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ABSTRACT

In view of the continued growth of vocational education, vocational educators have recognized the importance of leadership and have initiated educational programs to insure that competent professional personnel will be available in the future. This review and synthesis paper identifies and examines such developmental efforts and analyzes the leadership role at national, state, and local levels with special emphasis on the lack of clear role definition at the local level. Major sections of the document include: (1) Vocational Education Leadership, (2) Educational Leadership and Vocational Education, (3) Leadership Development Programs, (4) Recruitment and Selection For Leadership Development Programs, and (5) Summary and Conclusions. Among the recommendations are: (1) Terms describing functions related to leadership roles in vocational education at all levels need to be standardized, (2) Leadership development, instructional activities and procedures should be competency-based and not course oriented, and (3) More precise selection tools including the use of already existing tests and procedures should be adapted and/or standardized to use in the selection of candidates for leadership development programs in vocational education. (Author/JS)

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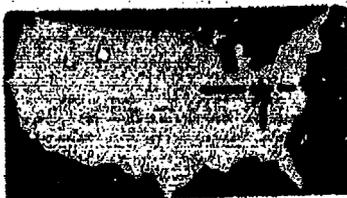
review and synthesis of
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LEADERSHIP PERSONNEL FOR VOCATIONAL AND TECHNICAL EDUCATION

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**REVIEW AND SYNTHESIS OF RESEARCH
ON PREPARATION OF
LEADERSHIP PERSONNEL FOR VOCATIONAL AND TECHNICAL EDUCATION**

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PREFACE

Through able leadership, vocational education has continued to grow quantitatively and qualitatively. Vocational educators have recognized the importance of leadership and have initiated educational programs to insure that competent professional personnel will be available in the future.

In this work, the author identifies and examines these developmental efforts by vocational educators. He further analyzes the leadership role at national, state and local levels with special emphasis on the lack of clear role definition at the local level.

The author recommends a new breed of leadership- one which represents a multiplicity of divergent interests and decision-making skills.

The profession is indebted to Melvin D. Miller for his scholarship in the preparation of this report. Recognition is also due Lloyd Phipps, University of Illinois; and Garry Bice, Tennessee Research Coordinating Unit for Vocational Education, for their critical review of the manuscript prior to final revision and publication. Wesley E. Budke, information specialist at The Center, coordinated the publication's development.

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INTRODUCTION

Vocational education is facing a challenge which is unique--a challenge rooted in the social and economic welfare of people. The years ahead will present vocational leadership with an ambiguity created by new problems that will not yield to solutions used in the past. Since vocational education leaders will face quandaries which past experience alone will not solve, a new leadership must be prepared and resources for self-renewal must be provided present leadership.

The purpose of this document is to review and synthesize the most significant research and information available concerning development of leadership to serve vocational education at all levels. Specific programs to develop vocational education leadership, however, have emerged only during the past decade, and it has been deemed advisable to go beyond sources which deal only with the preparation of leadership personnel for vocational education. Vocational and technical educators can extrapolate much from procedures and techniques serving traditional educational administration programs to help develop the maximum potential of prospective vocational and technical leaders.

The document base for this paper came from the collections of the Educational Resources Information Center (ERIC), the ERIC Clearinghouse on Vocational and Technical Education, the Research Library at Oregon State University, the University of Michigan Microfilms DATRIIX Search procedures, and personal sources of the author.

A search was conducted of documents reported in *Research in Education (RIE)*, *Abstracts of Instructional Materials in Vocational and Technical Education (AIM)*, *Abstracts of Research Materials in Vocational and Technical Education (ARM)*, and *Current Index in Journals in Education (CIJE)*. Computer searches of these resources were made using two search strategies for each source. The first strategy used a three-group descriptor system. To be selected, each document had to contain at least one element from each group. Group A included: individual characteristics, administrator role, role perception, factor analysis, responsibility, leadership qualities, and administrator characteristics. Group B: administrator, administrative personnel, supervisor, vocational directors, and teacher-educator. Group C: vocational and technical. This search produced a total of 51 documents: RIE, 40; CIJE, 5; AIM and ARM, 6.

Training Programs for Administrative Personnel, the title of the second search procedure, utilized a dual descriptor requirement. Group A terms included: educational programs, simulation, leadership training, in-service education, workshops, seminars, internship programs, field experience programs, trainees, T-groups, simulated environment and practicums. Group B included: administrator, administrative personnel, supervisor, vocational director,

teacher-educator, and administrator selection. RIE sources yielded 164 documents, CIJE, 20 and AIM and ARM, 21.

