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STATE VOCATIONAL ADMINISTRATORS' OPPORTUNITIES
FOR PROFESSIONAL AND MANAGEMENT DEVELOPMENT
IN STATE DEPARTMENTS OF EDUCATION

By

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ABSTRACT

STATE VOCATIONAL ADMINISTRATORS' OPPORTUNITIES FOR PROFESSIONAL AND MANAGEMENT DEVELOPMENT IN STATE DEPARTMENTS OF EDUCATION

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Purpose

The purposes of this study were (1) to describe state vocational administrators' opportunities to experience and their desire to experience professional and management development in state departments of education; (2) to identify the variable or combination of variables (state size, sex, age, level of administration, undergraduate vocational-specialty area, and number of years in the state department) that influence the degree of opportunity a state vocational administrator experiences and/or has the desire to experience; and (3) to describe a profile of a state vocational administrator who has the maximum opportunity to experience professional growth and development.

Eight exploratory questions, developed from the principal problem, set the boundaries of the research study. The growth areas tested included a planned in-service program, varied on-the-job assignments, development of communication skills, visibility and exposure with high state and government officials, outside training

and development, professional association activities, and mobility and job advancement.

Research Methodology

The survey questionnaire was sent to 381 state vocational administrators in the vocational divisions of 20 state departments of education. A response rate of 72.2 percent (275 respondents) was realized.

Responses were analyzed as a group and individually to determine the opportunity to experience and the desire to experience professional management development. The analysis of variance was used as the statistical technique to measure significant differences between the independent variables and the opportunity to experience and the desire to experience each of the developmental areas. Alpha was set at .05 as the critical value for all statistical tests. The Least Significant Differences post-hoc test was used as the follow-up procedure.

Conclusions

State departments of education appear not to provide outside management training and development for their state vocational administrative staffs. Opportunity for professional growth tends to be limited to the range of administrative responsibilities an administrator is assigned on the job. State departments do not provide added opportunities for professional and management growth.

Opportunities to participate in all of the developmental areas are restricted to a small group of individuals. Although lower-level

administrators desire the same opportunities as do upper-level administrators, they have not had the opportunity for such development.

Administrators who hold top-level positions have had no academic preparation in administration or management. The demands of the job require generalist-type capabilities, whereas the administrators' advanced degree work is in a vocational specialty area. It appears that the qualifications for the positions are not related to the duties performed.

A wide gap exists between what administrators would like to have the opportunity to experience and what the state departments provide. Administrators are ready and committed to be involved in professional development programs.

Females are not provided much opportunity for professional growth and development, as they are hired for traditionally female jobs and perform in areas that are narrower in scope than male positions. Female job designs do not provide equal employment opportunity, which, in turn, blocks opportunity for mobility and job advancement.

Most state agencies have made some attempt to provide an in-service program; few state agencies can be credited with effective in-service programs, as most administrators feel the quality of the programs could be improved.

Five independent variables were directly related to the opportunities state administrators have experienced.

High-opportunity administrators are Caucasian males, between 40 and 49 years of age, from the vocational-specialty areas of

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Agricultural and Industrial Education; they have worked 8 to 11 years in the state department.

If professional and management development activities are to be extended to all administrators,

1. Jobs need to be redesigned to encourage broader staff participation.
2. Top-level administrators need to adopt a participative management style.
3. State and/or federal agencies will need to provide funds for professional and management development.

To my son, Fritz, the light of my life,

and

To my mother, Winnie, and dad, John,
whose love, support, and encouragement
have been my constant companions in
every major endeavor.

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CHAPTER I

INTRODUCTION

Statement of the Problem

The problem of this study was to determine state vocational administrators' opportunities for professional and management development and to ascertain administrators' desire to experience the following professional and management development activities:

Varied On-the-Job Assignments
Development of Communication Skills
Visibility and Exposure with High State
and Government Officials
Outside Management Training and Development
Professional Association Activities
Mobility and Job Advancement

The following questions were examined to determine the extent to which opportunities for growth are provided and also to explore whether state administrators' perceptions of "opportunity" are differentially related to (a) state size; (b) sex and age; and (c) level of administration, undergraduate vocational specialty area, and number of years in the state department.

The exploratory questions to be addressed were:

1. Is a planned in-service training program provided for state administrators?
2. Are opportunities for professional and managerial development built into the job assignment?
3. Are there opportunities for development of communication skills?

4. Are there opportunities for visibility and exposure working with high state and government officials?
5. Does the state department support development in the form of outside professional and managerial training?
6. Have opportunities been extended to participate in professional association activities?
7. Is mobility encouraged and are promotions extant?
8. Which groups (sex, age, administrative level, vocational specialty area, state department experience) have the greatest desire for change--for more opportunity to experience professional and management development activities?

Purpose of the Study

The primary purpose of this study was to describe state vocational administrators' opportunities to experience and the desire to experience professional and management development in state departments of education throughout the United States.

The second purpose was to identify the variables or the combination of variables that influence the degree of opportunity a state vocational administrator experiences and/or has the desire to experience.

The final purpose was to describe a profile of a state vocational administrator who has had the maximum opportunity to experience professional growth and development.

The present research will provide information useful to those concerned with the development of effective planned professional and management development programs for state vocational administrators employed in vocational divisions of state departments of education.

Background

The enactment of the vocational legislation of 1976 (P.L. 94-482, 1976) has vastly broadened the scope and expanded the role of vocational education in the states; hence highly educated, well-trained state vocational education administrators are needed to act as catalysts in meeting the challenge of implementing this new legislation.

Mandates require that states develop more comprehensive state-wide planning and evaluation systems for vocational education. To meet that charge, state vocational administrators must have not only a thorough knowledge of the concepts, principles, and practices of planning and evaluation, but also must possess good interpersonal skills to enable them to work with individuals from a wide range of agencies and different educational levels. State administrators must understand and respect other professionals' expertise, whether they represent a state agency, a particular level of education, or business and industry. They need to work to build supportive relationships with the bureaucracy and the political community and at the same time function comfortably from a knowledge base of theory and research in all areas affecting vocational education.

The function of the state vocational agency is to provide technical assistance to local agencies in assessing their local needs, to aid in planning and evaluating their educational programs, to work toward compliance with legislative enactments, and to coordinate the independent or cooperative in-service programs for professional staff development.

The general public and the federal and state legislatures are requiring accountability for increased expenditure of funds on vocational education programs, for improved quality of occupational programs and supportive services for all students, and for expanding services to meet the needs of handicapped, disadvantaged, minority, and female students.

To enforce the educational laws of this country and at the same time avoid legal problems, state administrators must be knowledgeable about current legislation. Title IX of the Education Amendments of 1972 requires equal educational opportunities and employment in student programs and policies in educational institutions, regardless of sex. The Special Needs Law of 1975, Public Law 94-142, which becomes effective in September, 1978, requires a public education for all handicapped children. However, it is not enough to be knowledgeable of the laws, for if state administrators want to have credibility with educators in the state they must help devise methods to provide a data base for implementing new educational legislation that requires some operational changes.

State vocational administrators, although they possess advanced degrees, must continue to grow in their professional and managerial development if they are to help education adapt to changing societal and educational demands. They must up-date their competencies and retrain during their professional careers, as they are in a strategic position within education to provide the initial thrust of leadership--to be the advocacy group in effecting a meaningful change.

The present study was designed to investigate the professional and managerial development activities of state administrators who are establishing educational policies; setting priorities; directing, coordinating, and designing in-service activities; giving technical assistance to local educational agencies; and in general taking actions that have a profound effect on vocational-technical education in the states.

Conceptual Framework

Opportunity is a dynamic concept built into the structure of an organization. It refers to the expectations of present and future growth and mobility of the organization's members. The higher the opportunity factors, the more options for growth and mobility. Members who are high in opportunity factors have jobs with great variety and a meaningful range of activities, including various administrative functions. At the same time, employees use their creative talents and capabilities for self-direction and self-control, and jointly plan work objectives and schedules; they have opportunities to work in teams and project-management groups (Miles, 1975). They also have greater resources at their disposal than people who don't have opportunity, and are able to show enterprise and creativity (Jennings, 1967). Saline (1977) theorized that assignments which are important to professional development are those that "stretch your mind, that make you move out just a little farther in the acquisition and application of new knowledge, skills, and attitudes" (p. 5). Thompson (1967) proposed that performance requiring discretion is likely to

be noticeable; noticeability increases power, which in turn increases opportunity. Kanter and Jennings (1977, 1967) purported that members have to be extraordinary by being the first in a new position, by making organizational changes, or by taking major risks and succeeding. Rewards go to the innovators.

Management Training and Special Assignments

High opportunity factors go to members who are given many varieties of special attention, one of which is special professional or management-development training. Approaches vary from on-the-job in-service programs to off-site educational programs developed by or in conjunction with a prominent college or university and/or private business consultants. The substance of training includes supervisory methods, leadership styles, sensitivity training, or interpersonal interaction (Miles, 1975; McGregor, 1966; Leavitt, 1958; Argyris, 1964).

Special assignments or pet projects that focus on important issues and have department-wide significance are essential, according to Jennings (1967). Working on project teams as a member or manager, one gains a high degree of visibility and exposure of the lateral and vertical types. Jennings stated, "Today the greater part of managerial development is found in project performance rather than in position managing" (p. 57).

Sayles and Strauss' (1977) view of special assignments is that if they are to be successful as development tools, the problems assigned must cut across departmental lines and involve long-range

planning; the person must operate under the direct observation of top superiors who evaluate his/her performance; problems must be tough, challenging ones (p. 303).

Visibility and Exposure

Visibility and exposure are considered to be key elements in growth and mobility. Rosenberg (1977) described visibility as the need for members to be seen--to establish and expand visibility "(1) around the organization and the environment in which it operates, (2) within the organization itself, and (3) within the specific area of your assigned job" (p. 56).

Visibility in the environment means holding office in a professional organization, making speeches to community groups or outside organizations, and attending conferences and seminars. Upward visibility within the organization affords one the opportunity to see superiors at many levels, both vertically and laterally, whereas exposure provides the opportunity to be seen by superiors. The subjects' behaviors and the results of their performance are open to evaluation (Jennings, 1967).

Kanter (1977) suggested that the concept of visibility means:

For activities to enhance power, they have to be visible, to attract the notice of other people. Jobs that straddle the boundaries between organizational units or between the organization and its environment tend to have more noticeable activities . . . than those that are well within a unit. . . . It [is] also possible to gain visibility through participation on task forces or committees (p. 179).

Hennig and Jardim (1977) also addressed the idea of visibility in their book, The Managerial Woman. They stated:

Learn and move on. Act so that people will see you as having the ability to move on. Try to influence the people who can help you move on. Be needed by those people, become necessary to them. Try to identify what they want and don't want. Broaden your information base from what you need to do the job to include the people who can help you leave it (p. 41).

Management theorists are adamant that visibility and exposure are essential in the mobility and managerial development of an organization's members.

Significance of the Problem

Literature related to the professional and managerial development of state department of education administrators is limited. To date, the focus and concern have primarily been with the professional development of public school teachers. Since the roles of the two groups are very different, the literature could not be used in the current study. Therefore, it was necessary to take the issue to the field for further study and investigation.

This research topic was inspired by a study recently completed in the vocational division of a state department of education (Ferguson, 1977). More than half of the professional state staff personnel interviewed for that study mentioned the need for state administrators to be better trained in good managerial practices. In general, the group felt the human resources of the state staff were not being adequately used. Their staffs possessed a great deal of talent and professional experience that could be directed toward attaining the goals and objectives of the state department of education. However, because individuals were placed in administrative and supervisory

positions for which they had had no academic preparation, and once on the job received little in-service training, there was a lack of leadership at all levels. This situation resulted in a lack of staff commitment and wasted human resources. The staff members reported that a continuous in-service program is vital to maintain an effective organization.

State staff members appeared to be concerned not only about their superiors' in-service training, but their own as well. The general consensus of the group was a strong request for a planned in-service training program, which included the use of outside consulting firms that could help them solve some of their problems and also bring about better communication between and among groups.

In summary, it appears that the general feeling expressed is that there is a critical need in two areas: (1) state administrators need in-service training for management development capability and (2) all state staff members, including state administrators, need in-service training for professional development.

To be sure that the perceived need for in-service training was not an isolated issue, the researcher interviewed state department administrators at the 1977 national Association of Vocational Administrators (AVA) convention to determine whether they, too, felt there was a need in the aforementioned training areas, and if so, what their state leadership was doing about the problem.

An interview with the deputy director of field services in the Occupational Division of the Colorado State Department revealed they had a planned in-service program that included national speakers

and consultants in such areas as collective bargaining, management of conflict, and management by objectives. The Colorado state agency has instituted a program of state certification for state agency staff. As the deputy stated (December 1977),

They [state staff] need to understand that to maintain respect at the local levels, they must know the administrative system. Vocational education has lost credibility as it provides no ways to solve complex problems. The state staff needs to analyze the problems and then do something about them. Leadership has to set the stage for the rest of the staff.

The manager of special programs in the Illinois Vocational Division stated that his division has gone through an extensive external and internal management evaluation, which has resulted in a complete reorganization of the division. All units are now divided into management teams and function as consultants rather than as supervisors (AVA Convention, 1977).

According to the deputy director of the Vocational Division of the Indiana State Department, her agency has gone through a realignment of staff that has brought about new functions for staff members, who are organized into working teams. Task forces have been set up to improve program planning and evaluation (AVA Convention, 1977).

The program administrator for the Nebraska State Department, Vocational Division, stated that the state administrators in her division have attended Cleaver Institute in Princeton, New Jersey, for management training, to learn how to prepare profiles of staff

members so they can be placed in the right job to get maximum effectiveness from the management teams. According to the program administrator, the state leaders want to develop an organizational chart to help identify the individuals who can best do certain kinds of assignments and then build teams to carry out the functions of the division (AVA Convention, 1977).

In conclusion, some state vocational administrators have recognized and admitted there is a need for improved management practices, better use of human resources, and continuous in-service training for state staff. The present study examines these areas of concern. Included in the sample were administrative representatives from different geographical regions of the United States and from states of all sizes. The study describes the opportunities that are available for state department administrators' professional and managerial development. The descriptive research sheds light on the different aspects of the job in which opportunities might be experienced and the characteristics of the group receiving such opportunities.

The findings of the study will be made available to all who wish to provide professional and managerial development opportunities to their state administrative staffs. Study findings will provide information that can also be used to develop a model of a planned professional and management in-service program for state vocational administrators employed in the vocational division of state departments of education.

Delimitation of the Problem

The study examined the professional and management development opportunities that have existed for vocational state administrators the past two years. The review of literature focuses on current management theories concerning professional and executive development. No attempt is made to present the historical background of the establishment of state vocational administrative offices in state departments of education, nor will civil service or public administration be included in the review of literature.

Only individuals who are currently employed as first- or second-level administrators in the vocational division of state departments of education were included in the survey. The development opportunities included in the survey instrument were primarily high visibility-exposure items. No attempt was made to identify all possible opportunities for professional and managerial development.

Limitations of the Study

Survey research permits only the indirect measurement of behavior by examining either past or prospective behavior. Measures of prospective behavior can be either real or hypothetical and are considered to be somewhat less reliable than measures of past behavior. Nevertheless, measuring prospective behavior is still regarded as useful in the assessment of behavior (Babbie, 1973). Because the study includes both past and prospective behavior, the survey research method is somewhat of a limitation; however, Babbie considers it to be the best technique available.

State departments of education serve many of the same functions, are governed by the same federal legislation, and all U.S. Office of Education regions and state sizes are represented in the sample. Therefore, the results of the study are generalizable to the 50 state departments of education included on the U.S. Office of Education list of states and state vocational directors. The District of Columbia, Puerto Rico, American Samoa, the Virgin Islands, Guam, and the Trust Territory of the Pacific were not included in the study; hence the findings cannot be applied to those areas.

Basic Assumptions

The following assumptions underlie this study:

1. The opportunities made available to state vocational administrators can be ascertained through the perceptions of state administrators included in the sample.
2. Past and prospective behavior can be determined by a survey questionnaire instrument rather than by interview or other means of data collection.
3. All answers to survey instrument questions were accurately reported and substantially true. Validity depends on the extent to which the respondents provided honest, impartial, unbiased reactions to the survey.

Definition of Terms

The following terms are defined in the context in which they are used in the study.

Opportunity--The concept of an individual's amount of movement potential in terms of present and future prospects for growth and reward. In part, people relate to the present in terms of their expectations and prospects for the future. The structure of opportunity--of mobility and growth--is determined by such matters as access to challenge in the job position, visibility and exposure of the function, relevance of the function to current organizational problems, approval by high-status people, and increase in the development of skills and in rewards accrued. Other variables include the promotion rate from a particular job and the career paths opening from it, and the individual's prospects relative to others of his/her age and seniority (Kanter, 1977, p. 246).

Utilization of human resources--Using the full set of mental and physical resources available to the organization. The Human Resources Model (Miles, 1975) emphasizes the development and use of the full range of capabilities of organizational members. Outstanding performance is encouraged, rather than the control of substandard effort. The primary concern is to use effectively the full range of rewards for high levels of commitment and innovative contribution (Miles, 1975, p. 148).

Project teams--Staff members who work in various specialty areas and coordinate their skills to work on a particular project or

problem. Members are given the opportunity to use their full range of capabilities, including those outside their functional areas, in accomplishing the team's goals (Miles, 1975, p. 88).

Managerial development--The process of integrating organizational and human variables into an effective and efficient management system to achieve improved organizational performance. To achieve the goals of the state department, managerial-development activities must be provided to those who serve in administrative positions within the organization. These types of activities include: training programs conducted at various points in the administrator's career; systematic job rotation (or enlargement), involving changes in the nature of the functions performed; performance-appraisal programs, including various amounts of testing, general personality assessment, and counseling both within the organization and using outside consultants; special projects to facilitate growth; participation in special conferences and training programs, including professional association meetings, human relations workshops, dynamics of change and intervention strategies seminars, and advanced management programs conducted in university institutes (Schein, 1961).

Professional development--A continual process by which an administrator has the opportunity to participate in renewal and updating activities to increase knowledge, improve skills, or change attitudes in the field of education. Such areas of concern might include, but not be limited to, current developments in state-wide planning and evaluation methods, changes in curriculum strategies

and guidance and counseling focuses, meeting the needs of disadvantaged and handicapped students, increased options in delivery systems, elimination of sex-biased and discriminatory vocational programs, and state and federal legislation.

State staff in-service program--An organized effort on the part of the state department to provide state administrators and staff with updating and renewal activities to increase knowledge, improve skills, and change attitudes so that the goals and objectives of the annual and long-range state plan might be achieved.

State administrators--An all-inclusive term designating both first- and second-level administrators. A first-level administrator is likely to have one of the following titles: assistant, associate, or deputy director or commissioner; assistant or associate superintendent; chief or assistant chief; or manager. This individual reports directly to the state director, assistant superintendent, or similar individual. A second-level administrator is likely to be a supervisor, director, or coordinator in charge of a program area, a supportive service area, or a planning and development area. This individual officially reports to an administrator who, in turn, reports to the state director, assistant superintendent, or similar individual.

Visibility--A factor identified by management authorities as contributing to administrators' professional and managerial development. Visibility may be defined as the frequency with which a subordinate administrator, because of certain assignments or tasks, special projects or committees, can view superior administrators, both laterally and vertically.

Exposure--The frequency with which the subordinate administrator, because of demonstrated behavior and performance on assigned tasks, committees, or special projects, is viewed by superior administrators. The terms exposure and visibility can also be applied to contacts outside the state department and to any administrator who is in a position to hire, promote, or act as a sponsor or mentor to the subordinate administrator.

Geographic regions--The ten areas in the United States established as regions by the U.S. Department of Health, Education and Welfare, Office of Education.

Overview of the Study

The study is presented in five chapters. Chapter I includes the statement of the problem, the purpose of the study, and the research questions. Following these are the background of the problem and the conceptual framework. A section is included on the problem significance, limitations, and key terms.

Chapter II is a survey of the literature on professional and management development, including meaning of terms, the need for professional and management development, and theories and methods of executive and management development.

In Chapter III the research methodology and the design of the study are explained. Included are an explanation of the sample selection techniques, a description of the survey instrument used for data gathering, and a discussion of the statistical analyses used in the study.

Chapter IV contains the results of the data collected from the survey instruments.

Presented in Chapter V are the findings, conclusions, and implications of the study, and suggestions for future research.

CHAPTER II

REVIEW OF RELATED LITERATURE

Presented in this chapter is a synthesis of the literature and research considered related and relevant to theories on professional and management development. The selected topics considered to be important in the development of this study are: (1) the meaning of professional and management development, (2) factors that contribute to the need for professional and management development, and (3) theories and methods of executive and management development.

The Meaning of Professional and Management Development

A review of the literature revealed that professional and management development has various meanings. Many management theorists view the term broadly as a process that determines one's state of readiness to be and to become, or "to be everything that one is capable of becoming" (Maslow, 1954, p. 46). Saline (1977) defined the concept as the capability of an individual to perform socially, academically and professionally; to develop high self-esteem; and to prepare for future growth by increasing knowledge, skills, and attitudes (p. 3). The theory emphasizes that growth comes primarily from within the individual if real opportunity is

presented, and takes place both within and outside the confines of the job.

Other scholars and practitioners have defined management in more systematic terms as a "planned effort on the part of the organization to improve managerial performance by imparting information, increasing skills, conditioning attitudes, and broadening perspectives" (Pomerleau, 1974, p. 23). The present study is concerned primarily with the opportunities that management provides, both in and outside the job assignment, in the way of a planned professional and management development program.

The terms "training," "education," and "development" are often confused in management literature. Yoder (1970) stated that business firms and public service agencies tend to use the terms as though they were synonymous, offering training opportunities for all types of personnel and including all levels of management. Yoder, like most of the management theorists, tended to distinguish between the terms. He traced the earlier practices of training and development programs to help explain how the meanings came into existence. The initial training programs emphasized learning knowledges and skills required for lower-level employees to perform satisfactorily on a specific job. As the need increased for managers to develop more supervisory training abilities, special training programs came into existence. Eventually, special development programs were extended to top executives. Then university management programs sprang into existence, offering summer-on-campus management development

programs. Thus, the concept "development" came into being, which was meant to provide a more in-depth learning experience, to increase capabilities, to enlarge understanding, and to modify behavior.

The objective of training and development programs today includes not only an opportunity to learn skills, but also the opportunity to discover and cultivate basic aptitudes and to facilitate personal growth. The emphasis is on development as a process; training and education become a part of this process. Training helps one acquire specific skills and techniques that are directly related to work performance, whereas education "seeks to prepare individuals for a future, but identifiable, career position within an agency" (Pomerleau, 1974, p. 24).

Others view the difference between development and training as being the subject matter. Development focuses on the improvement of decision-making and human relations skills of middle and upper levels of management; training involves lower-level employees and the presentation of more factual, narrow subject matter (Wexley & Yukl, 1977).

In general, theorists view management development as encompassing formal schooling, on-the-job training, or promotions; it may be as remote as theoretical psychology. Management development may cover all of the managerial functions, some of them, or only certain aspects of them; it may be given to individuals or groups within or outside of the firm.

Factors That Contribute to the Need for Development

The increased importance of effective professional and management development has arisen from some basic assumptions about today's environment, organizations, and the professionals who work in organizations. The overall concern is to achieve maximum organizational effectiveness and at the same time a humanized work environment with an improved quality of work life (McGregor, 1960; Bennis, 1966; Bailyn & Schein, 1976; Katz, 1977).

Changing Environments

A central assumption about today's organizations is that administrators must function in a turbulent environment and have the necessary skills to cope constructively with and adapt to change, for that is a part of our future. Factors that add to the problem of management development are multiplied, because of environmental uncertainty. Rapid change causes learned knowledges and skills quickly to become obsolete; thus administrators must continue to grow and to develop as the nature of their jobs changes (Beatty & Morgan, 1975; Schein, 1977).

The management development process needs to foster in administrators a receptiveness to change so as to accommodate the changing laws, policies, and technologies, and to cope more effectively within the unpredictable environment (Pigors, Myers, & Malm, 1964; Pomerleau, 1974). Managers need to broaden their perspectives, to study the interrelationships between an organization and its environments, and to develop a better understanding of the political, economic, and

social circumstances affecting each individual and consequently all organizations. This part of the developmental process attempts to expand the manager's views, attitudes, and understandings beyond the functional and organizational limits (Odiorne, 1965; Pigors et al., 1974; Sayles & Strauss, 1977).

As organizations must function in more complex political, economic, and social environments, they are forced to depend more and more upon the competency of their human resources (Yoder, 1970; Miles, 1975; Schein, 1977). No longer can decisions be made by just one individual, for that one individual cannot digest enough information to be the "integrator and decision maker" (Schein, 1977, p. 2). Instead, the individual must

. . . manage the process of decision making, bringing the right people together around the right questions or problems, stimulating open discussion, insuring that all relevant information surfaces and is critically assessed, managing the ups and downs . . . and insuring that out of all this human and interpersonal process, a good decision will result (Schein, 1977, pp. 3-4).

Managers of the future will have to become much more skilled in training subordinates, running meetings and groups of all sorts, dealing with conflict, influencing and negotiating from a low power base, and integrating efforts of very diverse technical specialists (Miles, 1975; Schein, 1977; Maccoby, 1976).

Gellerman (1968) agreed that the manager's job must be changed drastically. He concluded that in many organizations today there is a lack of sufficient decision-making authority and responsibilities in jobs held by people who could respond to such powers

with much energy and commitment. Upper management unnecessarily monopolizes decision-making power.

Changing Social Values

The second central assumption about today's organizations is that the changing social values of people in general, because of the increased educational level of a large segment of the population and changed attitudes and aspirations toward the work role, will have a profound effect on the management of human resources (Gellerman, 1968; Odiorne, 1965; Swope, 1970).

Silverman and Heming (1975) theorized that the "organization man" of the 1950's, who sold his mind and soul to the organization, is a thing of the past. The replacement is a "professional person," who is the best prepared, most highly educated individual any society has produced. The authors described the professional person as being motivated by competency and personal growth. Commitment and loyalty belong first to the profession and second to the organization. The professional person needs achievement, recognition, and responsibility, and desires work that is decentralized in organizational units, such as temporary task teams (which cut across functional and departmental lines), temporary work assignments, and other ad hoc groups. This professional person believes all organizational members have something to contribute and that they should have a voice in decision making and in planning and carrying out policies and plans. This professional wants to be involved in the establishment of creative objectives. The work environment must provide the

opportunity to determine one's own work effectiveness areas and standards. Silverman and Heming (1975) made the following statement about the professional person:

The Professional Person has launched a quiet revolution to gradually change the face of organizations. When armed with sensitivity, management skills and style flexibility, the Professional Person fulfills the measurable time-found output requirements of his position without relinquishing his personality. And that has made all the difference (p. 148).

