perceptions of the school administrators and the business managers as to the emphasis given by community/junior colleges to: (a) providing programs appropriate for students with above average academic ability; and (b) training for entry level employment as a primary objective of the institution.

3. School administrators and business managers support the concept that manipulative skills programs such as welding, carpentry, machine tool, and printing are more in the province of the area vocational-technical school than in the community/junior colleges.

4. There was a significant difference between the perceptions of school administrators and business managers as to the emphasis that should be given by community/junior colleges to: (a) offering manipulative skills programs such as machine tool, printing, carpentry, and welding; (b) all vocational teachers having at least a bachelor's degree; and (c) training institutions financed at a level equal to that of neighboring states.

5. There was a significant difference between the perceptions of business managers and school administrators as to the emphasis community/junior colleges should give to all vocational teachers having appropriate business or industrial experience in their specialty.

6. There was a significant difference in the perceptions that school administrators and business managers have as to the emphasis that

is given by area vocational-technical schools to: (a) vocational programs offered that are closely geared to the state's manpower needs; (b) providing programs for students with above average academic ability; (c) developing programs to meet the specific needs of both sexes; (d) retraining to meet the changing manpower needs as an important institutional objective; (e) developing programs based on its assessment of area needs; (f) granting transferable school credit; (g) all vocational teachers having appropriate business or industry experience; (h) vocational teachers maintaining an affiliation with appropriate journeymen organizations; (i) training facilities duplicating those of business and industry; and (j) training programs financed primarily by local taxes.

7. There was a significant difference in the perceptions of school administrators and business managers as to the emphasis that should be given by area vocational and technical schools to: (a) providing programs appropriate for students with above average academic ability; (b) providing programs for students of all academic abilities; (c) offering programs to meet the special needs of handicapped students; (d) granting transferable school credit; and (e) all vocational teachers being certified by the state.

8. There was a significant difference in the perceptions of school administrators and business managers as to the degree of emphasis being given a state salary schedule for all vocational teachers by area vocational-technical schools as compared to community/junior colleges.

9. There was a significant difference in the perceptions of school administrators and business managers as to the degree of emphasis

being given the financing of physical facilities for vocational education programs at the local level by the area vocational-technical schools as compared to the community/junior colleges.

10. There was a significant difference in the perceptions of business managers and school administrators as to the degree of emphasis being given to providing vocational education for students of all academic abilities by community/junior colleges compared to the area vocational-technical schools.

11. The perceptions of school administrators and business managers were not significantly different with respect to priorities given the planning elements of facilities, staffing, organization, programs, and objectives by area vocational-technical schools as compared to priorities they should be giving them.

12. There was a significant difference in the perception of school administrators and business managers as to the priority being given by community/junior colleges to philosophy in the planning process. School administrators perceived the community/junior college as giving philosophy a higher priority than it should have. Business managers perceived community/junior colleges as giving less priority to philosophy that it should be given.

13. Both school administrators and business managers perceived that those responsible for planning programs of vocational education in the area vocational-technical schools and community/junior colleges put a higher priority on finance than should have been the case.

14. There was a significant difference in the perception of school administrators and business managers as to the priority being

given philosophy in the planning process by the area vocational-technical schools. The school administrators' group perceived philosophy being given a greater priority than it should have by area vocational-technical schools. Business managers perceived philosophy being given less priority by area vocational-technical schools than it should have been given.

15. Although both the school administrators' group and the business managers' group perceived finance being given a higher priority in the planning process by area vocational-technical schools than it should have had, there was a significant difference in their perceptions.

16. There were no significant differences in the perceptions of school administrators and business managers as to the priorities given objectives, programs, organization, staffing, facilities, and finance in the planning process by community/junior colleges compared to the priorities that should have been given them.

Conclusions

The rationale underlying this study was to attempt to find if there were different perceptions by four important groups as to the educational roles of community/junior colleges and area vocational-technical schools in providing vocational education. The area vocational-technical schools and the community/junior colleges have been accused of duplicating educational efforts and programs to the citizens of the state. Thus, it has become increasingly important that the users of the products of vocational education, the lay public and the suppliers of raw material be knowledgeable about the role, function, source of

funding, programs, etc., of the area vocational-technical schools and the community/junior colleges.