The DATRIX search made use of terms similar to both of the above search procedures and produced a list of 90 references. DATRIX, which does not make use of a descriptor system but relies on key words in the title is less precise and therefore less productive than the ERIC searches.

VOCATIONAL EDUCATION LEADERSHIP

Tasks of Vocational Leaders

Vocational education is at a point where its leadership demands have increased in both quantity and quality. The bold expansion of vocational education programs and the number of people being served has intensified the need for leaders at all levels. To meet these needs it is appropriate to examine leader's performance requirements and design programs based on these requirements. Unfortunately, little has been accomplished in this direction.

A recent study (Heilman, 1970) reported the results of task analysis for vocational leaders at four levels -- secondary, community college, state agency, and university teacher education. Sixty-four vocational educators representing these four levels in 28 states reported tasks performed over a five week period. Of the 14 task categories identified, the areas of personnel development, researching, planning, and supervising required about one-half of all time reported. However, statistically significant differences at the 0.05 level were reported in rank order correlations of tasks, based on time distribution, between the four position levels involved in the study. A more limited study (Ward, 1970), examined competencies of local leaders in occupational education selected from secondary, post-secondary, state and university settings in Oregon. Forty competencies were identified as being common to the performance requirements of each of these occupational education leaders.

In keeping with the task approach, Coster and Morgan (1969) presented a model for the specific task of evaluation. This model, which may be adapted to any level, uses the state director of vocational education to illustrate the total functions of program planning and evaluation as they apply to the needs of leaders in vocational education. Advisory committees, another task area of vocational leaders, is the subject of a study by McKinney (1969). The results of this study about perceptions of vocational educators and school administrators concerning the functions and operations of the advisory committee pinpoints issues to be dealt with in educational programs for vocational leaders.

Gray (1970) has undertaken a study of the competencies needed by personnel engaged in program planning in state divisions of vocational and technical education. Utilizing Arnold's model for program planning, Gray identified 147 competencies fitting the three planning levels; (1) socioeconomic planning as it relates to vocational education, (2) vocational education program planning, and (3) vocational education resources planning. It appears that many of the competencies identified for program planners at the state level have application to other roles in vocational education.

Attempts to identify other studies related to tasks or competencies of all vocational education leaders were not fruitful. However, other techniques have

been used to examine the leadership role. A California conference (University of California, 1965) studied current leadership practices and vocational programs as they related to national, state and local requirements. Discussion groups and brainstorming sessions were used to present images and patterns in vocational education and their implications for change. A series of institutes for leadership training (Cotrell and Valentine, 1967) provided views on leadership roles and functions. Presentations at the institutes included discussions of leadership needs in the context of administrative structure, program patterns and curriculum development, facilities and equipment, staffing, financing, establishing research programs, and developing public relations.

Studies in the field of adult education provide strategies, if not actual competencies, for studying leadership roles in vocational education. In an attempt to identify the functions of directors of adult education in public school systems and the competencies required for successful performance of these functions, Madry (1963) presented a rather thorough job description of the director. It established a pattern comprising a broad range of critical functions in adult education. The study went beyond a simple analysis to show the relationships that exist among important aspects of administering adult education and designated competencies needed by administrators to perform successfully the functions described.

In looking at preparatory programs for adult educators, Aker (1962) studied behaviors representing essential competencies of adult educators which, in his judgment, should make it possible to determine the acquisition of essential competencies among graduate students in adult education during their field work, internship activities, situational tests, or demonstrations.

The areas of task analysis and competency identification have received only limited attention in regard to vocational education leadership needs. Methodologies for this examination have been established and serve to guide future researchers. Continued study in this area should prove rewarding to the researcher and useful to the field.

State and National Roles

Numerous efforts have been made to explicate the role of state vocational education leadership personnel. The materials developed for self-analysis of state agencies for vocational and technical education (Lee, 1967) offer insight into state leadership roles and the operation of state agencies. Lee's work provides criteria for self-analysis in the areas of (1) philosophy and objectives, (2) the state board and the legal basis for the agency, (3) the individual program areas, and (4) the administrative functions of the overall agency. These criteria provide an examination of state leadership functions.

Service area specialist roles at the state agency level have also been studied as they pertain to change (Rice, 1966). Those findings indicate that while certain functions and activities of state supervisors in vocational education are explicit in job descriptions and in the literature, variations exist in the way functions are fulfilled and in the way activities are performed. It was also found that a primary variable in the way activities are performed seems to be the attitude or orientation of the supervisor toward change.