Maccoby (1976) described the new executive as a "gamesman" in his book, The Gamesman: The New Corporate Leaders. His research findings were a result of intensive interviews conducted over a six-year period with 250 business managers from 12 major American companies involved in high technology. He wrote that the gamesman is the most successful of the executives at making the organization function effectively. Maccoby described the gamesman as thriving on innovation, seeing his work as a challenging game, and working best on highly interdependent teams that make up the organization. The individual possesses the flexibility and daring to take big risks at the right times. He believes everyone should be allowed to play the game; therefore neither race, sex, religion, nor any other personal characteristic has a bearing on team membership.

A recent national survey, directed by Yankelovich and Clark (1974), reported that students and women have changed their definitions of success. The researchers concluded that the focus of success is on self-fulfillment, for "the emphasis is on the self that cries out for expression and demands satisfaction" (p. 31). Data collected in the study, which was conducted among a national

cross-section of college students between 1967 and 1973, suggested that college students are searching for new work values and they desire a career that provides challenge and self-fulfillment.

The researchers noted that cultural change has, perhaps, had the greatest impact on women. The idea of women working, not only for economic reasons but for self-fulfillment as well, has gained acceptance, and women's attitudes toward work are demonstrating a "new faith" toward employment and careers. The social movements of the 1960's pushed the enactment of new regulations and laws--most notably Title VII of the Civil Rights Act of 1964, the Equal Pay Act of 1963, and Title IX of the Education Amendments of 1972. The passage of these laws has encouraged women to enter or return to the work force.

Yankelovich and Clark (1974) proposed that:

The values that young people and women take to work with them will eventually spread to the rest of the work force. . . . There will be far more stress on the quality of working life (p. 87).

Young and old, women and men, blacks and whites will all demand the right to independence and autonomy; more stress will be placed on work that is meaningful and psychologically fulfilling.

As women and minorities are demanding their rights for equal employment opportunities, management officials, according to Burack (1975), are faced with new kinds of manpower problems. In his book on changing values, Burack stated that these social changes will have the following effects: seniority will come to mean less, the locus of decision making will be altered, and relationships among

workers and supervisors will become more collegial. Managers at all support levels will need increased training, education, and skills. However, increased academic preparation will bring about improved management capabilities and a movement toward more professional standards (Yoder, 1970; McGregor, 1967; Swope, 1970; Burack, 1975; Schein, 1977).

Hennig and Jardim (1977) viewed the implementation of equal opportunity to be a line management issue. Implementation requires that top management create and institute a corporate policy, for whose successful implementation all managers will be held responsible. At the present time, middle managers are undertrained for these new responsibilities. They need professional and management development in this area.

Kanter (1977) stated that public policy has a legitimate interest in the inner order of the organization, particularly when the operation of power and authority determines who has access to opportunity. She continued:

Employment practices that enhance individual welfare and the quality of work life should not be private decisions based on the voluntary goodwill or noblesse oblige of employers but rather a question of vital social concern to those outside the enterprise. Such issues move far beyond the existing body of labor law (which tends to treat individual "corporate citizens" only in their capacity as group members) to a radically different view of the purposes and practices of organizations and the role of legal intervention in internal affairs (p. 10).

Schein (1965) presented the results of a longitudinal research study he conducted on Sloan School graduates of the 1960's. He concluded that organizations must develop multiple career ladders and

multiple reward systems to accommodate and motivate people who hold different value systems. He suggested that the traditional success syndrome of "climbing the corporate ladder" will no longer be applicable to all people. Schein stated that people see more options open for themselves and demonstrate a desire for more balanced lives of work, family, and self-development.

Theories on Management Development

The difficulty in surveying the literature stems from the fact that there are so many approaches and methodologies concerning how best to develop managers. The theories range from placing an individual in the organization and leaving the rest to chance, to a well-designed management program that provides for planned developmental experiences (McGregor, 1960; Swope, 1970).

At one time it was thought that "the cream will rise to the top" in an organization, if left to the everyday course of events. Management theorists today agree that no organization can afford to leave the professional and management development of its administrative talent to chance. Operating an organization in today's environment is much too complex for that. Increased knowledge about organizations and the psychology of human behavior has contributed tremendously to the development of managerial competency and to the ultimate effectiveness of the organization (Swope, 1970).

McGregor (1960) designed some alternative approaches to management development in the early 1960's, on which Gellerman later enlarged. McGregor introduced what were termed (1) the manufacturing

approach and (2) the agricultural approach. Under the manufacturing philosophy of management development, the organization is directed and controlled by top management, with little or no career goal input from the individual. According to this view, whatever is good for the organization is good for the individual. The second approach is concerned with nurturing talent rather than "fabricating it." The basis of the agricultural approach is that the individual will grow to what he/she is capable of becoming if the environment is conducive to learning and growing.

Gellerman (1968) introduced three management theories:

(1) the jungle theory, (2) the education theory, and (3) the agricultural theory. When organizational requirements were modest, the jungle theory sufficed. Today, however, it is not an adequate method for training managers. The economics of the situation have changed, and the demand for talent has become greater. To wait for talent to emerge is a waste of precious resources. The education theory has become recognized as a means to overcome the inadequacies of the jungle theory. This approach is based on the view that all management development consists of skills that can be taught, or encouraged to surface, through an educational program. The educational program should be repeated on a regular basis and the course content should continually change. The training should take place away from the job and be devoted exclusively to enlarging competence.

The agricultural theory, as explained by both Gellerman (1968) and McGregor (1960), supports the approach that the major

growth factor takes place in the job environment; therefore, the job should be so structured as to include the four crucial factors of stretching, feedback, coaching, and career management.

A growth-inducing job environment should include responsibilities in the job assignment that are sufficiently challenging to cause mind stretching; such an environment would include feedback on performance appraisal, information on career prospects, and coaching or counseling (McGregor, 1960; Gellerman, 1968; Schein, 1965).

Management theorists tend to agree that opportunity for professional and management development takes place primarily on the job (McGregor, 1960; Bennis, 1966; Schein, 1965; Kirkpatrick, 1971).

As McGregor (1960) stated,

Managerial competence is created on the job, not in the classroom. However, classroom education can be used as a powerful aid to the process of management development, providing there is sufficient understanding of the different kinds of learning which are involved and of the different methods and strategies that are appropriate to these (p. 225).

Saline (1977) suggested that the work assignment should constitute 80 percent of the professional and management development process. Work assignments must challenge, stretch the mind, and make the individual move out a little further to acquire and apply new knowledge, skills, and attitudes. A good work climate facilitates and encourages learning and results in professional and management development. The basic factors include the kind of work an individual is assigned or not assigned, the kinds of rewards an individual is given or not given, the kind of information shared or

not shared with the individual, and how the manager distributes compensation.

Miles (1975) and other supporters of the human resource theory have claimed that management must not only provide fair pay and treatment but must go a step further:

In the interest of organizational performance, management must design jobs, structures, and processes in which individuals can fulfill their needs to develop and expand their abilities. Thus, they argue that work is not inherently distasteful; what is distasteful is a set of tasks so limited as to inhibit growth and development (p. 42).

Today's highly educated work force has put increased stress and demands on organizations to design jobs that allow for full use of organizational members' creative talents and capabilities. The premise of the human resources theory is that members have great potential for growth and that they are important untapped resources; therefore, the role of top management, rather than to control its members, is to develop and facilitate their growth and performance (Miles, 1975).

Insufficient challenge is a major problem affecting development and growth. The individual must learn as much as possible from the on-the-job experience. The job must have challenge built into it, by extending the range of responsibility--a form of growth and enrichment. Gellerman (1968) recommended the following:

Technological change, organizational growth and normal promotions absorb some volume of changes and are a source of new assignments. However, it may be necessary to move people about just for the sake of moving them so as to provide challenge in their work and keep them productive and growing (p. 270).

To experience more challenge in the job, organizational members should participate in decisions related to their work, exercise self-direction and self-control, and be involved in important issues concerning how and by whom departmental tasks would be done. Upper management would provide a substantial amount of training and development covering a wide range of tasks and activities. The individual would have the opportunity continually to upgrade and expand competencies in planning, scheduling, and directing departmental activities and to pursue a course of constant growth and development (Miles, 1975).

Basic Issues to Be Addressed

Before moving to the discussion of methods or approaches to professional and management development, certain basic controversial questions should be addressed. First is the question of whether to develop generalists, with broad points of view, or specialists, who have a functional orientation. A dilemma exists when specialists are hired at the lower organizational levels and are rewarded for good performance by advancement, whereas generalists are required at the higher levels. What should be done with the overabundance of specialists, and where do the generalists come from (Sayles & Strauss, 1977)?

According to Swope (1970), the anomaly of overspecialization is that specialization does not constitute proper training for administrative responsibilities. "A system that develops specialists while demanding more highly skilled generalists is inadequate"

(p. 311). A balance between generalization and specialization is needed. Swope's position is that an administrator needs managerial ability, with a broadened experience to administer complex organizations, and training in "multifunctional development as opposed to single-functional specialization" (p. 311).

Odiorne (1965) took the position that the modern manager must be more of a generalist than in the past, because the problems that are faced go beyond any specialty. The individual who manages needs to be adaptable, flexible, and able to solve complex problems. The trend is toward a sophisticated manager, one who is highly knowledgeable and professional. Managers and administrators of the future will be required to have the minimum of a master's degree; in some instances a Ph.D. will be necessary. Not only will more educational degrees be specified, but a combination of educational disciplines will become essential to the development of executive competence (Odiorne, 1965).

Is the system open or closed? What kind of a choice does an individual have in regard to job placement or the kinds of training or developmental opportunities? What options does an individual have when caught in an unrewarding, dead-end job? An open system publicizes job openings and training opportunities and allows individuals to compete for them (Kanter, 1977; Sayles & Strauss, 1977). This option provides everyone an opportunity for both lateral and vertical movement.

Who should be developed--just those with so-called special promise, or everyone? In earlier years, those who were thought to

be capable of moving to top-management jobs were singled out, given special training away from the job, often at universities, and marked for rapid promotion. This type of practice led to much resentment among those not selected, as the promotions were based on "vague character traits instead of on proven performance" (Sayles & Strauss, 1977, p. 290).

The recent trend has been to provide a wide range of programs for all managers, not just selected individuals, to encourage better job performance and at the same time to provide special training for individuals who show promise for advancement. The trend has been to provide an open system to allow individuals to design their own "custom-made developmental program" (Sayles & Strauss, 1977, p. 290). Another successful tool has been performance evaluation involving the superior and the subordinate. The evaluation is used to plan the individual's development program.

Organizational success is based on a continued in-flow of highly talented new managers. Yet experience shows that 50 percent of new hirees leave their jobs in their first five years, and the ones who leave are, on the average, as valuable as those who stay (Sayles & Strauss, 1977). When the turnover rate exceeds 50 percent, initiation is ineffective and is most likely to produce conformists, as innovators move on (Sayles & Strauss, 1977). The turnover results from the clash between what new hirees expect and the actual opportunities the job offers them for challenging, meaningful assignments. Some organizations have devised methods for making the initial period smoother, such as executive training programs that

include a general orientation to the organization, its policies, and frequent performance evaluations (Sayles & Strauss, 1977). Other initiation devices are on-the-job training, interspersed with classes, seminars, and discussion groups.

Evidence has shown that when an organization sets high levels of expectations for its new managers, the managers tend to meet them. Likewise, when low expectation levels are set, these expectations are also met (Sayles & Strauss, 1977). A self-fulfilling prophecy is at work!

At approximately 45 years of age, a large proportion of managers reach their peak. Sayles and Strauss (1977) termed this period "peaking out" and defined it as a time when one merely stays on his/her present job indefinitely, moves laterally to a lesser position, is demoted, fired, or retires. Jennings (1971) called this period shelf-sitting and the person who does the sitting a shelf-sitter. Managers who fit this description respond to the condition in one of two ways. They are dissatisfied with being placed in this position and are prone to be "overly aggressive to get off the shelf." They become active in negative, unconstructive ways; eventually they are labeled antagonists. Others never really give up. They have experienced visibility and never given up their hope of moving higher in the organization. Some refuse to accept the messages that mean a "loss of mobility, namely the decreasing amount of exposure, visibility, challenging assignments, and opportunities to evaluate and nominate" (Jennings, 1971, p. 286). These people are rarely forced to take a promotion or to extend themselves. The

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shelf-sitter can become marginally effective, but it's up to the superior to encourage the individual to do good work. As Jennings stated, "The motivation to do a good job is related to the motivation to go higher. It is difficult to increase one without the other" (p. 291). These individuals, even though they will not be promoted, should also have broadening assignments and training programs so as to prevent obsolescence and to help improve their performance on the job (Sayles & Strauss, 1977).

Methods or Approaches to Development

Job rotation is a system by which administrators are rotated periodically from one assignment to another and across functional lines, both to provide competence demanded by the assignment and to prepare for the future. This experience provides an opportunity to broaden perspectives and to learn where the individual's talents and interests lie (Koontz & O'Donnell, 1964; Bass & Vaughan, 1965; Swope, 1970; Sayles & Strauss, 1977). Rotation of assignments also reduces the opportunity gap between high-mobility and low-mobility jobs (Kanter, 1977). Job rotation is an excellent way to develop a strong, flexible management group. It is most effective in large organizations and only when long-range planning takes place (Swope, 1970; Sayles & Strauss, 1977).

Using project management teams is a strategy that involves creating temporary teams to perform certain tasks. These teams cut across functional and departmental lines, and tend to exist for short-term periods. The experience gives individuals an opportunity

to make lateral moves and to be involved in challenging projects with new fields to master. Project management is a major trend today, as most executives have had such experience some time in their careers. Performing on a project team gives high visibility and exposure and high status to one's position (Kanter, 1977; Jennings, 1971).

Special project assignments, like the others, are made on an individual basis. Another term used is "task force." This method is usually a crash program method of solving a current problem and developing management in the process. The assignment is usually full time, and during that time the individual is relieved of regular responsibilities. The special project team customarily is given authority to cut across organizational lines, and administrators in other departments or units are usually instructed to cooperate in this special project, which has top priority. Individuals who have the opportunity to participate in special projects come away from the experience with a broad knowledge of the organization's activities. This type of experience entails high opportunity for visibility and exposure and brings about maximum development in managers.

Special assignments are similar to special projects, except that the assignment is extended for a longer period of time. It provides an opportunity to serve on a committee investigating an issue or a current problem, and to develop some appreciation of higher-level management's attitudes and aims, as well as to be appraised by upper management. The individual may be promoted at

the conclusion of that special assignment and never return to his/her former responsibilities (Bass & Vaughan, 1965; Swope, 1970).

The committee system provides an opportunity for administrators to serve on committees that consider broader questions than their everyday routine would provide. Such experience provides individuals an opportunity to solve problems of a general nature and of a higher level than those with which they are ordinarily involved in their regular jobs. Used properly, committee experience can contribute greatly to the development of management growth.

The use of project teams, special projects, special assignments, and committees has given executives at all levels greater opportunity to "express themselves, engage in the influence processes, defend and advance their projects and performance" (Jennings, 1971, p. 168). The opportunity to communicate enhances learning and development and greatly increases the chances of being sponsored.

Internships are formalized coaching circumstances in which an individual is assigned a clearly designated set of duties and objectives. The superior works with the individual to improve performance, reviewing shortcomings and strong points (Bass & Vaughan, 1965).

Management educational programs may be carried on by the organization itself in the form of schools, seminars, conferences, and meetings. Opportunities may be provided outside the organization for consultants and facilities, or a combination of the two (Swope, 1970). Universities offer organized management development

conferences and programs. Such programs provide exposure to management principles, recent developments in management information systems and analytical models, new theories including contributions in the behavioral sciences, and the influence of continuing changes in the environment. Consultants are available to assist organizations with current problems (Yoder, 1970). Private consultant firms also provide educational opportunities through workshops, seminars, and special consultations.

Conferences provide an opportunity to acquire understanding of conceptual data and to develop or modify attitudes. This method of development should involve a carefully planned meeting with specific purposes and goals.

Summary

The strength of any organization depends largely on its management; to remain strong it must work to develop its human resources. The present thinking is that top management must provide an orderly system of professional and management development, one that gives everyone an equal opportunity for training experience and job advancement. To prosper and grow, talented individuals need tough challenges. They need custom-made development programs planned cooperatively with top management, which take into consideration the individual's needs and aspirations as well as those of the organization (Sayles & Strauss, 1977).

CHAPTER III

RESEARCH METHODOLOGY AND DESIGN OF THE STUDY

The intent of the study was to describe state administrators' opportunities for professional and managerial development. The abstract concept of opportunity had to be reduced to specific, understandable terms. Exploratory questions were devised to put the concept into operational terms, to support the question of whether opportunities for professional and managerial development do indeed exist. Babbie (1973) supported this approach:

Whether working from a rigorously deduced theory or from a set of tentative suspicions or curiosities, the researcher at some point is faced with a set of unspecified, abstract concepts that he believes will assist his understanding of the world around him. In survey research, these concepts must be converted into questions in a questionnaire, thus permitting the collection of empirical data relevant to analysis (p. 131).

Behavioral indicants were then specified to support each of the exploratory questions. Determining the behavioral indicants required a total immersion in the day-to-day experience of state administrators as they function in their job assignments and an examination of the growth opportunities they experience indirectly as a result of the position they hold.

As a standard with which to measure the quantity and quality of the opportunities experienced, a complete list of activities was

developed: those that take place in the job assignment or are directly related to the position and are development in nature and those that take place outside the job experience but are supported in some way by the state department. Once an extensive list of opportunities was developed, it was necessary to focus on key items of the study--those opportunities that have high visibility and exposure and/or are developmental in nature. Further delineation and categorization of the items provided a more manageable list with which to work. Behavioral indicants were selected for each of the seven exploratory questions.

The sources used to gather information and gain knowledge to develop the survey instrument were personal experience, a previous research study experience, personal interviews, and a review of literature, which included a Datrix search, two ERIC searches, and a hand search.

The research study was developed as a result of a four-month internship in the vocational division of a state department of education. That period of observation and work experience provided an opportunity to learn the internal workings of a state department organization and to view administrators of different levels as they functioned in their job assignments. At the same time, involvement in a research study provided an opportunity to interview one-third of the staff members about their perceptions of state department work. These personal experiences provided the framework for the design of a comprehensive list that would be used as a standard by

which to appraise the state administrators' opportunities for professional and managerial development.

Literature reviewed dealt with state department administrators' responsibilities and duties, management theories, and empirical research on executive development. These materials contributed to the design of the instrument and the conceptual framework of the study.

The Survey Instrument

The survey instrument was divided into three major parts. Part I was intended to elicit information pertaining to state-staff-planned in-service programs and the respondent's demographic data. Part II listed possible professional and managerial development activities--opportunities for professional growth--falling into six categories:

1. On-the-Job Assignment
2. Development of Communication Skills
3. Visibility and Exposure
4. Outside Development Training
5. Professional Association Activities
6. Mobility and Job Promotions

Respondents were requested to answer each question in two ways: (1) whether they had had the opportunity to experience the activity and (2) whether they had a desire to have this experience.

A two-pronged scale was decided on after much study and consultation. To answer the question "I have had the opportunity to . . . ," the respondent was to answer with one of three options--several times, once, or never--under the heading Experience. Then

the respondent was to reread the question as "I would like to have the opportunity to." The heading for the second part of the question was "Desire," and the respondent was to check yes, uncertain, or no. Respondents were reminded that they should have two checks for each item.

Part III contained four open-ended questions requesting: (1) state department experience that had greatly contributed to professional and managerial growth, (2) innovative steps taken by the state department to improve management practices, (3) suggestions for the improvement of professional and managerial growth opportunities, and (4) an evaluation of the areas in which the respondent felt a need for more adequate preparation so as to carry out the goals of the annual and long-range state plan.

Population

The study population included administrators in vocational divisions of state departments of education throughout the United States. A U.S. Office of Education list of the 50 states and state directors' names was used to request from the state departments a professional state staff personnel roster and an organizational chart. The staff roster and organizational chart facilitated identification of the sample of state administrators to be included in the research.

Sample

A stratified random sample of states was selected from each of the ten U.S. Office of Education regions. Forty percent of the

total number of states in each region were randomly selected for inclusion in the study. All state administrators from the vocational division of the state departments of those randomly selected states were included in the research. State administrators included in the survey sample were identified according to their hierarchical placement on the organizational chart and/or their administrative title. Table 1 identifies the 10 USOE regions, the states included in each region, the 20 states randomly selected from a stratified sample, and the number of state administrators from each state department who were included in the survey.

Table 2 exhibits the responses by United States Office of Education region. Responses were received from all 20 of the states randomly selected from the stratified sample; however, the rates varied from a low of 51.4 percent to a high of 90.9 percent and 100 percent, with an overall return of 72.2 percent. The total number of questionnaires returned was 275; 17 were not usable because four administrators had worked less than one year, two had retired, one had resigned, and ten questionnaires were either incomplete or incorrectly filled out. Table 3 (page 47) summarizes the administrators' responses by state size according to student enrollment figures of 14 to 17 year olds.

Data Collection

A mail survey was selected as the best data-collection approach for this study because it allows for a sizable number to be included in the sample, to generalize to a large population, and at

Table 1.--Population and sample distribution of vocational divisions in state departments of education, by U.S. Office of Education region.

Region	Population	States	Sample
<u>REGION I</u> --Connecticut, Maine, Massachusetts, New Hampshire, Vermont, Rhode Island	6	Connecticut Vermont	29 9
<u>REGION II</u> --New York, New Jersey	2	New Jersey	35
<u>REGION III</u> --Delaware, Maryland, Pennsylvania, Virginia, West Virginia	5	Delaware Virginia	10 11
<u>REGION IV</u> --Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee	8	Mississippi Tennessee Georgia	24 23 20
<u>REGION V</u> --Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin	6	Minnesota Illinois	35 19
<u>REGION VI</u> --Arkansas, Louisiana, New Mexico, Oklahoma, Texas	5	Arkansas New Mexico	19 14
<u>REGION VII</u> --Iowa, Kansas, Missouri, Nebraska	4	Iowa Nebraska	20 13
<u>REGION VIII</u> --Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming	6	Utah Colorado	19 22
<u>REGION IX</u> --Arizona, California, Hawaii, Nevada	4	Arizona California	11 17
<u>REGION X</u> --Alaska, Idaho, Oregon, Washington	4	Idaho Washington	14 17
Total	50		381

Table 2.--Responses by United States Office of Education region.

Region	Responses	Not Usable	Percent	No Response	Percent	Total
REGION I						
Connecticut	19	1 ^a	65.5	10	34.4	29
Vermont	6		66.6	3	33.3	9
REGION II						
New Jersey	29	2 ^a	82.9	6	17.1	35
REGION III						
Delaware	6	1 ^b	60.0	4	40.0	10
Virginia	10	1 ^a /1 ^b	90.9	1	9.1	11
REGION IV						
Mississippi	15	1 ^d /2 ^c	62.5	9	37.5	24
Tennessee	15	1 ^a /1 ^b	65.2	8	34.8	23
Georgia	13		65.0	7	35.0	20
REGION V						
Minnesota	18	1 ^a /1 ^b	51.4	17	48.6	35
Illinois	14		73.7	5	26.3	19
REGION VI						
Arkansas	16		84.2	3	15.8	19
New Mexico	12	2 ^a	85.7	2	14.3	14
REGION VII						
Iowa	14	1 ^a	70.0	6	30.0	20
Nebraska	13		100.0	0	--	13
REGION VIII						
Utah	14	1 ^a	73.7	5	26.3	19
Colorado	14		63.6	8	36.4	22
REGION IX						
Arizona	9		81.8	2	18.2	11
California	15		88.2	2	11.8	17
REGION X						
Idaho	9		64.3	5	35.7	14
Washington	14		82.4	3	17.6	17
Total	275 (72.2%)	17 (4.5%)		106 (27.8%)		381 (100%)

^aQuestionnaire incomplete.^bNew employee.^cRetired.^dResigned.

Table 3.--Response by state size by student enrollment of 14-17 year olds.

	Responses	Percent	No Response	Percent	Total
<u>SMALL (Less than 150,000)</u> Delaware, Idaho, Nebraska, New Mexico, Utah, Vermont	60	75.9	19	24.0	79
<u>MEDIUM (150,000-299,999)</u> Arizona, Arkansas, Colorado Connecticut, Iowa, Mississippi	87	69.6	38	30.4	125
<u>LARGE (300,000-499,999)</u> Georgia, Minnesota, Tennessee, Virginia, Washington	70	66.0	36	34.0	106
<u>EXTRA-LARGE (500,000 or more)</u> New Jersey Illinois California	58	81.7	13	18.3	71
Total	275 (72.2%)		106 (27.8%)		381 (100%)

Source: U.S. Department of Health, Education and Welfare, National Center for Educational Statistics, Statistics of State School Systems, 1973-74 (Washington, D.C.: Government Printing Office, 1976).

the same time is less expensive than other methods. It also allows for greater use of rating scales and checklists and is considered by authorities to be less time consuming and more manageable than other methods (Warwick, 1975).

Use of stamped, addressed return envelopes has proven to be an effective data-collection device; also, good returns result from questionnaires sent out by first-class mail and packaged with a personally typed letter (Babbie, 1973). These devices were used in the current study. In addition, a two-week deadline date, a follow-up questionnaire, and a survey instrument printed on green paper were used to encourage a higher response rate.

Data Analysis

Analysis of variance was selected as the technique of statistical analysis to measure opportunities for professional and managerial development. Each of the six opportunity areas--on-the-job assignment, communication skill, visibility and exposure, outside training development, professional association activities, and mobility--was assigned a weighted average of 3, 2, or 1 for experience, and the same for desire. The scores were computed for actual experience and for desired opportunity. A scale for experience and desire was set to determine the level of experience or desire, from zero to high. The following mean scores indicate low to high experience and desire: 1.0-1.5--No Experience, No Desire; 1.6-2.0--Low Experience, Low Desire; 2.1-2.5--Average Experience,

Some Desire; 2.6-3.0--High Experience, High Desire. Then, to determine the desire for a change in opportunity for each professional and management development area, a mean score was computed for the difference between desire and experience.