Based upon the findings of this study the following conclusions are deemed appropriate:

1. There were significant differences in the way business managers and school administrators perceived many of the roles of area schools and community/junior colleges which have implications for the future development of vocational and technical education programs in the state.

2. The conclusion was also drawn that area vocational-technical schools have greater responsibility for gearing their programs to the manpower needs of the state, training for entry level employment, developing programs to meet local area needs, offering programs in the area of manipulative skills and maintaining administrative control at the local level than do community/junior colleges.

3. It was also concluded that community/junior colleges should have greater responsibility for general education as a support component of the vocational programs, for providing programs for students with above average academic ability, for theory-oriented vocational programs with math and science components, and for greater academic credentials of teachers than do area vocational-technical schools.

4. Finally, it was concluded that there are many significant differences in the perceptions of school administrators and business managers as to the degree of emphasis that is given and should be given the various planning elements by area vocational-technical schools and by the community/junior colleges.

Recommendations

The analysis of the results of this study and the conclusions reached on the basis of the analysis support the following recommendations:

1. That a study be conducted within the area vocational-technical schools and community/junior colleges to see how their perceptions of the degree of emphasis being given the various planning elements compares with each other and with the perceptions of the groups involved in this study.

2. That further research be conducted to see if there is a significant difference in perception of school administrators and business managers as to the emphasis given the selected planning elements if an area vocational-technical school or a community/junior college is located in their immediate community compared to the institution being located some distance away.

3. That further research should include a much greater population in the survey.

4. That further research should be conducted to determine if there is a difference in perceptions of school administrators and business managers in rural and sparsely populated areas than those in more populous and urban centers as to the functions of area vocational-technical schools and community/junior colleges.

BIBLIOGRAPHY

Books

Fields, Ralph R. The Community College Movement. New York: McGraw-Hill Book Company, 1962.

Havighurst, Robert J., and Newgarten, Bernice L. Society and Education. Englewood Cliffs, New Jersey: Allyn and Bacon, 1957.

Higher Education for American Democracy: A Report of the President's Commission on Higher Education. New York: Harper and Brothers, 1948.

McDowell, F. M. The Curriculum of the Junior College. Washington, D.C.: U.S. Bureau of Education, 1922.

Medkser, Leland L. The Junior College: Progress and Prospect. New York: McGraw-Hill Book Company, 1960.

Roberts, Roy W. Vocational and Practical Arts Education. New York: Harper & Row Publishers, 1965.

Thomas, Frank W. The Junior College, Its Organization and Administration. Palo Alto: Stanford University Press, 1927.

Thornton, James W., Jr. The Community Junior College. New York: John Wiley & Sons, 1960.

Articles

Anzel, James Rowland. "The Junior College Movement in High Schools." School Review, XXIII (May, 1915), 302.

Bethel, Lawrence L. "Vocational Education." Fifty-Fifth Yearbook of the National Society for the Study of Education. Chicago: The University of Chicago Press, 1956.

"Continuity and Discontinuity of Higher Education and the Schools." Carnegie Commission cn Higher Education. New York: McGraw-Hill Book Company, August, 1973, 64.

Eells, Walter C. "Associate Degrees and Graduation Practices in Junior Colleges." Washington, D.C.: American Association of Junior Colleges, 1942, 53-54.

"Guiding Principles for Legislation for Establishment of Junior Colleges." Junior College Review, XLVII (May, 1947), 386-387.

Harris, Norman C. "Administrative Leadership in Vocational-Technical Education." Junior College Journal, XXXII, 7 (March, 1967), 382.

Harris, Norman C. "Occupational Education: Middle Manpower and the Junior College." Compact, II, 3 (Denver, Colorado: Education Commission of the States, June, 1968), 23.

Hoenninger, Ronald W., and Skovholt, Thomas M. Community and Junior College Journal, VIII, 43 (May, 1973), 22-23.

Hutchins, Robert. "Hard Times and Higher Learning." Yale Review, XXII (June, 1933), 729.

