A STUDY OF ADMINISTRATIVE PROBLEMS IN NEW MEXICO POSTSECONDARY TECHNICAL-VOCATIONAL SCHOOLS

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1975

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
DOCTOR OF EDUCATION
May, 1977

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ACKNOWLEDGMENTS

It is with sincere gratitude that acknowledgments are extended to those who contributed personally and professionally to the undertaking of this study:

To Dr. Lloyd L. Wiggins, major thesis adviser, for his understanding and guidance and for the opportunity to work and learn from his leadership throughout the entire graduate program.

To Dr. Donald S. Phillips, for his continued support and assistance throughout the study.

To Dr. D. Elaine Jorgenson, for sharing her friendship and professional expertise.

To Dr. Wayne Lockwood for sharing his expertise in the development of my master's thesis which set a foundation for this study.

To faculty of the School of Occupational and Adult Education (specially Dr. Richard Tinnell) for their encouragement and assistance throughout the graduate study.

To Ms. Wilma Ludwig and Mr. Frank Romero, Division of Vocational Education, State of New Mexico, for their support and assistance in the undertaking of this study.

To the administrators of New Mexico Technical-Vocational Schools for their willingness to share their experience in making this research possible.

To the ad hoc committee, for their time and effort in providing expertise in the completion of this study.

To Paula Keller for editing the draft and typing the final copy of the study.

To my mother, Evangelina; my daughter, Katrina; and my sons, Gabriel, Joseph Johnny, and Raymond for their continued personal support and understanding.

To my husband, Joseph, for his encouragement and reassurance over the duration of the educational program.

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CHAPTER I

INTRODUCTION

The provision of equal educational opportunity has become a major national priority in postsecondary education during recent years (1, p. 8). While considerable progress has been made in broadening access for many groups previously excluded, barriers still exist which prevent others from fully participating in postsecondary education. The state of New Mexico has addressed this problem and is attempting to make postsecondary education even more accessible.

New Mexico Two-Year Postsecondary Institutions

The 32nd (1975) New Mexico legislature passed House Joint Memorial Number 37 instructing the Board of Educational Finance in its role as the Commission on Postsecondary Education to give the highest priority to the task of statewide planning and to move vigorously to implement the Postsecondary Educational Planning Act (2, p. 45).

On May 3, 1975, the Board of Educational Finance-Commission on Postsecondary Education officially approved the creation of the General Advisory Council. This Council was created to serve as an advisory group to the Board. It is broadly representative of all segments of postsecondary education in New Mexico (2, p. 45).

The Board of Educational Finance and the General Advisory Council concur that one of the most important aspects of the planning activity

is the emerging growth of sub-baccalaureate education (3). As branch community colleges and other two-year institutions grow, they play an increasingly prominent role in providing access to academic and vocational programs at the postsecondary level. Two-year institutions are becoming increasingly attractive to learners because of the convenience, improved physical environment, and savings which accrue to learners from living at home while attending college or technical-vocational school.

According to Esquibel (4, pp. 1, 12-16), there is no statewide system of junior colleges in New Mexico; instead two types of institutions have developed. The New Mexico Junior College in Hobbs is the only "district" junior college in the state. It is controlled by the New Mexico Junior College Board, an elected five-member board. The eight other branch colleges are controlled by the Boards of Regents of their parent institutions. Four of the eight institutions organized under the Branch Community College Act have been designated as technical-vocational schools as well as the New Mexico Junior College in Hobbs.

New Mexico Technical-Vocational Schools

The Technical-Vocational School System in New Mexico consists of eight postsecondary schools. The prime objective of these schools is to provide occupational training or retraining for adults and eligible youth. Under the Vocational Education Amendments of 1968 (P.L. 90-576), the age of eligible learners was reduced from 18 to 16 years. Although learners served by these institutions must be 16 years of age or older, a heavy concentration of learners between the ages of 18 and 27 is currently being reported.

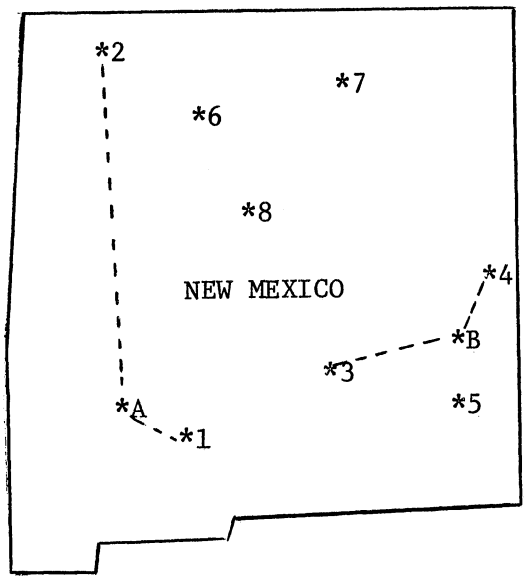
This research involved the eight postsecondary technical-vocational schools in New Mexico (See Figure 1). New Mexico State University has two branch community colleges designated as technical-vocational schools. The Dona Ana Occupational Education Branch established in 1973 is located on the main campus in Las Cruces and the San Juan Branch established in 1956 and designated as a technical-vocational school in 1969 is located in Farmington.

Eastern New Mexico University in Portales also has two branch community colleges designated as technical-vocational schools. The Roswell Branch was declared a technical-vocational school in 1965 and the High Plains Area Vocational School located in Clovis was designated as such in 1971.

The New Mexico Junior College in Hobbs established in 1966 also serves as a technical-vocational school. New Mexico Technical-Vocational School in El Rito, established in 1909, a state institution created in the constitution, became a technical-vocational school in 1964. Luna Vocational Technical Institute in Las Vegas was established in 1971 and is the only institution in New Mexico under the Area Vocational School Act. Albuquerque Technical-Vocational Institute, established in 1965, is the only institution in New Mexico organized under the Technical and Vocational Institute Act. (Appendix C).

Statement of the Problem

In 1975 New Mexico postsecondary technical-vocational school administrators began meeting with personnel from the State Department of Vocational Education on a quarterly basis. As a result of these meetings, there was a general agreement that a systematic approach



A. New Mexico State University
Las Cruces

1. Dona Ana
2. San Juan Branch

B. Eastern New Mexico University
Portales

3. Roswell Branch
4. High Plains Area Vocational School

5. New Mexico Junior College

6. New Mexico Technical-Vocational School

7. Luna Vocational-Technical Institute

8. Albuquerque Technical-Vocational Institute

Figure 1. New Mexico Postsecondary Technical-Vocational Schools

to problem identification and solutions needed to be implemented in order to develop a plan of articulation among institutions.

Purpose of the Study

The purpose of this study was to identify problems encountered by administrators in postsecondary technical-vocational schools in New Mexico and to develop a set of recommended guidelines to solve these problems.

Objectives of the Study

The following objectives provided a framework for the procedures used in this study. These objectives were:

1. To identify problems encountered by administrators in post-secondary technical-vocational schools in New Mexico.
2. To categorize by decision-making levels the problems identified.
3. To develop a set of recommended guidelines to solve the problems identified and categorized.

Definitions of Terms

The following are definitions used in this study:

Adult: an individual who has reached a specified minimum legal age, usually 18 years.

Adult Basic Education (ABE): services or instruction below the college level for adults who do not have a certificate of graduation from a secondary educations institution or its equivalent.

Adult Education: planned formal and informal learning experiences of an individual that are designed to create changes in his or her behavior.

Associate Degree: a degree offered after a two-year program of study at the college level.

Board of Educational Finance (BEF): the eleven member board appointed by the governor in 1951 which deals with problems of finance at institutions of higher education in New Mexico.

Boards of Regents: the five-member boards appointed by the governor of New Mexico which have as their responsibility the management and control of particular institutions of higher education and technical-vocational schools in New Mexico.

Branch Community College: a public two-year institution of higher education providing the first two years of college education and may include organized vocational and technical curricula of not more than two year's duration. Branch community colleges are under the auspices of the Board of Regents of the parent institution.

Junior College: a two-year collegiate institution conferring no higher than the associate degree and offering lower division transfer and/or terminal vocational programs of varying length.

Lifelong Learning: education that begins with the beginning of life and ends with the end of life. It subsumes all stages and aspects of human development and the varied roles that individuals have to play at each stage.

Learners: adults or youth beyond the age of compulsory attendance enrolled in any postsecondary technical-vocational program.

Postsecondary education: instructional programs (including curriculum, instruction, and related services) provided for learners who have completed or otherwise left educational programs in elementary or secondary schools.

Postsecondary Technical-Vocational School: a school with the primary purpose of offering technical-vocational education in one or more semi-skilled, skilled, or technical occupations for adults and youth beyond the age of compulsory attendance.

Technical-Vocational School Administrator (Level I): the person charged with the responsibility of operating the educational program at a New Mexico technical-vocational school. (Responsibilities vary with school philosophy and size.)

Technical-Vocational School Administrator (Level II): the person assisting the Level I administrator in operating the educational programs at a New Mexico technical-vocational school. (Responsibilities vary with school philosophy and size.)

CHAPTER II

REVIEW OF LITERATURE

The purpose of this study was to identify problems encountered by administrators in postsecondary technical-vocational schools in New Mexico and to develop a set of recommended guidelines to solve these problems. This chapter will include: (1) Postsecondary Education: National and State Perspectives; (2) Leadership in Administration of Technical and Vocational Education; (3) Similar Studies; and (4) the Delphi Technique.

Postsecondary Education National and State Perspectives

Adult education is the fastest growing level of instruction today. The field of adult education has experienced a massive influx of clients, an explosion of diverse programs and practices, and a substantial growth of knowledge over the past ten years. According to the National Council of Adult Education (5, pp. 9-10), "enrollment in public adult education is leaping upward at close to eleven percent a year compared with a growth of less than two percent for elementary and secondary education." New Mexico postsecondary technical-vocational schools provide vocational-technical education to adults and youth beyond the age of compulsory attendance.

National Perspectives

This section highlights recent federal legislation as it relates to two-year postsecondary educational institutions. The federal government no longer takes a laissez-faire attitude toward education. Education is now considered by the federal government as an important means to implement its policies of providing for the common defense, eliminating poverty, promoting economic growth, reducing unemployment, and promoting general welfare (6, p. 214).

The most important of the Veteran's Education Acts was P. L. 346 of 1944, popularly known as the G. I. Bill. This act provided training for all veterans of World War II, with the length of training depending upon the length of service. The Veteran's Educational Assistance Act made educational aid for service veterans a permanent federal policy for all veterans who had served 180 days or more since January 31, 1955. These acts have been administered by the Veteran's Administration (6, p. 241).

In 1958, with the launching of Sputnik I, the U. S. became concerned with human resources in the field of mathematics, the sciences, and foreign languages, and as a result the National Defense Education Act (NDEA) was enacted.

The 60's may be considered the great society era with developmental focus on the urban, the rural, the poor, and the disadvantaged. In 1962, the Manpower Development and Training Act (MDTA), P. L. 85-864, was passed. The basic objective of this act was to reduce hard core unemployment by retraining workers whose skills had become obsolete. This act was administered jointly by the Department of Labor and the Department of Health, Education, and Welfare (6, p. 244).

The Higher Education Facilities Act of 1963, P. L. 88-204, authorized $230 million a year for three years beginning in 1964 for the construction of facilities for higher education. Of this amount, 22 percent was earmarked for construction of public community colleges and public technical institutes. This act was administered by the United States Office of Education (6, p. 244).

The Vocational Education Act of 1963, P. L. 88-120, more than quadrupled the federal appropriations for vocational and technical education. The major purposes of the 1963 Act were to provide occupational training for persons of all ages and achievement levels in any occupational field that does not require a baccalaureate degree, to provide for related services which will help to ensure quality programs, to assist in the construction of area vocational facilities, and to promote and to provide financial assistance for work study programs in residential schools. The federal provisions for vocational education were greatly extended by the amendments to the 1963 act in 1968.

The major focus of the Economic Opportunity Act of 1964, P. L. 88-452, was to "mobilize the human and financial resources of the Nation to fight poverty in the United States,"

> ...to eliminate the paradox of poverty in the midst of plenty in this Nation by opening to everyone opportunities for education, training, work, and a life of decency and dignity, and the purpose of the act was to strengthen, supplement, and coordinate efforts in furtherance of that policy.

The Office of Economic Opportunity in the Executive Office of the President was established by this act. The operation of this act was discontinued in 1973 by executive order (6, p. 244).

The Economic Opportunity Amendments of 1965, P. L. 89-253, included the following provisions related to Adult Basic Education: (1) the

federal share of program funding for fiscal years 1966 and 1967 was to be 90 percent and (2) authorization for the use of up to five percent of the allocated funds for teacher training projects (7, p. 35).

The Adult Education Act of 1966, P. L. 89-750, defined adult education as services or instruction below the college level for adults who do not have a certificate of graduation from a secondary educational institution or an equivalent and who were not currently enrolled in schools.

The Elementary and Secondary Educational Act Amendments of 1967, P. L. 90-247, extended Adult Basic Education and included the following provisions: (1) the inclusion of private nonprofit agencies as appropriate for the offering of Adult Basic Education programs; (2) increased the minimum allotment per state to $100,000 per year; (3) established the federal share at the 90 percent level for succeeding years for the State grants, with the Trust Territory of the Pacific Islands at the 100 percent level; and (4) authorized $60 million for fiscal year 1968, $70 million for fiscal year 1969, and $80 million for fiscal year 1970 (7, p. 35).

The Vocational Education Amendments of 1968, P. L. 90-576, can be characterized as a charter for some important changes in emphasis for American education. The 1968 act was designed to assist the educational community in breaking down the barriers between the academic, general, and vocational curriculums so that no young person would be denied an opportunity to prepare for work suiting him or her as an individual. Title I of the Vocational Education Amendments of 1968 completely revised and restructured the Vocational Act of 1963.

Part A created a National Advisory Council on Vocational Education and provided for a State advisory council in every State.

Part B set forth the eligibility requirements for the basic State vocational education programs (i.e., 15 percent was earmarked for post-secondary vocational education, 10 percent for handicapped, and 15 percent for disadvantaged).

Part C substantially revised the authority for research and training in vocational education as provided in the 1963 Act.

Part D of the new legislation authorized grants and contracts for exemplary programs and projects with State boards, local educational agencies, and other public or private agencies.

Part E authorized funds for planning, constructing, and operating residential vocational education schools and dormitories for youth.

Part F authorized appropriations for consumer and homemaking education.

Part G authorized appropriations for grants to assist states to expand cooperative vocational education programs by providing instruction related to the work experience.

Part H of the legislation authorized appropriations for work-study programs which provided employment for vocational education students.

Part I authorized appropriations for curriculum development in vocational and technical education.

Title II of the Vocational Education Amendments of 1968 amended the Educational Professional Development Act by adding a new Part F entitled, "Training and Development Programs for Vocational Education Personnel."

The Adult Education Act of 1970, P. L. 91-230, included the following new provisions: (1) changed the purpose to enable adults to continue their education and complete the secondary level; (2) increased the minimum allotment per State to $150,000 per year; (3) authorized $160 million for fiscal year 1970, $200 million for fiscal year 1971, and $225 million for each of fiscal years 1972 and 1973; (4) authorized up to five percent of the funds for the administration and development of State Plans; and (5) created the National Advisory Council on Adult Education consisting of 15 members appointed by the President (7, p. 35).

The Education Amendment of 1972, P. L. 92-318, provided for Adult Education programs for Indians with an appropriation of $5 million for fiscal year 1973 and $8 million for each of the fiscal years 1974 and 1975 (7, p. 35).

The Education Amendments of 1974, P. L. 93-380 (1) defined community school program as:

> ...a program in which a public building, including but not limited to a public elementary or secondary school or a community or junior college, is used as a community center operated in conjunction with other groups in the community, community organizations, and local governmental agencies, to provide educational, recreational, cultural, and other related community services for the community that center serves in accordance with the needs, interests, and concerns of that community.

(2) stipulated state plans should provide for cooperation with manpower development and training and occupational education programs; and (3) made seven other provisions related to adult education (7, p. 35).

National expenditures for the Adult Basic Education Program have gradually increased from $32.5 million for fiscal year 1966 and 25.4 million for fiscal year 1967 to $67.5 million per year for fiscal years 1975 and 1976. The enrollments in federally-sponsored Adult Basic

Education grew from 38,000 in 1965 to over one million at the present time--1976. The categories of learners have been identified by priority levels as : 1st priority--grade levels 0-4; 2nd priority--grade levels 5-8; and 3rd priority--grade levels 9-12 (7, p. 36).

The 70's could be designated as a truly learning society; where prior legislation has been focused on reaching the rich, the poor, and the unemployed, the basic fibers of American needs and concerns have really not been emphasized (i.e., needs for better parenting, job changes, relocation, retirement, death and dying).

On October 12, 1976, the President signed the Education Amendments of 1976, P. L. 94-482. Title II of the Education Amendments of 1976 is vocational education. The new Act has provisions for (1) innovations and improvement of programs, (2) reducing sex bias and sex stereotyping in vocational education programs, (3) requiring the establishment of local advisory councils, (4) allocating a specific percentage of funds to Vocational Guidance and Counseling, (5) mandating the implementation of an occupational information system, (6) requiring that States must file a five-year state plan, plus an annual up-dated plan (7) requiring that States must evaluate each skill-proficiency program in conjunction with Project Baseline, (8) giving the Commissioner of Education discretionary funds to grant for bilingual vocational education programs, instructor training, and development of instructional materials, methods, and techniques, (9) encompassing a wider range of responsibilities in Home Economics to include school-parents, single parents, elimination of sex stereotyping in consumer homemaking, health-care delivery systems, and nutrition and food use, and (10) authorizing funding for five years

and mandating by law federal and state agency program evaluations (8, pp. 1-14).