Each of the 18 dependent variables was compared with the independent variables of state size, sex, age, administrative level, vocational-specialty area, and state department experience.

An analysis of variance was conducted to test for differences between groups, with $\alpha = .05$ set as the critical value for all statistical tests. When the F-value was statistically significant and the independent variable comprised three or more groups, a multiple comparison procedure--the Least Significant Differences post-hoc test--was applied. This follow-up procedure tested whether the groups differed significantly, and if so, which groups (Kirk, 1968).

Frequencies and percentages were calculated for Part I of the questionnaire. To determine differences in responses by subpopulations, the crosstabs and breakdown procedures were employed using the Statistical Package for the Social Sciences program for Items 1 through 19.

The data were keypunched onto IBM cards and processed using the computer facilities at Michigan State University. The Statistical Package for the Social Sciences was used to program, compute, and summarize the data.

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Instrument Reliability

As part II of the survey questionnaire was the primary source for the analysis of the research data, the Cronbach Alpha computed the reliability to determine internal consistency of the administrators' responses on experience and desire for each of the six subscales of professional and management development.

The Cronbach Alpha reliability coefficients for each of the six subscales for both experience and desire are as follows:

<u>Subscale</u>	<u>Reliability Coefficients Alpha</u>
On-the-Job Assignment, Experience	.80
On-the-Job Assignment, Desire	.87
Development of Communication Skills, Experience	.75
Development of Communication Skills, Desire	.88
Visibility and Exposure, Experience	.81
Visibility and Exposure, Desire	.89
Outside Training and Development, Experience	.72
Outside Training and Development, Desire	.80
Professional Association Activities, Experience	.83
Professional Association Activities, Desire	.88
Mobility and Job Advancement, Experience	.70
Mobility and Job Advancement, Desire	.70

CHAPTER IV

ANALYSIS OF RESULTS

This chapter presents an analysis of the data which describes that opportunities provided for state vocational administrators for professional and management development. The eight exploratory questions are presented and then the data analyzed to answer the question. As presented in Chapter I, the questions were the following:

1. Is a planned in-service training program provided for state administrators?
2. Are opportunities for professional and managerial development built into the job assignment?
3. Are there opportunities for development of communication skills?
4. Are there opportunities for visibility and exposure in working with high state and government officials?
5. Does the state department support development in the form of outside professional and managerial training?
6. Have opportunities been extended to participate in professional association activities?
7. Is mobility encouraged and are promotions extant?
8. Which administrator groups (sex, age, administrative level, vocational specialty area, state department experience) have the greatest desire for change--for more opportunity to experience professional and management development activities?

Part 1 will discuss planned in-service programs, how important the respondents view the professional development program, and how they evaluate the program as it currently exists and the funding that is provided for such a planned in-service program.

Exploratory questions 2 through 8 will be answered by analyzing the effects of six independent variables of state size, sex, age, administrative level, undergraduate vocational specialty area, and state department experience on the six areas of professional and managerial development opportunities.

State Department Planned In-Service Program

Is a planned in-service training program provided for state administrators?

Participation in state staff planned in-service programs for professional and managerial development was affirmed by 206 state vocational administrators or 79.8 percent of the total of those who responded to the question. Fifty-two administrators or 20.2 percent said they had not participated in a state department staff in-service program. Table 4 indicates that when responses are collated by state size, the administrators who are employed in extra-large-sized states are more apt to have participated in a planned in-service program, according to 96.4 percent of the respondents, whereas administrators from small states are least likely to have had the experience. Responses from 81.7 percent of administrators in medium-sized states indicated that planned in-service programs are provided, whereas 73.4 percent of administrators from large states indicated planned in-service programs.

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Table 4.--Participation in planned in-service programs by state size.^a

Response	Small State	Medium State	Large State	Extra-Large State	Row Total
Yes					
Number	38	67	47	54	206
Column percent	67.9	81.7	73.4	96.4	79.8
No					
Number	18	15	17	2	52
Column percent	32.1	18.3	26.6	3.6	20.2
Column total					
Number	56	82	64	56	258
Column percent	21.7	31.8	24.8	21.7	100.0

^aSee Table 3 for state size definition.

Table 5 reports the perceived need by state staff administrators for in-service programs.

Table 5.--State administrators who feel the need of an extensive in-service program for state staff administrators by the respondents who are currently participating in an in-service program.

Participation in In-Service Program	Very Important	Important	Somewhat Important	Row Total
Yes				
Number	95	82	25	202
Row percent	47.0	40.6	12.4	79.8
No				
Number	25	18	8	51
Row percent	49.0	35.3	15.7	20.2
Column total				
Number	120	100	33	253
Percent of total	47.4	39.5	13.0	100.0

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When asked if the administrators felt the need for an extensive in-service program for state staff administrators in order to improve skills, increase knowledge, and/or change attitudes, 120 or 47.4 percent responded that it was very important; 100 or 39.5 percent said that it was important, while 33 or 13 percent felt it was only somewhat important. Of the respondents who currently have an in-service program, 177 or 88 percent stated that the in-service program was very important to important and 25 or 12.4 percent feel that the in-service program is only somewhat important. Administrators who checked "no" to currently participating in an in-service program feel that a development program is important to very important, by a count of 43 out of 51 or 84.3 percent.

Administrators who have participated in a planned in-service program were asked to evaluate the program according to whether the in-service met their needs for professional and managerial development. Table 6 presents the data acquired from the respondents.

Table 6.--State vocational administrators' evaluation of planned in-service programs by administrative level.

Administrative Level	Excellent	Very Good	Fair	Not Meeting Expectations	Row Total
First level					
Number	10	21	23	2	56
Row percent	17.9	37.5	41.0	3.6	27.6
Second level					
Number	17	68	51	11	147
Row percent	11.6	46.3	34.7	7.5	72.4
Column total					
Number	27	89	74	13	203
Percent of total	13.3	43.8	36.5	6.4	100.0

As a total group, 89 respondents or 43.8 percent evaluated the in-service program as very good, while 74 or 36.5 percent rated it fair. First-level administrators tended to be more critical; 23 in number or 41 percent of first-level administrators rated the program as fair, while 68 second-level administrators or 46.3 percent of the second-level administrators stated the in-service was very good. (See Table 6.) A group of 13 or 6.4 percent of the total group felt that the in-service program was not meeting their expectations.

When the administrators were questioned regarding the amount of federal and state funds expended for state administrators' planned in-service programs during the current year, 104 administrators or 40.3 percent wrote that either they didn't know or didn't have access to that information. No answer was given by 85 respondents or 33 percent. A figure amount was written in by 51 administrators or 19.8 percent; the amount ranged from a low of \$500 to a high of \$80,000, with the average amount coming to \$15,540. A zero amount was filled in by 18 respondents or 7 percent.

On-the-Job Assignment

Are opportunities for professional and managerial development built into the job assignment?

State vocational administrators have been provided more opportunity to experience professional and management development in their on-the-job assignments than in any one of the other five developmental

areas, as shown in Figure 1.* Slightly more than 50 percent of the administrators have had a high degree of opportunity to participate in a variety of administrative responsibilities. These responsibilities include such developmental experiences as: evaluating and screening project proposals, serving on management or project teams for purposes of planning and evaluation, and working on special assignments with at least three other units. Administrators as a group have not engaged in budget allocation for all vocational areas, coordinated a planning or evaluation team for all vocational areas, or been involved in decision making in the executive council meetings.

Approximately 20 percent of the state administrators have had either no experience or low experience in their on-the-job assignments, a relatively low percentage compared to the other developmental areas. Only opportunity to develop communication skills has been greater.

Desire for the opportunity to participate in various job assignments is high for all four experience levels--73.3 percent of the total group. High on the priority list are the desire to make recommendations about the hiring of professional staff, to have a voice in decision making at executive council meetings, to work on management or project teams for planning and evaluation for all vocational areas, to serve as a liaison to outside agencies, and to coordinate a planning or evaluation team for one

*A tabular presentation of percentage responses according to experience and desire categories may be found in Appendix .

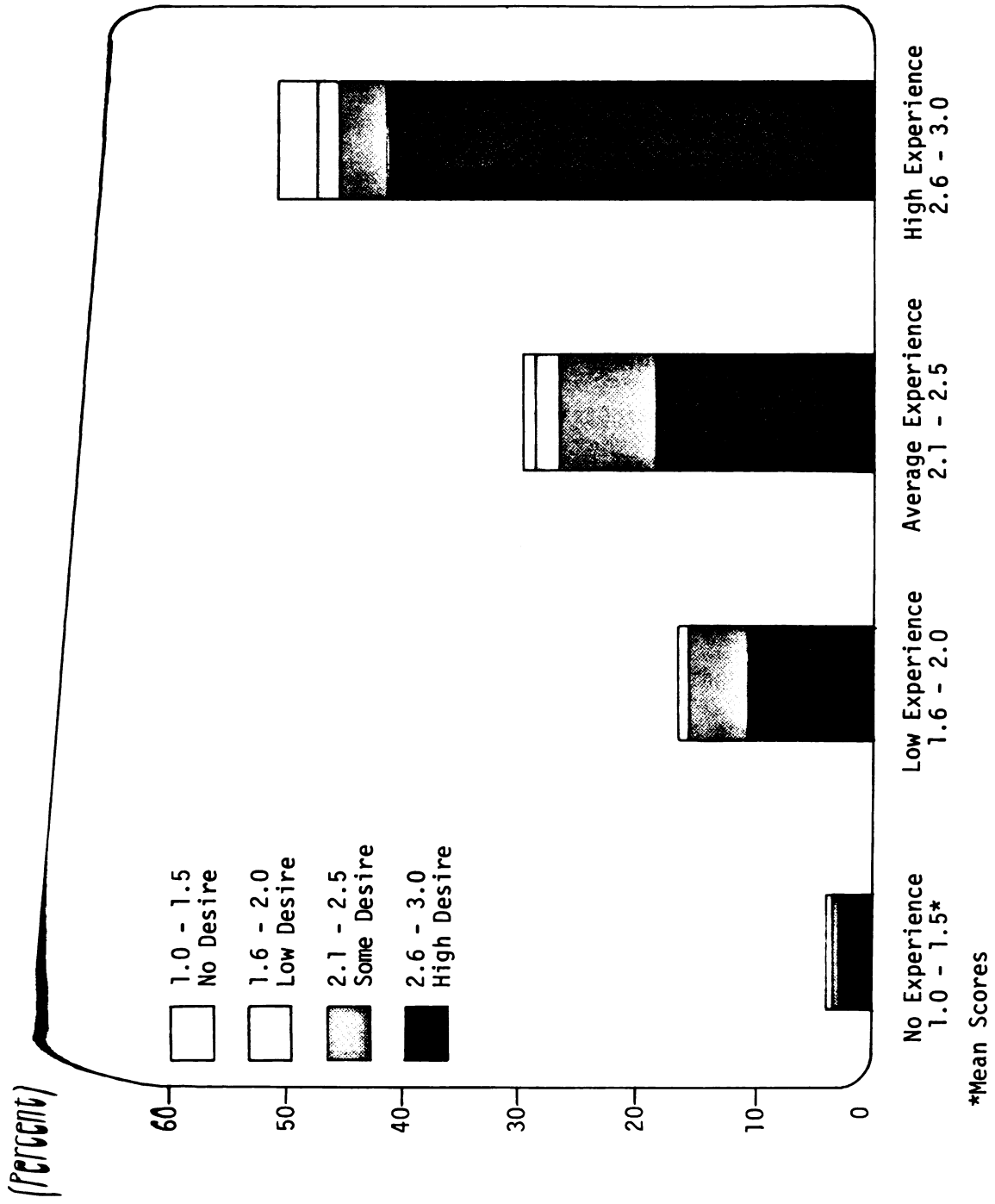


Figure 1.--Opportunity for on-the-job assignments by experience and desire.

vocational area. Management authorities recognize budgeting as a key administrative function, yet few respondents were involved in budgeting, nor did they indicate a desire to be involved.

The administrators who have no desire to engage actively in on-the-job assignments appear to be those who have had the greatest opportunity to experience such assignments.

State Size

Of the 258 state vocational administrators participating in this study, 31.8 percent or 82 represented medium-sized states; 21.7 percent or 56 respondents represented small and extra-large states, and large states were represented by 24.8 percent or 64 respondents. The analysis of variance was used to determine the significant relationships between state size groups and the opportunities for professional and managerial development in the on-the-job assignment. The alpha was set at 0.05 level. The results show that there is no significant difference between the state groups in the opportunities to participate in administrative functions of planning, evaluation, budget management, staff selection, decision making, and leadership.

As can be seen in Table 7, in the comparison of experience mean with desire mean, the greater differences appear to exist within the states; i.e., small states, experience mean, 2.314, desire mean 2.595; large states, experience mean 2.469, desire mean 2.777. More congruence is found in experience and desire mean scores of the medium-sized and the large-sized states.

Table 7.--Relationships between state size and opportunity for on-the-job assignments by experience and desire.

State Size ^a	Experience		Desire	
	Mean	S.D.	Mean	S.D.
Small	2.314	.4923	2.595	.5065
Medium	2.471	.4105	2.646	.4638
Large	2.469	.4642	2.777	.3260
Extra large	2.471	.3888	2.654	.3936
df = 3	Experience F = 1.849 Sig. = NS		Desire F = 2.002 Sig. = NS	

^aStates are grouped according to state student enrollment of 14 to 17 year olds. Figures are taken from U.S. Department of Health, Education, and Welfare, National Center for Educational Statistics, Statistics of State School Systems 1973-74 (Washington, D.C.: Government Printing Office, 1976: small states (less than 150,000), medium-sized states (150,000-299,999), large states (300,000-499,999), extra large states (500,000 or more).

Sex

State vocational administrators in the present study are 76.4 percent male or 197 in number, and 23.7 percent female or 61 of the total administrators. Table 8 illustrates the relationship between sex and the opportunity to experience professional and managerial development in the on-the-job assignment, which includes participating in a variety of administrative tasks as well as working on project or management teams and serving as a liaison to outside agencies.

Table 8.--Relationships between sex and the opportunity for on-the-job assignments by experience.

Sex	Experience	
	Mean	S.D.
Male	2.476	.4228
Female	2.302	.4717

$df = 1$

$F = 7.439$

Significance = .0068

The relationship between sex and opportunity for on-the-job assignments shows that a significant difference exists at less than .01 level of confidence. Males are apparently provided more opportunity for professional and managerial growth in their job assignment than are females. As indicated by the two groups' standard deviation scores, females show more variability in mean scores than males their opportunities for on-the-job assignment experience.

The desire to have more opportunity for on-the-job experiences is significantly different between males and females at less than .05 level of confidence. (See Table 9.)

Females demonstrate with a mean of 2.789 that they have more desire for varied administrative assignments than do males; however, both groups signify a high mean score of at least 2.6 for more variety in the job assignments. Females tend to be more in agreement than males for greater on-the-job experiences, as evidenced by the standard deviation scores.

Table 9.--Relationships between sex and opportunity for on-the-job assignments by desire.

Sex	Desire	
	Mean	S.D.
Male	2.640	.4359
Female	2.789	.3411

df = 1

F = 5.919

Significance = .0157

Age

Of the 247 administrators who responded, 35.4 percent or 87 were most likely to be in the 50-59 age group, 32.9 percent or 81 are in the 40-49 age group, 2.8 percent or 7 are in the less than 30 years group, 6.5 percent or 16 represent the 60 and over group, and 22.4 percent or 35 respondents represent the 30-39 age group.

The relationship of age to on-the-job assignment experience also demonstrates a significant difference at less than the .05 level of confidence (Table 10, page 62). The Least Significant Difference (LSD) post-hoc test was given to determine the pairwise comparisons. Group 40-49 years has more opportunity to experience varied on-the-job assignments than Group 30-39 years, and Group less than 30 has less opportunity than all other groups except the Group 30-39 years.

Table 10.--Relationships between age and opportunity for on-the-job assignments by experience.

Age	Experience	
	Mean	S.D.
Less than 30	2.050	.4342
30-39 years	2.355	.4658
40-49 years	2.525	.4060
50-59 years	2.426	.4504
Over 60	2.482	.3925

$df = 4$

$F = 2.986$

Significance = .0197

Conversely, the desire for on-the-job experience did not demonstrate a significant difference between groups, for each of the groups had a high desire score for greater opportunity in their job assignment (Table 11). The less than 30 age group indicates more consistency in the amount of opportunity desired than do the other age groups (S.D. .1753).

Administrative Level

Of the 258 respondents, 76.4 percent or 197 are second-level administrators, while 23.6 percent or 61 are first-level administrators. Table 12 illustrates the effect administrative level has on the opportunities to experience professional and managerial development in the on-the-job assignment.

Table 11.--Relationships between age and opportunity for on-the-job assignments by desire.

Age	Desire	
	Mean	S.D.
Less than 30	2.775	.1753
30-39 years	2.724	.3174
40-49 years	2.687	.4408
50-59 years	2.653	.4519
60 and over	2.588	.5667

$df = 4$

$F = .534$

Significance = NS

Table 12.--Relationships between administrative level and opportunity for on-the-job assignments by experience.

Administrative Level	Experience	
	Mean	S.D.
First level	2.700	.3347
Second level	2.357	.4330

$df = 1$

$F = 32.184$

Significance < .0001

As shown in Table 12, the significance level between first-level and second-level administrators is less than .0001. First-level administrators have high opportunity to experience a variety of administrative assignments, while second-level administrators have significantly less opportunity.

Table 13 indicates that the relationship between first- and second-level administrators on the variable of desire for on-the-job assignment is not significantly different. Both groups have a high desire for increased experience. The standard deviation for first-level administrators (.5799) shows a greater range within the mean score than for second-level administrators (.3550). First-level administrators have less agreement within the group than do second-level administrators regarding the amount of increased experience in on-the-job assignments they desire.

Table 13.--Relationships between administrative level and opportunity for on-the-job assignments by desire.

Administrative Level	Desire	
	Mean	S.D.
First level	2.590	.5799
Second level	2.701	.3550

$df = 1$
 $F = 3.198$
 Significance = NS

Undergraduate Vocational-Specialty Area

Table 14 indicates that the vocational-specialty area groups do not demonstrate a significant difference in either their experience mean scores or their desire mean scores in opportunity to participate in professional development activities in the on-the-job assignment.

Table 14.--Relationships between undergraduate vocational-specialty area and opportunity for on-the-job assignments by experience and desire.

Vocational-Specialty Area	Experience		Desire	
	Mean	S.D.	Mean	S.D.
Agriculture	2.508	.3931	2.563	.4861
Business & office	2.413	.4068	2.730	.3457
Distributive ed.	2.233	.5158	2.792	.2193
Health occ.	2.390	.5065	2.610	.6045
Home economics	2.320	.4627	2.813	.2403
Industrial ed.	2.529	.4764	2.650	.5185
Technical ed.	2.392	.3919	2.667	.3447
Other	2.413	.4256	2.606	.4608
df = 7	Experience F=1.233 Sig. = NS		Desire F=1.279 Sig. = NS	

Of greatest interest in examining the scores tabulated in Table 14 is the comparison of experience mean scores with desire mean scores. Agriculture and Industrial Education have few differences, whereas all the other groups demonstrate wide variance in experience and desire scores. The Distributive Education group shows the greatest variance between opportunity to experience on-the-job assignments and the desire to experience variety in administrative responsibility.

State Department Experience

The largest percentage of state administrators currently employed have worked 8 to 11 years in the state department of education by a count of 76 respondents or 30.2 percent of the sample population. The next most frequently checked group of years is the 4-7 years category, with 65 administrators for a total

of 25.8 percent. Least number of responses fall in the 3 or less years category with 9.9 percent; 21 percent have worked at the state department 12-15 years; 13.1 percent have been there over 15 years.

Table 15.--Relationships between state department experience and opportunity for on-the-job assignments by experience.

Number of Years in State Department	Experience	
	Mean	S.D.
Less than 3	2.146	.4492
4-7 years	2.351	.4434
8-11 years	2.545	.3873
12-15 years	2.485	.4159
Over 15	2.533	.4256

df = 4
F = 5.706
Significance = .0002

It appears from Table 15 that greater opportunity for growth in the on-the-job assignment is affected by the years of state department experience up through 11 years; then a slight decrease takes place in the 12-15 years group, while the over 15 years group experiences a slight increase and then a leveling off effect. With the exception of the 12-15 years group, the greater the years the more opportunity to experience a variety of administrative responsibilities in the assigned position.

The number of years in the state department and the opportunity for professional and managerial development in the on-the-job assignments are significantly related at less than the .01 level of

confidence. The Least Significant Difference post-hoc test was administered to check for differences in the pairwise comparisons and to determine which ones are different. The 8-11 years group and the over 15 years group are significantly different in experience than the 4-7 years group and the less than 3 years group. The less than 3 years group has less opportunity to experience a variety of on-the-job assignments than all other groups. The 8-11 years group comes closest to recording high opportunity (2.6-3.0) on the experience scale of all the groups.

As shown in Table 16, the desire scores for these groups do not demonstrate a significant difference; but each group, with the exception of the 12-15 years group, has high desire scores falling at least at the mean level of 2.6. The standard deviation scores show more agreement with the less than 3 years group and the 4-7 years group, whereas the 12-15 years group demonstrates less agreement within the group.

Table 16.--Relationships between state department experience and opportunity for on-the-job assignments by desire.

Number of Years in State Department	Desire	
	Mean	S.D.
Less than 3	2.800	.3098
4-7 years	2.728	.3214
8-11 years	2.649	.4222
12-15 years	2.552	.5466
Over 15	2.683	.4831

df = 4

F = 1.970

Significance = NS

Development of Communication Skills

Are there opportunities for development of communication skills?

State administrators have been afforded great opportunity to improve their communication skills of speaking, writing, and interacting, as illustrated in Figure 2. Approximately 80 percent of the administrators have had at least average or high experience in this developmental area, and less than 2 percent have had no experience. Most administrators have had the opportunity to participate in the following activities: making presentations at state vocational teacher workshops and conferences; giving technical assistance to vocational directors, administrators, deans, and teachers; making presentations to outside agencies; and writing state plans, reports, and position papers. The developmental activities administrators are least likely to perform are publishing articles in professional journals, conducting regional public meetings and hearings, and chairing vocational administrators' in-service workshops or conferences. More administrators have had the opportunity to develop their communication competencies than any of the other five developmental areas.

It appears that administrators rank the desire to participate in communicative activities less than the desire to perform a variety of administrative tasks in their on-the-job assignments. Approximately 65 percent desire the opportunity to develop communication skills, whereas around 73 percent would prefer more variety in their on-the-job assignments. Again, the respondents who have

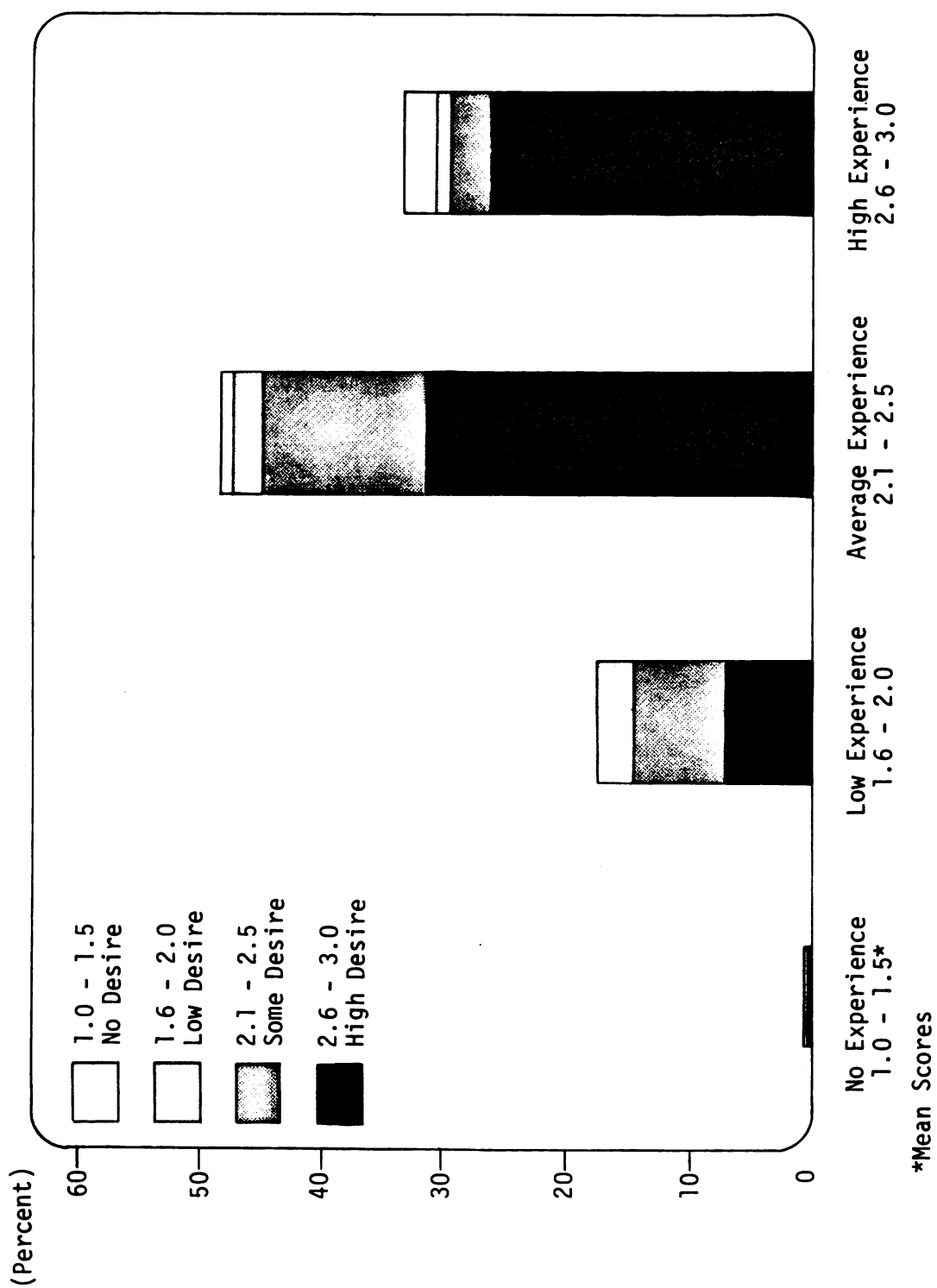


Figure 2.--Development of communication skills by experience and desire.

had the greatest experience have the least desire to engage in communicative activities.