Johnson, B. Lamar. "A Look to the Future." Fifty-Fifth Yearbook of the National Society for the Study of Education. Chicago: The University of Chicago Press, 1956.

Koss, Leonard V. "Business Education: The Present Status." Junior College Journal, II (January, 1932), 191.

Koss, Leonard V. "Current Conceptions of the Special Purpose of the Junior College." School Review, XXIX (September, 1921), 8.

Leighbody, Gerald B. "Major Issues of the 1970's." Vocational Education in America's Schools. Chicago: American Technical Society, 1972.

Skaggs, K. B. "Occupational Education: The Program Crisis." Community and Junior College Journal, (May, 1973), 33.

Reports

Brick, Michael. An Analysis of Selected Business and Technology Programs in High Schools and in Two-Year Colleges and Institutions of New York State with a View toward Initiating Articulation Procedures in Counterpart Offerings. New York: Center for Urban Education, 1967.

Deguglielmo, Bob; Frazier, Don; and Stevenson, Bill. A Study of the Needs of Oklahoma Citizens for Information About Vocational-Technical Education. Stillwater, Oklahoma: Oklahoma State Department of Vocational and Technical Education, 1975.

Education for a Changing World of Work: A Report of Consultants on Vocational Education. Washington, D.C.: U.S. Department of Health, Education, and Welfare; U.S. Office of Education; U.S. Government Printing Office, 1963.

Institutional Goals Study. Cumberland, Maryland: Allegany Community College, 1974.

Martorana, S. V. The Community College in Michigan. Staff Study Number 1 of the Survey of Higher Education in Michigan, 1956.

McKinnerney, B. Student Articulation between Secondary and Post-Secondary Education. Washington, D.C.: U.S. Department of Health, Education, and Welfare, 1974.

Minar, David W., et al. The Developing Relationship between Elementary-Secondary and Higher Education in American States. Paper presented at the annual meeting of American Research Association, Los Angeles, California, February 8, 1969.

National Association of State Directors of Vocational and Technical Education. Defining Critical Terms in Vocational Education. West Virginia: West Virginia Department of Education, 1976.

Oklahoma State Mini-Plan for the Administration of Vocational Education. Stillwater, Oklahoma: Oklahoma State Department of Vocational and Technical Education, 1975-76.

People, Progress, Programs: Annual Report of the American Association of Junior Colleges. Washington, D.C.: American Association of Junior Colleges, 1964.

Position Statement Concerning the Development of Area Vocational and Technical Education Programs in Michigan. Lansing, Michigan: Michigan State Department of Education, July, 1967.

President's Committee on Education Beyond the High School. Second Report to the President. Washington, D.C.: U.S. Government Printing Office, 1957.

Research: Two-Year Colleges Education Projects for Business Organizations. Washington, D.C.: Education Department of the Chamber of Commerce of the United States, 1964.

Schmidt, Roy L., and Stafford, David P. Attitudes of Secondary School Principals and Superintendents in the State of Washington toward Vocational Education. A report to the Washington State Association for Vocational Education, Olympia, Washington: Washington State Association for Vocational Education, 1976.

Second Report of the Washington State Advisory Council on Vocational Education. Olympia, Washington: Washington State Advisory Council, 1971.

Summary Report of the Panel of Consultants on Vocational Education. Washington, D.C.: U.S. GOvernment Printing Office, 1963.

Unpublished Materials

Ballard, James B. "The Role and Function of Public Junior Colleges in Oklahoma as Perceived by Citizens, Students, Faculty, Administrators, and Trustees." Unpublished Ed.D. dissertation, Oklahoma State University, 1973.

Banta, Trudy W. "Critical Issues in Tennessee Education." Unpublished report, Tennessee University, 1974.

Brooks, Ricky J. "A Delphi Study of Parents', Teachers', School Board Members', School Administrators', School Counselors', and Students' Perceptions of the Roles of Vocational and Technical Education in Oklahoma." Unpublished Ed.D. dissertation, Oklahoma State University, 1974.