One of the significant pieces of legislation today affecting the total educational delivery system is a Bill of Lifelong Learning (9, pp. 42-45). The modern concepts of adult basic education, occupational training, independent study, parent education, education for personal development, remedial education, continuing education, and education for groups with special needs are all included in the bill. Schools, factories, shops, homes, churches, and just about anywhere people gather or live can and should be sites of such education.

The recent report of the UNESCO International Commission on The Development of Education provided a useful historical perspective (10, pp. 1-130) and defined lifelong learning as:

> ...education that begins with the beginning of life and ends with the end of life, the total life span of an individual. It subsumes all stages and aspects of human development and the varied roles that individuals have to play at each stage.

Ulin (11), in her presentation at Oklahoma State University, commented that while the first year or two under the recently enacted Education Amendments of 1976 will be devoted to planning, a great many questions and issues need to be addressed as the lifelong learning process develops. She concluded with a specific concern, "How is this lifelong learning/education to be administered?"

Table I contains statistics presented by Okes (12, p. 22) which are vital in understanding the relation of adult education, postsecondary education (focus on two-year institutions), and vocational education. Of the 120 million United States adults, 13 million were engaged in adult education.

TABLE I

NUMBER AND PERCENT OF PARTICIPANTS IN VARIOUS SOURCES OF ADULT EDUCATION: U.S., MAY 1969

Type of Educational Delivery System	Percent
*Private, Public School	27.7
*Job Training	27.5
*Colleges and Universities (part-time)	25.2
Community Organizations	13.4
*Correspondence Courses	8.0
Tutor and Private Instruction	5.6
Others	10.3

*Eighty percent of this total participation is found in vocational-technical education, occupational training, or career development.

NOTE: Percentage totals more than 100.0 because of participation in more than one institutional source of adult education.

State Perspectives

This section will present some of the activities implemented by the Board of Educational Finance, State Department of Education, Division of Vocational Education, and postsecondary technical-vocational schools in New Mexico during the past two years.

According to the Fourth Annual Report of the State Commission on Postsecondary Education to the Governor and Legislature, 1976 (13, pp. 1-55), the Board of Educational Finance conducted fourteen meetings throughout New Mexico. Three goals were identified as having direct

impact on postsecondary educational institutions. These goals were:

(1) Identify a methodology for consistently analyzing the funding needs of two-year campuses and for improving the equity of BEF funding recommendations for two-year campuses.

(2) Development of a statewide plan for the future delivery of two-year postsecondary programs, both academic and vocational.

(3) Evaluate physical facilities needs on all postsecondary campuses and develop a prioritized list of capital improvements needs.

Provisions to house all Division of Vocational Education personnel in the State Department of Education Building have been made; this provides accessibility to and increased coordination of statewide comprehensive planning (Appendix C).

A Director of Postsecondary Vocational Education was added to the staff in 1976. One of his main objectives is to increase articulation among the Division of Vocational Education, postsecondary technical-vocational school administrators, and the New Mexico Placement Council. The Adult Basic Education State personnel coordinate many of its programs through postsecondary technical-vocational schools throughout the State. The Program Development Unit, EPD 553, encompasses administration of Part C, research in vocational education, and Part D, exemplary and innovative programs (i.e., career education, curriculum development, itinerant teacher programs).

This study would be incomplete without reference to learner characteristics of New Mexico postsecondary technical-vocational schools. Sanchez (14, p. 47) in his study, "Differences in Selected Abilities Between Students Enrolled in Occupational (Vocational-Technical) Curriculums and Students Enrolled in Baccalaureate Curriculums," at

the Dona Ana Occupational Education Branch of New Mexico State University, finds significant differences among occupational one-year program learners, occupational two-year program learners, and four-year baccalaureate degree-seeking learners. The nature of the differences indicates the two-year program learners and the baccalaureate learners perform significantly better on the ability measures which are primarily academic in nature. The differences tend to diminish when using measures of a non-academic nature. The differences he found between male and female learners seem to be compatible with other studies included in his review of literature. Ethnic background of the learner does seem to play a part in determining scores on the abilities measured in his study. Generally it can be said that the learners who self-identified as non-minority scored higher than the minority learners on all ability measures except the nonverbal measure. Again this may be due not to innate differences between groups but to uneven academic experiences. Specific implications for postsecondary vocational educational institutions involve recognition of the characteristics of the student body in the entire operation of the institution.

Parker (15, pp. 3-18), through the New Mexico Division of Vocational Education, conducted a recent (1974-75) follow-up study of New Mexico postsecondary technical-vocational graduates. Findings indicated that most learners enrolled in these schools were between ages 18 and 27. Of the 1,997 students surveyed, 59 percent of the graduates were minorities, and 44 percent were female. Because of the composition of the tri-culture unique to New Mexico, Spanish is the largest ethnic group completing the postsecondary technical-vocational school programs. Fifty-one percent of the graduates were Spanish, while Anglos comprised

41 percent. Indians, Blacks, and Orientals and other ethnic groups totaled only eight percent of the graduates.

Leadership in Administration of Technical and Vocational Education

This section presents information related to leadership in administration of vocational and technical education.

Strong (16, p. 79), in a recent publication, stressed the fact that "in no other segment of education has the administration and supervision at the various levels been so important or interrelated." The existence of vocational and technical education over many years and its current growth and strength have been dependent upon the adequacy and quality of administration. Strong states:

> The key to effective vocational and technical education, regardless of the size of the school or its level of instruction, is its top administrator. This administrator will have varying titles and duties depending upon the type and level of instruction or district in which he is serving. In a community college, he may be titled dean; in a technical institute, president; in an area school, director; and, in a local high school, director or supervisor. Depending upon the kind of institution, the individual holding this position may report directly to the board, or he may have to work through several administrative layers above him. Considering the importance of vocational education, it is desirable that the person holding the top administrative position in vocational education have the opportunity to communicate with and provide information necessary for policy decisions directly to the board.

Any time specific qualifications are established for a specific position, it will be possible to find successful administrators not meeting all of the desirable standards. Qualifications will also vary according to the level of the position and institution. Erickson (17, p. 55) studied the ten functions and competencies determined to be

the most important as ranked by six reference groups. The ten most often cited were:

(1) Coordinating vocational programs in the school district or center.

(2) Assisting in the selection of staff members.

(3) Keeping the community well-informed of the vocational programs.

(4) Planning or providing leadership in planning short- and long-range goals.

(5) Explaining the goals and scope of vocational education to school administrators and others to ensure balanced, comprehensive opportunities for all students.

(6) Promoting and demonstrating good public relations throughout the community and the media.

(7) Providing assistance to school administrators in initiating and operating vocational programs.

(8) Recommending policies concerning the total vocational program and its staff to superintendent and/or the school board.

(9.5) Planning and preparing cost estimates on equipment and facilities for the annual vocational budget.

(9.5) Working cooperatively with persons and groups in developing a total educational program.

Polk (18, p. 79) in his study, "Characteristics of Directors of Area Vocational-Technical Schools," sought to ascertain whether or not relationships exist between the rated success of local directors of area vocational-technical schools and specified personal, educational, and experience factors. In order to identify those relationships which were outside the realm of chance factors, chi square and "t" statistical

tests were computed. The major finding of his study was a significant relation between four factors: (1) graduate study in vocational education, (2) administrative experience in vocational education, (3) choice of undergraduate institution, and (4) membership in five or more professional organizations and rated success as a local director of an area vocational-technical school.

Nielsen and Perazolli (19, pp. 38-40) emphasized the increasing need for vocational education personnel development and reported that state directors of vocational education are referring to the situation as "critical" and "desperate." The disparity between increases in vocational enrollment and available teachers further illustrated the problem. Over a three-year period, 1971-74, the number of teachers increased by a little more than 50,000 or 25.5 percent, while the number of learners increased by a little more than 3 million, or almost 29 percent. More serious than this lag is the thrust of a diminishing potential.

Wenrich (20) stated that the shift in responsibility from the federal to state and local units of school administration creates a need for an increased number of local vocational education leaders who have the competence to plan, operate, and evaluate vocational programs on the secondary and postsecondary levels. He further goes on to comment that

> ...not only is there a need for more leaders for administrative roles, but there is a need for "new breed" of leaders--persons who have conceptual, technical, administrative, and human relations skills needed to develop dynamic vocational education programs which will serve the needs of individuals and society. Most vocational administrators are recruited from teaching positions in vocational education. These individuals generally have a high degree of competence in a particular occupational field. Leaders in vocational education can no longer

> follow their specialized roles exclusively; they must be both specialists in vocational education and knowledgeable about all areas of vocational education in order to make intelligent decisions. This leader, the administrator, is the "change agent."

Burkett (21, p. 10) commented on implications regarding the Education Amendments of 1976, P. L. 94-482, and urged every citizen to contribute to decision-making areas in which he or she has expertise. He further stated:

> It is unfortunate that only a few trained vocational educators are making an impact on vocational education policy at the national, state and local levels. The current trend of employing persons who have neither training nor experience in vocational education for administrative positions is serious. It is time to reverse this trend which is corroding our decision-making base and could leave us powerless to shape the policies that directly affect the quality and purpose of vocational education.

Simon (22, p. 240) suggested that the understanding of the application of administration principles be obtained by analyzing the administrative process in terms of decisions. In order to organize and present the basic elements of the research of administrative problems in the post-secondary technical-vocational schools in New Mexico, use has been made of an existing educational long-range planning model. The model, known as Emch's Model for Long-Range Planning for Educational Institutions contains the following levels of decision-making: Philosophy, Objectives, Programs, Organization, Staffing, Facilities, and Finance (23, p. 1).

Emch's Model for Long-Range Planning

Emch's Model for Long-Range Planning for Colleges and Universities serves to define and clarify the principal elements of planning and to provide the basic procedural steps essential to a successful program.

These steps are explained in Figure 2. However, in implementing an already planned program, the reverse procedure is followed. Reference to Emch's Model is found in Appendix C.

Similar Studies

Not many similar studies have been done, a typical example of one, however, is that of Jackson (24). His study, "Problem Identification of Local Administrators in Area Vocational-Technical Schools in Tennessee With the Development of Guidelines and Recommendations for Possible Solutions," conducted in 1973 revealed 189 initial administrative problems which were reduced to 17 major problems through a modification of the Delphi Technique.

Jackson's study indicates that administrative problems were grouped into ten categories of administrative tasks. The 17 major administrative problems were identified in the following categories: communications (1), facilities (3), financing (1), instructional materials and supplies (1), legal constraints (1), staff personnel (4), student personnel (1), planning (1), policy development (1), and teacher education (3).

The greatest number of problems identified were in the category of staff personnel, followed by teacher education and facilities. All the other categories each had one problem.

A recommendation for possible solution to each of the seventeen problems was agreed upon by the jury of experts. In most cases the solution to the problem was dependent upon action to be identified by local area vocational-technical school administrators.

Levels of Decision Making	Basic Decisions to Be Made at Each Level
PHILOSOPHY	What are the educational needs of a free society? Who should be educated, to what extent, and by whom? What new knowledge and skills are required?
OBJECTIVES	Which of these general educational needs should this institution seek to meet? What group or groups should it serve and what changes in their knowledge, skills and attitudes should it try to bring about?
PROGRAMS	What instructional programs, research programs and service activities will best serve the needs selected? What range and intensity of coverage is required? What curriculum content and educational methods are most appropriate?
ORGANIZATION	What human abilities, knowledge and skills are required in order to carry out the selected programs and activities? How can these required abilities, knowledge and skills best be translated into requirements for specific faculty, research, administrative and non-academic positions? What functions, responsibilities and authority should be associated with each position? What interrelationships should exist among the different positions in order to best achieve the institution's objectives?
STAFFING	What numbers, kinds, and qualifications of people are required to fill the positions and assume the responsibility in order to best carry out the selected programs and activities?
FACILITIES	What numbers, kinds, quality and locations of facilities are required to best enable the staff to carry out the desired programs and activities?
FINANCING	What operating and capital funds are required to provide the necessary staffing and facilities, and where and how can these funds best be obtained?

Figure 2. Emch's Model of Long-Range Planning

Delphi Technique

The Delphi Technique uses written communication to achieve a meeting of minds. Through the use of carefully designed communications, the Delphi Technique elicits individualized brainstormed responses which form the basis of feedback information to all other participants by way of successive communicative rounds until a convergent opinion is reached.

When in search of a solution to a problem whether that problem relates to current or future concerns, the process traditionally focuses on inquiry made of an expert in the field to provide insight into a potential solution. Convening such a prestigious panel encounters almost insurmountable barriers. Consideration not only of time, location, but also of the workability of the panel members are paramount. Written communications supplant the time and location factors as well as tending to promote more thoughtfully prepared responses (25, p. 24).

The Delphi communication process begins with a problem statement directed to carefully selected participants. Their first responses are collated and organized for redistribution to all participants. As the new communication is received, each member is asked to evaluate all previously submitted responses by some criteria (i.e., degree of importance, likelihood of success, probability of occurrence). In some of the more sophisticated Delphi communications, each participant may request additional information related to the problem area; the information will be supplied to all participants. Anonymity and confidentiality of participant responses are essential in the process to protect participants' ideas from being submerged and to afford the

opportunity to re-evaluate potential solutions and to privately change one's initial opinion. A meeting of the minds, the reaching of a concensus, is the concept underlying the Delphi.

The Delphi Technique was originally named for Apollo's Oracle at Delphi. Throughout ancient times the Delphi Oracle was one of the most important sources of advice and moral teaching. In some ways, the Oracle was a force of unity and peace in Greece (5, p. 263).

Olaf Helmer and his colleagues at Rand Corporation developed the Delphi Technique in the early 1950's. It was originally used to obtain concensus on urgent defense problems (26, p. 152). Other corporations began to use the technique to develop long-range plans. It is now being adapted to surveys in education.

Early uses of the Delphi Technique in education were demonstrated by Professor Donald Anderson of Ohio State University who used the Delphi Technique to arrive at a consensus among a varied group which included professional staffs of county school systems, members of a school board, local teachers, administrators, and recognized experts in the area of intermediate school systems. The concensus arrived at involved defining established goals and establishing priorities for a particular school system (25, p. 5).

The Delphi Technique as developed by Helmar was intended to be a flexible tool. It is not designed to apply to one format, but can be altered and still achieve a reliable concensus. The Delphi Technique in this study is a modification developed by the researcher to collect the data necessary for this study.

CHAPTER III

METHODOLOGY

The purpose of this study was to identify problems encountered by administrators in postsecondary technical-vocational schools in New Mexico and to develop a set of recommended guidelines to solve these problems.

This chapter describes the methodology used to reach the stated objectives of the study and is organized as follows: (1) Objectives of the Study, (2) Study Population, (3) Procedure Used in Identifying Administrative Problems, and (4) Limitations of the Study.

Objectives of the Study

The study had the following three specific objectives:

1. To identify problems encountered by administrators in post-secondary technical-vocational schools in New Mexico.
2. To categorize by decision-making levels the problems identified.
3. To develop a set of recommended guidelines to solve the problems identified and categorized.

Study Population

The population for the study consisted of Level I and Level II administrators of the eight postsecondary technical-vocational schools in New Mexico. Through a modification of the Delphi Technique each

administrator identified problems encountered in his respective school. The researcher synthesized and arbitrarily placed these problems in the various levels of decision-making as described in Emch's Model of Long-Range Planning. The problems were then ranked by "degree of importance" by the administrators. An analysis of the ranking order was made and the top 15-ranked problems were considered for discussion and development of recommended guidelines to solve them. The names of the administrators and their schools are included in Appendix A.

Frank Romero, Director of Postsecondary Vocational Education (See Memo No. 1, Appendix B) made provisions to include the development of recommended guidelines for this study during a regular directors' meeting held September 29, 1976, at the Albuquerque Technical-Vocational Institute. A 19-member ad hoc committee comprised of members of the Board of Educational Finance; members of the General Advisory Council to the Board of Educational Finance; State Department of Education, Division of Vocational Education personnel; and postsecondary technical-vocational school administrators discussed these problems and developed recommended guidelines to solve them. A list of the members of the ad hoc committee is included in Appendix B. (Also see Letter No. 3).

Don Phillips, Head, Technical Education, Oklahoma State University, and a member of the researcher's graduate committee, assisted as facilitator and timekeeper and Christine Lopez served as recording secretary. The meeting was tape recorded with the approval of the committee members. The tapes were later transcribed and the information was used to develop recommended guidelines to solve the problems identified.

Procedure Used in Identifying Problems

The Delphi Technique of research was selected for this study because of its flexibility and adaptation to this type of study. A modification of the Delphi Technique was developed by the researcher to collect the data necessary. It acquired a concensus relative to major administrative problems of postsecondary technical-vocational school administrators in New Mexico without a face-to-face confrontation.

Other rationale for using a modification of the Delphi Technique were: (1) to provide the opportunity for administrators to re-evaluate and/or discuss administrative problems with other level administrators in their institutions and to privately change their initial opinion and (2) to reduce expense and time involved in regular directors' meetings necessary to identify, discuss, and arrive at a concensus of the major administrative problems.

In order to attain the objectives of the study, the procedure was divided into two phases (See Figure 3). Phase I involved the use of a modification of the Delphi Technique used by the researcher to identify the administrative problems of post-secondary technical-vocational schools in New Mexico, to categorize them by levels of decision-making, and to acquire a ranking order by rating the degree of importance of these problems. An on-site visitation (See Letters No. 1 and No. 2, Appendix A) to all eight postsecondary technical-vocational schools in the State was conducted by the researcher.