State Size

There is a relationship between state size and the administrator's opportunity for development of communication skills. The analysis of variance demonstrates, as shown in Table 17, that there is a significant difference at less than the .05 level of confidence between or among the state size groups.

Table 17.--Relationships between state size and opportunity for development of communication skills by experience.

State Size	Experience	
	Mean	S.D.
Small	2.252	.4521
Medium	2.376	.3589
Large	2.450	.3246
Extra large	2.454	.3712

df = 3
 F = 3.620
 Significance = .0137

The Least Significant Difference test determined that administrators who work in large states and extra-large states as a group tend to have more opportunity to develop communication skills than administrators as a group who work in states that are small in size. Administrators who have the opportunity to develop these skills are speaking at conferences, workshops, and meetings to such groups as

vocational teachers, directors, administrators, deans, and to outside agencies. They are also writing state plans, reports, position papers, and grant proposals.

As indicated in Table 18, the desire mean scores of these four groups show no significant difference. However, the large and extra large states have high desire for more opportunity to develop communication skills, whereas the small and medium states record average desire for the experience.

Table 18.--Relationships between state size and opportunity for development of communication skills by desire.

State Size	Desire	
	Mean	S.D.
Small	2.579	.4658
Medium	2.578	.4738
Large	2.681	.3935
Extra large	2.609	.4594

df = 3
F = .763
Significance = NS

Sex

Table 19 indicates that no significant difference exists between males and females in the opportunity to develop their communication skills, but both groups seek greater opportunity to use these skills. The spread between the mean scores for experience and desire tends to be greater for females than for males.

Table 19.--Relationships between sex and opportunity for development of communication skills by experience and desire.

Sex	Experience		Desire	
	Mean	S.D.	Mean	S.D.
Male	2.401	.3785	2.591	.4568
Female	2.321	.3835	2.698	.3676
df = 1	Experience F=2.025 Sig. = NS		Desire F=1.279 Sig. = NS	

Age

Table 20 illustrates that there is a significant relationship between age and the opportunity to develop a state vocational administrator's communication skills.

Table 20.--Relationships between age and opportunity for development of communication skills by experience.

Age	Experience	
	Mean	S.D.
Less than 30	2.088	.4549
30-39 years	2.300	.3949
40-49 years	2.463	.3744
50-59 years	2.385	.3637
Over 60	2.365	.3316
df = 4	F = 2.856	
	Significance = .0043	

The analysis of variance records that the groups are significantly related at less than the .05 level of confidence. The post hoc test verifies that the less than 30 age group has less opportunity to develop communication skills than the 40-49 years group and the 50-59 years group; the 30-39 years group has less opportunity for the experience than the 40-49 years age group.

Table 21 indicates that no significant differences exist between the groups who desire increased opportunity to utilize communication skills.

Table 21.--Relationships between age and opportunity for development of communication skills by desire.

Age	Desire	
	Mean	S.D.
Less than 30	2.663	.2615
30-39 years	2.687	.2835
40-49 years	2.663	.4352
50-59 years	2.579	.4899
Over 60	2.500	.5408

df = 4

F = 1.057

Significance = NS

The three younger age groups register a high desire to experience speaking and writing developmental activities, whereas the two older age groups demonstrate some desire for increased opportunity. The standard deviation scores show the less than 30 group

and the 30-39 years group is more in agreement with the group mean than is the over 60 years group.

Administrative Level

As shown in Table 22, the relationship between administrative level and the opportunity to experience the development of communication skills is significantly related at less than .0001 level of significance.

Table 22.--Relationships between administrative level and opportunity for development of communication skills by experience.

Administrative Level	Experience	
	Mean	S.D.
First level	2.566	.3265
Second level	2.320	.3802

df = 1
F = 20.552
Significance = .0001

The first-level administrators' mean score of 2.566 is significantly greater than the second-level administrators' mean score of 2.320. More opportunities are extended to first-level than second-level administrators to develop in the communicative areas of speaking to various groups and writing reports, position papers, plans, and proposals.

Table 23 indicates the desire to experience greater opportunities in the communicative areas did not differ significantly

between first-level and second-level administrators. Second-level administrators mark a high desire in this developmental area, whereas first-level administrators record some desire on the experience scale. More second-level administrators are in agreement with the mean than are first-level administrators, .3833 as opposed to .5883.

Table 23.--Relationships between administrative level and opportunity for development of communication skills by desire.

Administrative Level	Desire	
	Mean	S.D.
First level	2.562	.5883
Second level	2.629	.3833

df = 1
F = 1.064
Significance = NS

Undergraduate Vocational-Specialty Area

The relationships between undergraduate vocational-specialty area and development of communication skills by both experience and desire do not demonstrate a significant difference between groups. Table 24 does show the differences between the experience of the particular vocational-specialty area groups and their desire for experience in the development of communication skills.

Table 24.--Relationships between undergraduate vocational-specialty area and opportunity for development of communication skills by experience and desire.

Vocational-Specialty Area	Experience		Desire	
	Mean	S.D.	Mean	S.D.
Agriculture	2.423	.3125	2.518	.4466
Business & office	2.381	.4277	2.732	.3330
Distributive ed.	2.425	.4413	2.717	.3186
Health occ.	2.420	.3676	2.430	.5832
Home economics	2.313	.3848	2.697	.3358
Industrial ed.	2.447	.4045	2.544	.5456
Technical ed.	2.375	.3049	2.633	.3257
Other	2.289	.3726	2.575	.5028
df = 7	Experience F=.854 Sig. = NS		Desire F=1.445 Sig. = NS	

The groups which show the greatest congruence between actual experience and desire for experience are Agriculture, experience mean score of 2.423 and desire mean of 2.518; Health Occupations, experience mean score of 2.420 and desire mean of 2.430; Industrial Education, experience mean score of 2.447 and desire mean of 2.544.

Four groups have a high desire to be more active in communicative endeavors: Business and Office, 2.732; Distributive Education, 2.717; Home Economics, 2.697; and Technical Education, 2.633. Health has the least desire of all the groups (2.430).

Of those who fall in the high desire range, the greatest differences between experience mean scores and desire mean scores belong to Business and Office, experience 2.381 and desire 2.732; Distributive Education, experience 2.425 and desire 2.717; Home

Economics, experience 2.313 and desire 2.697; Technical Education, experience 2.375 and desire 2.633. The Other group (not in vocational-specialty area), tends to have less experience (2.289) but only some desire (2.575).

State Department Experience

The relationships between the state department experience and development of communication skills is shown in Table 25.

Table 25.--Relationships between state department experience and opportunity for development of communication skills by experience.

Number of Years in State Department	Experience	
	Mean	S.D.
Less than 3	2.331	.4913
4-7 years	2.280	.3658
8-11 years	2.426	.3372
12-15 years	2.428	.3488
Over 15	2.494	.3577

df = 4

F = 2.678

Significance = .0324

There is a significant difference at below the .05 level of confidence. Using the Least Significant Difference post-hoc test to analyze the pairwise comparisons demonstrates that the 4-7 years group is significantly different from the 8-11 years group, the 12-15 years group, and the over 15 years group. The 4-7 years group has less

opportunity than the other three groups to give presentations, to be involved in writing, or to interact with professionals in the field.

The state department experience groups demonstrate no significant difference in desire for more development of communication skills (Table 26).

Table 26.--Relationships between state department experience and opportunity for development of communication skills by desire.

Number of Years in State Department	Experience		Desire	
	Mean	S.D.	Mean	S.D.
Less than 3	2.331	.4913	2.789	.2613
4-7 years	2.280	.3658	2.659	.3588
8-11 years	2.426	.3372	2.600	.4268
12-15 years	2.428	.3488	2.543	.5427
Over 15	2.494	.3577	2.528	.5645
df = 4	Experience F = 2.678 Sig. = .0324		Desire F = 1.847 Sig. = NS	

All groups who have worked less than 11 years in the state department have a high desire to participate in communicative activities. The groups with 12 or more years in the state department appear to register some desire on the desire scale. The greatest differences tend to be between the mean experience scores and the mean desire scores of the group with less than 3 years in the state department (experience 2.331, desire 2.789) and the 4-7 years group

(experience 2.280, desire 2.659). It appears that the range of scores is somewhat related to the number of years in the state department--the more years the wider the range among the mean scores.

Visibility and Exposure

Are there opportunities for visibility and exposure in working with high state and government officials?

Of the six professional development areas, opportunity to experience visibility and exposure shows the percentages to be more evenly distributed among experience levels than they are in any of the other five growth areas, as illustrated in Figure 3. The four experience levels are no experience (1.0-1.5) 20.9 percent; low experience (1.6-2.0) 33.3 percent; average experience (2.1-2.5) 26.4 percent; and high experience (2.6-3.0) 19.4 percent.

Less than 46 percent of the total group has had average to high experience mean scores, the third lowest of the growth areas. In general, administrators are likely to have had the opportunity to work on special projects or task forces with the superintendent of education; to prepare plans, policies, issue and position papers, and reports for presentation to the state board and/or superintendent; or to serve in a leadership capacity on a state task force. However, few administrators have had an opportunity to act as consultants to the state legislature for purposes of writing or analyzing legislation, to work on special assignments to the state legislature, to serve on national or regional task forces or ad hoc committees, or to make presentations to the state board.

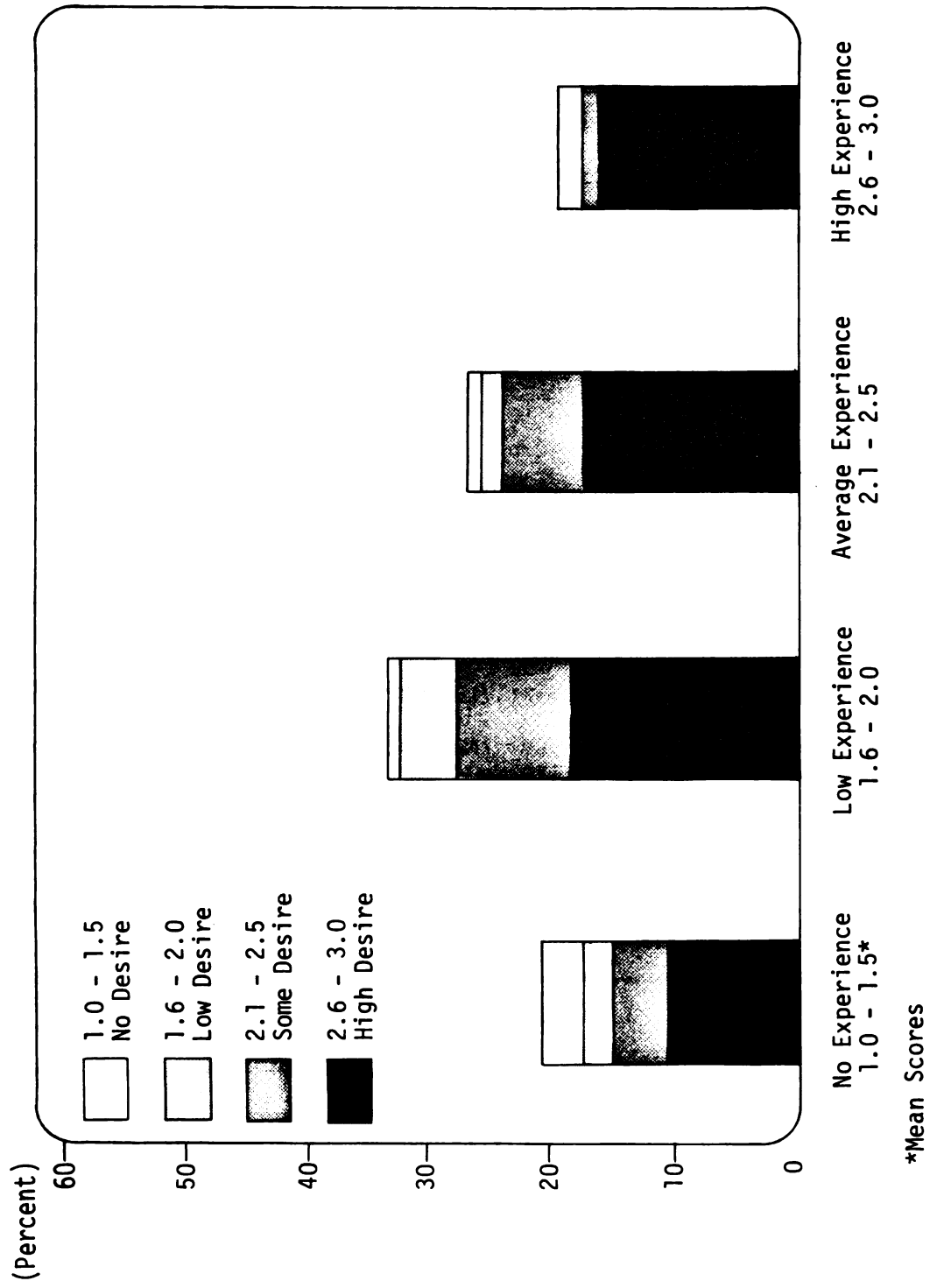


Figure 3.--Opportunity for visibility and exposure by experience and desire.

Approximately 63 percent of the administrators have a high desire to experience visibility and exposure, which places this area fifth among the six developmental areas. Only the desire to participate in professional association activities shows less desire. As a group, administrators seem to demonstrate less desire for the opportunity to experience visibility and exposure; an exception is the high experience administrators, who tend to seek more of this type of growth experience, with only 1.9 percent indicating no desire.

State Size

Table 27 illustrates that there is no significant difference between state sizes as to the degree of visibility and exposure administrators experience in their administrative positions. All mean scores tend to be considerably lower than the on-the-job assignment opportunities or the opportunities to develop communication skills.

Table 27.--Relationships between state size and opportunity for visibility and exposure by experience and desire.

State Size	<u>Experience</u>		<u>Desire</u>	
	Mean	S.D.	Mean	S.D.
Small	1.925	.5488	2.530	.5205
Medium	1.979	.5413	2.506	.5518
Large	1.981	.5707	2.580	.6634
Extra large	2.027	.5469	2.552	.5271
df = 3	Experience F=.319 Sig. = NS		Desire F=.213 Sig. = NS	

The high standard deviation scores tend to demonstrate that there is disagreement within all four of the groups as to the amount of experience administrators do have within each of the four groups. It appears that administrators as a group in all states have not been provided the opportunity to work on special task forces or ad hoc committees at the local, state, regional, or national levels.

The mean score for desire also shows no significance; however, the mean score differences between experience and desire for all groups demonstrate considerable variation in what is actually experienced and what administrators would like to have the opportunity to experience. Again, individual administrators' mean scores within the group show a degree of variance from the mean score of the group.

Sex

As illustrated in Table 28, sex is related at below the .05 level of confidence with opportunities for visibility and exposure in the job assignment.

Table 28.--Relationships between sex and opportunity for visibility and exposure by experience.

Sex	Experience	
	Mean	S.D.
Male	2.015	.5389
Female	1.844	.5584

df = 1

F = 4.606

Significance = .0328

Males show a mean experience score of 2.015, while the females' mean score is 1.844; both scores are considerably less than the opportunities experienced in the on-the-job assignment or in the development of communication skills. The standard deviations of .5389 and .5584 demonstrate a wide range of scores within each of the two groups.

Both groups desire greater opportunity for visibility and exposure working with high state and government officials, but there is no significant difference between the groups (Table 29). On the desire scale, females scored in the high desire range, whereas males scored in the average desire area.

Table 29.--Relationships between sex and opportunity for visibility and exposure by desire.

Sex	Desire	
	Mean	S.D.
Male	2.520	.5406
Female	2.626	.6215

df = 1

F = 1.673

Significance = NS

Age

The relationship of age to opportunities for visibility and exposure shows no significance, as illustrated by Table 30. All group scores are low in comparison to the previous professional and

managerial development opportunities discussed. All groups fall in the low experience range of below 2.1 mean.

Table 30.--Relationships between age and opportunity for visibility and exposure by experience.

Age	Experience	
	Mean	S.D.
Less than 30	1.600	.5880
30-39 years	1.876	.5474
40-49 years	2.023	.4920
50-59 years	2.026	.5693
Over 60	1.982	.5961

df = 4

F = 1.764

Significance = NS

As illustrated in Table 31, there is a significant relationship between age and visibility and exposure by desire at below the .05 critical value somewhere within the design. Using the Least Significant Difference post-hoc test of multiple comparisons, none of the groups were significant in themselves. While the means of some complex combinations of groups were different from the mean of some other group or combination of groups, it was something other than pairwise comparisons.

Three of the groups--less than 30 years, 30-39 years, and 40-49 years--had at least a mean score of 2.6, which measures a high desire score for the opportunity to experience visibility and exposure

working on special task forces and ad hoc committees at the local, state, regional, and national levels.

Table 31.--Relationships between age and opportunity for visibility and exposure by desire.

Age	Desire	
	Mean	S.D.
Less than 30	2.775	.3059
30-39 years	2.607	.4337
40-49 years	2.649	.4897
50-59 years	2.445	.6616
Over 60	2.318	.6541

df = 4

F = 2.677

Significance = .0325

Administrative Level

Table 32 illustrates that there is a significant relationship between administrative level and opportunity for visibility and exposure working with high government and state officials. The first-level administrators' mean experience score of 2.167, in comparison to the second-level administrators' mean experience score of 1.910, shows a significance level of below .01. First-level administrators have more opportunity than second-level administrators to work on national, regional, or state task forces or special projects with the superintendent of education; to serve in a special assignment capacity to the state legislature; and to make presentations to the state board.

Table 32.--Relationships between administrative level and opportunity for visibility and exposure by experience.

Administrative Level	Experience	
	Mean	S.D.
First level	2.167	.5492
Second level	1.910	.5373

$df = 1$
 $F = 10.507$
 Significance = .0013

No significance exists between administrative level and the desire for visibility and exposure. Both groups demonstrate some desire for increased opportunity in this professional area. (See Table 33.)

Table 33.--Relationships between administrative level and opportunity for visibility and exposure by desire.

Administrative Level	Desire	
	Mean	S.D.
First level	2.536	.6116
Second level	2.551	.5454

$df = 1$
 $F = .031$
 Significance = NS

Undergraduate Vocational-
Specialty Area

Table 34 indicates that some relationship exists between the undergraduate vocational-specialty area and opportunity to experience visibility and exposure. The significance level shows an association at below the .01 critical value. The Least Significant Difference post-hoc test determined that the vocational-specialty areas of Agriculture, Distributive Education, and Industrial Education all have significantly more opportunity to experience visibility and exposure with high state and government officials than do the Technical Education or the Other group.

Table 34.--Relationships between undergraduate vocational-specialty area and opportunity for visibility and exposure by experience.

Vocational- Specialty Area	Experience	
	Mean	S.D.
Agriculture	2.070	.4513
Business & office	2.009	.5465
Distributive ed.	2.133	.6541
Health occ.	2.030	.6701
Home economics	1.863	.5586
Industrial ed.	2.098	.5655
Technical ed.	1.683	.4239
Other	1.747	.4722
df = 7		
F = 2.733		
Significance = .0095		

As shown in Table 35, the desire mean scores for the vocational-specialty area groups do not indicate a significant

difference between groups. Three groups designate a high desire to experience visibility and exposure activities: Distributive Education, mean 2.675; Home Economics, mean 2.643; and Business and Office, mean 2.619. Distributive Education appears to be among the groups that have the most experience but also score a high desire to participate in this management development activity.

Table 35.--Relationships between undergraduate vocational-specialty area and opportunity for visibility and exposure by desire.

Vocational-Specialty Area	Desire	
	Mean	S.D.
Agriculture	2.468	.5924
Business & office	2.619	.5148
Distributive ed.	2.675	.3545
Health occ.	2.280	.7657
Home economics	2.643	.6532
Industrial ed.	2.551	.5256
Technical ed.	2.275	.6312
Other	2.500	.5688
df = 7		
F = 1.166		
Significance = NS		

State Department Experience

Presented in Table 36 is the relationship of years in the department to the opportunity to experience visibility and exposure with high government and state officials. There is a significant difference at below the .01 level within the design, and the post-hoc test proved that the 8-11 years group and the over 15 years group

have significantly more experience than the less than 3 years group and the 4-7 years group.

Table 36.--Relationships between state department experience and the opportunity to experience visibility and exposure by experience.

Number of Years in State Department	Experience	
	Mean	S.D.
Less than 3	1.789	.5729
4-7 years	1.808	.5415
8-11 years	2.125	.5254
12-15 years	1.991	.5335
Over 15	2.122	.4963

df = 4
F = .0013
Significance = .0013

As illustrated in Table 37, there is no significant difference between number of years in the state department and the desire for visibility and exposure. The less than 3 years group has a high desire to experience visibility and exposure with high government and state officials.

Table 37.--Relationships between state department experience and the opportunity for visibility and exposure by desire.

Number of Years in State Department	Desire	
	Mean	S.D.
Less than 3	2.723	.4430
4-7 years	2.585	.5224
8-11 years	2.575	.5329
12-15 years	2.435	.5581
Over 15	2.339	.7526

df = 4
F = 2.136
Significance = NS

Outside Development Training

Does the state department support development in the form of outside professional and management training?

State department administrators, as a group, tend not to have an opportunity to participate in special training or management development programs sponsored by universities, private consultant firms, or USOE regional or national offices, or in special internships at the regional or national level. (See Figure 4.) A select few-- 4.7 percent of the administrators--fall in the high experience category; 65.1 percent have either no experience (1.0-1.5) or low experience (1.6-2.0). The opportunity to experience at least some outside management training has been extended to only 35.7 percent of the total group, the least-offered developmental area of the six.

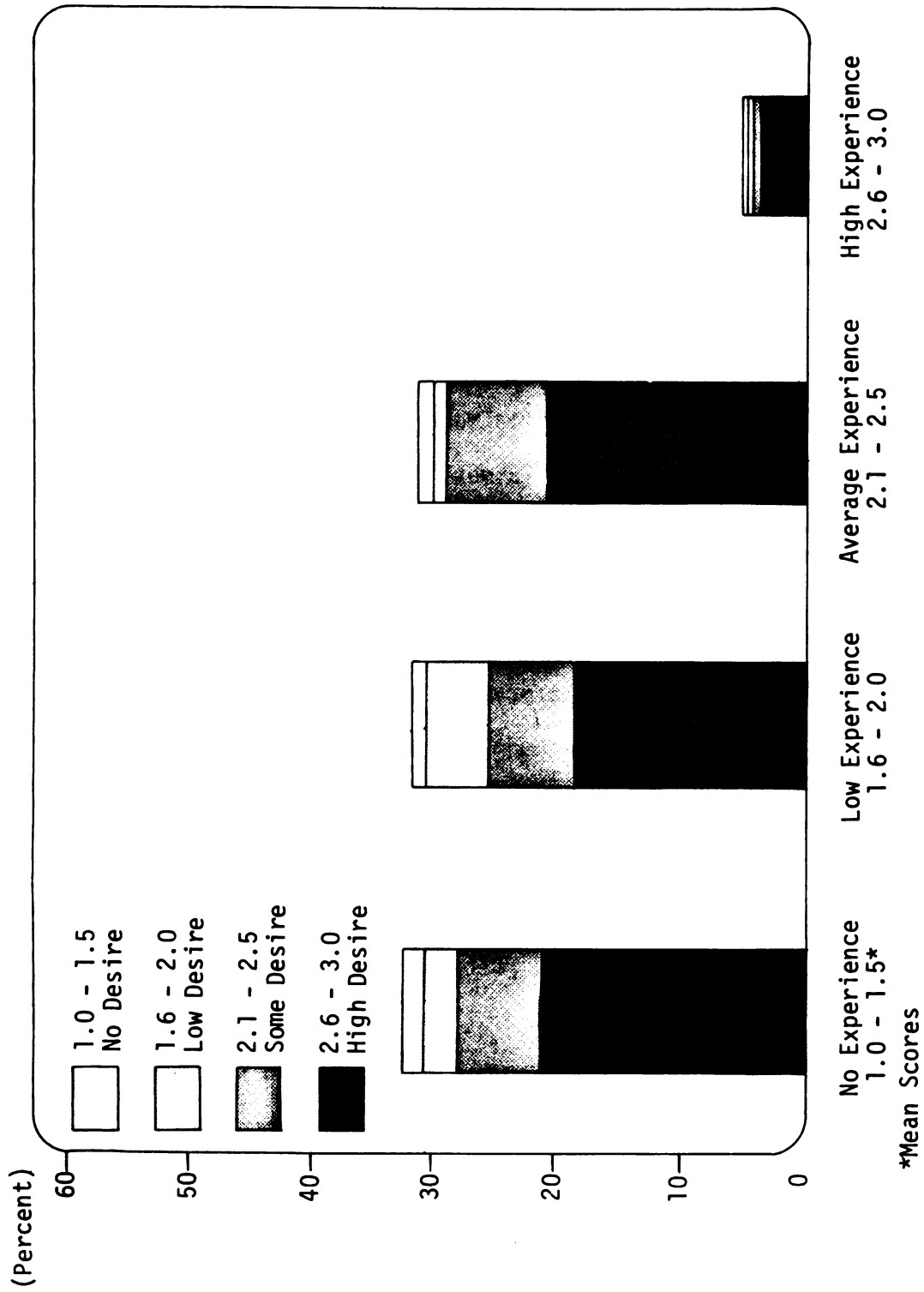


Figure 4.--Opportunity for outside management training by experience and desire.

It appears that nearly 65 percent of the administrators at all experience levels have a high desire for outside management training. The activities that seem to be high on the administrators' desire list are the opportunity to participate in specialized training programs at USOE regional or national seminars or meetings; to attend outside-agency-sponsored seminars, conferences, and meetings; and to participate in management training programs at university institutes or with private consultant firms in state or out-of-state. Administrators show some willingness to participate in special internships at USOE federal or regional offices, AVA headquarters, and U.S. Congress.

The desire for outside training and development is third in administrator priorities, following the desire for mobility and job advancement and the desire for variety in administrative responsibilities in their on-the-job assignments.

State vocational administrators evidently are required not only to perform expertly while executing administrative responsibilities in their on-the-job assignments, but also to function with a high degree of communication skill, serve the state in general, take risks, and cope in stressful, highly visible, exposed positions. Not only must state vocational administrators carry out these responsibilities, but they must also do so without special outside management training and development.

State Size

As demonstrated in Table 38, there is no significant difference among different state size groups in terms of opportunity for outside development training. The mean scores for all state size groups appear to be less than those for professional and management development opportunities provided in the on-the-job assignments, development of communication skills, and visibility and exposure with high government and state officials.