Rice (1968, Rice and Roth, 1967) reported two additional efforts which bear on the state leadership role. The earlier was part of a multi-phased project to identify state leadership needs and to develop training programs based on those needs. The later publication depicts the current status of vocational education state leadership personnel in terms of policies, numbers, education and experience as a part of a profile of these leaders.

The role of the state supervisor in vocational agriculture has been examined in terms of four recognized functions of supervision; administration, improvement of instruction, research and evaluation, and public relations (Schroeder, 1962). Of particular interest is a determination of the perception of the role of state supervision in vocational agriculture as related to the operational aspects of the program at the local level. Role definers included teachers of vocational agriculture, local school administrators, and state supervisory personnel. Using an analysis of critical incidents, Smith (1965) has determined some of the critical requirements of an effective state consultant of business education. He presents a list of 26 critical requirements which have value in the preparation of state leadership personnel in all service areas.

Formulation and implementation of a comprehensive manpower policy at the state and national level has also been identified as a role of leaders in vocational education (Koehn, 1970). State leadership demands people who are concerned with those in the work force today, together with those who will be the future work force. Accordingly, these concerns manifest themselves in programs with occupational counseling from kindergarten until retirement. Counseling and guidance services have also been examined as a function of state leaders (Gysbers, 1967). In this national seminar, state leadership personnel were presented as having a major influence on the future of vocational guidance programs.

A study made in Utah (Stephens, 1967) started with the assumption that the state agency role involved support to local vocational directors. A survey of local directors indicated that state office personnel were most effective in assisting local directors in their roles when they worked with or through local directors in matters pertaining to their districts.

Other broad roles have been ascribed to state agency personnel in serving vocational education (U.S. Office of Education, 1968). These include; leadership, regulation, and involvement of appropriate groups in the planning and implementation of programs. The USOE's nationwide study was conducted to investigate factors which might be associated with differences in perceptions of state administration about these roles.

The self-analysis for state agencies for vocational and technical education (Lee, 1967) provides a guide for evaluating the administrative organization and practices of these agencies. Within the guide are 10 administrative or leadership functions of the state agency and its personnel. Leadership responsibilities of state agencies for improvement of secondary school curriculum without regard to the specialized area of vocational education was also reported (Chismore, 1963). For this, five categories--coordinating, planning, research, public relations, and consulting--were used to evaluate state leadership.

Leaders in Local Educational Agencies

The influence of various leadership personnel in the decision-making process at the local school level is not well defined. To determine where vocational education decisions are made in the administrative hierarchy of the school system, Long (1970) analyzed the location of decision responsibility for 38 of the 45 decisions studied.

Edmunds (1967) studied the qualifications, responsibilities, and duties of vocational directors at the local level in Utah. He considered 10 categories: budgeting, reporting, directing work study and adult programs, contracting employers and employment service personnel, recommending advisory committee appointments, holding conferences, conducting in-service training, maintaining public relations, and recommending facility improvement. To be qualified to serve as a local vocational director, 90 percent of the respondents believed that industry or business work experience was essential. Varying agreement was found on such issues as length of the work experience, kind of certification required, lines of authority and responsibility, and requirements about prior teaching experience.

Bowdoin (1966) made an assessment of the educational and experience qualifications of administrative and supervisory personnel for vocational industrial education which was to determine whether or not required and actual qualification of persons holding these positions were needed; and if they were not, what should be done to bring their competencies in line with job requirements. Discrepancy was found between the recommended professional preparation and stated job requirements; however, the greater discrepancy existed between the recommended professional training and reality. In-service training programs were recommended to overcome this gap.

In looking at the roles of the administrator of vocational education in a single college junior college district (Lien, 1968) considerable agreement was found between the literature and the job descriptions of those being studied. However, neither the literature nor the job descriptions accurately reflected what the vocational administrators were actually doing. Background characteristics of occupational education directors in two-year colleges compared favorably with the experiences considered desirable by the 24 states studied (Frankie and Miller, 1969). A comparison of the stated requirements with actual backgrounds revealed that administrators were weakest in the areas of meaningful occupational and vocational teaching experience.

A questionnaire survey of 85 administrators of junior college technical education programs provided a limited profile and a description of the duties of these administrators (Lien, 1964). No statistically significant relationship was found between either the rigor or scope of a program and the administrator's background or characteristics. Further study of directors of vocational and technical education in the junior college also provided background information and role descriptions for personnel holding these positions (Fielding, 1966). The study, which initially involved all of the junior colleges in the 1966 directory, also provided data on certain aspects of the organizational structure as it pertains to the administration of vocational and technical programs.