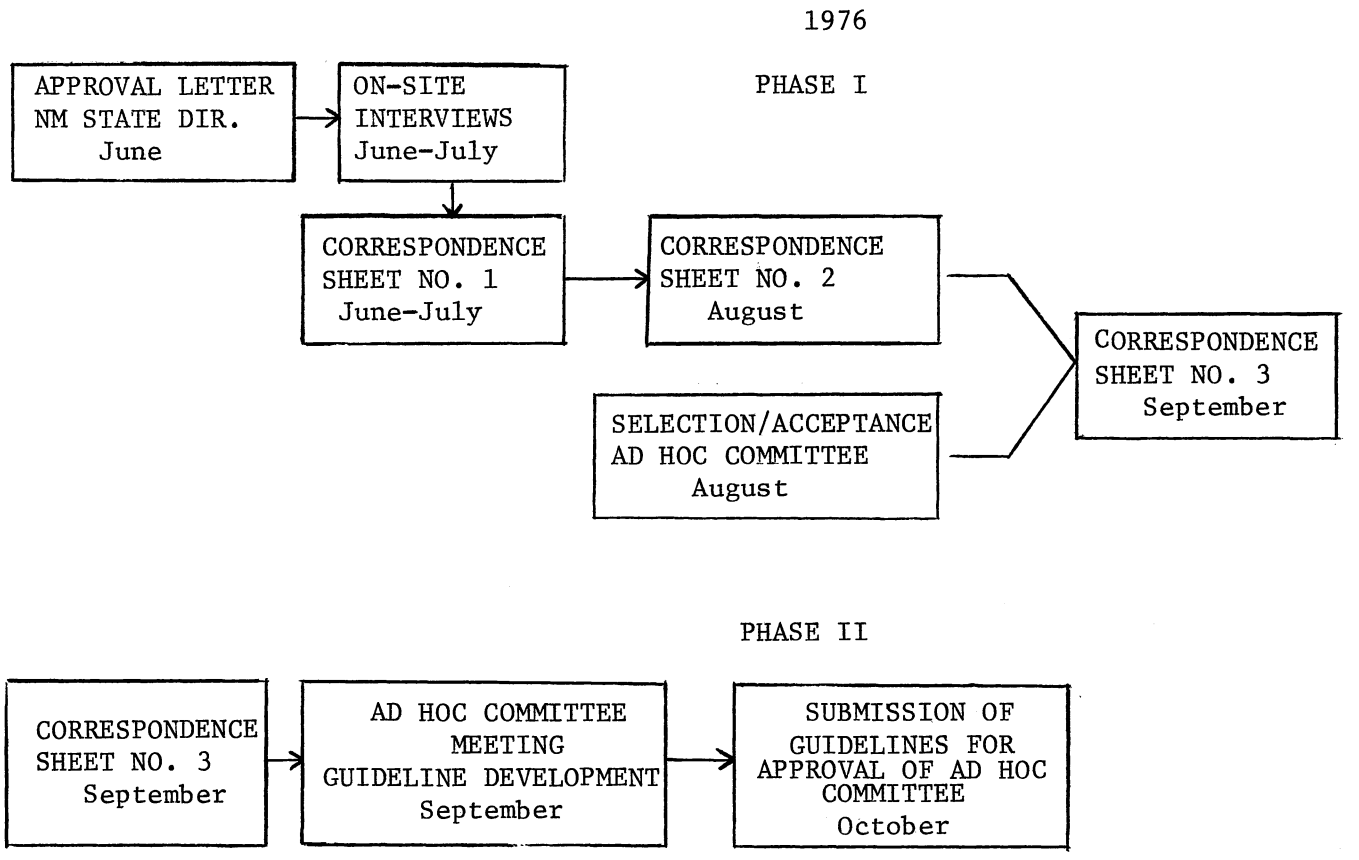


Figure 3. Procedure Used in Identifying Administrative Problems

Correspondence Sheet No. 1

During the on-site interview with both Level I and Level II administrators the researcher discussed the nature of this study and asked each of the administrators to participate. At this time the researcher asked each administrator to complete Correspondence Sheet No. 1 (See Appendix A) and to return it at his earliest convenience. Although space was provided for ten responses, administrators were not limited to ten responses only. Confidentiality was maintained throughout the study.

Correspondence Sheet No. 2

Correspondence Sheet No. 2 (Appendix A) consisted of a listing of the administrative problems identified in Correspondence No. 1. Each participant of the eight postsecondary technical-vocational schools was asked to rate the degree of importance on a one to seven point continuum ranging from the least (1) to the most (7) important. He was also asked to add any other problems he felt needed to be included in the study. A Likert-type scale (28, pp. 25-53) allowed the respondent to express degree of importance. Usually a Likert scale with five or seven categories allows an odd number of responses providing for a neutral response, or commitment from "complete and unqualified agreement" to "complete and qualified agreement." This type of scale facilitates fairly reliable procedures for assessing attitudes and arriving at a concensus by a group.

The responses to Correspondence Sheet No. 2 were analyzed and the degree of importance--values--placed on each problem was totaled. This provided the rank ordering of administrative problems.

Correspondence Sheet No. 3

Correspondence Sheet No. 3 contains the top 15-ranked problems considered for the development of recommended guidelines to solve these problems (Appendix B). It was mailed to each of the ad hoc committee members asking them to jot down recommendations prior to the meeting. The ad hoc committee discussed the administrative problems and developed a set of recommended guidelines to solve these problems.

Phase II provided the development of a set of recommended guidelines to solve the major administrative problems identified and rated by the degree of importance by the participating Level I and Level II administrators in postsecondary technical-vocational schools.

A 19-member ad hoc committee comprised of members of the Board of Educational Finance; members of the General Advisory Council to the Board of Educational Finance--State Commission on Postsecondary Education; Division of Vocational Education personnel; and postsecondary technical-vocational administrators (See Letter No. 3 and Memo No. 1, Appendix A) met during a directors' meeting on September 29, 1976, discussed the major administrative problems, and developed a set of recommended guidelines to solve these problems. A copy of the set of guidelines transcribed from the committee's discussion was mailed to each of the ad hoc committee members asking him to report any inconsistencies or added recommendations (See Letter No. 6 and Information Sheet No. 2, Appendix B).

Limitations of the Study

This study had certain limitations. Among these limitations:

1. The extent of information furnished by the administrators.
2. The hesitation by some administrators to list their major administrative problems in written form.
3. The problems identified for this study were encountered during a short duration--June, 1976-October, 1976.
4. The varying backgrounds and experiences of the technical-vocational school administrators. Four of the 18 administrators had been in office three or less months prior to initial start of study.
5. The extent to which problems are caused by the mere fact that there are five different types of governing bodies in the eight postsecondary technical-vocational schools in New Mexico.
6. The extent to which problems are caused by unique features of the community--economic, social, political--which are not common to other geographical areas.
7. The limited time (one-half day) for the development of a set of recommended guidelines to solve the major administrative problems provided for minimum discussion and recommendations by the ad hoc committee.

CHAPTER IV

ANALYSIS OF DATA

This study was conducted in two phases. Phase I had two objectives: (1) to identify problems encountered by administrators in postsecondary technical-vocational schools in New Mexico and (2) to categorize by decision-making level the problems identified.

Phase II provided means to meet the following objective: (3) to develop a set of recommended guidelines to solve the problems identified and categorized.

Phase I

A modification of the Delphi Technique was used to obtain responses from the administrators of postsecondary technical-vocational schools.

Results of Correspondence Sheet No. 1

Twelve of the seventeen administrators contacted to participate in this study responded to Correspondence Sheet No. 1; some of the schools submitted a joint response with concurrence of both Level I and Level II administrators. This included participation from seven of the eight postsecondary technical-vocational schools (one school designating three levels of administration did not respond).

Upon receipt of Correspondence Sheet No. 1, the researcher synthesized and categorized the identified problems for use of interpretation

and workability using Emch's Model for Long-Range Planning (Figure 2) which includes the following levels of decision-making: Philosophy, Objectives, Programs, Organization, Staffing, Facilities, and Finance. Eighty-nine administrative problems were identified by Level I and Level II administrators in seven postsecondary technical-vocational schools. These were synthesized into seventy-four unduplicated administrative problems. Table II shows the breakdown of problems by each of the levels of decision-making.

TABLE II

DISTRIBUTION OF ADMINISTRATIVE PROBLEMS
BY DECISION-MAKING LEVELS
FROM EMCH'S MODEL

Decision-Making Level	Number	Percentage
Philosophy	10	11
Objectives	15	17
Programs	11	12
Organization	11	12
Staffing	25	29
Facilities	5	6
Finance	12	13
TOTAL	89	100

The greatest number of administrative problems, 29 percent, were identified in the decision-making level of Staffing. The fewest problems were in the category of Facilities. It was also noted that Finance accounted for 12 problems or 13 percent. Approximately one-fourth of the problems were related to the combined decision-making levels of Philosophy and Objectives.

Table III lists administrative problems related to institutional Philosophy as identified by New Mexico postsecondary technical-vocational school administrators. The decision-making level, Philosophy, encompasses basic decisions to be made which relate to the following questions: What are the educational needs of a free society? Who should be educated, to what extent, and by whom? What new knowledge and skills are required?

Table IV lists administrative problems related to institutional Objectives as identified by New Mexico postsecondary technical-vocational school administrators. This decision-making level of Emch's Model of Long-Range Planning, Objectives, encompasses basic decisions to be made which relate to the following questions: Which of these general educational needs should this institution seek to meet? What group should it serve and what changes in their knowledge, skills and attitudes should it try to bring about?

Table V lists administrative problems related to institutional Programs as identified by New Mexico postsecondary technical-vocational school administrators. This decision-making level of Emch's Model of Long-Range Planning, Programs, relates to decisions to the following questions: What instructional programs, research programs and service activities will best serve the needs selected? What range and intensity of coverage is required? What curriculum content and educational methods are most appropriate?

TABLE III

PROBLEMS RELATED TO INSTITUTIONAL PHILOSOPHY AS IDENTIFIED BY NEW MEXICO POSTSECONDARY TECHNICAL-VOCATIONAL SCHOOL ADMINISTRATORS FROM EMCH'S MODEL

Problem	Frequency
Operation of postsecondary technical-vocational schools under five different laws--almost impossible to operate, much less state bonding for facilities	1
Inaccessability of crucial statistics when conducting data search and program planning on long-range scale	1
Administering programs according to the dictates of laws which fail to allow for uniqueness of programs and community needs	1
Lack of articulation between two and four-year institutions and postsecondary technical-vocational schools	1
Lack of articulation between secondary and post-secondary vocational education	1
Accreditation in postsecondary technical-vocational schools	1
Lack of functional statewide plan for area technical-vocational schools	1
Long-range planning	3
TOTAL	10

TABLE IV

PROBLEMS RELATED TO INSTITUTIONAL OBJECTIVES AS IDENTIFIED BY NEW MEXICO POSTSECONDARY TECHNICAL-VOCATIONAL SCHOOL ADMINISTRATORS FROM EMCH'S MODEL

Problem	Frequency
The need for definitive data to make long-range program projections	1
Veterans Administration wanting to provide guidelines for programs, yet not knowing what it takes to make a quality program	1
The need for Career Education in the public schools must be more realistic and linked closely to vocational education and postsecondary vocational schools	1
The need for additional support to upgrade the general basic skills needed by entering students into vocational education to increase their probability of success in vocational skills training	1
The need for closer relationship with State Department visitations by supervisors	1
Overflow of applicants (up to 60 percent) in specific classes and programs	2
Keeping occupational surveys of community needs up to date	1
Coordinating vocational with academic programs	1
Lack of industry in proximity of school's service area to facilitate employment of graduates and avoid mandatory relocation	1
Many of the students attending technical-vocational schools are classified as very poor, which makes it difficult for them to meet their financial obligations (i.e., transportation and child care)	1
Having to comply with varying programs approval criteria (i.e., Veterans Administration and State Department of Education)	1

TABLE IV (CONTINUED)

Program	Frequency
Keeping all agencies which require (demand) information and data fully informed	1
The need for re-education and orientation of public school administrators and instructional personnel to the real world of work. Many such personnel stereotype vocational education as training for those learners who cannot succeed academically	1
Keeping abreast of what is taking place within the other divisions of the institution and satellite programs	1
TOTAL	15

Table VI lists administrative problems related to institutional Organization as identified by New Mexico postsecondary technical-vocational school administrators. The Organization level of decision-making according to Emch's Model of Long-Range Planning addresses the following questions: What human abilities, knowledge and skills are required in order to carry out the selected programs and activities? How can these required abilities, knowledge and skills best be translated into requirements for specific faculty, research, administrative and non-academic positions? What functions, responsibility and authority should be associated with each position? What interrelationships should exist among the different positions in order to best achieve the institution's objectives?

TABLE V

PROBLEMS RELATED TO INSTITUTIONAL PROGRAMS AS IDENTIFIED BY NEW MEXICO POSTSECONDARY TECHNICAL-VOCATIONAL SCHOOL ADMINISTRATORS FROM EMCH'S MODEL

Problem	Frequency
Individualized instruction at an acceptable cost	1
Development and update of instructional materials--modern methods of reproduction	2
Placement and follow-up	1
Organization and development of postsecondary youth organization	2
Follow-up data from the part-time programs	1
Student motivation	1
Many students completing programs are highly ethnocentric and are reluctant to leave area to find jobs	1
Obtaining information on students background, age, plans	1
VA students--a large percent of these students are attending school just to receive their benefits, therefore, eliminating slots for students who truly want an education, no matter what the cost. No way to effectively screen applicants	1
TOTAL	11

TABLE VI

PROBLEMS RELATED TO INSTITUTIONAL ORGANIZATION AS IDENTIFIED BY NEW MEXICO POSTSECONDARY TECHNICAL-VOCATIONAL SCHOOL ADMINISTRATORS FROM EMCH'S MODEL

Problem	Frequency
Keeping up with mountains of paperwork required by government agencies (i.e., affirmative action, OSHA), not to mention internal sources	3
Lack of administrative and support staff	1
The demand for concurrent accountability from the State Department of Education, Board of Educational Finance, head institutions, and other agencies with varying reporting criteria. This often times causes unnecessary duplication of reporting activities	
Keeping track of purchase orders, equipment--business transactions	2
Lack of time to do planning for needed improvements in existing programs and new programs--innovations	2
TOTAL	11

Table VII lists administrative problems related to institutional Staffing as identified by New Mexico postsecondary technical-vocational school administrators. Decisions to be made regarding institutional Staffing as stated by Emch are: what numbers, kinds, and qualifications of people are required to fill the postions and assume the responsibility in order to best carry out the selected programs and activities?

TABLE VII

PROBLEMS RELATED TO INSTITUTIONAL STAFFING AS IDENTIFIED BY NEW MEXICO POSTSECONDARY TECHNICAL-VOCATIONAL SCHOOL ADMINISTRATORS FROM EMCH'S MODEL

Problem	Frequency
Lack of vocational education staff training centers to allow vocational school instructors to fully certify for employment and upgrade their professional development, to include preservice and inservice training	1
State workshops attendance by instructors is disappointing	1
The need for coordinated effort to provide for the needs of postsecondary instructors (i.e., meetings, conferences, present services are high-school oriented)	1
Lack of sufficient in-state resources to assist with instructional faculty inservice. Currently our only resource is Eastern New Mexico University	1
Technical improvement for instructors. Near-by workshops are few for some occupational areas and nil for others	1
Instructor certification	1
Position rating of faculty (in community colleges there are both academic and vocational instructors)	1
Making available time for upgrading of faculty related to their area of instruction	1
Collective bargaining or employee negotiations	1
Providing incentive for professional development when the vocational faculty is on an 11-month contract	1
Motivation of part-time instructors	1
Attracting individuals as instructors from industry who are willing to spend summer school away from home, in order to obtain 12 semester hours required for full vocational certification	1

TABLE VII (CONTINUED)

Programs	Frequency
There is difficulty in hiring new instructors with the salary that can be offered--qualified instructors that is!	1
The recruitment of a highly qualified instructional staff; particularly in the trade and technical education field	1
Evaluation of vocational faculty and measurement of the effectiveness of programs	2
Evaluation of faculty (merit system and not being able to provide opportunities for them to return to industry)	3
Need for a fair and equitable classification system for promotion of vocational faculty	1
Staff support services--inservice, clerical help	1
Difficulty in dealing with incompetent faculty (an instructor that is doing more harm than good)	2
Solving scheduling problems because of possessive attitudes of vocational faculty toward labs	1
TOTAL	25

Table VIII lists administrative problems related to institutional Facilities as identified by New Mexico postsecondary technical-vocational school administrators. In reference to Facilities, in accorance with Emch's Model of Long-Range Planning, the following areas are considered: what numbers, kinds, quality, and locations of facilities are required to best enable the staff to carry out the desired programs and activities?

TABLE VIII

PROBLEMS RELATED TO INSTITUTIONAL FACILITIES AS IDENTIFIED BY NEW MEXICO POSTSECONDARY TECHNICAL-VOCATIONAL SCHOOL ADMINISTRATORS FROM EMCH'S MODEL

Problem	Frequency
Finding suitable and adequate facilities	1
Space for some programs that require ground level	1
Lack of facilities to adequately house the present programs and to expand into new programs	1
In the State of New Mexico, there has not been a system to replace equipment once it is worn out. Need to develop a statewide depreciation system	2
TOTAL	5

Table IX lists administrative problems related to institutional Finance as identified by New Mexico postsecondary technical-vocational school administrators. The Finance level of decision-making according to Emch's Model of Long-Range Planning focuses on the following question in relation to Finance: What operating and capital funds are required to provide the necessary staffing and facilities, and where and how can these funds be best obtained?

TABLE IX

PROBLEMS RELATED TO INSTITUTIONAL FINANCE AS IDENTIFIED BY NEW MEXICO POSTSECONDARY TECHNICAL-VOCATIONAL SCHOOL ADMINISTRATORS FROM EMCH'S MODEL

Problem	Frequency
The need for a uniform method for funding vocational education programs in technical-vocational schools--such method would take into consideration program requirements, program needs, student characteristic and geographic location of the institution	1
Funding for new programs	1
Adequate funding for continuing programs	1
Additional capital outlay support is needed to keep training areas well equipped and abreast of changes in business, industry, and government	1
Maintaining funding levels to provide for program operation and replacement of equipment	1
A funding formula must be developed so that the vocational schools may recover the "real cost of training high school students"	1
Need for improved funding for operational budget	1
Funding for facilities and programs	1
Establishing equitable salary scale relative to academic faculty scale	1
Lack of adequate funding to facilitate competing with industry on salaries for instructional faculty--this specially true in trades and industrial area	1
Lack of sufficient state appropriations to employ additional necessary staff in student services area	1
Inconsistency of funding agencies as related to individual student referral (i.e., CETA, WIN, HELP, DVR)	1
TOTAL	12

Correspondence Sheet No. 2 (Appendix A) consists of a listing of the 74 administrative problems identified by postsecondary technical-vocational school administrators. Each participant was asked to rate the degree of important on a one to seven point continuum ranging from the least (1) to the most (7) important. He was also asked to add any other problems he felt should be included in the study.