Table 38.--Relationships between state size and opportunity for outside professional and management training by experience and desire.

State Size	Experience		Desire	
	Mean	S.D.	Mean	S.D.
Small	1.773	.4982	2.720	.4818
Medium	1.863	.4404	2.584	.4862
Large	1.847	.5538	2.564	.6516
Extra large	1.843	.4377	2.643	.4592
df = 3	Experience F = .418 Sig. = NS		Desire F = 1.073 Sig. = NS	

State vocational administrators evidently have low opportunity to participate in off-site educational programs developed by or in conjunction with prominent colleges or universities and/or private consultant firms. It also appears that, as a group, administrators have little opportunity to participate in specialized training programs in the form of seminars, conferences, and meetings

sponsored by regional or federal USOE agencies or outside governmental agencies. Participation in internships at the regional or federal level does not appear to be a frequently practiced professional management development activity.

A comparison of mean experience scores with desire mean scores does show the disparity between what administrators actually experience in management training and what they would like to experience. The wide discrepancy in mean scores demonstrates that state administrators have low experience but would like to have high to average opportunity to experience outside development activities. The large state group indicates greatest disagreement within the sample regarding both the amount of experience and the desire for experience.

Sex

Table 39 illustrates that there is no relationship between outside development training experience and sex, nor is there a significant relationship between the desire for outside development training and sex. Both groups have low experience scores, falling below the mean of 2.1, and high desire scores, with a mean of at least 2.6.

Differences in experience mean and desire mean illustrate a wide gap between the training experience and the desire of both groups for training. Females, however, have the greatest diversity in mean scores.

Table 39.--Relationships between sex and opportunity for outside development training by experience and desire.

Sex	Experience		Desire	
	Mean	S.D.	Mean	S.D.
Male	1.864	.4703	2.607	.4838
Female	1.734	.5063	2.695	.6125
df = 1	Experience F = 3.419 Sig. = NS		Desire F = 1.362 Sig. = NS	

Age

As illustrated in Table 40, age is related to opportunities to experience outside development training, at less than the .01 level of confidence.

Table 40.--Relationships between age and opportunity for outside development training by experience.

Age	Experience	
	Mean	S.D.
Less than 30	1.238	.2387
30-39 years	1.733	.5654
40-49 years	1.864	.4679
50-59 years	1.877	.4369
Over 60	1.935	.3707
df = 4	F = 4.272 Significance = .0023	

The post-hoc test revealed that the less than 30 group has had significantly less experience than all of the other groups.

Again, when comparing experience and desire, large differences in mean scores are evident. State administrators desire much more opportunity to experience outside development training than they are actually experiencing. (See Table 41.)

Table 41.--Relationships between age and opportunity for outside development training by experience and desire.

Age	Experience		Desire	
	Mean	S.D.	Mean	S.D.
Less than 30	1.238	.2387	2.663	.5153
30-39 years	1.733	.5654	2.744	.4883
40-49 years	1.864	.4679	2.751	.3469
50-59 years	1.877	.4369	2.485	.6165
Over 60	1.935	.3707	2.429	.6430
df = 4	Experience F = 4.272 Sig. = .0023		Desire F = 4.235 Sig. = .0025	

Desire to experience outside development training is significant at less than the .01 level of confidence. When the post-hoc test was administered, the 30-39 years group and the 40-49 years group had significantly more desire than the 50-59 years group and the over 60 group.

Administrative Level

The relationship between administrative level and outside development training is significant at less than the .0001 level of

confidence, as illustrated by Table 42. First-level administrators' mean score of 2.051, as compared to second-level administrators' mean score of 1.766, is significantly different at less than the .0001 level of confidence. First-level administrators have more opportunity than do second-level administrators to participate in outside training and development. Both groups, however, fall in the low experience area, with mean scores below the mean level of 2.1, as neither group has had much opportunity to experience this type of activity.

Table 42.--Relationships between administrative level and opportunity for outside development training by experience.

Administrative Level	Experience	
	Mean	S.D.
First level	2.051	.3682
Second level	1.766	.4944

df = 1
F = 17.176
Significance = .0001

Table 43 illustrates the relationship between experience and desire. Both groups have a wide gap between experience and desire, but second-level administrators indicate a greater difference between opportunity to experience outside management training and the desire to have such an opportunity.

Table 43.--Relationships between administrative level and opportunity for outside development training by experience and desire.

Administrative Level	Experience		Desire	
	Mean	S.D.	Mean	S.D.
First level	2.051	.3682	2.607	.4718
Second level	1.766	.4944	2.632	.5333
df = 1	Experience F = 17.176 Sig. = .0001		Desire F = .109 Sig. = NS	

Undergraduate Vocational-Specialty Area

Table 44 indicates that there is no relationship between the undergraduate vocational-specialty area and outside development training by experience or desire.

Table 44.--Relationships between undergraduate vocational-specialty area and opportunity for outside development training by experience and desire.

Vocational-Specialty Area	Experience		Desire	
	Mean	S.D.	Mean	S.D.
Agriculture	1.890	.3842	2.498	.4638
Business & office	1.864	.5546	2.709	.4903
Distributive ed.	1.917	.6206	2.750	.3477
Health occ.	2.030	.4715	2.490	.5646
Home economics	1.733	.5222	2.667	.7671
Industrial ed.	1.853	.4795	2.587	.5420
Technical ed.	1.625	.4093	2.525	.5659
Other	1.768	.4264	2.647	.4423
df = 7	Experience F = 1.038 Sig. = NS		Desire F = .813 Sig. = NS	

All groups have had low opportunity to experience this type of development activity. The groups that have the highest desire scores and the greatest differences between experience and desire means are the following: Business and Office (experience 1.864, desire 2.709), Distributive Education (experience 1.917, desire 2.750), Home Economics (experience 1.733, desire 2.667), and Other (experience 1.768, desire 2.647).

State Department Experience

Presented in Table 45 is the relationship of state department experience to the opportunity to experience outside development training. Significance is less than .05 within the design.

Table 45.--Relationships between state department experience and opportunity for outside development training by experience.

Number of Years in State Department	Experience	
	Mean	S.D.
Less than 3	1.762	.5123
4-7 years	1.679	.5493
8-11 years	1.918	.4483
12-15 years	1.870	.4187
Over 15	1.967	.4007

df = 4

F = 3.328

Significance = .0112

The post-hoc test indicated that the 4-7 years group has had significantly less experience than the 8-11 years group, the

12-15 years group, and the over 15 years group. All five groups have had low opportunity to experience this professional development activity, as the mean scores fall below the 2.1 mean of average opportunity for the experience.

As shown in Table 46, the significance level between number of years in the state department and outside training is less than the .01 level of confidence.

Table 46.--Relationships between state department experience and outside development training by desire.

Number of Years in State Department	Desire	
	Mean	S.D.
Less than 3	2.915	.1666
4-7 years	2.691	.5074
8-11 years	2.653	.4365
12-15 years	2.528	.5286
Over 15	2.347	.7354

df = 4
F = 5.617
Significance = .0002

The Least Significant Difference test determined that the less than 3 years group has a significantly higher desire score than the 8-11 years group, the 12-15 years group, or the over 15 years group. The 4-7 years group has a significantly higher desire score than the over 15 years group. The standard deviation scores indicate that the less than 3 years group is more consistent in its

desire for outside training than is the over 15 years group. State vocational administrators who have the fewest years of experience tend to have mean scores that are more in agreement with the group mean than administrators who have had over 15 years in the state department, as shown by their respective standard deviation scores of .1666 and .7354.

Professional Association Activities

Have opportunities been extended to participate in professional association activities?

Approximately 59 percent of the administrators have had either no opportunity or low opportunity to participate in professional association activities, as shown in Figure 5. Even though state administrators attend national professional association conferences, the data indicate that few hold an executive office, serve as a national conference committee chairman, or make formal presentations at the conference meetings.

Within the four experience levels, 56.5 percent of the respondents signify a high desire to become actively involved, which is the lowest percentage of high desire scores in any of the other developmental spheres. The findings denote a willingness of administrators not only to attend the national conferences but to speak at the sessions, serve on the American Vocational Association conference committees, and preside at state professional conferences.

Nearly 7 percent of the respondents indicated no desire in this area. Administrators showed less of a desire to participate in

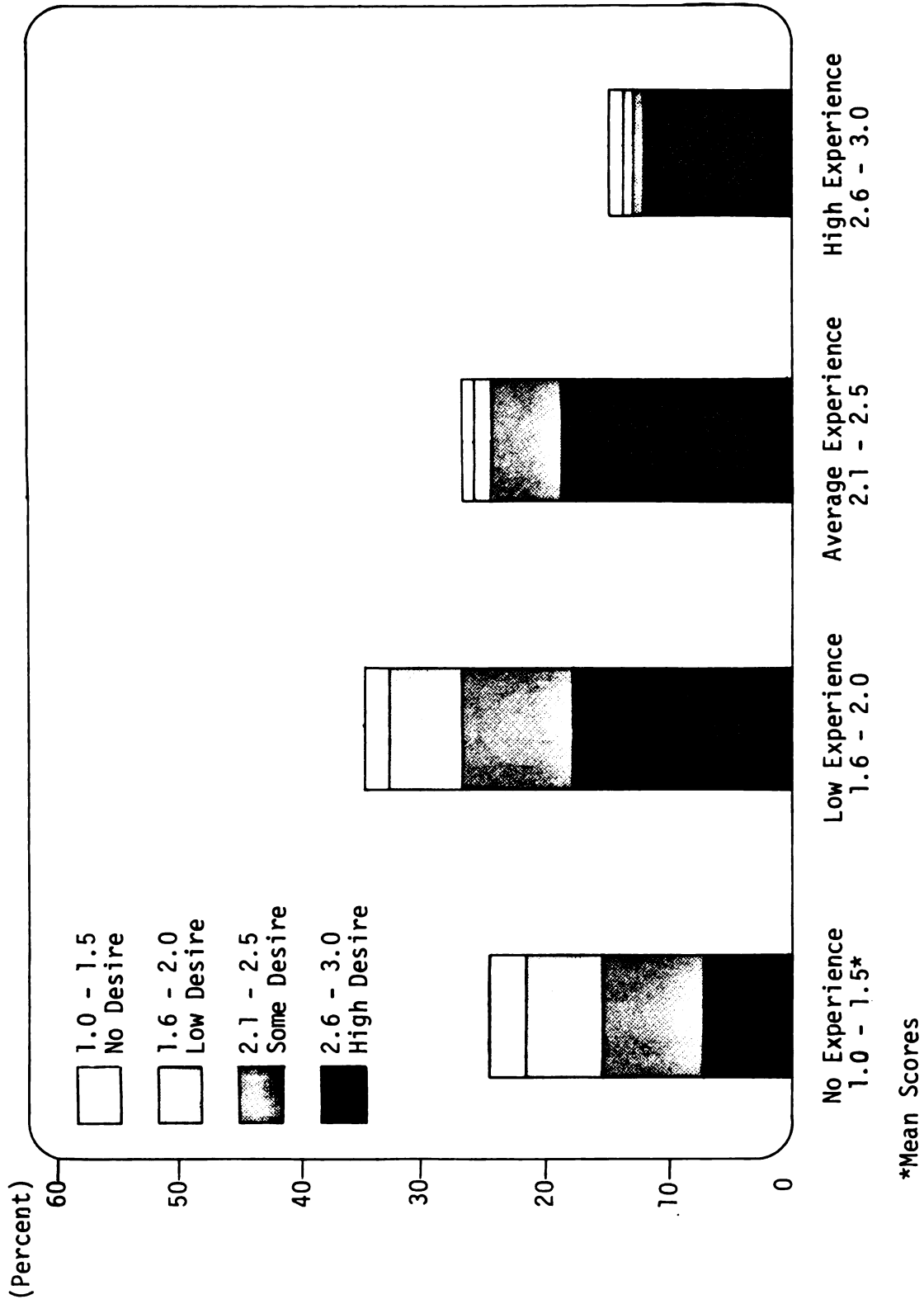


Figure 5.--Opportunity for professional association activities by experience and desire.

professional association activities than in the other developmental spheres. Visibility and exposure is the only area in which administrators recorded less desire.

The question needs to be asked--Do state departments of education support or reward administrators for being involved in professional association activities or are the problems and needs of the state vocational administrators not being met by the professional organizations?

State Size

Table 47 illustrates that opportunity to participate in professional association activities is not related to state size.

Table 47.--Relationships between state size and opportunity to participate in professional association activities by experience and desire.

State Size	Experience		Desire	
	Mean	S.D.	Mean	S.D.
Small	1.850	.5002	2.509	.5327
Medium	1.983	.4708	2.467	.5607
Large	2.048	.5099	2.511	.5680
Extra large	1.918	.5085	2.482	.4640
df = 3	Experience F = 1.789 Sig. = NS		Desire F = .109 Sig. = NS	

All four groups have low opportunity, as they fall below the 2.1 mean score. In general, state vocational administrators are not given the opportunity to participate in state, regional, or national professional

association activities. As a group, they tend not to hold executive office, serve on conference committees, or speak at national conferences, conventions, or meetings. The mean desire score, falling below the 2.6 mean score, demonstrates that state groups have an average desire to participate in these types of developmental activities. In the comparison of state size groups' desire for professional and management development experiences, it appears that they have less desire for opportunities in the professional association area than in the other five growth areas of on-the-job assignment, development of communication skills, visibility and exposure, outside development training, and mobility and job advancement.

Sex

As shown in Table 48, the experience scores for male and female groups do not demonstrate a significant difference. Also, the mean experience scores indicate that state administrators, regardless of sex, have low opportunity to participate in professional association activities.

Table 48.--Relationships between sex and opportunity to participate in professional association activities by experience and desire.

Sex	Experience		Desire	
	Mean	S.D.	Mean	S.D.
Male	1.933	.4868	2.461	.5181
Female	2.016	.5226	2.610	.5434
df = 1	Experience F = 1.313 Sig. = NS		Desire F = 3.765 Sig. = .0534	

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Of special interest is the fact that this is the one developmental area out of the six in which females scored higher than males. The desire for this type of professional development shows a significance level between males and females of .0534, slightly above the .05 confidence level. Females desire high opportunity for the experience, whereas males desire average opportunity. Males not only experience less opportunity to participate in professional association activities but also desire less opportunity for such activity. On the other hand, females both experience and desire more activities of this nature.

Age

Table 49 indicates the opportunity to experience professional association activities did not differ significantly between the various age groups. All groups, with the exception of the over 60 group, have experienced low opportunity in this developmental area. The over 60 group has had average experience, with a mean score of at least 2.1.

The relationship between age and desire for the opportunity to experience professional association activities is significant at the .0360 level of confidence. Using the post-hoc test to analyze the pairwise comparisons demonstrates that the means of some complex combination of experience groups were different from the mean of some other group or combinations of groups. However, it was something other than pairwise comparisons. The standard deviations of the five groups indicate greater agreement in the less than 30

age group regarding the desire to experience greater opportunity in professional association activities.

Table 49.--Relationships between age and opportunity to participate in professional association activities by experience and desire.

Age	Experience		Desire	
	Mean	S.D.	Mean	S.D.
Less than 30	1.650	.4342	2.763	.2973
30-39 years	1.849	.4710	2.536	.5115
40-49 years	1.986	.4966	2.584	.4209
50-59 years	1.952	.4854	2.360	.6209
Over 60	2.112	.5159	2.512	.5754
df = 4	Experience F = 1.912 Sig. = NS		Desire F = 2.614 Sig. = .0360	

Administrative Level

The relationship between administrative level and opportunity to participate in professional association activities is not significant, as shown in Table 50 under the experience column. Both first- and second-level administrators have had low experience in the opportunity to participate in professional association activities.

Desire for such experience also demonstrates no significance. The mean desire scores indicate only an average desire for the experience, falling below the 2.6 mean score level. Second-level administrators exhibit a wider range of difference between the

experience mean score and the desire mean score than do first-level administrators.

Table 50.--Relationships between administrative level and opportunity to participate in professional association activities by experience and desire.

Administrative Level	Experience		Desire	
	Mean	S.D.	Mean	S.D.
First level	2.048	.4911	2.408	.5435
Second level	1.922	.4987	2.519	.5230
df = 1	Experience F = 2.961 Sig. = NS		Desire F = 2.029 Sig. = NS	

Undergraduate Vocational-Specialty Area

Presented in Table 51 is the relationship between the undergraduate vocational-specialty area and the opportunity to experience professional association activities. Significance is less than the .01 level within the design, but the post-hoc test indicated that no pairwise groups were significant in themselves. Only the Agriculture group has an average experience score; all others have low opportunity to experience development in professional association activities.

As illustrated in Table 52, undergraduate vocational-specialty area is related at less than the .05 level of confidence with desire to participate in professional association activities.

Table 51.--Relationships between undergraduate vocational-specialty area and opportunity to participate in professional association activities by experience.

Vocational-Specialty Area	Experience	
	Mean	S.D.
Agriculture	2.100	.4925
Business & office	1.989	.4724
Distributive ed.	2.075	.4393
Health occ.	1.960	.5522
Home economics	2.097	.5654
Industrial ed.	1.955	.5315
Technical ed.	1.675	.3841
Other	1.726	.3796
df = 7		
F = 3.101		
Significance = .0038		

Table 52.--Relationships between undergraduate vocational-specialty area and the opportunity to participate in professional association activities by experience and desire.

Vocational-Specialty Area	Experience		Desire	
	Mean	S.D.	Mean	S.D.
Agriculture	2.100	.4925	2.508	.4698
Business & office	1.989	.4724	2.657	.3664
Distributive ed.	2.075	.4393	2.642	.5017
Health occ.	1.960	.5522	2.330	.6516
Home economics	2.097	.5654	2.613	.6050
Industrial ed.	1.955	.5315	2.384	.5646
Technical ed.	1.675	.3841	2.383	.6807
Other	1.726	.3796	2.349	.5500
df = 7	Experience F = 3.101		Desire F = 2.055	
	Sig. = .0038		Sig. = .0490	

The post-hoc test demonstrated that the significance was something other than the pairwise comparisons. Of the specialty area groups that desire experience in this developmental area, only three groups desire high opportunity for the experience: Business and Office (2.657), Distributive Education (2.642), and Home Economics (2.613). All other groups have an average desire for the experience. There is greater desire within Business and Office than in the other five groups to participate in professional association activities (mean 2.657, standard deviation .3664). Health Occupations, Agriculture, and Industrial Education have more congruence in experience and desire mean scores than do the other groups. The greatest differences between the experience and desire mean scores belong to the Technical Education and the Business and Office groups.

State Department Experience

As Table 53 illustrates, the number of years in the state department and the opportunity to participate in professional association activities are related at less than the .05 level of confidence. The post-hoc test verified that the less than 3 years group and the 4-7 years group have had significantly less experience than the over 15 years group. Only the group with over 15 years in the state department demonstrates average experience in professional association activities, whereas the other four groups indicate low experience in the area.

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Table 53.--Relationships between state department experience and the opportunity to participate in professional association activities by experience.

Number of Years in State Department	Experience	
	Mean	S.D.
Less than 3	1.808	.4724
4-7 years	1.869	.4707
8-11 years	2.017	.4892
12-15 years	1.952	.4741
Over 15	2.125	.5536

df = 4

F = 2.474

Significance = .0449

The relationships between state department experience and desire to participate in professional association activities are shown in Table 54.

Table 54.--Relationships between state department experience and the opportunity to participate in professional association activities by desire.

Number of Years in State Department	Desire	
	Mean	S.D.
Less than 3	2.785	.2908
4-7 years	2.509	.5168
8-11 years	2.509	.4986
12-15 years	2.420	.4939
Over 15	2.322	.7314

df = 4

F = 3.248

Significance = .0127

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The Least Significant Difference post-hoc test determined that the less than 3 years group has significantly more desire to participate in professional association activities than all of the other groups. Only the less than 3 years group has a high desire for professional development experience, with a mean score of at least 2.6. All other groups desire average opportunity for the experience. The less than 3 years group has the greatest within-group agreement regarding desire for the experience, whereas the over 15 years group shows the least agreement within the group.

Mobility and Job Advancement

Is mobility encouraged and are promotions extant?

As indicated in Figure 6, 59.7 percent of the state vocational administrators have average or high experience in mobility, whereas 40.3 percent of the group have had no or low experience. Opportunity for mobility and job advancement is more evenly distributed among experience level groups than in any of the other five developmental areas. Approximately the same percentage of administrators have low opportunity for mobility as have average experience--31 percent compared to 34.1 percent.

Administrators who have had mobility experience have worked with supervisors to set goals for improvement of work performance, have had regular appraisals to evaluate work performance, and have had their range of responsibilities expanded in the job assignment. There appears to be low opportunity in the state department for promotions, merit pay raises, lateral positional moves, and job

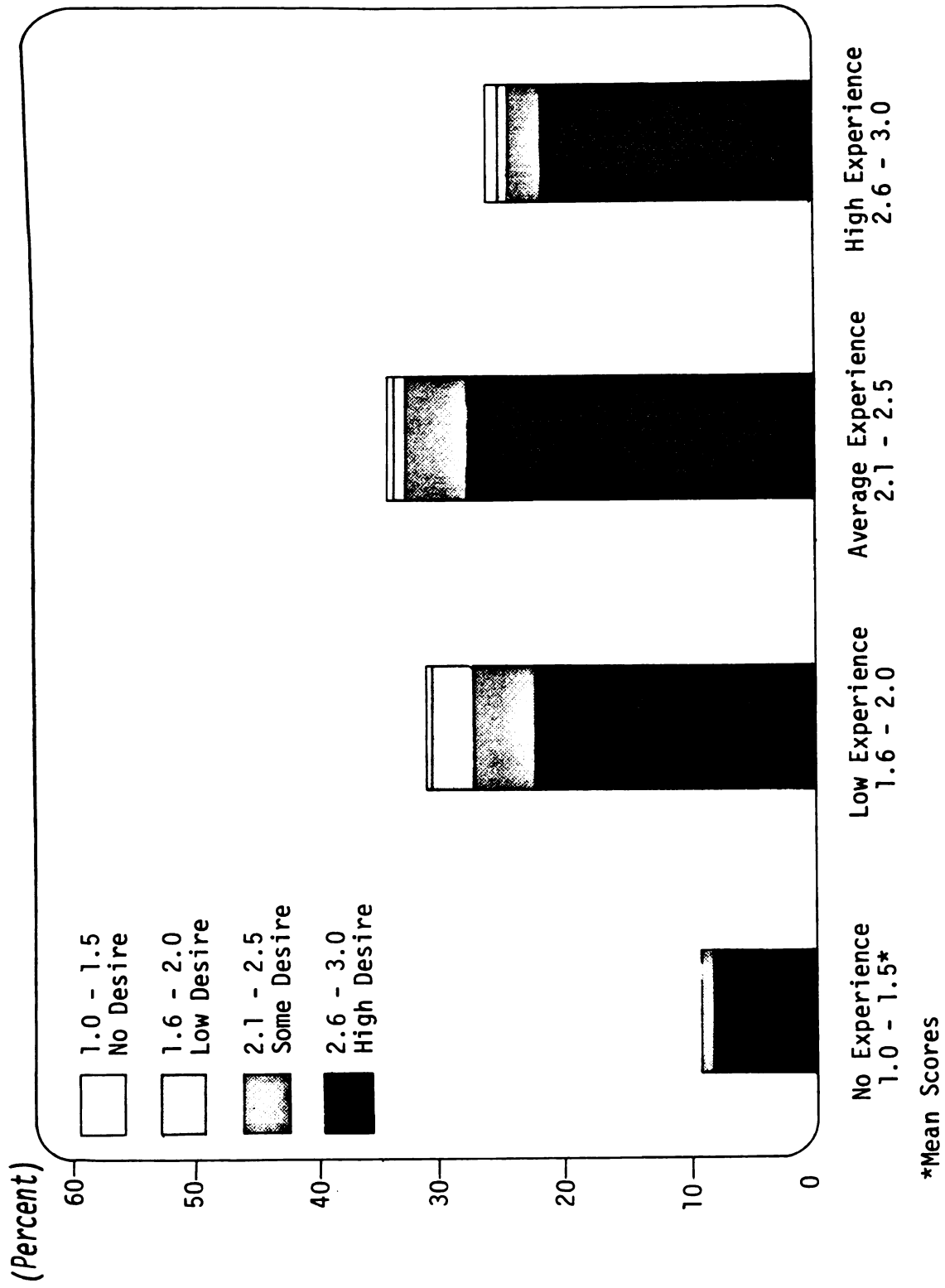


Figure 6.--Opportunity for mobility and job advancement by experience and desire.

advancement. Administrators at all experience levels indicated a high desire to experience almost all of the mobility items, with 79.4 percent of the group indicating the high desire category. Administrators indicated somewhat less desire to move laterally into a position that provides a wider scope of responsibility. Desire for mobility ranked first among the six developmental areas.

State Size

As illustrated in Table 55, there is no relationship between state size and the opportunity to experience mobility and job advancement. All groups tend to rank toward the lower end of the average experience scale. All state size groups have a high desire for mobility and job advancement, as evidenced by the mean desire score of at least 2.6.

Table 55.--Relationships between state size and opportunity for mobility and job advancement by experience and desire.

State Size	Experience		Desire	
	Mean	S.D.	Mean	S.D.
Small	2.107	.4600	2.798	.4167
Medium	2.124	.4550	2.667	.4190
Large	2.228	.5054	2.709	.4435
Extra large	2.229	.5102	2.738	.3350
df = 3	Experience F = 1.152 Sig. = NS		Desire F = 1.192 Sig. = NS	

Sex

The relationship of sex to opportunities for mobility and job advancement is significant at the .0548 level, just above the .05 critical value range. Desire for mobility and advancement demonstrates no significance, as both groups denote a high desire. (See Table 56.)

Table 56.--Relationships between sex and opportunity for mobility and job advancement by experience and desire.

Sex	Experience		Desire	
	Mean	S.D.	Mean	S.D.
Male	2.200	.4749	2.735	.3384
Female	2.064	.4933	2.705	.5414
df = 1	Experience F = 3.722 Sig. = .0548		Desire F = .273 Sig. = NS	

There is a considerable spread in mean scores for both males and females, with females' scores demonstrating the wider range between experience and desire. This is the only instance in which males indicated a higher desire than females to experience greater opportunity in a particular developmental area. All other areas show males to have less desire than females.

Age

There is a relationship between age and the administrator's opportunity for mobility and job advancement. The analysis of

variance proves, as shown in Table 57, that there is a significant difference at less than the .05 level of confidence between or among age groups.