Emch, Arnold F. "Long-Range Planning for Colleges and Universities." Undated and unpublished report, Chicago, Illinois: Booze, Allen, and Hamilton Management Consultants.

Gardner, Glen M. "The Association between Local School Administrators' and Counselors' Attitudes toward Vocational Education and Selected Characteristics of Their Students Attending a Vocational Technical School." Unpublished Ed.D. dissertation, Oklahoma State University, 1972.

Heathman, James E. "An Investigation of Attitudes of New Mexico Educational Decision Makers toward Vocational Education." Unpublished Ed.D. dissertation, New Mexico State University, 1972.

Krepel, Wayne J. "An Examination of Selected Salient Correlates of Nebraska School Administrators as Related to Vocational Education." Unpublished Ed.D. dissertation, University of Nebraska, 1967.

Milam, Thomas R. "Vocational Education in Selected High Schools." Unpublished Ed.D. dissertation, Auburn University, 1968.

Spooner, Kendrick L. "Attitudes toward Vocational Education: A Comparison." Unpublished Master's thesis, Ohio State University, 1971.

Thomas, Frank W. "A Study of the Functions of the Public Junior Colleges and the Extent of the Realization in California." Unpublished Ph.D. dissertation, Stanford University, 1927.

APPENDICES

APPENDIX A

QUESTIONNAIRE ADMINISTERED TO HIGH SCHOOL SUPERINTENDENTS, HIGH SCHOOL PRINCIPALS, INDUSTRY MANAGERS, AND CHAMBER OF COMMERCE EXECUTIVES

What Is and What Should Be the Emphasis of Selected Planning Elements for Vocational Education in Area Vocational-Technical Schools and Community/Junior Colleges

These data areas are being collected from school superintendents, school principals, chamber of commerce executives, and business and industry managers to help answer some of the questions that have been of concern to vocational education administrators and planners for some time. These questions have implications for future activities in vocational education. Items have been gathered by researching literature, conferring with practicing school administrators, vocational education personnel, business and industry leaders, and from personal experience.

Please return completed forms to: Arch B. Alexander, 1515 West Sixth Avenue, State Department of Vocational and Technical Education, Stillwater, Oklahoma 74074.

Date: _____ (1) Age: 20-29; 30-39; 40-49; over 50
(Circle the appropriate item)

(2) Sex _____

(3) Years in present position _____

(4) Educational or Training Institution attended: Area Vocational Technical School, Community/Junior College, College, University, Other (Circle the appropriate item)

(5) Highest educational level achieved: H. S. grad, H.S. + 1 yr, JC grad, 3 yr college, College grad, Masters, Doctorate (Circle the appropriate item)

(6) Number of teachers in system. _____

The Instrument

The following instrument is comprised of 35 items under seven elements relevant to administrative and planning practices and responsibilities. Please rate each item according to your thinking of <u>what is</u> and <u>what should be</u> for the Area Vocational Technical Schools (AVTS) and Community/Junior Colleges (CJC) respectively. Circle the appropriate number: (1) indicates no emphasis; (2) indicates little emphasis; (3) indicates moderate emphasis; (4) indicates much emphasis; (5) indicates very much emphasis.

		Area Vocational and Technical School		Community or Junior College	
		What Is	What Should Be	What Is	What Should Be
	PHILOSOPHY				
1.	No person denied enrollment because of low family income.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
2.	General education and important component of the vocational program.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
3.	Vocational programs offered closely geared to the manpower needs of the state.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
4.	Institutions provide programs appropriate for students with above average academic ability.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.	Vocational programs developed to meet the specific needs of both sexes.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	OBJECTIVES				
6.	Vocational programs provided for students of all academic abilities.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
7.	Training for entry level employment a primary objective of the institution.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
8.	Vocational programs offered within commuting distance for all citizens.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
9.	Vocational programs offered to meet the special needs of handicapped students.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
10.	Retraining to meet changing business and industry needs, an important objective of the institution.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	PROGRAMS				
11.	Each institution develops vocational programs based on its assessment of area needs.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