Results of Correspondence Sheet No. 2

In the analysis of responses from Correspondence Sheets No. 2, there was 100 percent representation of the eight postsecondary technical-vocational schools in New Mexico. Some schools submitted only one response with the concurrence of two or three levels of administrators rating these administrative problems by degree of importance ranging from the least (1) to the most (7) important. Table X lists three additional administrative problems as identified by individual administrators at this stage of the study, bringing the total administrative problems to seventy-seven.

Table XI indicates the rank order, arithmetic mean, and level of decision-making of all seventy-three administrative problems identified as most critical to operation of education institutions and to the overall efficiency of the postsecondary technical-vocational school system.

Since each problem was ranked on a seven-point continuum ranging from the least important (1) to the most important (7), those problems with the highest means are considered as most important and appear first in the ranked order (See Information Sheet No. 1, Appendix B).

TABLE X

ADDITIONAL PROBLEMS RELATED TO INSTITUTIONAL LONG-RANGE PLANNING AS IDENTIFIED BY NEW MEXICO POSTSECONDARY TECHNICAL-VOCATIONAL SCHOOL ADMINISTRATORS FROM EMCH'S MODEL

Problem	Decision-Making Level
Postsecondary vocational education should be exclusively under the Board of Educational Finance not State Department of Education	Philosophy
New Mexico Vocational Education Division of Postsecondary Education is not adequately staffed	Philosophy
Assistance to graduates for relocation (i.e., loans, grants)	Programs

As the purpose of this study was to identify problems encountered by administrators in postsecondary technical-vocational schools in New Mexico and to develop a set of recommended guidelines to solve these problems, the fifteen (15) highest ranked problems were considered the major problems and were used in the development of the set of recommended guidelines.

TABLE XI

ADMINISTRATIVE PROBLEMS RANKED BY DEGREE OF IMPORTANCE

Problem	Decision-Making Level	Rank	Mean
Funding for new programs	Finance	1.0	6.00
The need for a uniform method for funding vocational education programs in technical-vocational schools--such method would take in consideration program requirements, program needs, student characteristics, and geographic location of institution	Finance	3.5	5.97
Placement and follow-up	Programs	3.5	5.97
Additional capital outlay support is needed to keep training areas well equipped and abreast of changes in business, industry, and government	Funding	3.5	5.97
Funding for facilities and programs	Finance	3.5	5.97
Maintaining funding levels to provide for program operation and replacement of equipment	Finance	6.0	5.75
Keeping up with mountains of paperwork required by government agencies (i.e., OSHA, and affirmative action), not to mention internal sources	Organization	8.0	5.58
Individualized instruction at an acceptable cost	Programs	8.0	5.58
Adequate funding for continuing programs	Funding	8.0	5.58
Lack of facilities to adequately house the present programs and to expand into new programs	Facilities	11.0	5.50
Need improved funding for operational budget	Finance	11.0	5.50
In the state of New Mexico, there has not been a system to replace equipment once it is worm out. Need to develop a depreciation system	Facilities	11.0	5.50

TABLE XI (CONTINUED)

Problem	Decision-Making Level	Rank	Mean
Technical improvement for instructors. Nearby workshops are few for some occupational areas and nil for others	Staffing	14.0	5.42
Evaluation of faculty (merit system and not being able to provide opportunities for them to return to industry)	Staffing	14.0	5.42
Lack of adequate funding to facilitate competing with industry on salaries for instructional faculty--this is specially true in trades and industrial area	Finance	14.0	5.42
Keeping all agencies which require (demand) information and data fully informed	Objectives	16.0	5.33
Long-range planning	Philosophy	18.5	5.25
Veteran's Administration wanting to provide guidelines for programs, yet not knowing what it takes to make a quality program	Objectives	18.5	5.25
Development and update of instructional materials--modern methods of reproduction	Programs	18.5	5.25
There is difficulty in hiring new instructors with the salary that can be offered, qualified instructors that is!	Staffing	18.5	5.25
The need for re-education and orientation of public school administrators and instructional personnel to the real world of work. Many such personnel stereotype vocational education as training for those students who cannot succeed academically	Objectives	21.5	5.17
Finding suitable and adequate facilities	Facilities	21.5	5.17
Having to comply with varying program criteria (i.e., Veteran's Administration and State Department of Education)	Objectives	25.5	5.05

TABLE XI (CONTINUED)

Problem	Decision-Making Level	Rank	Mean
Lack of sufficient in-state resources to assist with instructional faculty inservice. Currently, our only resource is Eastern New Mexico University	Staffing	25.5	5.05
Making available time for upgrading of faculty related to their area of instruction	Staffing	25.5	5.05
Evaluation of vocational faculty and measurement of the effectiveness of programs	Staffing	25.5	5.05
Establishing equitable salary scale relative to academic faculty scale	Finance	25.5	5.05
Lack of vocational education staff training centers to allow vocational school instructors to fully certify for employment and upgrade their professional development, to include preservice and inservice training	Staffing	25.5	5.05
The need for definitive data to make long-range program projections	Objectives	30.0	5.00
The need for additional support to upgrade the general basic skills needed by entering students into vocational education to increase their probability of success in vocational skills training	Objectives	30.0	5.00
Student motivation	Programs	30.0	5.00
Keeping occupational surveys of community needs up to date	Objectives	35.5	4.92
Instructor certification	Staffing	35.5	4.92
The recruitment of a highly qualified instructional staff; particularly in the trade and technical education field	Staffing	35.5	4.92

TABLE XI (CONTINUED)

Problem	Decision-Making Level	Rank	Mean
Inconsistency of funding agencies as related to individual student referral (i.e., CETA, WIN, HELP, DVR)	Finance	35.5	4.92
Administering programs according to dictates of law which fail to allow for uniqueness of programs and community needs	Philosophy	37.0	4.83
A funding formula must be developed so that the vocational schools may recover the "real cost of training high school students"	Finance	37.0	4.83
Lack of functional statewide plan for area technical-vocational schools	Philosophy	37.0	4.83
VA students--a large percent of these students attend school just to receive their benefits; therefore, eliminating slots for those who truly want an education, no matter what the cost. No way to effectively screen applicants	Programs	40.0	4.75
Providing incentive for professional development when the vocational faculty is on an 11-month contract	Staffing	40.0	4.75
Attracting individuals as instructors from industry who are willing to spend summer school away from home, in order to obtain the 12 semester hours required for full vocational certification	Staffing	40.0	4.75
Inaccessability of crucial statistics when conducting data search and program planning on long range scale	Philosophy	43.5	4.67
Overflow of applicants (up to 60 percent) in specific classes and programs	Programs	43.5	4.67
Lack of industry in proximity of school's service area to facilitate employment of graduates and avoiding mandatory relocation	Objectives	43.5	4.67

TABLE XI (CONTINUED)

Problem	Decision-Making Level	Rank	Mean
The demand for concurrent accountability from the State Department of Education, Board of Educational Finance, head institutions, and other agencies with varying reporting criteria. This oftentimes causes unnecessary duplication of reporting activities	Organization	43.5	4.67
Operation of postsecondary techincal-vocational schools under five laws--almost impossible to operate, much less state bonding for facilities	Philosophy	46.5	4.58
Many of the students attending technical-vocational schools are classified as very poor, which makes it difficult for them to meet their financial obligations (i.e., transportation and child care)	Objectives	46.5	4.58
The need for an information gathering system to develop an accurate student profile	Programs	48.5	4.50
Lack of time to do planning for needed improvements in existing programs, new programs--innovations	Organization	48.5	4.50
The need for Career Education in the public school must be more realistic and linked closely to vocational education and postsecondary vocational schools	Objectives	50.5	4.41
Lack of sufficient state appropriations to employ additional necessary staff in student services area	Finance	50.5	4.41
Lack of articulation between secondary and postsecondary vocational education	Philosophy	52.5	4.33
Lack of time to do community relations	Organization	52.5	4.33

TABLE XI (CONTINUED)

Problem	Decision-Making Level	Rank	Mean
Many students completing programs are highly ethnocentric and are reluctant to leave area to find jobs	Objectives	52.5	4.25
Lack of administrative and supportive staff	Staffing	52.5	4.25
Position rating of faculty (in community colleges we have academic and vocational instructors)	Staffing	52.5	4.25
Difficulty in dealing with incompetent faculty (an instructor that is doing more harm than good)	Staffing	52.5	4.25
Need for a fair and equitable classification system for promotion of vocational faculty	Staffing	58.0	4.17
State workshops attendance by instructors is disappointing	Staffing	59.0	4.08
The need for closer relationship with State Department visitations by supervisors	Objectives	60.6	4.00
Staff support services--in-service, clerical help	Staffing	60.6	4.00
Keeping abreast of what is taking place within the other divisions of the institutions and satellite programs	Objectives	62.5	3.75
The need for coordinated effort to provide for the needs of postsecondary instructors (i.e., meetings, conferences (presently they are high-school oriented)	Staffing	62.5	3.75
Accreditation in post-secondary technical-vocational schools	Philosophy	64.0	3.66
Lack of articulation between two and four-year institutions and postsecondary technical-vocational schools	Philosophy	66.0	3.58

TABLE XI (CONTINUED)

Problem	Decision-Making Level	Rank	Mean
Coordinating vocational with academic programs	Objectives	66.0	3.58
Motivation of part-time instructors	Staffing	66.0	3.58
Solving scheduling problems because of possessive attitudes of vocational faculty toward labs	Staffing	68.0	3.50
Follow-up data from the part-time programs	Programs	70.0	3.42
Obtaining information on students background, age, plans	Programs	70.0	3.42
Keeping track of purchase orders, equipment--business problems	Organization	70.0	3.42
Organization and development of post-secondary youth organizations	Programs	72.0	3.08
Collective bargaining or employee negotiations	Staffing	73.0	3.00
Space for some programs that require ground level	Facilities	74.0	2.58

Phase II

Phase II of this study was designed to develop a set of recommended guidelines to solve the major administrative problems encountered by administrators in postsecondary technical-vocational schools in New Mexico.

Based on the information presented in Table XI, the fifteen (15) top-ranked administrative problems were considered as major problems of

this study and were used to develop a set of recommended guidelines.

These major administrative problems are listed in Table XII.

TABLE XII

MAJOR ADMINISTRATIVE PROBLEMS RANKED BY DEGREE OF IMPORTANCE

Problem	Decision-Making Level	Rank	Mean
Funding for new programs	Finance	1.0	6.00
The need for a uniform method for funding vocational programs in technical-vocational schools--such method would take into consideration program requirements, program needs, student characteristics and geographic location of institutions	Finance	3.5	5.97
Placement and follow-up	Programs	3.5	5.97
Additional capital outlay support is needed to keep training areas well equipped and abreast of changes in business, industry and government	Finance	3.5	5.97
Funding for facilities and programs	Finance	3.5	5.97
Maintaining funding levels to provide for program operation and replacement of equipment	Finance	6.0	5.75
Keeping up with mountains of paperwork required by government agencies (i.e., affirmative action, OSHA), not to mention internal sources	Organization	8.0	5.58
Individualized instruction at an acceptable cost	Programs	8.0	5.58
Adequate funding for continuing programs	Finance	8.0	5.58

TABLE XII (CONTINUED)

Problem	Decision-Making Level	Rank	Mean
Lack of facilities to adequately house the present programs and to expand into new programs	Facilities	11.0	5.50
In the state of New Mexico, there has not been a system to replace equipment once it is worn out. Need to develop a statewide depreciation system	Facilities	11.0	5.50
Need improved funding for operational budget	Finance	11.0	5.50
Technical improvement for instructors. Nearby workshops are few for some occupational areas and nil for others	Staffing	14.0	5.42
Evaluation of faculty (merit system and not being able to provide opportunities for them to return to industry)	Staffing	14.0	5.42
Lack of adequate funding to facilitate competing with industry on salaries for instructional faculty--this is specially true in trades and industrial area	Finance	14.0	5.42

Through the use of Emch's Model for Long-Range Planning, the fifteen (15) major administrative problems were categorized by the following decision-making levels: Philosophy, Objectives, Programs, Organization, Staffing, Facilities, and Finance. Table XIII presents the breakdown of these major administrative problems by each of the levels of decision-making.

TABLE XIII

DISTRIBUTION OF MAJOR ADMINISTRATIVE PROBLEMS
BY DECISION-MAKING LEVELS
FROM EMCH'S MODEL

Decision-Making Level	Number	Percentage
Philosophy	0	0
Objectives	0	0
Programs	2	13
Organization	1	7
Staffing	2	13
Facilities	2	13
Finance	8	54
TOTAL	15	100

The greatest number of major administrative problems, 54 percent, were categorized in the Finance level of decision-making. Programs, Staffing, and Facilities were comprised of two problems each, or 13 percent. One problem was identified in Organization, and none in the levels of Philosophy and Objectives.

Results of Correspondence Sheet No. 3

Development of Recommended Guidelines to Solve Problems. The initial two rounds of the procedure allowed for the listing of concerns to be used in the study, ranking these administrative problems by degree of importance and arriving at a concensus of the problems to be used to develop recommended guidelines. After discussion of the problems, the ad hoc committee developed recommended guidelines to solve the 15 top-ranked problems or concerns, and the committee's set of recommended guidelines are presented below. Note none of the 15 top-ranked administrative problems fit into the first two levels of decision-making, Philosophy and Objectives.

A copy of the set of guidelines transcribed from the committee discussion was submitted to each of the ad hoc committee members asking him to report any inconsistencies or added recommendations (See Appendix B).

One recommendation for Item 2 was submitted at this time, and reads as follows: While there is a need for materials for those who have a low reading level, there is also a great need for individualized, trade related, materials in the mathematics area.

Philosophy: None

Objectives: None

Programs: Two statements

1. Placement and Follow-up

   --Establish statewide loan/grant fund to assist students relocate in order to take advantage of employment opportunities

--Develop a uniform reporting system through a statewide committee to determine information relative to placement and follow-up. This would take into account the uniqueness of each institution

2. Individualized instruction at an acceptable cost

--Articulate advantages and costs of individualized instruction to funding agencies (i.e., legislators, VA administration)--a need for their understanding exists

--One of the concerns expressed was the need for individualized instructional materials for low-reading level learners. A comprehensive plan with joint efforts of the Division of Vocational Education curriculum personnel and instructional staff from each of the eight schools (i.e., welding is offered in all institutions, thus the curriculum consultant would meet with all welding instructors, one from each institution, to assist them in developing materials) for developing instructional materials should be developed

--Share individualized materials among institutions. (The Vocational Education Conference with focus on postsecondary may provide for instructors to exchange ideas and materials)

--Utilize the expertise of consultants--either on individual school basis or among several schools (such as Mid-America Vocational Curriculum Consortium)

--Seed instructional personnel may be utilized--that is personnel with expertise in instructional material development--either on individual school basis or among several schools

--Develop statewide inservice programs for instructional staff with provisions to orient them to the individualized concept of instruction and the development of instructional materials.

Organization: One Statement

1. Keeping up with mountains of paperwork required by government agencies (i.e., affirmative action, OSHA), not to mention internal sources

--Analyze costs of data collection and report to the public

--Coordinate state agencies concerned with educational data and consolidate data requests

--Encourage area technical-vocational institutions to develop an information system

--Utilize data collected through the Division of Vocational Education Department and available through a centralized computer center

Staffing: Two Statements

1. Technical improvement for instructors. Nearby workshops are few for some occupational areas and nil for others

   --Develop a statewide professional development model through the Division of Vocational Education to encompass participation of all vocational personnel (i.e., workshops, conferences, and seminars)

   --Seek and/or initiate faculty-development funding (such as that of EPDA 553). This may provide professional development statewide or through joint efforts among states (Region VI)

   --Coordinate efforts through the Division of Vocational Education and teacher training institutions to provide technical and professional improvement for instructional personnel.

   --Coordinate efforts among institutions in identifying pertinent professional development activities (i.e., extension courses, workshops) within regions and explore attendance possibilities

   --Explore faculty exchange. An education-business exchange program with two planned phases: move educators into the world of work (short-term inservice training) and bring businessmen into the classroom (develop an understanding of the educational environment)

   --Initiate an advisory committee comprised of teachers, teacher educators, administrators, students, supervisors, and business and industrial, and community leaders with periodically meetings to plan, conduct, promote, and/or evaluate programs of inservice education.

2. Evaluation of faculty (merit system and not being able to provide opportunities for them to return to industry)

   --Evaluation and accountability are controversial issues in the entire system of education today, and more so in vocational education. Evaluation should ensure continually improving processes and programs of all educational institutions and agencies with this concept as a major purpose of evaluation and considerable efforts toward its attainment

--Develop a positive attitude towards evaluation of faculty

--Develop a statewide professional development model of which faculty evaluation is a component

Facilities: Two Statements

1. In the state of New Mexico, there has not been a system to replace equipment once it is worn out. Need to develop a statewide depreciation system.