Table 57.--Relationships between age and opportunity for mobility and job advancement by experience.

Age	Experience	
	Mean	S.D.
Less than 30	1.713	.3980
30-39 years	2.104	.5004
40-49 years	2.145	.4639
50-59 years	2.258	.4732
Over 60	2.159	.5001

df = 4
F = 2.875
Significance = .0236

The Least Significant Difference test determined that the less than 30 group has had significantly less opportunity than all the other groups to experience job advancements, lateral moves with increased responsibility, merit pay raises, and promotional title changes. All the other groups have had at least average experience in the developmental area of mobility and advancement, whereas the less than 30 group has had low experience.

Somewhere within the design there is a significant relationship, at less than the .05 level of confidence, between age and the desire for mobility and advancement. (See Table 58.) However,

using the Least Significant Difference post-hoc multiple comparisons test, none of the groups were significant in themselves. Although the means of some complex combination of groups were different from the mean of some other group or combinations of groups, it was something other than pairwise comparisons.

Table 58.--Relationships between age and opportunity for mobility and job advancement by desire.

Age	Desire	
	Mean	S.D.
Less than 30	2.838	.3292
30-39 years	2.827	.2684
40-49 years	2.783	.2883
50-59 years	2.648	.4879
Over 60	2.594	.5309

df = 4

F = 2.908

Significance = .0223

Administrative Level

As presented in Table 59, administrative level is related, at the .0001 level of confidence, to opportunities for mobility and job advancement. First-level administrators have had more opportunity than second-level administrators to experience mobility and job advancement.

Table 59.--Relationships between administrative level and opportunity for mobility and job advancement by experience.

Administrative Level	Experience	
	Mean	S.D.
First level	2.372	.4960
Second level	2.109	.4533

df = 1
F = 14.910
Significance = .0001

Table 60 illustrates that there is no relationship between administrative level and the desire for mobility and job advancement, as both groups seek more opportunity for mobility and job advancement.

Table 60.--Relationships between administrative level and opportunity for mobility and job advancement by experience and desire.

Administrative Level	Experience		Desire	
	Mean	S.D.	Mean	S.D.
First level	2.372	.4960	2.743	.3640
Second level	2.109	.4533	2.721	.4066

df = 1
Experience F = 14.910
Sig. = .0001
Desire F = .133
Sig. = NS

There appears to be a considerable spread in mean experience and desire scores for both groups. However, second-level administrators tend to indicate greater diversity between what the group

has actually had the opportunity to experience and what it would like to experience.

Undergraduate Vocational-Specialty Area

The relationships between undergraduate vocational-specialty area and opportunity for mobility and job advancement by both experience and desire do not demonstrate a significant difference between groups. Table 61 illustrates the differences between the experience of a particular vocational-specialty area group and the desire of that group to have opportunities for mobility and job advancement.

Table 61.--Relationships between vocational-specialty area and opportunity for mobility and job advancement by experience and desire.

Vocational-Specialty Area	Experience		Desire	
	Mean	S.D.	Mean	S.D.
Agriculture	2.293	.4693	2.678	.4365
Business & office	2.160	.4590	2.753	.3387
Distributive ed.	2.058	.5248	2.892	.1929
Health occ.	2.100	.4738	2.490	.6367
Home economics	2.137	.5082	2.660	.6251
Industrial ed.	2.164	.5352	2.711	.4067
Technical ed.	1.958	.3872	2.742	.3147
Other	2.204	.4530	2.757	.2676
df = 7	Experience F = .874 Sig. = NS		Desire F = 1.005 Sig. = NS	

All groups except Technical Education have had at least an average amount of experience, as indicated by the mean experience scores. With the exception of the Health Occupations group, which desires an average amount of mobility, all groups indicate a high desire for mobility and job advancement.

State Department Experience

A significant relationship, at less than the .01 critical value, does exist between the number of years in the state department and the opportunity to experience mobility and job advancement. (See Table 62.)

Table 62.--Relationships between state department experience and opportunity for mobility and job advancement by experience.

Number of Years in State Department	Experience	
	Mean	S.D.
Less than 3	1.896	.5295
4-7 years	2.103	.4050
8-11 years	2.253	.4263
12-15 years	2.187	.4953
Over 15	2.314	.5499

df = 4
F = 4.050
Significance = .0034

The post-hoc test differentiated the groups that differed significantly in their opportunities to experience mobility and

advancement. The less than 3 years group has had less opportunity than the 8-11 years group, the 12-15 years group, and the over 15 years group. The 4-7 years group has had less opportunity than the over 15 years group.

Presented in Table 63 is the relationship between the number of years in the state department and the opportunity for mobility and job advancement by desire. The analysis of variance verified that there is a significant difference, at less than the .01 level of confidence, somewhere within the design. The Least Significant Difference post-hoc test established that the over 15 years group has less desire for mobility and advancement than all other groups.

Table 63.--Relationships between state department experience and opportunity for mobility and job advancement by desire.

Number of Years in State Department	Desire	
	Mean	S.D.
Less than 3	2.831	.2346
4-7 years	2.783	.3267
8-11 years	2.779	.3515
12-15 years	2.680	.3212
Over 15	2.464	.6892

df = 4

F = 5.241

Significance = .0005

Desire for Greater Opportunity to Experience
Professional and Management
Development Activities

Which groups (sex, age, administrative level, vocational specialty area, state department experience) have the greatest desire for change--for more opportunity to experience professional and management development activities?

To determine which groups desired more opportunity to experience professional and management development activities, a change score was computed to represent the desire for change in opportunity. This score was computed by finding the difference between the accumulated desire score and the accumulated experience score. The analysis of variance tested significant differences between groups, with alpha set at .05 as the critical value. A multiple comparisons procedure of the Least Significant Differences technique was used when the F-value was statistically significant and the independent variable contained three or more groups. In the following discussion the groups desiring change in opportunity are presented and the developmental activities are ranked, beginning with the group's highest priority.

Females

The female group has the greatest desire for change in four professional and management development areas, as shown in Table 64. Their highest priorities tend to be opportunities that would provide more varied administrative responsibilities and higher visibility and exposure.

Table 64.--Females' desire for change, according to professional and management development areas.

Development Area	F-Value	Significance
On-the-job assignments	26.680	<.0001
Visibility and exposure	8.266	.0044
Outside development training	6.142	.0135
Professional Association activities	5.783	.0169

Age Groups

Various age groups indicated a significant desire for change--for more opportunity. (See Table 65.) The less than 30 years group tends to want more opportunity for visibility and exposure, whereas the 30-39 years group and the 40-49 years group desire more outside development training.

Table 65.--Desire for change according to age level and professional and management development areas.

Development Area	F-Value	Significance
<u>Less than 30 Years</u>		
Visibility and Exposure	4.454	.0017
Outside Development Training	4.149	.0029
Mobility and Job Advancement	3.760	.0055
Professional Association Activities	2.575	.0383
<u>30-39 Years</u>		
Outside Development Training	4.149	.0029
Visibility and Exposure	4.454	.0017
<u>40-49 Years</u>		
Outside Development Training	4.149	.0029
Professional Association Activities	2.575	.0383

Second-Level Administrators

Second-level administrators would like to have increased opportunity to grow in the three areas shown in Table 66. This group's highest priority tends to be more opportunity for mobility and job advancement.

Table 66.--Second-level administrators' desire for change, according to development areas.

Development Area	F-Value	Significance
Mobility and job advancement	7.807	.0056
On-the-job assignments	3.590	.0037
Professional association activities	4.683	.0314

Vocational-Specialty Areas

Two groups in the vocational-specialty area group have a high desire for change. Their desires for growth are presented in Table 67.

Table 67.--Desire for change according to vocational-specialty area and development area.

Development Area	F-Value	Significance
<u>Home Economics</u>		
On-the-job assignment	3.977	.0004
Outside development training	2.241	.0317
<u>Business and Office</u>		
Outside Development training	2.241	.0317

State Department Experience

Two groups have a strong desire for change in opportunity for developmental activities--the less than 3 years group and the 4-7 years group. (See Table 68.)

Table 68.--Desire for change according to state department experience and development area.

Development Area	F-Value	Significance
<u>Less Than 3 Years</u>		
Mobility and job advancement	7.263	<.0001
Outside development training	6.142	.0001
Professional association activities	4.693	.0011
Visibility and exposure	4.408	.0018
On-the-job assignment	3.717	.0058
Development of communication skills	2.414	.0495
<u>4-7 Years</u>		
Mobility and job advancement	7.263	<.0001
Outside development training	6.142	.0001
Professional association activities	4.693	.0011
Visibility and exposure	4.408	.0018
Development of communication skills	2.414	.0495

State administrators who have worked at the state department less than 3 years desire more change than any other group, as indicated by the six developmental areas listed in Table 68. They tend to have more desire for mobility and advancement and special outside development training than for the other four development areas.

The 4-7 years group also wants change for increased opportunity to experience professional and management development activities, as evidenced by the five areas that showed significance.

Profile of a State Vocational Administrator

A profile of a state vocational administrator may be sketched by examining the groups that hold status and position relative to other groups within the formal organization. Then a descriptive analysis of the individuals who make up the group, in terms of physical attributes, professional experiences, and educational background, will enable the researcher to formulate some generalizations about the norms of the group and to determine which groups are provided opportunities for growth and mobility.

In reviewing the data collected, it appears that state vocational administrators are primarily Caucasian males (Table 69), between the ages of 40 and 59 (Table 70). Out of a total of 61 first-level administrators responding (Tables 70 and 71), 83.6 percent (51) are male, and mostly between 40 and 59 years of age.

Table 69.--State vocational administrators by sex and race.

Sex	Caucasian	Black	Amer. Indian	Spanish Surname	Oriental	Row Total
Male						
Number	186	3	1	6	1	197
Row percent	94.4	1.5	.5	3.1	.5	76.4
Female						
Number	57	3	0	0	1	61
Row percent	93.4	4.9	0	0	1.6	23.7
Column total						
Number	243	6	1	6	2	258
% of total	94.2	2.4	.4	2.3	.8	100.0

Table 70.--Administrative level by age: Male respondents.

Administrative Level	Less Than 30	30-39	40-49	50-59	60 and Over	Row Total
First Level						
Number	0	6	22	19	4	51
Row percent	0	11.8	43.1	37.3	7.8	27.0
Second Level						
Number	3	34	43	47	11	138
Row percent	2.2	24.6	31.2	34.1	8.0	73.0
Column total						
Number	3	40	65	66	15	189
% of total	1.6	21.2	34.4	34.9	7.9	100.0

Note: Eight second-level administrators did not respond.

In the 40-49 age group, the proportion of male first-level to second-level administrators is 43.1 percent (22) to 31.2 percent (43), more first-level to second-level administrators than in any other age group. The fewest male first-level administrators are in the over 60 age group, with only 7.8 percent (4).

Almost 75 percent (146) of all second-level administrators in the sample are male. Again, the 40-59 age group has the largest number of administrators--48 percent (90) of the total number of second-level administrators. Only 2.2 percent (3) are in the less-than-30 age group. The central tendency measures for the entire group of all state vocational administrators are as follows: The mean is 45.6 years, the mode is 37 years, and the median equals 46.5 years of age.

As shown in Table 71, 16 percent (10) of the female respondents are first-level administrators. The largest percentage in a single age group is 50 percent (5) in the 50-59 age category; the smallest percentage is in the 30-39 and 40-49 age groups, each representing 20 percent (2).

Table 71.--Administrative level by age: Female respondents.

Administrative Level	Less Than 30	30-39	40-49	50-59	60 and Over	Row Total
First Level						
Number	0	2	2	5	1	10
Row percent	0	20.0	20.0	50.0	10.0	16.0
Second Level						
Number	4	13	14	14	3	48
Row percent	8.3	27.1	29.2	29.2	6.3	84.0
Column total						
Number	4	15	16	19	4	58
% of total	6.9	25.9	27.6	32.8	6.9	100.0

Note: Three second-level administrators did not respond.

There are 48 female second-level administrators, or 26 percent of the entire sample. The number of female first- and second-level administrators remains basically the same from 30 years of age through 59, whereas the number of male administrators at both the first and second levels drastically increases from 30 to 49 years of age.

Referring back to Table 69, it can be seen that minority groups are represented by 15 administrators, 11 of whom are male and 4 female. Of the females, three are black and one is oriental.

Black and Spanish-surname respondents have the highest minority representation, with six members each or 2.3 percent of the total.

In determining the vocational-specialty background of the individuals who become first- and second-level administrators, it appears that the largest percentage of administrators comes from Industrial Education, with a total of 21.3 percent (53) of the total group; however, they represent 31 percent (18) of the first-level administrators and 18.3 percent (35) of second-level administrators (see Table 72). Proportionately, there are more first-level administrators to second-level administrators than any other vocational-specialty area, except for Agriculture, which has the same. The groups that have the second highest total numbers are Business and Office and the group labeled Other (not in a vocational-specialty area). Business and Office comprises 18.9 percent (47) of the overall group--15.5 percent (9) of the first-level administrators and 19.9 percent of the second-level administrators. The ratio of first-to second-level administrators is one to four.

The group named Other has 18.5 percent (46) of the state vocational administrators--19 percent (11) of the first-level administrators and 18.3 percent (35) of the second-level administrators. Within the Others group, the ratio of first-to second-level administrators is one to three. Agriculture boasts 15.7 percent (39) of the total group, and ranks third in numbers of state vocational administrators. It is second highest in numbers of first-level administrators, 22.4 percent (13) of that group. Within the

Table 72.--Administrative level by undergraduate vocational-specialty area.

Administrative Level	Agric.	Business & Office	Distrib. Educ.	Health Occup.	Home Econ.	Indust. Educ.	Tech. Educ.	Other	Row Total
First Level									
Number	13	9	0	3	4	18	0	11	58
Row percent	22.4	15.5	0	5.2	6.9	31.0	0	19.0	23.3
Column percent	33.3	19.1	0	30.0	13.3	34.0	0	23.9	
Total percent	5.2	3.6	0	1.2	1.6	7.2	0	4.4	
Second Level									
Number	26	38	12	7	26	35	12	35	191
Row percent	13.6	19.9	6.3	3.7	13.6	18.3	6.3	18.3	76.7
Column percent	66.7	80.9	100.0	70.0	86.7	66.0	100.0	76.1	
Total percent	10.4	15.3	4.8	2.8	10.4	14.1	4.8	14.1	
Column total									
Number	39	47	12	10	30	53	12	46	249
% of total	15.7	18.9	4.8	4.0	12.0	21.3	4.8	18.5	100.0

Note: Nine individuals did not respond.

Agriculture group, the ratio of first-level administrators to second-level administrators is one to two.

The smallest number of administrators is in the Health Occupations area, with a total of 4 percent (10), 3 first level and 7 second level. Distributive Education and Technical Education have no first-level administrators, but each area claims 12 percent (12) second-level administrators each. Although Home Economics has the same number of second-level administrators as does Agriculture--13.6 percent (26)--as a group it can claim only 6.9 percent (4) of the first-level administrators.

State vocational administrators as a group have an educational background of at least a master's degree or higher (see Table 73). Only 8.1 percent (20) of the 248 respondents have only a bachelor's degree. Of those holding advanced degrees, 74.1 percent (169) have a master's degree, 16.2 percent (37) possess a doctorate degree, and 9.6 percent (22) have completed a specialist degree.

As illustrated in Table 74, the state administrators most often have master's degrees in their vocational specialty area--41.4 percent (70) of the respondents--and least often have the degree in guidance and counseling--4.7 percent (8)--or curriculum and instruction--6.5 percent (11). Almost 19 percent (32) of the respondents in the total master's degree group had majors in vocational-technical education and educational administration.

The largest number of respondents have a Ph.D. major in educational administration--43.2 percent (16). A major in the vocational specialty area tends to be the second highest degree major.

Table 73.--Educational level by advanced degree major.

Educational Level	Voc.- Tech. Ed.	Guidance & Couns.	Curric. & Instr.	Educ. Admin.	Vocational Spec. Area	Other	Row Total
Masters							
Number	32	8	11	32	70	16	169
Row percent	18.9	4.7	6.5	18.9	41.4	9.5	74.1
Educ. Specialist							
Number	5	2	0	14	1	0	22
Row percent	22.7	9.1	0	63.6	4.5	0	9.6
Ph.D.							
Number	5	0	2	16	10	4	37
Row percent	13.5	0	5.4	43.2	27.0	10.8	16.2
Column total							
Number	42	10	13	62	81	20	228
% of total	18.4	4.4	5.7	27.2	35.5	8.8	100.0

Note: Five individuals did not respond.

Table 74.--Administrative level by advanced degree major.

Administrative Level	Voc.- Tech. Ed.	Guidance & Couns.	Curric. & Instr.	Educ. Admin.	Vocational Spec. Area	Other	Row Total
First Level							
Number	13	3	2	16	22	4	60
Row percent	21.7	5.0	3.3	26.7	36.7	6.7	23.8
Second Level							
Number	39	7	11	46	73	16	192
Row percent	20.3	3.6	5.7	24.0	38.0	8.3	76.2
Column total							
Number	52	10	13	62	95	20	252
% of total	20.6	4.0	5.2	24.6	37.7	7.9	100.0

Note: Five individuals did not respond. One first-level administrator's advanced degree was in educational research.

Guidance and Counseling and Curriculum and Instruction have the lowest numbers--0 and 5.4 percent (2), respectively.

First-level administrators obtained their advanced degrees in their vocational specialty area (36.7 percent [22]), educational administration (26.7 percent [16]), and vocational-technical education (21.7 percent [13]). Second-level administrators also earned advanced degrees in their vocational-specialty area (38 percent [73]), educational administration (24 percent [46]), and vocational-technical education (20.3 percent [39]).

Table 75 indicates that 61 percent (36) of the first-level administrators have a master's degree and 16.9 percent (10) hold a doctorate degree. The smallest group (10.2 percent [6]) has the specialist degree.

Table 75.--Sex by education level: First-level administrators.

Sex	Bachelor's Degree	Master's Degree	Specialist Degree	Doctorate Degree	Row Total
Male					
Number	5	31	6	8	50
Row percent	10.0	62.0	12.0	16.0	84.7
Female					
Number	2	5	0	2	9
Row percent	22.2	55.6	0	22.2	15.3
Column total					
Number	7	36	6	10	59
% of total	11.9	61.0	10.2	16.9	100.0

As evidenced by Table 76, second-level administrators also predominantly possess master's degrees, with 70.4 percent (133). The second highest group holds doctorates, with 14.3 percent (27).

Table 76.--Sex by education level: Second-level administrators.

Sex	Bachelor's Degree	Master's Degree	Specialist Degree	Doctorate Degree	Row Total
Male					
Number	8	99	9	23	139
Row percent	5.8	71.2	6.5	16.5	73.5
Female					
Number	5	34	7	4	50
Row percent	10.0	68.0	14.0	8.0	26.5
Column total					
Number	13	133	16	27	189
% of total	6.9	70.4	8.5	14.3	100.0

Unlike the first-level administrators, the second-level administrators' smallest group (6.9 percent [13]) holds a bachelor's degree. In terms of percentages, more first-level administrators have bachelor's degrees than do second-level administrators. There appear to be no significant differences between males and females in terms of educational background, other than the fact that no females in first-level positions have specialist degrees and the number of male second-level administrators who hold doctorate degrees is 16.5 percent (23), compared to 8 percent (4) of the female second-level administrators who hold doctorates.

Most first-level administrators in the sample (21.7 percent [13]) earn salaries in the \$28,000-\$30,999 range. (See Table 77.) It appears that salaries are widely diverse, since as many first-level administrators earn \$16,000-\$18,999 as earn over \$34,000. Numbers of responses in the other salary ranges are evenly distributed. Females are not represented in three of the salary ranges--the extreme low and high groups, and the middle group.

The second-level administrators most frequently checked the \$22,000-\$24,999 salary range--30 percent [57] of the total. (See Table 78.) The second highest number was in the \$19,000-\$21,999 range, with 23.7 percent (45). The ratio of females to males drops in the \$22,000-\$24,999 group; this trend continues throughout the higher salary ranges.

The largest percentage of state administrators who are currently employed have worked 8 to 11 years in the state department of education (30.2 percent [76] of the sample). (See Tables 79 and 80.) Next most frequently checked was the 4-7 years group (25.8 percent [65] of the sample). No first-level male administrator has worked at the state department for three years or less. It appears that it takes at least eight years to advance to a first-level position and the administrator stays in that position until some time in the 12-15 year period. The number of second-level administrators in each experience group increases through the 11 years category; then a sharp decline in numbers is evident.

Table 77.--Sex by salary range: First-level administrators.

Sex	\$16,000- \$18,999	\$19,000- \$21,999	\$22,000- \$24,999	\$25,000- \$27,999	\$28,000- \$30,999	\$31,000- \$33,999	\$34,000 and Over	Row Total
Male								
Number	5	9	6	10	9	6	5	50
Row percent	1.0	18.0	12.0	20.0	18.0	12.0	10.0	83.3
Female								
Number	0	1	2	0	4	3	0	10
Row percent	0	10.0	20.0	0	40.0	30.0	0	16.7
Column total								
Number	5	10	8	10	13	9	5	50
% of total	8.3	16.7	13.3	16.7	21.7	15.0	8.3	100.0

Note: One individual did not respond.

Table 78.--Sex by salary range: Second-level administrators.

Sex	Less Than \$16,000	\$16,000- \$18,999	\$19,000- \$21,999	\$22,000- \$24,999	\$25,000- \$27,999	\$28,000- \$30,999	\$31,000- \$33,999	Row Total
Male								
Number	3	19	30	43	25	13	8	141
Row percent	2.1	13.5	21.3	30.5	17.7	9.2	5.7	74.2
Female								
Number	2	9	15	14	7	2	0	49
Row percent	4.1	18.4	30.6	28.6	14.3	4.1	0	25.8
Column total								
Number	5	28	45	57	32	15	8	190
% of total	2.6	14.7	23.7	30.0	16.8	7.9	4.2	100.0

Note: Seven individuals did not respond.

Table 79.--Administrative level by state department experience: Males.

Administrative Level	3 or Less Years	4-7 Years	8-11 Years	12-15 Years	Over 15 Years	Row Total
First Level						
Number	0	8	19	19	5	51
Row percent	0	15.7	37.3	37.3	9.8	26.6
Second Level						
Number	13	38	45	27	18	141
Row percent	9.2	27.0	31.9	19.1	12.8	73.4
Column total						
Number	13	46	64	46	23	192
% of total	6.8	24.0	33.3	24.0	12.0	100.0

There appears to be no defined route for the female first-level administrator, as the 10 individuals holding such positions are spread throughout the five experience ranges in no particular pattern. (See Table 80.) There is a noticeable similarity in the number of female and male second-level administrators with less than three years experience, but as the next eight years demonstrate, the number of males holding second-level positions triples, whereas the number of females holding such positions remains substantially the same.

State vocational administrators tend to stay in a position between seven and nine years. Male first-level administrators, after remaining constant in terms of numbers through nine years, exhibit the biggest drop in numbers during the 10-12 year period. (See Table 81.)

Table 80.--Administrative level by state department experience:
Females.

Administrative Level	3 or Less Years	4-7 Years	8-11 Years	12-15 Years	Over 15 Years	Row Total
First Level						
Number	1	2	3	1	3	10
Row percent	10.0	20.0	30.0	10.0	30.0	16.7
Second Level						
Number	11	17	9	6	7	50
Row percent	22.0	34.0	18.0	12.0	14.0	83.3
Column total						
Number	12	19	12	7	10	60
% of total	20.0	31.7	20.0	11.7	16.7	100.0

Table 81.--Sex by years in present position: First-level administrators.

Sex	3 or Less Years	4-6 Years	7-9 Years	10-12 Years	Over 13 Years	Row Total
Male						
Number	17	15	14	4	1	51
Row percent	33.3	29.4	27.5	7.8	2.0	83.6
Female						
Number	4	2	3	0	1	10
Row percent	40.0	20.0	30.0	0	10.0	16.4
Column total						
Number	21	17	17	4	2	61
% of total	34.4	27.9	27.9	6.6	3.3	100.0

Table 82 shows that between the seventh and ninth years of employment, male second-level administrators tend to leave that administrator grouping and either move into a first-level position or leave the state department. Between the tenth and twelfth years, a more drastic decrease in numbers is in evidence.

Table 82.--Sex by years in present position: Second-level administrators.

Sex	3 or Less Years	4-6 Years	7-9 Years	10-12 Years	Over 13 Years	Row Total
Male						
Number	42	42	31	18	11	142
Row percent	29.6	29.6	21.8	11.3	7.7	74.0
Female						
Number	26	13	6	2	3	50
Row percent	52.0	25.0	12.0	4.0	6.0	26.0
Column total						
Number	68	55	37	18	14	192
% of total	35.4	28.6	19.3	9.4	7.3	100.0

Female first-level administrators are sparse in number and are almost evenly dispersed in the three experience groups representing up to nine years of employment. Most female second-level administrators (52 percent [26]) are in the three or less years category. However, this group is the only one of the three administrator groups to lose 50 percent of its numbers in each succeeding three-year period. Most noticeable is the 50 percent decrease in numbers in the four to six year category.

State vocational administrators average 11 years of professional employment before coming to work in the state department. The educational work years most frequently experienced is 7, while median educational experience is 10 years. Most respondents (35.6 percent [86]) had had four to eight years of previous education experience. (See Table 83.) The fewest administrators--8.3 percent (20)--were in the three or less years group.

Table 83.--Professional experience in education before being employed in the state department.

Years of Experience	Number	Percent
3 or less	20	8.3
4 to 8 years	86	35.6
9 to 13 years	45	18.6
14 to 18 years	52	21.5
19 years and over	39	16.1
Total	242	100.1

Note: Percentages do not total 100 because of rounding off figures.

As shown in Table 84, almost 71 percent (83) of the respondents had an academic background in administration or management; 29.1 percent (75) did not have this background.

Table 84.--Academic background in administration or management.

Academic Preparation	Number of Respondents	Percent
Yes	183	70.9
No	75	29.1
Total	258	100.0

Of the respondents who had an administrative or management background, a majority (33.9 percent [59]) had taken 6 to 12 credits in these fields. (See Table 85.) "Other" was the next most frequently mentioned level of preparation, indicated by 32.8 percent (57) of the total respondents.

Table 85.--Academic preparation in administration or management by administrative level: Yes respondents.