		Area Vocational and Technical School		Community or Junior College	
		What Is	What Should Be	What Is	What Should Be
12.	Vocational education opportunities offered to adult students on a full-time basis.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
13.	Vocational education opportunities offered to adult students on a part-time basis.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
14.	Manipulative skill programs offered in such areas as machine tool, printing, carpentry, welding.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
15.	Theory oriented programs with a mathematics and science base offered.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	ORGANIZATION				
16.	Formal school credit granted for on-the-job experience.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
17.	Transferable school credit granted.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
18.	Each institution serve only citizens of its immediate community.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
19.	Principal administrative control rests with the local community.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
20.	Advisory committees assist with curriculum development.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	STAFFING				
21.	All vocational teachers have appropriate business or industrial experience in their speciality.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
22.	All vocational teachers have a minimum of the bachelor's degree.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
23.	All vocational teachers certified by the state.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

		Area Vocational and Technical School		Community or Junior College	
		What Is	What Should Be	What Is	What Should Be
24.	A state salary schedule for vocational teachers.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
25.	Teachers of a skilled trade subject maintain affiliation with the appropriate journeyman organization.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	FACILITIES				
26.	Training facilities shared with other types of institutions.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
27.	Physical facilities for vocational programs primarily financed at the local level.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
28.	Training facilities duplicate those found in business and industry.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
29.	Training facilities and equipment provided and owned by the State Department of Vocational and Technical Education.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
30.	Adequate vocational program facilities to serve the needs of the State of Oklahoma.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	FINANCE				
31.	The Oklahoma Legislature provides adequate state financial support for programs.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
32.	As educational costs rise, student tuition and fees rise proportionately.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
33.	Training institutions financed at a level to offer programs in equal quality to those in neighboring states.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

		Area Vocational and Technical School		Community or Junior College	
		What Is	What Should Be	What Is	What Should Be
34.	Training programs primarily financed by local taxes.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
35.	The five-mill levy to support vocational education provides adequate local funding for support of training programs.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Below are seven distinct elements of the vocational education planning process described above. Please rank order them as to your perception of the importance currently being placed on them by area vocational-technical schools and community/junior colleges. In addition, please give us your own perceptions as to the rank order of importance that should be given to each planning element by Area Vocational and Technical Schools and Community/Junior Colleges. Under column (1) for the element which is of greatest importance, 2 for the element of next greatest importance, and continue accordingly with 3, 4, 5, 6, and 7. Please rank columns (2), (3), and (4) likewise.

	Area Vocational and Technical School		Community or Junior College	
	(1)	(2)	(1)	(2)
	What Is	What Should Be	What Is	What Should Be
Philosophy	_____	_____	_____	_____
Objectives	_____	_____	_____	_____
Programs	_____	_____	_____	_____
Organization	_____	_____	_____	_____
Staffing	_____	_____	_____	_____
Facilities	_____	_____	_____	_____
Finance	_____	_____	_____	_____

THANK YOU

APPENDIX B

COVER LETTER

Cover letter sent to the following: High School Superintendents
High School Principals
Chamber of Commerce Executives
Business/Industry Managers

It would be appreciated if you would give time to complete the attached questionnaire.

You have a particular vantage point from which to view vocational and technical education. Please give us your thinking even though you may or may not have an Area Vocational-Technical School or Community/Junior College in your area. We believe if you have been in Oklahoma long you will have some conceptions as to what area schools and community colleges are doing and should be doing with regard to vocational education. It is these conceptions we would like you to give us on the attached questionnaire. Your identity and your responses will be kept confidential.

This survey instrument is being brought to you by a member of the staff of the State Department of Vocational and Technical Education. If at all possible, will you complete the form and give it to the vo-tech staff member at this time. If you do not have the time at present, would you advise the staff member when it may be picked up or when it will be mailed. If it is mailed, we will refund the postage.

Please note that the items on the questionnaire's cover refer to personal data regarding you and the organization for which you work. The balance of the questionnaire is self-explanatory. Please note the last item on the questionnaire is unnumbered and requires rank ordering of the elements 1 thru 7.

Your assistance in this survey will be most appreciated.

Sincerely,

Arch B. Alexander
Deputy State Director

Attachment