   --Develop a systematic plan for replacing equipment at the state level. Include money in annual budget for replacement of equipment

   --Document equipment replacement needs on a systematic basis

2. Lack of facilities to adequately house the present programs and to expand into new programs

   --Priorities for expansion of facilities need to be established in terms of greatest justifiable needs

   --Work towards legislation which provides funding for capital outlay on a systematic basis

   --Rent or lease facilities to accommodate expansion of present or new programs

   --Seek special funds for facilities

   --Seek gifts to assist in purchasing or expansion of facilities (such as state and local committees, business and industry)

   --Initiate school bond issues as a means to acquire facilities to adequately house the present programs and to expand into new programs

   --Write proposals seeking federal dollars for renovations and remodeling of facilities (provisions under new vocational legislation)

Finance: Eight Statements

1. Funding for new programs

   --Establish a procedure through the State Department of Education to assist local institutions in determining set-up costs and operational costs for new programs

--As in the item of facilities to expand into new programs, some of the guidelines discussed above will apply in the funding of new programs: seek federal dollars, capitalize on one-time requests from the State, seek special grants (individuals or institutions), and establish cooperation with industry.

2. The need for a uniform method for funding vocational education programs in technical-vocational schools--such method would take into consideration program requirements, program needs, student characteristics, and geographic location of institution

--Seek legislation to provide a uniform method for capital and operational funding for two-year institutions (presently the eight postsecondary area technical-vocational institutions are operating under five different statutes: Junior College Act, Area Vocational School Act, Technical-Vocational Institute Act, Constitutional Institution, and the Branch Community College Act)

3. Additional capital outlay support is needed to keep training areas well equipped and abreast of changes in business, industry, and government.

--Long-range plan to be included in the next budget under capital outlay funds

4. Funding for facilities and programs

--Priorities for expansion of facilities need to be established in terms of the greatest justifiable need

5. Maintaining funding levels to provide for program operation and replacement of equipment

--Seek legislation to provide a uniform method for capital and operational funding for two-year institutions

6. Adequate funding for continuing programs

--Seek legislation to provide a uniform method for capital and operational funding for two-year institutions

7. Need improved funding for operational budget

--Seek legislation to provide a uniform method for capital and operational funding for two-year institutions

8. Lack of adequate funding to facilitate competing with industry on salaries for instructional faculty--this is specially true in trades and industrial areas

--Collect and compare salary schedules from all area technical-vocational schools in New Mexico and nationwide (market differential should be taken into account)

--Develop a statewide schedule which will provide for quality of instructional faculty recruitment and professional development. This is an attempt to maintain quality vocational education for learners

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of this study was to identify problems encountered by administrators in postsecondary technical-vocational schools in New Mexico and to develop a set of recommended guidelines to solve these problems. A modification of the Delphi Technique was used to solicit responses from administrators to identify, to rank, and to acquire a concensus on the major administrative problems. The study was designed to include an ad hoc committee to develop a set of recommended guidelines to solve the major administrative problems.

Objectives of the Study

The study had the following three specific objectives:

1. To identify problems encountered by administrators in post-secondary technical-vocational schools in New Mexico.
2. To categorize by decision-making levels the problems identified.
3. To develop a set of recommended guidelines to solve the problems identified and categorized.

Procedure of the Study

In order to organize and present the basic elements of the research of administrative problems in the postsecondary area technical-vocational

schools in New Mexico, use has been made of an existing long-range planning model, known as Emch's Model for Long-Range Planning for colleges and universities. The model contains the following levels of decision-making: Philosophy, Objectives, Programs, Organization, Staffing, Facilities, and Finance.

The statements submitted by New Mexico postsecondary technical-vocational school administrators through the use of the Delphi Technique were evaluated and arbitrarily placed into one of the levels of decision-making mentioned above. The initial two rounds of the procedure allowed for the listing of concerns to be used in the study, ranking these administrative problems by degree of importance, and arriving at a concensus of the problems to be used for purposes of the research. After discussion of the problems, the ad hoc committee developed recommended guidelines to solve the 15 top-ranked administrative problems.

Review of Literature

A review of literature in postsecondary education included: (1) National and State Perspectives, (2) Leadership in Administration of Technical and Vocational Education, (3) Similar Studies, and (4) the Delphi Technique.

Major Findings of the Study

The following are the major findings of this study:

Initially, 89 administrative problems were listed by the individual postsecondary technical-vocational administrators. When the duplicate problems were synthesized, statements evaluated and arbitrarily placed

into one of the seven levels of decision-making as described in Emch's Model of Long-Range Planning for Educational Institutions: Philosophy, Objectives, Programs, Organization, Staffing, Facilities, and Finance, seventy-four (74) problems remained to be further considered.

Correspondence Sheet No. 2 of the Delphi procedure allowed for administrators to rank these problems by degree of importance, and arriving at a concensus of the major problems to be used to develop a set of recommended guidelines. The 15 top-ranked administrative problems were considered as major problems.

Major administrative problems were identified in five of the seven levels of decision-making of Emch's Model for Long-Range Planning. None of the administrative problems were in decision-making levels related to the institutional Philosophy and Objectives; 54 percent of the major administrative problems in this study were categorized in the institutional Finance level, in direct contrast to the Jackson study which indicated fewest problems in this area; 13 percent in each institutional Program, Staffing, and Facilities level; and 7 percent in the institutional Organization level. An ad hoc committee developed a set of recommended guidelines to solve the problems identified. In most cases, the solutions to the problems were dependent upon action of the Board of Educational Finance, State Department of Education, and administrators.

Conclusions

The following conclusions were drawn based on interpretation of the data presented in the study:

1. The Delphi Technique was found to be effective as a means of identifying administrative problems in post-secondary technical-vocational schools and developing rankings of comparative importance.
2. The problems of postsecondary technical-vocational school administrators can be categorized into decision-making levels as described in Emch's Model for Long-Range Planning for Colleges and Universities.
3. Administrators' perceptions of the importance of their administrative problems in the postsecondary technical-vocational schools changed markedly as they considered these problems over a period of time and in conjunction with other administrators.
4. An ad hoc committee, comprised of members of the Board of Educational Finance; members of the General Advisory Council to the Board of Educational Finance; State Department of Education, Division of Vocational Education personnel; and postsecondary technical-vocational school administrators, was of value in developing guidelines for solving administrative problems and provided articulation among agencies and institutions.
5. The set of recommended guidelines developed by the ad hoc committee was useful and relevant and the ad hoc committee approach to problem solving is promising.
6. The recommended guidelines in their final form are presented below: Note none of the 15 top-ranked administrative problems

fit into the first two levels: Philosophy and Objectives.

Philosophy: None

Objectives: None

Programs: Two Statements

1. Placement and Follow-up

   --Establish statewide loan/grant fund to assist students relocate in order to take advantage of employment opportunities

   --Develop a uniform reporting system through a statewide committee to determine information relative to placement and follow-up. This would take into account the uniqueness of each institution

2. Individualized instruction at an acceptable cost

   --Articulate advantages and costs of individualized instruction to funding agencies (i.e., legislators, VA administration)--a need for their understanding exists

   --One of the concerns expressed was the need for individualized instructional materials for low-reading level learners. A comprehensive plan with joint efforts of the Division of Vocational Education curriculum personnel and instructional staff from each of the eight schools (i.e., welding is offered in all institutions, thus the curriculum consultant would meet with all welding instructors, one from each institution, to assist them in developing materials) for developing instructional materials should be developed

   --Share individualized materials among institutions. (The Vocational Education Conference with focus on post-secondary may provide for instructors to exchange ideas and materials)

   --Utilize the expertise of consultants--either on individual school basis or among several schools (such as Mid-America Vocational Curriculum Consortium)

   --Seed instructional personnel may be utilized--that is personnel with expertise in instructional material development--either on individual school basis or among several schools

--Develop statewide inservice programs for instructional staff with provisions to orient them to the individualized concept of instruction and the development of instructional materials

--While there is a need for materials for those who have a low reading level, there is also a great need for individualized, trade related, materials in the mathematics area

Organization: One Statement

1. Keeping up with mountains of paperwork required by government agencies (i.e., affirmative action, OSHA), not to mention internal sources

--Analyze costs of data collection and report to the public

--Coordinate state agencies concerned with educational data and consolidate data requests

--Encourage area technical-vocational institutions to develop an information system

--Utilize data collected through the Division of Vocational Education Department and available through a centralized computer center

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--Develop a statewide professional development model through the Division of Vocational Education to encompass participation of all vocational personnel (i.e., workshops, conferences, and seminars)

--Seek and/or initiate faculty-development funding (such as that of EPDA 553). This may provide professional development statewide or through joint efforts among states (Region VI)

--Coordinate efforts through the Division of Vocational Education and teacher training institutions to provide technical and professional improvement for instructional personnel

--Coordinate efforts among institutions in identifying pertinent professional development activities (i.e., extension courses, workshops) within regions and explore attendance possibilities

--Explore faculty exchange. An education-business exchange program with two-planned phases: move educators into the world of work (short-term inservice training) and bring businessmen into the classroom (develop an understanding of the educational environment)

--Initiate an advisory committee comprised of teachers, teacher educators, administrators, students, supervisors, and business and industry, and community leaders with periodical meetings to plan, conduct, promote, and/or evaluate programs of inservice education

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--Evaluation and accountability are controversial issues in the entire system of education today, and more so in vocational education. Evaluation should ensure continually improving processes and programs of all educational institutions and agencies with this concept as a major purpose of evaluation and considerable efforts towards its attainment

--Develop a positive attitude towards evaluation of faculty

--Develop a statewide professional development model of which faculty evaluation is a component

Facilities: Two Statements

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--Document equipment replacement needs on a systematic basis

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--Work towards legislation which provides funding for capital outlay on a systematic basis

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--Seek gifts to assist in purchasing or expansion of facilities (such as state and local committees, business and industry)

--Initiate school bond issues as a means to acquire facilities to adequately house the present programs and to expand into new programs

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Finance: Eight Statements

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--Establish a procedure through the State Department of Education to assist local institutions in determining set-up costs and operational costs for new programs

--As in the item of facilities to expand into new programs, some of the guidelines discussed above will apply in the funding for new programs: seek special grants (individuals or institutions), seek federal dollars, capitalize on one-time requests from the State, and establish cooperation with industry

2. The need for a uniform method for funding vocational education programs in technical-vocational schools--such method would take into consideration program requirements, program needs, student characteristics, and geographic location of institution

--Seek legislation to provide a uniform method for capital and operational funding for two-year institutions (presently the eight postsecondary technical-vocational institutions are operating under five different statues: Junior College Act, Area Vocational School Act, Technical-Vocational Institute Act, Constitutional Institution, and the Branch Community College Act

3. Additional capital outlay support is needed to keep training areas well equipped and abreast of changes in business, industry, and government

--Long-range plan to be included in the next budget under capital outlay funds

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--Priorities for expansion of facilities need to be established in terms of the greatest justifiable need

5. Maintaining funding levels to provide for program operation and replacement of equipment

   --Seek legislation to provide a uniform method for capital and operational funding for two-year institutions

6. Adequate funding for continuing programs

   --Seek legislation to provide a uniform method for capital and operational funding for two-year institutions

7. Need improved funding for operational budget

   --Seek legislation to provide a uniform method for capital and operational funding for two-year institutions

8. Lack of adequate funding to facilitate competing with industry on salaries for instructional faculty--this is specially true in trade and industrial areas

   --Collect and compare salary schedules from all area technical-vocational schools in New Mexico and nationwide (market differential should be taken into account)

   --Develop a statewide salary schedule which will provide for quality of instructional faculty recruitment and professional development. This is an attempt to maintain quality vocational education for learners

Recommendations

Recommendations are based on the findings and conclusions of this study as well as the experience of the writer.

It is recommended that:

1. Provisions should be made to continue the series of meetings of postsecondary technical-vocational school administrators and State Department of Vocational Education officials for the purpose of implementing the recommended guidelines in this study and to discuss, develop guidelines, and implement guidelines of other problems not identified as the top 15-ranked problems but that need special attention.

2. The New Mexico State Department, Division of Vocational Education should definitely increase its postsecondary education administration staff in order to provide the necessary services to postsecondary technical-vocational schools.
3. Local program planning should be coordinated with statewide planning to maintain high quality and economic efficiency.
4. A procedure should be developed to provide systematic analysis of the differential funding needs of various postsecondary technical-vocational institutions. The basic concept behind differential funding asserts that technical-vocational institutions have varying needs for funds depending upon the combination of disciplines, student levels and characteristics, and student body size unique to each geographic location of the institution.
5. A periodic assessment should be made to identify new and emerging problems in postsecondary technical-vocational schools in New Mexico.
6. More attention should be given by the Department of Vocational Education to professional development than has been given in the past. Perhaps an approach would be to determine a workable means whereby postsecondary administrators, counselors, and instructors could attend and participate in the August Vocational Conference in the same manner that is provided for secondary vocational teachers and administrators.
7. The State Department of Vocational Education officials should develop a model for providing a systematic inservice and

preservice training program with some form of monetary payment for vocational instructors who are required to upgrade their teaching skills. This seems to be a national trend developing whereby both beginning and experienced instructors expect and perhaps even demand monetary compensation in order for them to participate in preservice and inservice training programs.

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APPENDIX A

Study Population

The population for the study consisted of Level I and Level II administrators of the eight postsecondary technical-vocational schools in New Mexico. The following individuals participated.

Alex A. Sanchez, Director
Wade Frederickson, Coordinator of Instruction
Dona Ana Occupational Education Branch
New Mexico State University
Las Cruces

John Gillis, Dean
Karl Doss, Director
Eastern New Mexico University Branch
Roswell

Jack Young, Dean
Jodie Smith, Instructor, Division President
John Sheppard, Instructor, Division Vice-President
New Mexico Junior College
Hobbs

Robert L. Matheny, Dean
O. B. Coffey, Vocational Director
High Plains Vocational School
Eastern New Mexico University Branch
Clovis

Louis Saavedra, Vice-President
Harold Jackson, Evening Director
Albuquerque Technical-Vocational Institute
Albuquerque

James C. Henderson, Dean
Glen Gabehart, Vocational Director
New Mexico State University
San Juan Branch
Farmington

Frank Serrano, III, President
William E. Sailer, Vice-President
Academic and Vocational Studies
New Mexico Technical-Vocational School
El Rito

Sam Vigil, Superintendent
Lawrence Pino, Director
Luna Vocational-Technical Institute
Las Vegas

LETTER NO. 1

STATE OF NEW MEXICO
DEPARTMENT OF EDUCATION — EDUCATION BUILDING
SANTA FE - 87503

June 16, 1976

LEONARD J. DE LAYO
SUPERINTENDENT OF PUBLIC INSTRUCTION

Dear

In an effort to provide a more comprehensive vocational education delivery system, Viola L. Madrid is currently conducting research to identify the major administrative problems encountered by local administrators of area technical-vocational schools. Once these problems have been identified, a committee will be comprised to develop guidelines as recommendations of possible solutions.

Viola is a doctoral candidate in Vocational-Technical and Career Education attending Oklahoma State University as one of New Mexico's two EPDA awardees. Prior to attending OSU she was office occupation's instructor at New Mexico Technical Vocational School in El Rito for four years. She is currently involved in a six-week internship under my supervision and plans to begin collection of the data for her study during this time.

She will be on your campus on Thursday, July 1 at 8:30 a.m., which will take approximately an hour of your time, as she would like to visit with you and Dr. Bill Sailor to discuss her study. The Delphi Technique has been chosen as the method to be used in conducting this research, as it is built on the strength of informed intuitive judgment, and is intended to get opinions from persons without bringing the individuals together in any kind of face-to-face confrontation.

It is for this reason that I am asking your assistance in providing information for her study. Thank you for your time and efforts, which I can assure you will be wisely used.

Sincerely,

Wilma Ludwig
State Director
Vocational Education

WL:sst

New Mexico Salutes the American Revolution Bicentennial —
Nuevo México saluda al bicentenario de la revolución americana

LETTER No. 2

STATE OF NEW MEXICO

DEPARTMENT OF EDUCATION — EDUCATION BUILDING

SANTA FE - 87503

LEONARD J. DE LAYO
SUPERINTENDENT OF PUBLIC INSTRUCTION

June 17, 1976

Dear

Thank you for the opportunity to meet with you and discuss my study. As the economic and social factors within the state of New Mexico continue to evolve, realistic assessment of post-secondary area technical-vocational schools is essential to expand educational delivery systems, sharpen their focus, and improve the quality of instructional programs.

The purpose of this study will be to identify the major administrative problems encountered by local administrators of area technical-vocational schools in New Mexico. Once these problems have been identified, a committee will be comprised to develop guidelines as recommendations for possible solutions. This study will also serve as preliminary steps toward the development of a comprehensive plan for postsecondary area technical-vocational schools.

The Delphi Technique has been chosen as the method to be used in identifying the problems encountered by local administrators of area technical-vocational schools to examine and develop guidelines as recommendations for possible solutions. This technique, which is built on the strength of informed intuitive judgment, is intended to get opinions from administrators like you without bringing the individuals together in any kind of a face-to-face confrontation. Successive questionnaires and feedback are necessary with each round designed to produce more carefully considered group opinions. Three separate mailings will be used to gather and finalize your opinions.

Correspondence No. 1 Attached	List ten administrative problems you are encountering as administrator of one of New Mexico's area technical-vocational schools.

Correspondence No. 2	A list of administrative problems will be compiled from the participants' responses and mailed back to you. Using this list, each administrator will be asked to evaluate and rank each item on a seven-point continuum giving priority by degree of importance.
Correspondence No. 3	A ranked list of ten major administrative problems encountered by administrators in area technical-vocational schools will be compiled from the concensus obtained in Step 2. Each participant and additional New Mexico vocational educators, comprising a committee, will be asked for recommendations for possible solutions for these administrative problems identified.

From the response obtained in Step 3, a final list of the ranked administrative problems with guidelines as recommendations for possible solutions will be developed.

Problem identification will be kept confidential and all materials and data will be treated anonymously (color-coded sheets will be used only to differentiate administrative level one and two in order to analyze composite comparisons of problems identified).

We hope you will agree to participate in this study in an effort to provide a well-rounded vocational education to all of New Mexico's citizens. Thank you very much for your continued support and assistance.