Administrative Level	6 Credits	6-12 Credits	Degree Minor	Other	Row Total
First Level					
Number	5	16	10	14	45
Row percent	11.1	35.6	22.2	31.1	100.0
Second Level					
Number	10	43	33	43	129
Row percent	7.8	33.3	25.6	33.3	100.0
Column total					
Number	15	59	43	57	174
% of total	8.6	33.9	24.7	32.8	100.0

Ten administrators in the group labeled "Other" had had a major in administration, and five had a master's degree in business administration. Others had had such experiences as in-service courses, military service, seminars, accounting, and nursing. The majority, however, checked only "Other" and did not specify the type of experience. The least academic preparation mentioned was less than six credits (8.6 percent [15]); a larger percentage of first- than second-level administrators had taken only six credits in administration or management.

As illustrated in Table 86, first-level state administrators are four times as likely to be promoted from within the state department as to be hired from outside the department.

Table 86.--Promotion from within or outside the state department by academic preparation in administration: First-level administrators.

Type of Promotion	Academic Preparation		Row Total
	Yes	No	
Within the department			
Number	35	12	47
Column percent	79.5	75.0	78.3
Outside the department			
Number	9	4	13
Column percent	20.5	25.0	21.7
Column total			
Number	44	16	60
% of total	73.3	26.7	100.0

Administrators promoted from within the state department total 78.3 percent (47), whereas 21.7 percent (13) were hired from outside the department. Of the first-level administrator group, 73.3 percent (44) stated they had had academic preparation in administration or management and 26.7 percent (16) said they had not. An administrator without training is three times as likely to be promoted from within the department as from outside, or 75 percent (12) of the respondents as opposed to 25 percent (4).

Second-level administrators are also more apt to be promoted from within than from outside the department, but at a much lower rate than first-level administrators, as shown in Table 87.

Table 87.--Promotion from within or outside the state department by academic preparation in administration: Second-level administrators.

Type of Promotion	Academic Preparation		Row Total
	Yes	No	
Within the department			
Number	76	36	112
Column percent	56.3	64.3	58.6
Outside the department			
Number	59	20	79
Column percent	43.7	35.7	41.4
Total			
Number	135	56	191
% of total	70.7	29.3	100.0

Administrators promoted from within the department total 58.6 percent (112) of the sample, whereas 41.4 percent (79) were hired from outside the department. Of those promoted from within the state department, 56.3 percent (76) had had academic preparation in administration, while 43.7 percent (20) of those hired from outside the department had had such preparation. Administrators with no academic preparation in administration are more likely to be promoted from within than from outside the state department (64.3 percent [36] as opposed to 35.7 percent [20]); however, a sizable number are employed from outside the department.

Promotion to the present position came after administrators had obtained their highest educational degree, according to 80.6 percent (208) of the total group; however, 19.4 percent (50) of the administrators had been promoted without the advanced degree, as shown in Table 88.

Table 88.--Promotion to present position before or after completion of the advanced degree.

When Promoted	Number of Responses	Percent
Before degree completed	50	19.4
After degree completed	208	80.6
Total	258	100.0

Profile Summary

In summary, a state vocational administrator who has high opportunity for professional and management development and upward mobility is a Caucasian male, usually between 40 and 49 years of age. His vocational-specialty background is either Industrial Education or Agricultural Education, and his highest educational level is a master's degree in his vocational-specialty area. Some academic preparation in administration or management has been a part of his educational experience, but the most common experience is likely to have been the earning of 6 to 12 credits in administration or management.

A first-level administrator is most likely to be in the \$25,000-\$31,000 income bracket, whereas the second-level administrator is in the \$22,000-\$25,000 range. This high-opportunity administrator has had approximately 11 years of professional employment in education before coming to the state department, and has worked approximately 10 to 11 years in the state department. Some time during the 8-to-11-year period he advanced to a first-level position, but then only after having completed his advanced degree. It appears that some time between the twelfth and the fifteenth year of employment he will leave the state department, most likely to seek greater opportunity for professional growth and development and to achieve further upward mobility.

CHAPTER V

DISCUSSION, SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The primary purpose of this study was to describe state vocational administrators' opportunities to experience and the desire to experience professional and management development in state departments of education throughout the United States. A secondary purpose was to identify the variables or the combination of variables that influence the degree of opportunity a state vocational administrator experiences and/or has the desire to experience. The final purpose was to describe a profile of a state vocational administrator who has the maximum opportunity to experience professional growth and development.

Six growth areas were identified to represent opportunities for professional and management development; they included: varied on-the-job assignments, development of communication skills, visibility and exposure with high state and government officials, outside training and development, professional association activities, and mobility and job advancement. Eight exploratory questions, deduced from the principal problem, set the boundaries of the research study.

The study population included state vocational administrators employed in vocational divisions of state departments of education throughout the United States. A stratified random sample of

20 states (40 percent) was selected from the 10 United States Office of Education regions. The survey sample included 381 state vocational administrators, the total state vocational administrative staff who met certain criteria, namely, administrative title and/or hierarchical placement on the organizational chart. A six-page survey questionnaire was used to gather the data for the study. A response rate of 72.2 percent, or 275 questionnaires, was realized.

Summary of Findings

The findings were summarized in two main parts. In the first part, the data were analyzed to answer the exploratory questions as to whether the state vocational administrators have had the opportunity to experience and the desire to experience professional and management development (1) as a total group, (2) by the independent variables of (a) state size; (b) sex and age; (c) level of administration, vocational-specialty area, and number of years in the state department. The second part contains a summary of the demographic data and a description of a profile of a state vocational administrator who has had maximum opportunity to experience professional and management development.

Although 275 administrators comprised the sample, 258 usable questionnaires provided the data for the study. Of the states that responded, more than half had a 70 percent or higher response rate; just less than half had a 60-69 percent response rate, and only one state scored below 60 percent on returns. In analyzing the returns according to state size, the percentages were fairly evenly

distributed with the highest returns from the extra-large states (82 percent return) and the lowest returns from the large states (66 percent). The small and medium-size states fall in the middle, with 76 percent and 70 percent, respectively.

The reliability of the instrument used to collect the data demonstrates that all six subscales have a reliability coefficient above .70, with most of the subscales indicating a coefficient of .80 or higher. This questionnaire evidences internal consistency--that state vocational administrators were consistent in their responses when questioned about their opportunities to experience and the desire to experience professional and management development activities. Therefore, conclusions drawn concerning the results of the study may be interpreted with confidence for all six subscales.

A summary of findings relating to the exploratory research questions for this study is now presented.

Is a planned in-service training program provided
for state vocational administrators?

Participation in a state staff planned in-service program for professional and managerial development was affirmed by 80 percent of the group, whereas approximately 20 percent said they had not participated in such a program. State administrators employed in extra-large-sized states are more apt to have had the opportunity, so agreed 96 percent, while administrators from small states are least likely, as checked by 68 percent. A majority of state administrators agreed to the need for such a program; it was rated important

to very important by approximately 90 percent of those who are currently participating in an in-service program, and nearly 85 percent of those who are not. When the respondents were asked to evaluate their in-service program according to whether it was meeting their needs for professional and managerial development, approximately 58 percent rated the current in-service program as very good to excellent, while 43 percent felt the program rated fair to not meeting expectations. First-level administrators were more apt to rate the program fair, whereas a majority of the second-level administrators evaluated their program as very good.

The respondents in general did not appear to know the amount of funds allocated for a planned in-service program, as 80 percent either didn't know, didn't have access to the information, left the question blank, or filled in a zero amount.

The results of the study appear to indicate that a majority of the state vocational administrators do participate in an in-service program; however, a sizable number do not, and would like to have the benefits of such a program. It appears that the needs of second-level administrators are better being met than those of first-level administrators.

Are opportunities for professional and managerial
development built into the job assignment?

State vocational administrators, as a group, have had more opportunity to experience professional and management development in their on-the-job assignments than in any one of the other five developmental areas, which tends to be in agreement with the theories

of McGregor, Miles, and other management theorists--that variety of opportunity to experience administrative functions in the job assignment is the basis for any professional and management development program. Slightly more than 50 percent of the administrators experienced a high degree of opportunity, while approximately 20 percent have had either no experience or low experience in their on-the-job assignments, a relatively low percentage compared to other developmental areas. Administrators tended to have responsibilities which included such developmental activities as: evaluating and screening project proposals, serving on management or project teams for purposes of planning and evaluation, and working on special assignments with at least three other units. Administrators as a group tended not to engage in budget allocation for all vocational areas, coordinate a planning or evaluation team for all vocational areas, or be involved in decision making in the executive council meetings. Administrators appear to recognize the importance of the job assignment, as 73 percent of the respondents had a high desire to participate in such development activities, whereas only administrators who had the greatest opportunity marked no desire.

High-priority items for growth are the desire to make recommendations about the hiring of professional staff, to have a voice in decision making at executive council meetings, to work on management or project teams for planning and evaluation for all vocational areas, to serve as a liaison to outside agencies, and to coordinate a planning or evaluation team for one vocational area. Factors which

indicate a significant difference as to the degree of opportunity to experience a variety of on-the-job assignments are:

FEMALES have LESS OPPORTUNITY than males.

Administrators LESS THAN 39 years of age have LESS OPPORTUNITY than administrators 40-49 years of age.

SECOND-LEVEL ADMINISTRATORS have LESS OPPORTUNITY than first-level administrators.

Administrators who have undergraduate degrees in HOME ECONOMICS have LESS OPPORTUNITY than administrators who have undergraduate degrees in the vocational-specialty areas of Agriculture and/or Industrial Education.

Administrators who have worked in the state department of education LESS THAN 7 YEARS have LESS OPPORTUNITY than administrators who have worked 8-11 years in the state department.

Of the above groups, only females demonstrate a significant difference in the desire to have the opportunity to experience more professional and management development in the on-the-job assignments.

Administrators who are male, between the ages of 40 and 49, are first-level administrators, have an undergraduate degree in the vocational-specialty areas of Agriculture and/or Industrial Education, and have worked 8 to 11 years have high opportunity for on-the-job assignments.

Are there opportunities for development
of communication skills?

State administrators have been afforded great opportunity to improve their communication skills of speaking, writing, and interacting. Approximately 80 percent of the administrators have had at least average or high experience in this developmental area, and

less than 2 percent have had no experience; only administrators with the greatest experience have the least desire to participate in communication activities. Most administrators have had the opportunity to participate in the following activities: making presentations at state vocational teacher workshops and conferences; giving technical assistance to vocational directors, administrators, deans, and teachers; making presentations to outside agencies; and writing state plans, reports, and position papers. The developmental activities administrators are least likely to perform are publishing articles in professional journals, conducting regional public meetings and hearings, and chairing vocational administrators' in-service workshops or conferences. More administrators have had the opportunity to develop their communication competencies than any of the other five developmental areas. As a result, administrators tend to demonstrate less desire for this activity than the developmental activities of mobility and job advancement, on-the-job assignments, and outside development training.

Factors which indicate a significant difference as to the degree of opportunity to experience the development of communication skills are as follows:

SMALL and MEDIUM-SIZED STATES have LESS OPPORTUNITY than extra-large and large states.

Administrators LESS THAN 39 years of age have LESS OPPORTUNITY than administrators 40-49 years of age.

Administrators LESS THAN 30 years of age have LESS OPPORTUNITY than administrators 50-59 years of age.

SECOND-LEVEL ADMINISTRATORS have LESS OPPORTUNITY than first-level administrators.

Administrators who have worked in the state department 4-7 YEARS have LESS OPPORTUNITY than administrators who have worked 8 years or more in the state department.

Administrators who are employed in extra-large or large states, who are 40-59 years of age, are first-level administrators, and have worked 8 or more years in the state department have high opportunity to develop communication skills.

Are there opportunities for visibility and exposure in working with high state and government officials?

State administrators have had less opportunity as a total group to experience high visibility and exposure working with state and government officials, as only 46 percent had average to high experience mean scores, the third lowest of the growth areas, surpassing only outside training and development and participation in professional association activities. Administrators are most likely to have had the opportunity to work on special projects or task forces with the superintendent of education; to prepare plans, policies, issue and position papers, and reports for presentation to the state board and/or superintendent; or to serve in a leadership capacity on a state task force. However, few administrators have had an opportunity to act as consultants to the state legislature for purposes of writing or analyzing legislation, to work on special assignments to the state legislature, to serve on national or regional task forces or ad hoc committees, or to make presentations to the state board. In regard to the desire to have these experiences,

approximately 63 percent of the administrators have a high desire for visibility and exposure; but in priorities only the desire to participate in professional association activities rates lower.

Factors that influence the degree of opportunity experienced, as indicated by the significant differences between variables, are:

FEMALES have LESS OPPORTUNITY than males.

SECOND-LEVEL ADMINISTRATORS have LESS OPPORTUNITY than first-level administrators.

Administrators who have undergraduate degrees in TECHNICAL EDUCATION or NOT IN A VOCATIONAL-SPECIALTY AREA have LESS OPPORTUNITY than administrators who have an undergraduate degree in Agriculture, Distributive Education, and Industrial Education.

Administrators who have worked LESS THAN 7 years in the state department have had LESS OPPORTUNITY than 8-11 years and over 15 years administrators.

Administrators who tend to have the most opportunity for visibility and exposure are male, first-level administrators; have an undergraduate degree major in Agriculture, Distributive Education, or Industrial Education; and have worked in the state department 8 to 11 years or over 15 years.

Does the state department support development in the form of outside professional and management training?

The opportunity to participate in outside training and development tends not to be a frequently experienced professional and management development activity, as only 5 percent of the state vocational administrators have had a high degree of experience and 65 percent have had either no experience or low experience. This developmental area tends to be the least supported area of the six.

Nearly 65 percent seem to have a high desire for outside management training, and would particularly like to participate in specialized training programs at USOE regional or national seminars or meetings; to attend outside-agency-sponsored seminars, conferences, and meetings; and to participate in management training programs at university institutes or with private consultant firms in state or out-of-state. Administrators show a willingness to participate in special internships at USOE federal or regional offices, AVA headquarters, or U.S. Congress.

State administrators, as a group, have placed outside training and development as third in priorities following the desire for mobility and job advancement and the desire for variety in administrative responsibilities in their on-the-job assignments.

Significant differences were evidenced on the following independent variables:

Administrators LESS THAN 30 have LESS OPPORTUNITY than administrators who are 30 years or older.

SECOND-LEVEL ADMINISTRATORS have LESS OPPORTUNITY than first-level administrators.

Administrators who have worked at the state department 4-7 YEARS have had LESS OPPORTUNITY than administrators who have worked 8 or more years.

Of the above groups, the following have a significantly different desire to experience outside development training:

Administrators who are 30-49 YEARS of age DESIRE MORE OPPORTUNITY than administrators who are 50 years or over.

Administrators who have been in the state department LESS THAN 3 YEARS DESIRE MORE OPPORTUNITY than administrators who have worked in the state department 8 years or more.

Administrators who have worked in the state department 4-7 YEARS DESIRE MORE OPPORTUNITY than administrators who have worked in the state department over 15 years.

A profile of an administrator who has more likely had the opportunity to participate in outside training and development is at least 30 years of age or older, is a first-level administrator, and has worked in the state department at least 8 years.

Have opportunities been extended to participate
in professional association activities?

As a group, state vocational administrators tend not to be actively involved in professional association activities, as indicated by 59 percent of the administrators who have had either no opportunity or low opportunity. Although state administrators attend national professional association conferences, the data indicate that few hold an executive office, serve as a national conference committee chairman, or make formal presentations at the conference meetings. Nearly 57 percent of the respondents signify a high desire to become actively involved. The findings denote a willingness of administrators not only to attend the national conferences but to speak at the sessions, serve on the American Vocational Association conference committees, and preside at state professional conferences. Professional association activities do, however, have a low priority in comparison to the other developmental areas, as shown by the 56.5 percent signifying a high desire for such activities.

Significant differences were found for the following independent variables:

Administrators who are LESS THAN 30 years of age have LESS OPPORTUNITY than administrators over 60 years.

Administrators who have an undergraduate degree in TECHNICAL EDUCATION or NOT IN A VOCATIONAL-SPECIALTY AREA have LESS OPPORTUNITY than those with degrees in Agriculture, Business and Office, Distributive Education, and Home Economics.

Administrators who have worked in the state department LESS THAN 7 YEARS have LESS OPPORTUNITY than administrators who have been in the state department over 15 years.

Only the group who has worked in the state department LESS THAN 3 YEARS demonstrates a significant difference in the desire to have the opportunity to participate in professional association activities.

A profile of an administrator who has high opportunity to participate in professional association activities can be described as an individual who is over 60 years of age; who has an undergraduate degree major in Agriculture, Business and Office, Distributive Education, or Home Economics; and has worked in the state department over 15 years.

Is mobility encouraged and are promotions extant?

Approximately 60 percent of the state administrators have average or high experience in opportunity for mobility and job advancement, whereas 40 percent of the group have had no or low experience. Opportunity for mobility is more evenly distributed among experience level groups than in any of the other five developmental areas. Administrators who have had mobility experience have worked with supervisors to set goals for improvement of work performance, have had regular appraisals to evaluate work performance, and have had their range of responsibilities expanded in the job assignment.

There appears to be low opportunity in the state department for promotions, merit pay raises, lateral positional moves, and job advancement. Administrators at all experience levels indicate a high desire to experience almost all of the mobility items, with 79 percent of the group indicating the high desire category. Administrators indicate somewhat less desire to move laterally into a position that provides a wider scope of responsibility. Desire for mobility ranked first among the six developmental areas.

Factors which influence the degree of mobility and job promotion experience are:

Administrators who are LESS THAN 30 YEARS of age have LESS OPPORTUNITY than administrators who are 30 or over.

SECOND-LEVEL ADMINISTRATORS have LESS OPPORTUNITY than first-level administrators.

Administrators with LESS THAN 3 YEARS of experience in the state department have LESS OPPORTUNITY than administrators who have 8 or more years in the state department.

Administrators who have worked in the state department 4-7 YEARS have had LESS OPPORTUNITY than administrators who have worked in the state department over 15 years.

Of those who demonstrated a significant difference in desire,

Administrators who have worked in the state department LESS THAN 15 YEARS have DESIRE FOR MORE OPPORTUNITY than administrators who have worked at the state department over 15 years.

Administrators who have high opportunity to experience mobility and job advancement are usually over 30 years of age, are first-level administrators, and have worked at least 8 years in the state department.

Which groups (sex, age, administrative level, vocational specialty area, state department experience) have the greatest desire for change--for more opportunity to experience professional and management development activities?

The groups desiring a change in opportunity are presented and the developmental activities are ranked, beginning with the group's highest priority.

The female group has the greatest desire for change in four professional and management development areas, with the highest priority being opportunity for varied administrative responsibilities followed by visibility and exposure, outside development training, and professional association activities.

The less than 30 years group tends to want more opportunity for visibility and exposure, outside development training, mobility and job advancement, and professional association activities.

The 30-39 years group prefers outside development training and visibility and exposure.

The 40-49 years group would like more opportunity for outside training and development and participation in professional association activities.

Second-level administrators would like to have increased opportunity to grow in three areas: mobility and job advancement, on-the-job assignments, and professional association activities.

Home Economics undergraduate majors have a high desire for change in their on-the-job assignments and outside development training, whereas Business and Office majors would like to have more opportunity for outside development training.

State administrators who have worked at the state department less than 3 years desire more change than any other group, in all six developmental areas. Highest desire is in mobility and job advancement, outside development training, professional association activities, visibility and exposure, on-the-job assignment, and development of communication skills.

The 4-7 years group also wants increased opportunity to experience professional and management development activities, but in five areas. They desire opportunity in the same areas as the less than 3 years group, and in the same order with the exception of on-the-job assignments, which does not demonstrate a significant difference.

Profile of a State Vocational Administrator

A state vocational administrator who has high opportunity for professional and management development and upward mobility is a Caucasian male, usually between 40 and 49 years of age. His vocational-specialty background is either Industrial Education or Agricultural Education, and his highest educational level is a master's degree in his vocational-specialty area. Some academic preparation in administration or management has been a part of his educational experience, but the most common experience is likely to have been the earning of 6 to 12 credits in administration or management.

A first-level administrator is most likely to be in the \$25,000-\$31,000 income bracket, whereas the second-level administrator

is in the \$22,000-\$25,000 range. This high-opportunity administrator has had approximately 11 years of professional employment in education before coming to the state department, and has worked approximately 10 to 11 years in the state department. Some time during the 8-11 period he advanced to a first-level position, but then only after having completed his advanced degree. It appears that some time between the twelfth and the fifteenth year of employment he will leave the state department, most likely to seek greater opportunity for professional growth and development and to achieve further upward mobility.

Conclusions

According to the findings of this study, state departments of education appear not to provide outside management training and development for their state vocational administrative staff. Opportunity for professional growth tends to be limited to the range of administrative responsibilities an administrator is assigned on the job. Although the job design is considered a primary source for growth and development, according to management theorists McGregor, Miles, Sayles and Strauss, additional developmental activities are considered necessary to keep administrators current with the changing times and to reeducate administrators so that they may be instrumental in implementing recent federal legislation that requires drastic changes in employment and educational programs. It appears that state departments are not providing added opportunities for professional and management growth and although the federal government is

legislating change it is not providing assistance to the states in the form of funds or in-service programs to educate and train state vocational administrators.

It seems tenable from the data that opportunities to participate in developmental activities are restricted to a small group of individuals. These high-opportunity administrators not only have a wide range of administrative assignments but have access to other growth areas as well. They have had opportunity for visibility and exposure working with high state and government officials, which Kanter and Jennings consider to be key elements in the development of administrators and guarantees of future growth and advancement. These individuals also have some exposure to outside management training, they receive state department support to participate in professional association activities, and they are likely to have had job advancements and a degree of mobility. Individuals at the lower levels of administration require the same kinds of opportunities for growth and development as do higher level administrators. The results show that they have the desire but have not had the opportunity for such development. The administrators who have had the most opportunity do not need it and in many instances do not desire it. Administrators who have had little opportunity for growth are forced to seek other kinds of developmental activities, such as participation in organizations, in order to grow professionally; or as the data indicate, a large number leave the state department and look elsewhere for professional growth.

As stated previously, the opportunity for administrators to participate in outside training and development is nearly nonexistent, except for a select few. Yet findings show that many state vocational administrators who are hired for or are advanced to a top-level position have had no academic preparation in administration or management. The incongruity of the situation is that although state vocational administrators possess advanced degrees in their vocational specialty areas, the positions for which they are hired require generalist-type capabilities; at the same time, state departments of education provide no outside training. This current condition is in conflict with the views of theorists like Swope, Odiorne, and Sayles and Strauss--that specialization does not constitute proper training or education for the development of management capabilities. A generalist-type education is more apt to provide the tools necessary to utilize human resources effectively and to solve the complex problems that organizations are faced with today. If administrators are not selected for their administrative and management capabilities, what are they selected for? Should the top-level state vocational administrators be limited to individuals from only two specialty areas, and do the decisions made by this small group represent the entire field of vocational education? Are the power groups too small, and do they stifle creativity in solving complex problems?

It appears that the qualifications required for state vocational administrator positions do not match the job descriptions. This may be because the characteristics and complexion of the role

of state department administrators have changed, away from the specialist to the generalist, and the job description does not reflect that change. Perhaps civil service and/or personnel departments need to examine the criteria for hiring and promoting individuals in state departments of education, and change these criteria so that qualifications for the position are directly related to the duties performed on the job.

It may be concluded that a wide gap exists between what state vocational administrators would like to have the opportunity to experience in the way of professional and management development activities and what the state departments of education have provided them in these areas. State administrators are ready and committed to be involved in professional development programs, as they desire greater opportunity to participate in good-quality in-service programs and outside training and management development. They desire more variety in administrative responsibilities and greater visibility and exposure on the job. Administrators are also willing to participate in professional association activities and are particularly interested in opportunities for mobility and job advancement. Of high priority to all administrators is the desire for mobility, for good quality in-service programs, and for outside training and development opportunities.

The opportunity for varied on-the-job assignments is a crucial factor in terms of the degree of professional growth a state vocational administrator experiences. As the study findings point out, females' job assignments are not presently designed to provide a

variety of administrative responsibilities, which male administrators automatically have the opportunity to experience. Without opportunity in the job assignment, there is no opportunity for professional growth and development. Females tend to be hired for traditionally female jobs, which are narrower in scope than male positions. It may be concluded that state departments of education currently operate under a system of designing jobs that do not provide equal employment opportunities to females. Although females must possess the same qualifications as males, they do not have the same degree of opportunity in assignments; less opportunity for a variety of administrative responsibilities in the job assignment appears, in turn, to block opportunity for mobility and job advancement.

It is apparent that most state agencies have made some attempt to provide an in-service program for their state vocational staffs, and the larger the state the more likely they are to have an on-going program. However, it seems that only a few state agencies are providing an effective in-service program, as most state administrators feel the quality of the programs could be improved. Upper level administrators are particularly critical of the in-service programs as not meeting their particular needs.

Five factors seem to make the difference between effective and ineffective state agency in-service programs: (1) whether the professional development activities are supported by the top administrators; (2) whether state vocational staff are involved in the planning and evaluation of the in-service programs; (3) whether staff

provide input into the establishment of the budget and the allocation of the funds; (4) whether a line staff person has as one of his/her main functions the responsibility for surveying, directing, and coordinating the professional development of the state staff; and (5) whether the state administrator's professional development program is custom designed, based on performance appraisal, to meet the administrator's individual needs. It appears that some state agencies are achieving success in providing good quality in-service programs. The state vocational agencies in Colorado and Nebraska may be considered possible models for further inquiry into how to establish opportunities to meet the needs of the entire staff and to provide equal opportunity for professional and management growth.

The variables of sex, age, administrative level, undergraduate vocational specialty area, and the number of years employed in the state department are all directly related to the opportunities state administrators have to experience professional and management development. Administrators who have a high opportunity for professional and management development are Caucasian males, between 40 and 49 years of age, from the vocational specialty areas of Agriculture and Industrial Education; they have worked 8 to 11 years in the state departments of education.

If professional and management development activities are to be extended to all administrators rather than to a select few, state vocational divisions will need to implement more equal employment opportunities. Several factors will need to change. Jobs will need to be designed to encourage broader participation of more groups of

administrators who previously have been excluded, namely females and individuals under 39 years of age. Top-level state administrators will need to assume the role of administrators rather than specialists and delegate more responsibility, involve more administrators in the decision making, and in general adopt a more participative management style. State and/or federal agencies will need to provide funds to support the professional and management development activities for all the state staff. These funds would be used to provide more effective in-service programs and outside training and management with university consultants, private business firms, and other state and federal agencies. State administrators would also be encouraged to participate actively in professional association activities, with state departments supplying travel funds and providing commitment.

Recommendations

This section provides recommendations to those concerned with the development of effective planned professional and management development programs for state vocational administrators, as well as suggestions for further research.

One of the purposes of this research was to provide information that will be useful to those concerned with the design of effective planned professional and management development programs for state vocational administrators employed in vocational divisions of state departments of education. On the basis of the findings of this study, it is recommended that:

A study be conducted to determine the most effective learning methods and approaches to professional and management development so as to bring about increased knowledge and/or change attitudes and behaviors.

A study be undertaken to determine the job assignments that provide the most growth and challenge.

A study be undertaken to determine the environmental conditions that are supportive of equal opportunity for professional and management growth.

A study be conducted to determine the specific subject area needs of state vocational administrators that should be included in the professional and management development program.

A study be conducted to determine the role of top-level state vocational administrators according to first-level administrators and second-level administrators.

APPENDICES

APPENDIX A

SURVEY QUESTIONNAIRE

APPENDIX A

A SURVEY OF PROFESSIONAL GROWTH OPPORTUNITIES FOR VOCATIONAL STATE ADMINISTRATORS

This survey is designed to describe the opportunities of vocational state administrators in state departments of education for professional and management development. This questionnaire is divided into three parts.

Part I requests information about your state staff inservice program and demographic data about yourself.

Part II lists specific experiences or events in which you may have had opportunities to participate.

Part III requests your response to open ended questions. Please select the answer that comes closest to being true as you know it. **The time frame should include only your experiences within the past two years.**

PART I--STATE DEPARTMENT STAFF INSERVICE PROGRAM

1. [5] Have you participated in a vocational state staff planned inservice program for your professional and management development? ☐ Yes ☐ No
2. [6] If yes, answer the following, otherwise, move to question 3.
How would you evaluate your state department's planned inservice program in meeting your needs as a state administrator in terms of professional and management development?

1 ☐ Excellent 2 ☐ Very Good 3 ☐ Fair 4 ☐ Not meeting anticipated expectations
3. [7] Do you feel the need of an extensive inservice program for state staff administrators in order to improve skills, increase knowledge and/or change attitudes?

1 ☐ Very Important 2 ☐ Important 3 ☐ Somewhat Important 4 ☐ Not important
4. [8-12] What were the total federal and state funds expended for state administrators' professional and management development in the form of a planned inservice program for 1977-1978 _____ Total Amount.

DEMOGRAPHIC DATA

5. [13]Sex: 1[] Male 6. [14]Race: 1[] White 3[] American Ind. 5[] Oriental
2[] Female 2[] Black 4[] Spanish Surname 6[] _____
7. [15,16]Age: _____
8. [17]Level of Administration:
- 1[] Title is likely to be any one of the following: assistant, associate, or deputy director, or commissioner; assistant or associate superintendent; chief or assistant chief, or manager. Officially report directly to the state director, assistant superintendent or similarly titled position.
- 2[] Title is like to be any one of the following: supervisor, director, or coordinator, who is in charge of a program area, a supportive service area, or a planning and development area. Officially report to an administrator who in turn reports to the state director, assistant superintendent or similarly titled position.

9. [18]What is your undergraduate vocational-specialty area?

- | | | |
|------------------------------------|---------------------------|---------------------------|
| 1[] Agricultural Education | 4[] Health Education | 7[] Technical Education |
| 2[] Business and Office Education | 5[] Home Economics | 8[] Not in a Vocational- |
| 3[] Distributive Education | 6[] Industrial Education | Technical Area |

10. [19]Highest Education Level:

- 1[] Baccalaureate 2[] Masters 3[] Specialist 4[] Doctorate

11. [20]If your advanced degree is the same as your undergraduate degree move to question 12, otherwise, what is your advanced degree major?

- | | | |
|-------------------------------------|---------------------------------|------------------|
| 1[] Vocational-Technical Education | 3[] Curriculum and Instruction | 5[] Educational |
| 2[] Guidance and Counseling | 4[] Educational Administration | Research |
| | and/or Higher Education | 6[] _____ Other |

12. [21]Your Salary Range:

- | | | |
|------------------------|------------------------|------------------------|
| 1[] Under \$16,000 | 4[] \$22,000-\$24,999 | 7[] \$31,000-\$33,999 |
| 2[] \$16,000-\$18,999 | 5[] \$25,000-\$27,999 | 8[] Over \$34,000 |
| 3[] \$19,000-\$21,999 | 6[] \$28,000-\$30,999 | |

13. [22,23] What are your total years of professional work experience in the state department of education? _____(Years)

14. [24,25]What are your total years in your present position? _____(Years)

15. [26,27]What are your total years of professional work experience in education excluding state department work? _____(Years)

16. [28]Did you have academic preparation in administration or management before obtaining your present position? 1[] Yes 2[] No

17. [29]If yes, which best describes your experience, otherwise, skip to question 18.

- | | | | |
|---|------------------------------------|--|---------------------|
| 1[] Less than 6 Credits
of Coursework | 2[] 6-12 Credits
of Coursework | 3[] a Minor in a Formal
Degree Program | 4[] Other
_____ |
|---|------------------------------------|--|---------------------|

18. [30]Were you promoted to your present position from within or outside the state department? 1[] Within the Department 2[] Outside the Department

19. [31]Did you obtain your present position before or after obtaining your highest educational degree? 1[] Before Obtaining Degree 2[] After Obtaining Degree

PART II--OPPORTUNITIES FOR PROFESSIONAL AND MANAGEMENT DEVELOPMENT

Below are listed possible professional and management development activities. Would you please respond to each of the statements in two ways. First, whether you have had the experience of participating in the activity several times, once, or never; secondly, whether you desire the opportunity to have this experience yes, uncertain, or no. Answer the questions within the time frame of the past two years.

Example: If you have not had the experience, mark never, but if you would like to have the experience mark yes. Please be sure that you have two checks for each numbered item.

THE STATEMENT SHOULD BE READ TWO TIMES: I HAVE HAD THE OPPORTUNITY TO... and then I WOULD LIKE TO HAVE THE OPPORTUNITY TO..

<u>ON THE JOB ASSIGNMENT</u>	<u>EXPERIENCE</u>			<u>DESIRE</u>		
	<u>SEVERAL TIMES</u>	<u>ONCE</u>	<u>NEVER</u>	<u>YES</u>	<u>UNCER- TAIN</u>	<u>NO</u>
1-1 Work on management or project teams for planning and evaluation for all vocational areas.....	_____	_____	_____	_____	_____	_____
1-2 Coordinate a planning or evaluation team for all vocational areas.....	_____	_____	_____	_____	_____	_____
1-3 Budget for all vocational areas.....	_____	_____	_____	_____	_____	_____
1-4 Coordinate a project team to evaluate and screen project proposals.....	_____	_____	_____	_____	_____	_____
1-5 Coordinate a planning or evaluation team for one vocational area.....	_____	_____	_____	_____	_____	_____
1-6 Budget for one vocational area.....	_____	_____	_____	_____	_____	_____
1-7 Evaluate and screen project proposals....	_____	_____	_____	_____	_____	_____
1-8 Work on assignments with at least three other units, i.e. special needs, guidance and counseling, professional development.	_____	_____	_____	_____	_____	_____
1-9 Participate in decision making in the executive council meetings.....	_____	_____	_____	_____	_____	_____
1-10 Serve as liaison to outside agencies, i.e. SACVE, CETA, vocational administrators, etc	_____	_____	_____	_____	_____	_____
1-11 Interview, screen employee applicants for the division.....	_____	_____	_____	_____	_____	_____
1-12 Recommend the hiring of professional staff personnel.....	_____	_____	_____	_____	_____	_____
<u>DEVELOPMENT OF COMMUNICATION SKILLS</u>						
2-1 Make presentations at state workshops, conferences for vocational teachers.....	_____	_____	_____	_____	_____	_____
2-2 Make presentations at state workshops conferences for VE directors, deans, etc.	_____	_____	_____	_____	_____	_____
2-3 Make presentations to outside agencies i.e. manpower groups, community groups..	_____	_____	_____	_____	_____	_____
2-4 Conduct regional public mtgs. hearings...	_____	_____	_____	_____	_____	_____
2-5 Give technical assistance to VE teachers..	_____	_____	_____	_____	_____	_____
2-6 Give technical assistance to VE directors, administrators, and deans.....	_____	_____	_____	_____	_____	_____
2-7 Chair VE teacher inservice workshops/confabs	_____	_____	_____	_____	_____	_____
2-8 Chair VE administrators, directors or deans inservice workshops or conferences.....	_____	_____	_____	_____	_____	_____

I HAVE HAD THE OPPORTUNITY TO...and
I WOULD LIKE TO HAVE THE OPPORTUNITY TO...

		<u>EXPERIENCE</u>			<u>DESIRE</u>	
		<u>SEVERAL</u>	<u>ONCE</u>	<u>NEVER</u>	<u>UNCER-</u>	<u>NO</u>
<u>PROFESSIONAL ASSOCIATION ACTIVITIES</u>		<u>TIMES</u>			<u>TAIN</u>	
5-3	Attend national conferences which involve my job assignment, i.e. state directors, research and development, professional development, guidance and counseling...	_____	_____	_____	_____	_____
5-4	Attend national conferences i.e. Business and Office Education, Agricultural Education, Industrial Education, etc.....	_____	_____	_____	_____	_____
5-5	Speak at national or regional professional conferences, meetings.....	_____	_____	_____	_____	_____
5-6	Serve as national conference committee chair	_____	_____	_____	_____	_____
5-7	Attend the American Vocational Association Convention.....	_____	_____	_____	_____	_____
5-8	Serve on a American Vocational Association Conference Committee.....	_____	_____	_____	_____	_____
5-9	Serve in a national executive office for a professional organization.....	_____	_____	_____	_____	_____
5-10	Make a formal presentation at an AVA convention session.....	_____	_____	_____	_____	_____
<u>MOBILITY AND JOB PROMOTION</u>						
6-1	Expand the range of responsibilities in my job assignment.....	_____	_____	_____	_____	_____
6-2	Laterally move in position which provided a wider scope of responsibilities.....	_____	_____	_____	_____	_____
6-3	Have regular appraisals to evaluate my performance on the job.....	_____	_____	_____	_____	_____
6-4	Work with my supervisor to set goals for my improved work performance.....	_____	_____	_____	_____	_____
6-5	Receive merit pay as a result of improved work performance.....	_____	_____	_____	_____	_____
6-6	Receive promotional title changes other than the automatic civil service ratings required by law.....	_____	_____	_____	_____	_____
6-7	Job advancements with increased salary other than the automatic cost of living increases civil service pays as required..	_____	_____	_____	_____	_____

If you have had some significant state department experiences which have contributed greatly to your professional and management growth, please list up to three and give reasons for doing so.

1. _____

Reason: _____

2. _____

Reason: _____

3. _____

Reason: _____

Has the leadership in your state department taken innovative steps to improve its management practices in terms of better utilization of human resources? If yes, explain.

What suggestions, if any, would you make to improve professional and management growth opportunities for vocational state administrators in your state department?

In what areas do you feel the greatest need for more adequate preparation in the way of increased knowledge, improved skills, and/or changed attitudes in order to better carry out the goals of your vocational division?

THANK YOU FOR YOUR ASSISTANCE AND PLEASE RETURN TO:

Barbara A. Ferguson
 Graduate Assistant
 Occupational and Applied Arts
 Education
 321 Erickson Hall
 Michigan State University
 East Lansing, Michigan 48824

APPENDIX B

LETTERS TO SAMPLE

APPENDIX B

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF SECONDARY EDUCATION AND CURRICULUM
ERICKSON HALL

EAST LANSING • MICHIGAN • 48824

March 17, 1978

Dear Vocational State Administrator:

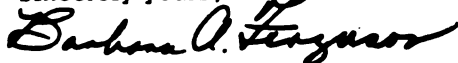
Staff Development is a primary concern in vocational education today. The American Vocational Association at its 1977 convention resolved that high funding priority be given to vocational education staff development programs. AVA has also endorsed the development of standards and procedures for accreditation of vocational programs, institutions, and agencies. New federal education legislation has required changes in vocational state agency functions, procedures, and/or structure. The focus of the enclosed questionnaire is to explore the staff development activities of state vocational administrators throughout the United States. More specifically, this research study will examine the opportunities for professional and management development of vocational state administrators in state departments of education.

As little research has been done in this area, your participation in this nationwide study would be a valuable contribution to state staff development. Your state vocational agency, along with 20 others in the United States, has been selected randomly from the ten United States Office of Education regions.

Would you please fill out the enclosed questionnaire within the week and return it in the stamped self-addressed envelope no later than Friday, March 31. Please feel free to answer all questions openly as the information on this survey is confidential. All results will be summarized by groups and will not reflect individual responses. The number in the upper right margin on the first page of the questionnaire is used only to classify responses and to assist in follow-up procedures.

Thank you for your time and consideration in this research study.

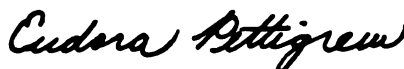
Sincerely yours,



Barbara A. Ferguson
Graduate Assistant
Occupational and Applied Arts



Dr. Robert Poland, Coordinator
Occupational and Applied Arts Education



Dr. Eudora Pettigrew, Chairman
Urban and Metropolitan Studies

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
 DEPARTMENT OF SECONDARY EDUCATION AND CURRICULUM
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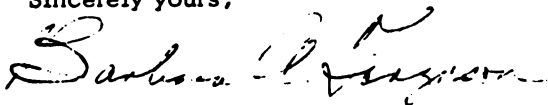
April 12, 1978

Dear Vocational State Administrator:

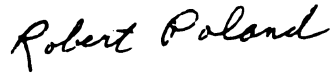
Recently you received a survey questionnaire requesting information for a nationwide study on the professional and management growth opportunities that you have experienced as a vocational state administrator. The meaningfulness of this research depends upon accurate and complete responses from vocational state administrators like yourself, who are employed in one of the 20 state departments of education randomly selected for this study.

Please participate in this research study by taking 15 to 20 minutes to answer the enclosed survey questionnaire. Your doing so will make a valuable contribution to state staff development. Your responses will be treated confidentially and all results will be summarized by groups and will not reflect individual responses. A stamped self-addressed envelope is enclosed. A response from you by April 21 would be greatly appreciated.

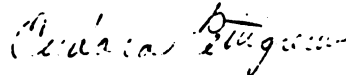
Sincerely yours,



Barbara A. Ferguson
 Graduate Assistant
 Occupational and Applied Arts
 Education



Dr. Robert Poland, Coordinator
 Occupational and Applied Arts
 Education



Dr. Eudora Pettigrew, Chairman
 Urban and Metropolitan Studies

APPENDIX C

TABULAR PRESENTATION OF RESPONSES IN EXPERIENCE
AND DESIRE CATEGORIES, ACCORDING TO
DEVELOPMENTAL AREAS

APPENDIX C

Table 89.--Opportunities for professional and management development, according to desire and experience categories (in percentages).

	No Exp.	Low Exp.	Ave. Exp.	High Exp.	Total
<u>On-the-Job Assignment</u>					
High desire	3.1	10.9	18.2	41.1	73.3
Some desire	.4	5.0	8.1	4.3	17.8
Low desire	.4	.8	1.9	2.3	5.4
No desire	0.0	0.0	.8	2.7	3.5
Total	3.9	16.7	29.1	50.4	100.0
<u>Development of Communication Skills</u>					
High desire	0.0	7.0	31.4	26.0	64.4
Some desire	.8	7.8	13.6	3.5	25.7
Low desire	.4	2.7	2.3	.8	6.2
No desire	0.0	0.0	1.2	2.7	3.9
Total	1.2	17.4	48.5	33.0	100.0
<u>Visibility and Exposure</u>					
High desire	10.5	18.6	17.4	16.3	62.8
Some desire	4.7	8.9	6.6	1.2	21.4
Low desire	2.3	4.7	1.6	0.0	8.6
No desire	3.5	1.2	.8	1.9	7.4
Total	21.0	33.4	26.4	19.4	100.2

Table 89.--Continued.

	No Exp.	Low Exp.	Ave. Exp.	High Exp.	Total
<u>Outside Management Training</u>					
High desire	22.1	18.6	20.9	3.5	65.1
Some desire	5.8	7.0	7.8	.4	21.0
Low desire	2.7	5.0	1.2	.4	9.3
No desire	1.9	1.2	1.2	.4	4.7
Total	32.5	31.8	31.1	4.7	100.1
<u>Professional Association Activities</u>					
High desire	8.1	17.8	18.6	12.0	56.5
Some desire	7.0	8.5	5.4	.8	21.7
Low desire	6.2	6.6	1.6	.8	15.2
No desire	3.1	1.6	.8	1.2	6.7
Total	24.4	34.5	26.4	14.8	100.0
<u>Mobility and Job Advancement</u>					
High desire	8.5	22.1	27.5	21.3	79.4
Some desire	.8	5.0	5.4	2.7	13.9
Low desire	0.0	3.5	.8	.8	5.1
No desire	0.0	.4	.4	.8	1.6
Total	9.3	31.0	34.1	25.6	100.0

Note: Percentages do not always total 100 because of rounding off figures.

APPENDIX D

**PROFESSIONAL AND MANAGEMENT DEVELOPMENT ACTIVITIES,
ACCORDING TO EXPERIENCE AND DESIRE**

APPENDIX D

Table 90.--Professional and management development activities, according to experience and desire.

Activity	Experience					Desire		
	Several Times	Once	Never	Weighted Mean	Rank	Yes	Uncertain	No
I. On-the-Job Assignment								
1-1 Work on management or project teams for planning and evaluation for all vocational areas	F 201 78.2	16 40	2.626	2	214 83.3	22 8.6	21 8.2	3 2.751
1-2 Coordinate a planning or evaluation team for all vocational areas	F 131 50.8	38 89	2.163	11	190 74.5	32 12.5	33 12.9	9 2.616
1-3 Budget for all vocational areas	F 95 37.0	16 146	1.802	12	160 62.3	37 60	23.3 2.389	11
1-4 Coordinate a project team to evaluate and screen project proposals	F 163 63.2	27 68	2.368	9	185 72.0	37 35	35 13.6	10 2.584
1-5 Coordinate a planning or evaluation team for one vocational area	F 182 70.5	30 46	2.527	5	208 80.6	16 33	12.8 2.681	6
1-6 Budget for one vocational area	F 179 70.5	24 51	2.504	6	203 80.2	14 5.5	14.2 2.660	8
1-7 Evaluate and screen project proposals	F 215 86.0	16 19	2.784	1	198 78.9	22 31	8.8 2.665	7
1-8 Work on assignments with at least three other units, i.e., special needs, guidance and counseling, professional development	F 193 75.4	27 36	2.613	3	195 76.2	35 26	10.2 2.660	8
1-9 Participate in decision making in the executive council meetings	F 163 63.4	17 77	2.335	10	214 83.3	26 17	6.6 2.767	2
1-10 Serve as liaison to outside agencies, i.e., SACVE, CETA, vocational administrators, etc.	F 190 74.8	12 52	2.543	4	210 82.4	26 19	7.5 2.749	4
1-11 Interview, screen employee applicants for the division	F 165 64.5	37 54	2.434	8	208 82.0	20 26	10.2 2.718	5
1-12 Recommend the hiring of professional staff personnel	F 173 67.3	32 52	2.471	7	218 85.2	19 7.4	7.4 2.777	1

Table 90.--Continued.

Activity	Experience					Desire				
	Several Times	Once	Never	Weighted Mean	Rank	Yes	Uncertain	No	Weighted Mean	Rank
II. Development of Communication Skills										
2-1 Make presentations at state workshops, conferences for vocational teachers	F 237 91.9	13 8 5.0 3.1		2.888	1	227 88.3	12 18 4.7 7.0		2.813	3
2-2 Make presentations at state workshops, conferences for VE directors, deans, etc.	F 188 72.9	19 51 7.4 19.8		2.531	7	214 83.3	23 20 8.9 7.8		2.755	5
2-3 Make presentations to outside agencies, i.e., manpower groups, community groups	F 221 86.0	18 18 7.0 7.0		2.790	4	224 87.8	16 15 6.3 5.9		2.820	2
2-4 Conduct regional public meetings, hearings	F 104 41.1	27 122 10.7 48.2		1.929	11	155 61.3	43 55 17.0 21.7		2.395	12
2-5 Give technical assistance to VE teachers	F 230 89.5	4 23 1.6 8.9		2.805	3	219 86.9	9 24 3.6 9.5		2.774	4
2-6 Give technical assistance to VE directors, administrators, deans	F 227 88.3	14 16 5.4 6.2		2.821	2	228 89.4	9 18 3.5 7.1		2.824	1
2-7 Chair VE teacher inservice workshops/confabs	F 190 73.9	22 45 8.6 17.5		2.564	6	202 78.9	23 31 9.0 12.1		2.668	6
2-8 Chair VE administrators, directors or deans inservice workshops or conferences	F 121 46.9	31 106 12.0 41.1		2.058	10	174 67.7	42 41 16.3 16.0		2.518	9
2-9 Write state plans, reports, and position papers	F 204 79.4	28 25 10.9 9.7		2.696	5	198 77.3	22 36 8.6 14.1		2.633	7
2-10 Present the plans, reports, position papers to staff or exec. council	F 168 65.4	29 60 11.3 23.3		2.420	8	183 71.5	36 37 14.1 14.5		2.570	8
2-11 Write proposals for federal funding	F 130 50.8	41 85 16.0 33.2		2.176	9	163 64.2	34 57 13.4 22.4		2.417	11
2-12 Publish articles in journals on topics relating to one vocational specialty area	F 84 32.8	55 117 21.5 45.7		1.871	12	166 64.8	51 39 19.9 15.2		2.496	10
2-13 Publish articles in journals on topics relating to broad area of voc. ed.	F 46 17.9	31 180 12.1 70.0		1.479	13	141 54.9	62 54 24.1 21.0		2.339	13

Table 90.--Continued.

Activity	Experience					Desire			
	Several Times	Once	Never	Weighted Mean	Rank	Yes	Uncertain	No	Weighted Mean Rank
III. Visibility and Exposure									
3-1 Work on special projects or task forces with the supt. of education or deputy asst.	F 191 74.9	36 14.1	28 11.0	2.639	1	191 74.9	36 14.1	28 11.0	2.639 4
3-2 Prepare issue papers, position papers, reports for the state board and/or supt.	F 147 57.0	47 18.2	64 24.8	2.322	3	178 69.8	48 18.8	29 11.4	2.584 6
3-3 Present the paper or report to the board	F 88 34.1	42 16.3	128 49.6	1.845	5	157 62.1	57 22.5	39 15.4	2.466 7
3-4 Prepare plans or policies for presentation	F 174 69.0	30 11.9	48 19.0	2.500	2	194 78.2	34 13.7	20 8.1	2.702 1
3-5 Work on special assignments to the state legislature	F 82 31.9	38 14.8	137 53.3	1.786	8	159 62.1	42 16.4	55 21.5	2.406 8
3-6 Act as consultant to the legislature for writing or analyzing legislation	F 35 13.6	21 8.2	201 78.2	1.354	9	131 52.0	58 23.0	63 25.0	2.270 9
3-7 Serve on a national task force or ad hoc committee	F 81 31.4	43 16.7	134 51.9	1.795	7	191 74.6	29 11.3	36 14.1	2.605 5
3-8 Serve on a regional task force or ad hoc committee	F 90 35.2	35 13.7	131 51.2	1.840	6	193 76.3	37 14.6	23 9.1	2.672 3
3-9 Serve in a leadership capacity on a regional or state task force	F 124 48.2	36 14.0	97 37.5	2.105	4	197 77.6	33 13.0	24 9.4	2.681 2
IV. Outside Development Training									
4-1 Attend outside-agency-sponsored seminars, conferences, meetings, i.e., manpower, AAUP, etc.	F 190 74.2	28 10.9	38 14.8	2.594	1	216 85.4	20 7.9	17 6.7	2.787 2
4-2 Participate in specialized training programs at USOE regional or national seminars, meetings, etc.	F 172 67.2	28 10.9	56 21.9	2.453	2	225 88.9	16 6.3	12 4.7	2.842 1
4-3 Participate in management training programs at univ. institutes or with private consult. firms out of state	F 102 39.7	34 13.2	121 47.1	1.926	4	208 81.6	28 11.0	19 7.5	2.741 3

Table 90.--Continued.

Activity	Experience				Desire			
	Several Times	Once	Never	Weighted Mean	Rank	Yes	Uncertain	No
4-4 Participate in management training programs at the local univ. or with firms in state	F 198 38.4	44 17.3	113 44.3	1.941	3	204 81.3	29 11.6	18 7.2
4-5 Participate in special internships at the regional USEO office	F 10 3.9	8 3.1	237 92.9	1.110	5	153 60.2	42 16.5	59 23.2
4-6 Participate in special internships at Federal USEO office, NVA headquarters, U.S. Congress	F 5 1.9	5 1.9	247 96.1	1.058	6	158 61.7	41 16.0	57 22.3
V. Professional Association Activities								
5-1 Serve in an executive position for a professional state organization	F 85 33.3	38 14.9	132 51.8	1.816	6	143 57.0	44 17.5	64 25.5
5-2 Preside at state professional conferences or meetings	F 141 55.1	37 14.5	78 30.5	2.246	4	175 69.2	29 11.5	49 19.4
5-3 Attend nat'l conferences which involve my job assignment, i.e., state directors, research & dev., prof. dev., guidance and counseling	F 197 77.0	29 11.3	30 11.7	2.652	1	230 90.6	16 6.3	8 3.1
5-4 Attend nat'l conf., i.e., Business & Office Education, Agricultural Education, Indust. Education, etc.	F 183 70.9	24 9.3	51 19.8	2.512	3	209 81.6	18 7.0	29 11.3
5-5 Speak at nat'l or regional professional conferences, meetings, etc.	F 139 54.1	34 13.2	84 32.7	2.214	5	185 73.1	45 17.8	23 9.1
5-6 Serve as national conference committee chairman	F 37 14.5	22 8.6	197 77.0	1.375	9	120 47.1	70 27.5	65 25.5
5-7 Attend the American Vocational Association Convention	F 171 66.3	53 20.5	34 13.2	2.531	2	226 89.0	19 7.5	9 3.5
5.8 Serve on an American Vocational Association Conference Committee	F 45 17.6	24 9.4	187 73.0	1.445	7	153 59.8	57 22.3	46 18.0

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