Sincerely yours,

Viola L. Madrid

Mrs. Viola L. Madrid

VLM:sst

Enclosure

CORRESPONDENCE SHEET NO. 1

(TO BE ENCLOSED BY RETURN MAIL)

Please list endings, no particular order of importance required, to the following statement:

> As one of New Mexico's area technical-vocational school administrators, I am encountering the following administrative problems:

LIST RESPONSES BELOW

NUMBER ONE:

NUMBER TWO:

NUMBER THREE:

NUMBER FOUR:

NUMBER FIVE:

NUMBER SIX:

Correspondence Sheet No. 1

NUMBER SEVEN:

NUMBER EIGHT:

NUMBER NINE:

NUMBER TEN:

(NOTE: CORRESPONDENCE SHEET NO. 1 WAS COLOR-CODED--BLUE - LEVEL I ADMINISTRATORS; YELLOW - LEVEL II ADMINISTRATORS)

DATE September 5, 1976
Please return On/Or Before

CORRESPONDENCE SHEET NO. 2

(To be Enclosed by Return Mail)

In the first column are the major administrative problems identified by the postsecondary area technical-vocational school administrators in New Mexico in July and August 1976. Column two requires your evaluation of the degree of importance of the problem to you as the administrator of your educational institution and to the overall efficiency of the postsecondary area technical-vocational school system.

Please circle the number you feel is the degree of importance ranging from the least (1) to the most important (7).

In the space provided at the end of the form, please list any new problem which you feel should be included within the study.

IDENTIFIED PROBLEM	Circle the number to indicate the degree of importance of the problem. Least Important 1 2 3 4 5 6 7 Most Important
The need for a uniform method for funding vocational education programs in technical-vocational schools--such method would take in consideration program requirements, program needs, student characteristic and geographic location of the institution	1 2 3 4 5 6 7
Operation of postsecondary technical-vocational schools under five laws--almost impossible to operate, much less state bonding for facilities	1 2 3 4 5 6 7
Inaccessability of crucial statistics when conducting data search and program planning on long range scale	1 2 3 4 5 6 7
Administering programs according to dictates of law which fail to allow for uniqueness of programs and community needs	1 2 3 4 5 6 7
Lack of articulation between two and four-year institutions and postsecondary technical-vocational schools	1 2 3 4 5 6 7

(Continuation of Correspondence Sheet No. 2)

IDENTIFIED PROBLEMS	Circle the number to indicate the degree of importance of the problem. Least Important 1 2 3 4 5 6 7 Most Important
Lack of articulation between secondary and postsecondary vocational education	1 2 3 4 5 6 7
The need for definitive data to make long-range program projections	1 2 3 4 5 6 7
Accreditation in postsecondary technical-vocational schools	1 2 3 4 5 6 7
Lack of functional statewide plan for area technical-vocational schools	1 2 3 4 5 6 7
The need for Career Education in the public school must be more realistic and linked closely to vocational education and post-secondary vocational schools	1 2 3 4 5 6 7
Long-range planning	1 2 3 4 5 6 7
Veteran's Administration wanting to provide guidelines for programs, yet not knowing what it takes to make a quality program	1 2 3 4 5 6 7
The need for additional support to upgrade the general basic skills needed by entering students into vocational education to increase their probability of success in vocational skills training	1 2 3 4 5 6 7
The need for closer relationship with State Department visitations by supervisors	1 2 3 4 5 6 7
Overflow of applicants (up to 60%) in specific classes and programs	1 2 3 4 5 6 7
Keeping occupational surveys of community needs up to date	1 2 3 4 5 6 7
Coordinating vocational with academic programs	1 2 3 4 5 6 7
Lack of industry in proximity of school's service area to facilitate employment of graduates and avoiding mandatory relocation	1 2 3 4 5 6 7

(Continuation of Correspondence Sheet No. 2)

IDENTIFIED PROBLEMS	Circle the number to indicate the degree of importance of the problem Least Important → Most Important
Many of the students attending technical-vocational schools are classified as very poor, which makes it difficult for them to meet their financial obligations (i.e., transportation and child care)	1 2 3 4 5 6 7
Having to comply with varying program approval criteria (i.e., Veteran's Administration and State Department of Education)	1 2 3 4 5 6 7
Keeping all agencies which require (demand) information and data fully informed	1 2 3 4 5 6 7
The need for an information gathering system to develop an accurate student profile	1 2 3 4 5 6 7
The need for re-education and orientation of public school administrators and instructional personnel to the real world of work. Many such personnel stereotype vocational education as training for those students who cannot succeed academically	1 2 3 4 5 6 7
Keeping abreast of what is taking place within the other divisions of the institution and satellite programs	1 2 3 4 5 6 7
Keeping up with mountains of paperwork required by government agencies (i.e., affirmative action, OSHA), not to mention internal sources	1 2 3 4 5 6 7
Individualized instruction at an acceptable cost	1 2 3 4 5 6 7
Development and update of instructional materials--modern methods of reproduction	1 2 3 4 5 6 7
Organization and development of postsecondary youth organizations	1 2 3 4 5 6 7
Placement and follow-up	1 2 3 4 5 6 7
Follow-up data from the part-time programs	1 2 3 4 5 6 7
Student motivation	1 2 3 4 5 6 7

(Continuation of Correspondence Sheet No. 2)

IDENTIFIED PROBLEMS	Circle the number to indicate the degree of importance of the problem. Least Important — Most Important
Many students completing programs are highly ethnocentric and are reluctant to leave area to find jobs	1 2 3 4 5 6 7
Obtaining information on students background, age, plans	1 2 3 4 5 6 7
VA students - a large percent of these students are attending school just to receive their benefits, therefore, eliminating slots for students who truly want an education, no matter what the cost. No way to effectively screen applicants	1 2 3 4 5 6 7
Lack of administrative and supportive staff	1 2 3 4 5 6 7
The demand for concurrent accountability from the State Department of Education, Board of Educational Finance, head institutions, and other agencies with varying reporting criteria. This oftentimes causes unnecessary duplication of reporting activities	1 2 3 4 5 6 7
Keeping track of purchase orders, equipment, etc., --business problems	1 2 3 4 5 6 7
Lack of time to do community relations	1 2 3 4 5 6 7
Lack of time to do planning for needed improvements in existing programs, new programs--innovations	1 2 3 4 5 6 7
Lack of vocational education staff training centers to allow vocational school instructors to fully certify for employment and upgrade their professional development, to include preservice and inservice training.	1 2 3 4 5 6 7
State workshops attendance by instructors is disappointing.	1 2 3 4 5 6 7
The need for coordinated effort to provide for the needs of postsecondary instructors i.e., meetings, conferences (high-school oriented)	1 2 3 4 5 6 7

(Continuation of Correspondence Sheet No. 2)

IDENTIFIED PROBLEMS	Circle the number to indicate the degree of importance of the problem. Least Important 1 2 3 4 5 6 7 Most Important
Lack of sufficient in-state resources to assist with instructional faculty inservice. Currently, our only resource is Eastern New Mexico University	1 2 3 4 5 6 7
Technical improvement for instructors. Near-by workshops are few for some occupational areas and nil for others	1 2 3 4 5 6 7
Instructor certification	1 2 3 4 5 6 7
Position rating of faculty (in community colleges we have academic and vocational instructors)	1 2 3 4 5 6 7
Making available time for upgrading of faculty related to their area of instruction	1 2 3 4 5 6 7
Collective bargaining or employee negotiations	1 2 3 4 5 6 7
Providing incentive for professional development when the vocational faculty is on an 11-month contract	1 2 3 4 5 6 7
Motivation of part-time instructors	1 2 3 4 5 6 7
Attracting individuals as instructors from industry who are willing to spend summer school away from home, in order to obtain the 12 semester hours required for full vocational certification	1 2 3 4 5 6 7
There is difficulty in hiring new instructors with the salary that can be offered, qualified instructors that is!	1 2 3 4 5 6 7
The recruitment of a highly qualified instructional staff; particularly in the trade and technical educational field	1 2 3 4 5 6 7
Evaluation of vocational faculty and measurement of the effectiveness of programs	1 2 3 4 5 6 7
Evaluation of faculty (merit system and not being able to provide opportunities for them to return to industry)	1 2 3 4 5 6 7

(Continuation of Correspondence Sheet No. 2)

IDENTIFIED PROBLEMS	Circle the number to indicate the degree of importance of the problem. Least Important — Most Important
Need for a fair and equitable classification system for promotion of vocational faculty	1 2 3 4 5 6 7
Staff support services-- in-service, clerical help	1 2 3 4 5 6 7
Difficulty in dealing with incompetent faculty (an instructor that is doing more harm than good)	1 2 3 4 5 6 7
Solving scheduling problems because of possessive attitudes of vocational faculty toward labs	1 2 3 4 5 6 7
Finding suitable and adequate facilities	1 2 3 4 5 6 7
Space for some programs that require ground level	1 2 3 4 5 6 7
Lack of facilities to adequately house the present programs and to expand into new programs	1 2 3 4 5 6 7
In the state of New Mexico, there has not been a system to replace equipment once it is worn out. Need to develop a statewide depreciation system	1 2 3 4 5 6 7
Funding for new programs	1 2 3 4 5 6 7
Adequate funding for continuing programs	1 2 3 4 5 6 7
Additional capital outlay support is needed to keep training areas well equipped and abreast of changes in business, industry, and government	1 2 3 4 5 6 7
Maintaining funding levels to provide for program operation and replacement of equipment	1 2 3 4 5 6 7
A funding formula must be developed so that the vocational schools may recover the "real cost of training high school students"	1 2 3 4 5 6 7

(Continuation of Correspondence Sheet No. 2)

IDENTIFIED PROBLEMS	Circle the number to indicate the degree of importance of the problem. Least Important ... Most Important
Need improved funding for operational budget	1 2 3 4 5 6 7
Funding for facilities and programs	1 2 3 4 5 6 7
Establishing equitable salary scale relative to academic faculty scale	1 2 3 4 5 6 7
Lack of adequate funding to facilitate competing with industry on salaries for instructional faculty--this is specially true in trades and industrial area	1 2 3 4 5 6 7
Lack of sufficient state appropriations to employ additional necessary staff in student services area	1 2 3 4 5 6 7
Inconsistency of funding agencies as related to individual student referral (i.e., CETA, WIN, HELP, DVR)	1 2 3 4 5 6 7
PLEASE LIST ANY NEW PROBLEM WHICH YOU FEEL SHOULD BE INCLUDED IN THIS STUDY	
	1 2 3 4 5 6 7

APPENDIX B

Memo No. 1

STATE OF NEW MEXICO

DEPARTMENT OF EDUCATION — EDUCATION BUILDING

SANTA FE - 87503

August 27, 1976

LEONARD J. DE LAYO
SUPERINTENDENT OF PUBLIC INSTRUCTION

Subject: AVS' Directors Meeting, September 29, 1976

The next AVS' directors meeting will be held on Wednesday, September 29, 1976, at the Albuquerque TVI, 525 Buena Vista SE (Room S-10). The meeting will begin at 9:00 a.m. and terminate at 3:30 p.m.

During the first portion of the meeting, we will have a presentation on the TVI preparatory program by Dick Rounds. As you are aware, TVI has one of the better programs of this type in the nation. At our last meeting, Wilma mentioned to the group that she was planning to give you funding for preparatory, prevocational programs starting next year. We realize how poorly prepared students are in basic education when they enter into occupational training, so we need to find the best means to provide them with remedial education.

As a second item, we will be discussing the matter of directives imposed on the AVS' by the Veterans Administration through the Veterans Training Unit in the State Department of Education. You will recall that I told the group that I would look into the matter during the conference that I attended in Keystone, Colorado. I have gathered some interesting facts from various states' VA experts that I want to convey to you for possible action by you as a group.

The last item on the agenda will consist of an extremely important aspect for the future of AVS' in New Mexico. At this time, Viola Madrid, who has contacted all of you during her internship with Wilma will introduce what you as a group have identified as the ten major administrative problems. We hope that you can share your ideas on how to find solutions to these problems, because the AVS' students in the state will gain from your expertise.

Viola has invited Dr. Lloyd Wiggins, EPDA Director from Oklahoma State University and a select panel of experts whom all of you know, to help us in this crucial problem-solving session. These people are Dr. Bill Witter, Ms. Jeanne Hightower, Dr. Bob Huff, Mr. Dan Lopez, Dr. Sigfredo Maestas, Mr. Bill Jackson, Mr. Tom Trujillo, Mr. Robert Sanchez, and Dr. Gary Sims.

Please make a special effort to attend.

Sincerely,

Frank Romero
State Director
Post-Secondary Education

FR:sst

STATE OF NEW MEXICO
DEPARTMENT OF EDUCATION — EDUCATION BUILDING
SANTA FE - 87503

LEONARD J. DE LAYO
SUPERINTENDENT OF PUBLIC INSTRUCTION

August 27, 1976

Mrs. Viola Madrid
2023 W. Sherwood
Stillwater, Oklahoma 74074

Dear Viola:

In reference to your letter of August 18, I am enclosing copies of the letter that I have sent to the Area Vocational Schools' directors inviting them to attend the meeting of September 29.

I am also returning the copy of the form you sent requesting my participation in your committee. I am very glad to be able to render whatever help I can. I indicated to you in the past that I thought your project was something that we need badly in New Mexico.

I look forward to seeing you so that we can coordinate more of our efforts to help postsecondary education in the state.

Sincerely,

Frank Romero III
State Director
Postsecondary Education

FR/kb

Enclosures

AD HOC COMMITTEE

Bill Witter, Assistant Executive Secretary
Board of Educational Finance
Santa Fe

Gary Sims, Director
Carlsbad Community College--Carlsbad
Member of General Advisory Council

Daniel H. Lopez, Executive Director
New Mexico Advisory Council of Vocational-Technical Education
Santa Fe
Member of General Advisory Council

Frank Romero, III
Director of Postsecondary Education
Division of Vocational Education

Tom Trujillo, Adult Basic Education Director
Division of Vocational Education
Member of General Advisory Committee

Phillip Felix, Adult Basic Education Supervisor
Division of Vocational Education

James Parker, Program Assistant
Program Development Unit
Division of Vocational Education

Glen Gabehart, Director
New Mexico State University Branch
San Juan Campus
Member of General Advisory Council
Farmington

Louis A. Saavedra, Vice-President
Albuquerque Technical-Vocational Institute
Member of General Advisory Council

Karl Doss, Director
Eastern New Mexico University Branch
Roswell

Jack Young, Dean
New Mexico Junior College
Hobbs

O. B. Coffey, Vocational Director
High Plains Vocational School
Eastern New Mexico University Branch
Clovis

Harold Jackson, Evening Director
Albuquerque Technical-Vocational Institute

James C. Henderson, Dean
New Mexico State University Branch
San Jaun Campus--Farmington

Frank Serrano, III, President
New Mexico Technical-Vocational School
El Rito

Sam Vigil, Superintendent
Luna Vocational-Technical Institute
Las Vegas

Lawrence Pino, Director
Luna Vocational-Technical Institute
Las Vegas

Because of conflict in meeting dates, the following were unable to attend the September 29, 1976, meeting; however, they were willing to serve on the Ad Hoc Committee and responded to all correspondence submitted:

Robert A. Huff, Executive Secretary
Board of Educational Finance

Wilma Ludwig, Director
State Department of Education
Division of Vocational Education
Member of General Advisory Council

Robert S. Sanchez, Jr.
State of New Mexico
Governor's Secretary for Manpower
Member of General Advisory Council

Letter No. 3

Oklahoma State University

SCHOOL OF OCCUPATIONAL AND ADULT EDUCATION

STILLWATER, OKLAHOMA 74074
CLASSROOM BUILDING 406
(405) 624-6276

August 18, 1976

Dear

In reference to our telephone conversation of August 17, 1976, thank you for your willingness to serve on the committee to develop guidelines as recommendations for possible solutions to the ten major administrative problems identified by local administrators in the eight area technical-vocational schools in New Mexico.

As a doctoral candidate in Vocational-Technical and Career Education attending Oklahoma State University and one of New Mexico's two EPDA 552 Awardees, I have chosen this as my dissertation topic because of the demand for a needs assessment in subbaccalaureate education--specifically post-secondary technical-vocational education in New Mexico. While interning under the supervision of Ms. Wilma Ludwig, Director of Vocational Education, this summer, I visited with each of the administrators in the eight technical-vocational schools in New Mexico and discussed my study with them. The Delphi Technique was chosen in identifying administrative problems encountered by these administrators. This process is being completed, and the ten major administrative problems have been identified.

Therefore, during the regular postsecondary area technical-vocational school administrators meeting which will be held on Wednesday, September 29, 1976 (9:00 a.m. - 3:30 p.m.) at the Albuquerque Technical-Vocational Institute, these ten major administrative problems will be discussed and guidelines will be developed as recommendations for possible solutions. The 17 administrators (Level I and II) who participated in the study will be attending this meeting and I have contacted experts such as yourself, which together will comprise the aforementioned committee.

August 18, 1976
Page 2

Necessary materials will be forwarded to you by approximately September 15 in order to allow time for you to review the list of administrative problems ranked by degree of importance as have been identified by the practitioners in the field. Please complete the enclosed form indicating your willingness to serve in this committee and return to me at your earliest convenience. If you need additional information, please let me know.

Thank you very kindly.

Sincerely yours,

Viola L. Madrid
EPDA 552 Awardee

Concurred by:

Lloyd L. Wiggins, EPDA 552 Director & Graduate Committee Chairman	Frank Romero, III, Dir. of Postsecondary Education, NM State Dept. of Voc. Educ.

Enclosure

Form No. 1

DATE August 25, 1976
Please return on/or before

/ / YES, I am willing to serve on the committee to discuss and develop guidelines as recommendations for possible solutions to the ten major administrative problems identified by local administrators in the eight area technical-vocational schools in New Mexico AND will attend the regular postsecondary area technical-vocational administrators meeting on Wednesday, September 29, 1976 at Albuquerque Technical-Vocational Institute, Rm. S - 10, (9:00 a.m. to 3:30 p.m.)

/ / NO, I am unable to serve on the committee at this time.

COMMENTS: _____

_____

_____

_____

SIGNED _____ DATE _____

PLEASE TYPE OR PRINT NAME _____

TITLES OR POSITIONS _____

ADDRESS _____

TELEPHONE NUMBER _____

CORRESPONDENCE SHEET NO. 3

(To be completed prior to attending the September 29, 1976 AVS' Directors Meeting)

Listed below are the administrative problems identified by the postsecondary area technical-vocational school administrators in New Mexico as those most critical to operation of their educational institutions and to the overall efficiency of the postsecondary area technical-vocational school system.

Since each problem was ranked on a seven-point continuum ranging from the least important (1) to most important (7), those problems with the highest means are considered as most important and appear first in the ranked order.

Space has been provided for you to list guidelines as recommendations for possible solutions to these administrative problems.

EXAMPLE:

Rank	Mean	Administrative Problem	Guidelines as Recommendations for possible solutions
1	6.93	Providing inservice teacher training	*A program to train local Area Vocational-Technical School administrators in methods and techniques to conduct inservice training should be developed which would include providing specific blocks of time to conduct inservice programs on the local level. The development and dissemination of materials to conduct local inservice programs is also recommended. These materials should be developed by curriculum departments.*

(Continuation of Correspondence Sheet No. 3)

Rank	Mean	Administrative Problem	Guidelines as Recommendations for Possible Solutions
1.0	6.00	Funding for new programs	
3.5	5.97	The need for a uniform method for funding vocational education programs in technical-vocational schools--such method would take in consideration program requirements, program needs, student characteristics and geographic location of institution	
3.5	5.97	Placement and follow-up	
3.5	5.97	Funding for Facilities and Programs	
3.5	5.97	Additional capital outlay support is needed to keep training areas well equipped and abreast of changes in business, industry, and government	

(Continuation of Correspondence Sheet No. 3)

Rank	Mean	Administrative Problem	Guidelines as Recommendations for Possible Solutions
6.0	5.75	Maintaining funding levels to provide for program operation and replacement of equipment	
8.0	5.58	Keeping up with mountains of paperwork required by government agencies (i.e., affirmative action, OSHA), not to mention internal sources	
8.0	5.58	Individualized instruction at an acceptable cost	
8.0	5.58	Adequate funding for continuing programs	

(Continuation of Correspondence Sheet No. 3)

Rank	Mean	Administrative Problem	Guidelines as Recommendations for Possible Solutions
11.0	5.50	Lack of facilities to adequately house the present programs and to expand into new programs	
11.0	5.50	In the state of New Mexico, there has not been a system to replace equipment once it is worn out. Need to develop a statewide depreciation system	
11.0	5.50	Need improved funding for operational budget	
14.0	5.42	Technical improvement for instructors. Near-by workshops are few for some occupational areas and nil for others	

(Continuation of Correspondence Sheet No. 3)

Rank	Mean	Administrative Problem	Guidelines as Recommendations for Possible Solutions
14.0	5.42	Evaluation of faculty (merit system and not being able to provide opportunities for them to return to industry)	
14.0	5.42	Lack of adequate funding to facilitate competing with industry on salaries for instructional faculty —this is specially true in trades and industrial area	

Letter No. 4

Oklahoma State University

SCHOOL OF OCCUPATIONAL AND ADULT EDUCATION

STILLWATER, OKLAHOMA 74074
CLASSROOM BUILDING 406
(405) 624-6276

September 20, 1976

Dear

It is with enthusiasm that I look forward to my trip to Albuquerque and meet with you and all committee members to discuss and develop guidelines to administrative problems of postsecondary area technical-vocational school administrators in New Mexico.

The meeting will be held on Wednesday, September 29, 1976, at the Albuquerque Technical-Vocational Institute, 525 Buena Vista SE (Room S-10). As per enclosed agenda from the Division of Vocational Education, the morning session will be directed to a presentation on the TVI preparatory program and Veterans Administration concerns. Although we encourage you to attend the morning session, discussion and development of guidelines as recommendations for possible solutions to critical administrative problems will commence at 1:00 p.m. It will be very helpful for you to jot down your recommendations prior to the meeting as you will have an opportunity to voice your suggestions and turn in a list of recommendations.

Again, may I extend my sincere appreciation to you for the time and thought you are contributing to this project and ultimately to post-secondary technical-vocational education.

Sincerely yours,

Viola L. Madrid
EPDA Awardee

Enclosures

Letter No. 5

Oklahoma State University

SCHOOL OF OCCUPATIONAL AND ADULT EDUCATION

STILLWATER, OKLAHOMA 74074
CLASSROOM BUILDING 406
(405) 624-6276

September 20, 1976

Dear

It is with enthusiasm that I look forward to my trip to Albuquerque and meeting with you administrators to discuss and develop guidelines as recommendations for possible solutions to those administrative problems identified most critical to operation of your institutions and to the overall efficiency of the postsecondary area technical-vocational school system.

It would be very helpful for you to job down recommendations prior to the meeting as you will have an opportunity to voice your suggestions and also to turn in a list of recommendations. The meeting will be held Wednesday, September 29, 1976, at the Albuquerque Technical-Vocational Institute, 525 Buena Vista SE (Room S-10). It will commence at 9:00 a.m. and adjourn by 3:30 p.m.

Since only the critical administrative problems are considered for discussion in this forthcoming meeting, the rank order of all the administrative problems identified in previous correspondence will be available at that time. A copy of the guidelines as recommendations for possible solutions to these problems will also be provided as soon as a final copy is compiled.

Again, may I extend my sincere appreciation to you for the time and thought you are contributing to this project and ultimately to the significant impact on postsecondary technical-vocational education.

Sincerely yours,

Viola L. Madrid
EPD Awardee

Enclosures

Below are administrative problems ranked in respect to their "degree of importance" by postsecondary area technical-vocational school administrators in New Mexico as those most critical to operation of their educational institutions and to the overall efficiency of the post-secondary area technical-vocational school system.

Since each problem was ranked on a seven-point continuum ranging from the least important (1) to most important (7), those problems with the highest means are considered as most important and appear first in the ranked order.

Rank	Mean	Administrative Problem
1.0	6.00	Funding for new programs
3.5	5.97	The need for a uniform method for funding vocational education programs in technical-vocational schools--such method would take in consideration program requirements, program needs, student characteristics, and geographic location of institution
3.5	5.97	Placement and follow-up
3.5	5.97	Additional capital outlay support is needed to keep training areas well equipped and abreast of changes in business, industry, and government
3.5	5.97	Funding for Facilities and Programs
6.0	5.75	Maintaining funding levels to provide for program operation and replacement of equipment
8.0	5.58	Keeping up with mountains of paperwork required by government agencies (i.e., OSHA, and affirmative action), not to mention internal sources
8.0	5.58	Individualized instruction at an acceptable cost
8.0	5.58	Adequate funding for continuing programs
11.0	5.50	Lack of facilities to adequately house the present programs and to expand into new programs
11.0	5.50	Need improved funding for operational budget

(Continued)

Rank	Mean	Administrative Problem
11.0	5.50	In the state of New Mexico, there has not been a system to replace equipment once it is worn out. Need to develop a depreciation system
14.0	5.42	Technical improvement for instructors. Near-workshops are few for some occupational areas and nil for others
14.0	5.42	Evaluation of faculty (merit system and not being able to provide opportunities for them to return to industry)
14.0	5.42	Lack of adequate funding to facilitate competing with industry on salaries for instructional faculty--this is specially true in trades and industrial area
16.0	5.33	Keeping all agencies which require (demand) information and data fully informed
18.5	5.25	Long-range planning
18.5	5.25	Veteran's Administration wanting to provide guidelines for programs, yet not knowing what it takes to make a quality program
18.5	5.25	Development and update of instructional materials--modern methods of reproduction
18.5	5.25	There is difficulty in hiring new instructors with the salary that can be offered, qualified instructors that is!
21.5	5.17	The need for re-education and orientation of public school administrators and instructional personnel to the real world of work. Many such personnel stereotype vocational education as training for those students who cannot succeed academically
21.5	5.17	Finding suitable and adquate facilities
25.5	5.05	Having to comply with varying program approval criteria (i.e., Veteran's Administration and State Department of Education)
25.5	5.05	Lack of sufficient in-state resources to assist with instructional faculty inservice. Currently, our only resource is Eastern New Mexico University

(Continued) Page 3

Rank	Mean	Administrative Problem
25.5	5.05	Making available time for upgrading of faculty related to their area of instruction
25.5	5.05	Evaluation of vocational faculty and measurement of the effectiveness of programs
25.5	5.05	Establishing equitable salary scale relative to academic faculty scale
25.5	5.05	Lack of vocational education staff training centers to allow vocational school instructors to fully certify for employment and upgrade their professional development, to include preservice and inservice training
30.0	5.00	The need for definitive data to make long-range program projections
30.0	5.00	The need for additional support to upgrade the general basic skills needed by entering students into vocational education to increase their probability of success in vocational skills training
30.0	5.00	Student motivation
35.5	4.92	Keeping occupational surveys of community needs up to date
35.5	4.92	Instructor certification
35.5	4.92	The recruitment of a highly qualified instructional staff; particularly in the trade and technical educational field
35.5	4.92	Inconsistency of funding agencies as related to individual student referral (i.e., CETA, WIN, HELP, DVR)
37.0	4.83	Administering programs according to dictates of law which fail to allow for uniqueness of programs and community needs
37.0	4.83	A funding formula must be developed so that the vocational schools may recover the "real cost of training high school students"
37.0	4.83	Lack of functional statewide plan for area technical-vocational schools

(Continuation) Page 4

Rank	Mean	Administrative Problems
40.0	4.75	VA students–a large percent of these students attend school just to receive their benefits; therefore, eliminating slots for those who truly want an education, no matter what the cost. No way to effectively screen applicants
40.0	4.75	Providing incentive for professional development when the vocational faculty is on an 11-month contract
40.0	4.75	Attracting individuals as instructors from industry who are willing to spend summer school away from home, in order to obtain the 12 semester hours required for full vocational certification
43.5	4.67	Inaccessability of crucial statistics when conducting data search and program planning on long range scale
43.5	4.67	Overflow of applicants (up to 60%) in specific classes and programs
43.5	4.67	Lack of industry in proximity of school's service area to facilitate employment of graduates and avoiding mandatory relocation
43.5	4.67	The demand for concurrent accountability from the State Department of Education, Board of Educational Finance, haead institutions, and other agencies with varying reporting criteria This oftentimes causes unnecessary duplication of reporting activities
46.5	4.58	Operation of postsecondary technical-vocational schools under five laws--almost impossible to operate, much less state bonding for facilities
46.5	4.58	Many of the students attending technical-vocational schools are classified as very poor, which makes it difficult for them to meet their financial obligations (i.e., transportation and child care)
48.5	4.50	The need for an information gathering system to develop an accurate student profile
48.5	4.50	Lack of time to do planning for needed improve-improvements in existing programs, new programs--innovations

(Continuation) Page 5

Rank	Mean	Administrative Problem
50.5	4.41	The need for Career Education in the public school must be more realistic and linked closely to vocational education and post-secondary vocational schools
50.5	4.41	Lack of sufficient state appropriations to employ additional necessary staff in student services area
52.5	4.33	Lack of articulation between secondary and postsecondary vocational education
52.5	4.33	Lack of time to do community relations
52.5	4.25	Many students completing programs are highly ethnocentric and are reluctant to leave area to find jobs
52.5	4.25	Lack of administrative and supportive staff
52.5	4.25	Position rating of faculty (in community colleges we have academic and vocational instructors)
52.5	4.25	Difficulty in dealing with incompetent faculty (an instructor that is doing more harm than good)
58.0	4.17	Need for a fair and equitable classification system for promotion of vocational faculty
59.0	4.08	State workshops attendance by instructors is disappointing
60.6	4.00	The need for closer relationship with State Department visitations by supervisors
60.5	4.00	Staff support services--in-service, clerical help
62.5	3.75	Keeping abreast of what is taking place within the other divisions of the institutions and satellite programs
62.5	3.75	The need for coordinated effort to provide for the needs of postsecondary instructors (i.e., meetings, conferences (presently they are high-school oriented)

(Continuation) Page 6

Rank	Mean	Administrative Problems
64.0	3.66	Accreditation in postsecondary technical-vocational schools
66.0	3.58	Lack of articulation between two and four-year institutions and postsecondary technical-vocational schools
66.0	3.58	Coordinating vocational with academic programs
66.0	3.58	Motivation of part-time instructors
68.0	3.50	Solving scheduling problems because of possessive attitudes of vocational faculty toward labs
70.0	3.42	Follow-up data from the part-time programs
70.0	3.42	Obtaining information on students background, age, plans
70.0	3.42	Keeping track of purchase orders, equipment--business problems
72.0	3.08	Organization and development of postsecondary youth organizations
73.0	3.00	Collective bargaining or employee negotiations
74.0	2.58	Space for some programs that require ground level

THE FOLLOWING ARE PROBLEMS IDENTIFIED ON CORRESPONDENCE SHEET NO. 2 RESPONSES WHICH ADMINISTRATORS FELT SHOULD BE INCLUDED IN THIS STUDY:

Postsecondary vocational education should be exclusively under the Board of Educational Finance not State Department of Education.

New Mexico Vocational Education Division of Postsecondary Education is not adequately staffed.

Assistance to graduates for relocation (i.e., loans, grants).

Letter No. 6

Oklahoma State University

SCHOOL OF OCCUPATIONAL AND ADULT EDUCATION

STILLWATER, OKLAHOMA 74074
CLASSROOM BUILDING 406
(405) 624-6276

October 20, 1976

Dear

Enclosed is your copy of the guidelines as recommendations for possible solutions to administrative problems in New Mexico Postsecondary Area Technical-Vocational Institutions--as developed during our meeting at Albuquerque Technical-Vocational Institute September 29, 1976.

If you find inconsistencies in the stated guidelines as compared to our discussion during the September 29, 1976, meeting, submit your recommended change(s) to me by November 1, 1976.

As you know, the materials that you provided became an integral part of my doctoral dissertation to be completed by April 15, 1977. The dissertation will contain a brief history of the area technical-vocational school programs in New Mexico as well as a description of each school.

The final chapters will be developed from the materials that you helped provide through the Delphi Technique and the development of guidelines. If you would like to have a copy of my dissertation, just write me a note between now and April 15, and I will be happy to send you one at no cost.

Thank you once again for your support and assistance!

Sincerely yours,

Viola L. Madrid
EPD 552 Awardee

Enclosure

PROBLEM IDENTIFICATION OF LOCAL ADMINISTRATORS IN AREA TECHNICAL-VOCATIONAL SCHOOLS IN NEW MEXICO WITH THE DEVELOPMENT OF GUIDELINES AS RECOMMENDATIONS FOR POSSIBLE SOLUTIONS

Viola L. Madrid, EPDA 552 Awardee - New Mexico
Oklahoma State University
October 20, 1976

In order to organize and present the basic elements of the research of administrative problems in the postsecondary area technical-vocational schools in New Mexico, use has been made of an existing educational long-range planning model. The model, known as Emch's Model for long-range planning for educational institutions* briefly contains the following levels of decision-making: Philosophy, Objectives, Programs, Organization, Staffing, Facilities, and Finance.

The statements submitted by New Mexico postsecondary area technical-vocational school administrators through the use of the Delphi Technique were evaluated and arbitrarily placed into one of the levels of decision-making mentioned above. The initial two rounds of the procedure allowed for the listing of concerns to be used in the study, ranking these administrative problems by degree of importance, and arriving at a concensus of the problems to be used for purposes of the research. Upon discussion by participants and a selected committee during the September 29, 1976, meeting, guidelines were developed as recommendations for possible solutions to the 15 top-ranked administrative problems. Each level of decision-making, the statement of problem or concern, and the group's recommended guidelines for possible solution are presented below: (Please note below none of the 15 top-ranked administrative problems fit into the first two levels)

Philosophy: None

Objectives: None

Programs: Two Statements

1. Placement and Follow-up

   --Establish statewide loan/grant fund to assist students relocate in order to take advantage of employment opportunities

   --Develop a uniform reporting system through a statewide committee to determine information relative to placement and follow-up. This would take into account the uniqueness of each institution.

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*See attachment for details

2. Individualized instruction at an acceptable cost

--Articulate advantages and costs of individualized instruction to funding agencies (i.e., legislators, VA administration)--a need for their understanding exists

--One of the concerns expressed was the need for individualized instructional materials for low-reading level learners. A comprehensive plan with joint efforts of the Division of Vocational Education curriculum personnel and instructional staff from each of the eight schools (i.e., welding is offered in all institutions thus the curriculum consultant would meet with all welding instructors, one from each institution, to assist them in developing materials) for developing instructional materials should be developed

--Share individualized materials among institutions (The Vocational Education Conference with focus on postsecondary may provide for instructors to exchange ideas and materials)

--Utilize the expertise of consultants--either on individual school basis or among several schools (such as Mid-America Vocational Curriculum Consortium)

--Seed instructional personnel may be utilized--that is personnel with expertise in instructional material development--either on individual school basis or among several schools

--Develop statewide inservice programs for instructional staff with provisions to orient them to the individualized concept of instruction and the development of instructional materials.

Organization: One Statement

1. Keeping up with mountains of paperwork required by government agencies (i.e., affirmative action, OSHA), not to mention internal sources

--Analyze costs of data collection and report to the public

--Coordinate state agencies concerned with educational data and consolidate data requests

--Encourage area technical-vocational institutions to develop an information system

--Utilize data collected through the Division of Vocational Education Department and available through a centralized computer center

Staffing: Two Statements

1. Technical improvement for instructors. Nearby workshops are few for some occupational areas and nil for others

   --Develop a statewide professional development model through the Division of Vocational Education to encompass participation of all vocational personnel (i.e., workshops, conferences, and seminars)

   --Seek and/or initiate faculty-development funding (such as that of EPDA 553). This may provide professional development statewide or through joint efforts among states (Region VI)

   --Coordinate efforts through the Division of Vocational Education and teacher training institutions to provide technical and professional improvement for instructional personnel

   --Coordinate efforts among institutions in identifying pertinent professional development activities (i.e., extension courses, workshops) within regions and explore attendance possibilities

   --Explore faculty exchange. An education-business exchange program with two-planned phases: move educators into the world of work (short-term inservice training) and bring businessmen into the classroom (develop an understanding of the educational environment)

   --Initiate an advisory committee comprised of teachers, teacher educators, administrators, students, supervisors, and business and industry, and community leaders with periodical meetings to plan, conduct, promote, and/or evaluate programs of inservice education

2. Evaluation of faculty (merit system and not being able to provide opportunities for them to return to industry)

   --Evaluation and accountability are controversial issues in the entire system of education today, and more so in vocational education. Evaluation should ensure continually improving processes and programs of all educational institutions and agencies with this concept as a major purpose of evaluation and considerable efforts towards its attainment

   --Develop a positive attitude towards evaluation of faculty

   --Develop a statewide professional development model of which faculty evaluation is a component

Facilities: Two Statements

1. In the State of New Mexico, there has not been a system to replace equipment once it is worn out. Need to develop a statewide depreciation system

   --Develop a systematic plan for replacing equipment at the state level. Include money in annual budget for replacement of equipment

   --Document equipment replacement needs on a systematic basis

2. Lack of facilities to adequately house the present programs and to expand into new programs

   --Priorities for expansion of facilities need to be established in terms of greatest justifiable needs

   --Work towards legislation which provides funding for capital outlay on a systematic basis

   --Rent or lease facilities to accommodate expansion of present or new programs

   --Seek special funds for facilities

   --Seek gifts to assist in purchasing or expansion of facilities (such as state and local committees, business and industry)

   --Initiate school bond issues as a means to acquire facilities to adequately house the present programs and to expand into new programs

   --Write proposals seeking federal dollars for renovating and remodeling of facilities (provisions under new vocational legislation)

Finance: Eight Statements

1. Funding for new programs

   --Establish a procedure through the State Department of Education to assist local institutions in determining set-up costs and operational costs for new programs

   --As in the item of facilities to expand into new programs, some of the guidelines discussed above will apply in the funding for new programs: seek special grants (individuals or institutions), seek federal dollars, capitalize on one-time requests from the State, and establish cooperation with industry

2. The need for a uniform method of funding vocational education programs in technical-vocational schools--such method would take into consideration program requirements, program needs, student characteristics, and geographic location of institution

   --Seek legislation to provide a uniform method for capital and operational funding for two-year institutions (presently the eight postsecondary area technical-vocational institutions are operating under five different statutes: Junior College Act, Area Vocational School Act, Technical-Vocational Institute Act, Constitutional Institution, and the Branch Community College Act)

3. Additional capital outlay support is needed to keep training areas well equipped and abreast of changes in business, industry and government

   --Long range plan to be included in the next budget under capital outlay funds

4. Funding for facilities and programs

   --Priorities for expansion of facilities need to be established in terms of the greatest justifiable need

5. Maintaining funding levels to provide for program operation and replacement of equipment

   --Seek legislation to provide a uniform method for capital and operational funding for two-year institutions

6. Adequate funding for continuing programs

   --Seek legislation to provide a uniform method for capital and operational funding for two-year institutions

7. Need improved funding for operational budget

   --Seek legislation to provide a uniform method for capital and operational funding for two-year institutions

8. Lack of adequate funding to facilitate competing with industry on salaries for instructional faculty--this is specially true in trades and industrial areas

   --Collect and compare salary schedules from all area technical-vocational schools in New Mexico and nationwide (market differential should be taken into account)

   --Develop a statewide salary schedule which will provide for quality of instructional faculty recruitment and professional development. This is an attempt to maintain quality vocational education for learners

Excerpt from Emch's Model of Long-Range Planning

In order to develop a basic framework for long-range planning it is necessary to explore three areas of top policy and management represented by the following questions:

What decisions have to be made?
In what order should they be made?
What information is necessary in order to make them?

Systematic analysis of the questions, the required decisions, and their interrelationships reveals that the planning process has seven distinct elements. These seven elements or levels and the basic decisions to be made at each level are presented concisely in the following table:

Levels of Decision-Making	Basic Decisions to be Made at Each Level
PHILOSOPHY	What are the educational needs of a free society? Who should be educated, to what extent, and by whom? What new knowledge and skills are required?
OBJECTIVES	Which of these general educational needs should this institution seek to meet? What group or groups should it serve and what changes in their knowledge, skills and attitudes should it try to bring about?
PROGRAMS	What instructional programs, research programs and service activities will best serve the needs selected? What range and intensity of coverage is required? What curriculum content and educational methods are most appropriate?
ORGANIZATION	What human abilities, knowledge and skills are required in order to carry out the selected programs and activities? How can these required abilities, knowledge and skills best be translated into requirements for specific faculty, research, administrative and non-academic positions? What functions, responsibility and authority should be associated with each position? What interrelationships should exist among the different positions in order to best achieve the institution's objectives?
STAFFING	What numbers, kinds and qualifications of people are required to fill the positions and assume the responsibility in order to best carry out the selected programs and activities?
FACILITIES	What numbers, kinds, quality and locations of facilities are required to best enable the staff to carry out the desired programs and activities?

FINANCING	What operating and capital funds are required to provide the necessary staffing and facilities, and where and how can these funds best be obtained?

It is evident from this planning pattern that the decisions made at each level are independent on these made at all preceding levels. In other words, the proper sequence of planning decision is from Philosophy to Objectives to Programs to Organization to Staffing to Facilities to Financing.

APPENDIX C

Excerpts From

LONG-RANGE PLANNING FOR COLLEGES AND UNIVERSITIES

Dr. Arnold F. Emch
Partner, Booz, Allen and Hamilton
Management Consultants, Chicago, Illinois

The magnitude of changes taking place in the next decade emphasizes the need for careful planning by each individual institution. No institution will be unaffected by the wave of future students. No institution can afford to be unprepared.

Important and far reaching as the possible effects of a rapid growth in learner enrollment are, they are not the only, and perhaps not the most critical problems facing American higher education over the next decade. Perhaps the most serious problem is a growing confusion as to the proper role of higher education in our society.

First, there are certain significant changes within the education system itself. There is a constant pressure to extend college instruction to include many vocational fields outside the traditional liberal arts. There is also a marked trend toward development of a modern university with its heavy emphasis on research and departmental specialization. And finally there has been the growth of the elective system with the subsequent proliferation of courses in response to the demands of learners.

Second, there are many outside demands for special services which educational institutions of higher learning are expected to provide. Among these are applied research services for business corporations and various government units; increased vocational, social and personal guidance programs for learners; adult education opportunities for local communities; and spectator sports and other events for learners, alumni, and townspeople.

Third, increasing financial pressures seriously affect the outlook of many institutions. The gradual shifting of the base of financial support and the pressing need for additional funds have made institutions more responsive to the special demands of supporting groups. Increasing financial pressures also tend to focus attention on immediate problems rather than long range educational objectives.

The planning process is concerned with combining the best current practices, along with new concepts, into a comprehensive and practical guide for long-range institutional planning. Such a guide will serve to define and clarify the principal elements of planning and to provide the basic procedural steps essential to a successful planning program.

It should be noted that the goal of planning is achievement. The end product of planning is not just a blueprint, but achievement of defined objectives. Planning, to be fully effective, must carry within itself the seeds of accomplishment.

It should be noted also that the planning process must anticipate and facilitate the action that is to follow. Achievement is the result of action toward desired objectives. Planning must be done in such a way that the process of determining objectives actually helps to generate the action required for achievement. This rule is of greatest importance and distinguishes the recommendation in this process from most of the prevailing planning practices in universities and colleges.

Finally, the planning itself must be planned. In order for an institution to move smoothly and surely from plans to implementation of those plans, the planning process must be well thought out in advance of the actual planning activity. Only in this way can the proper relation between planning and action be established.

In order to develop a basic framework for long range planning it is necessary to explore three areas of top policy and management represented by the following questions:

What decisions have to be made?

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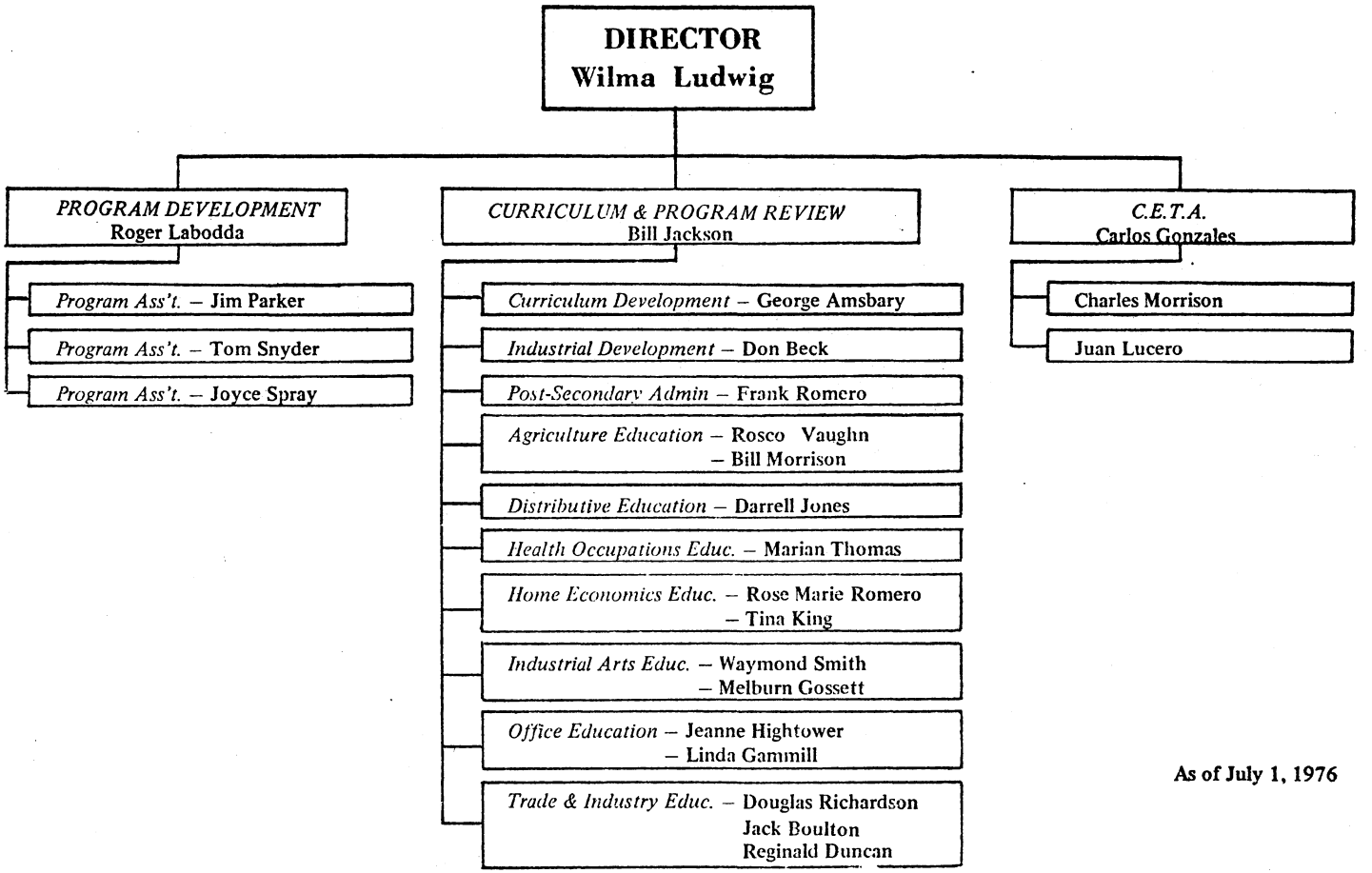
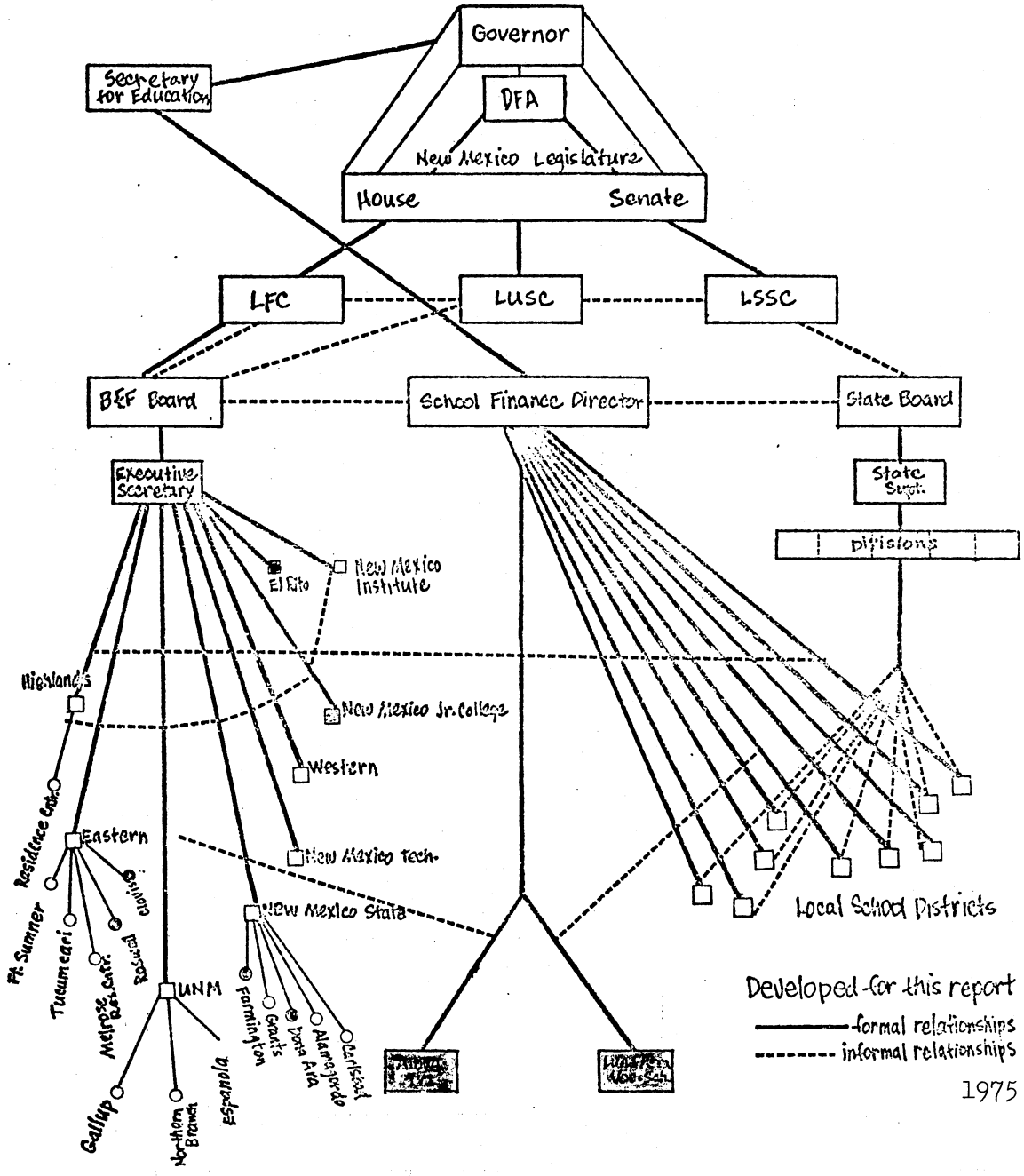
VOCATIONAL EDUCATION



As of July 1, 1976



Organizational Chart for New Mexico's
Educational Delivery System

VITA

Viola Lopez Madrid

Candidate for the Degree of

Doctor of Education

Thesis: A STUDY OF ADMINISTRATIVE PROBLEMS IN NEW MEXICO POSTSECONDARY TECHNICAL-VOCATIONAL SCHOOLS

Major Field: Vocational-Technical and Career Education

Biographical:

Personal Data: Born in El Rito, New Mexico, January 4, 1941, the daughter of Bonificio Hererra and Evangelina Lopez.

Education: Graduated from Northern New Mexico State School, El Rito, New Mexico, in May, 1958; received Bachelor of Arts degree, with a major in Business and Office Education, minors in Home Economics and Spanish, from New Mexico Highlands University, Las Vegas, New Mexico, in August, 1968; engaged in graduate study at Eastern New Mexico University, Portales, New Mexico; EPD Awardee, 1974-75, 1975-76, 1976-77, received Master of Science degree, with a major in Vocational-Technical and Career Education, Oklahoma State University, Stillwater, Oklahoma, in December, 1975; completed the requirements for the Doctor of Education degree at Oklahoma State University Stillwater, Oklahoma, in May, 1977.

Professional Experience: Secretarial Experience, 1959-1963; teacher of typing at Henry T. Gage Junior High School, Huntington Park, California, from September 1969 to June, 1970; instructor of Office Occupations and Office Education Association Coordinator at New Mexico Postsecondary Technical-Vocational School, El Rito, New Mexico, from September, 1970 to August, 1974; Graduate assistant in the School of Occupational and Adult Education, Oklahoma State University, Stillwater, Oklahoma, from February, 1977 to June, 1977.

Professional Organizations: Member of American Vocational Association, Oklahoma Vocational Association, Kappa Delta Pi, Oklahoma Adult and Continuing Education Association, Phi Delta Kappa, American Personnel and Guidance Association, Adult Education of the USA, and Chicano Community Association; former member of New Mexico Education Association, New Mexico Vocational Education Association, New Mexico Technical-Vocational Instructors Association, Los Amigos de la Escuela (PTA), and California Business Education Association.