Senior administrators of vocational programs were asked to provide data on desirable characteristics of vocational department heads in comprehensive high schools, vocational high schools, and junior colleges (Butcher, 1968). Characteristics ranked high by all types of schools were: vocational education background, general education background, technical knowledge, student-centered approach, and an understanding of basic principles of learning. There was more agreement in what was unimportant in supervisor characteristics than what was important.

A profile of the typical director of area vocational and technical schools has been projected as a result of a study conducted in the 24 states having the largest number of operating area schools (Polk, 1969). A statistical comparison between the top and bottom 20 percent of each state's local directors is given. Findings concern relations between rated success and (1) graduate preparation in vocational education, (2) undergraduate preparation at a private college or university, (3) the number of years of administrative experience in vocational education and (4) membership in professional organizations.

A profile for trade and technical leaders has also been developed (Barlow, 1969). This study provided descriptive information of leader characteristics of trade and technical education leaders in California and indicated that these persons spend a majority of their time in the functional areas of coordination, supervision and administration. Meetings, report writing, and coordinating were the most often reported activities. For purposes of this study these leaders rated 15 major issues confronting them and their possible solutions.

More specific functions of local leaders have been formulated in various settings and by a multiplicity of procedures. A suggested guide for post-secondary vocational and technical education (A. Miller and Gillie, 1970) was based upon comments and recommendations of qualified national consultants and discussion groups of experienced administrators who had taken part in a national conference. This guide presents a discussion of the roles of administrative and supervisory staff in relationship to staff, students, community, accreditation agencies and governmental departments.

Another conference on professional and leadership development for West Virginia County vocational supervisory personnel (West Virginia State Department, 1966) was designed to help supervisors formulate a philosophical foundation and familiarization with the principles and concepts of vocational education. Functions considered important included: planning, implementing, operating and evaluating programs of vocational education; cooperative approaches to program planning; and administration and supervision of state and local programs. Public relations is presented by Maner (1970) as a function of the director of career education in a comprehensive community college. Through a synthesis of selected literature, the author presented a tentative plan to assist in the growth of career education programs in the two-year college utilizing a planned public relations program.

Teacher Educators

Studies of characteristics, backgrounds, profiles or required competencies of specialists in teacher education are limited. With the expanding concern for

special population groups, the literature on teacher education roles seems to focus on this area. Arnold (1968) reported on a two-week seminar conducted to develop knowledge about, understanding of, and empathy for persons with special needs. Topics on identification, psychological and sociological characteristics, urban and rural differences, teacher qualifications, and teacher training were presented. Teacher education programs and programs for persons with special needs were developed during the seminar.

A Missouri study (Garret, 1967) also dealt with special population groups in vocational education and proposed an interdisciplinary approach to preparing home economics leaders for emerging programs serving disadvantaged youth and adults. According to the report, teacher education institutions should help future home economics teachers in parent-education programs to understand socioeconomic differences. They should also increase their emphasis on the need for continued in-service training as a part of increasing professionalization of the leadership role. Looking more broadly at the same issue, Nag (1966) studied the role of professional leaders in educational programs for parents handicapped by socioeconomic status differences, to identify and compare concepts of the actual and the ideal roles of the professional leader.

Future Roles and Needs

Education is not noted for responsiveness to societal changes; however, the persuasiveness of the evolving world of work demands continued examination of vocational education leadership preparation programs. Leaders and leadership programs must be prepared for change and cannot be threatened by life and work patterns in a continual state of flux. In a paper presented to EPDA directors of programs in educational administration, Culbertson (1969) indicated that all educational administrator preparation programs must set new objectives for leadership development, adopt a perspective which is both national and future oriented, and incorporate activities adapted from the private sector, to bring about an erosion of the differences between education and business.

The emerging role of the school administrator is that of a management specialist rather than an authority figure (McGowan, 1969). The school administrator must also become a manager of change (Kraft, 1969). In this new role, the administrator is required to utilize techniques of systems analysis, interaction analysis, group organizational patterns and new decision-making procedures. With growing interdependence between vocational and technical education and industry, the educational planner-administrator needs predictive, quantitative models which can be used to identify long-term technological changes. It is through these skills that educators will be able to control the wide range of pressing problems facing schools as they fulfill their role in contemporary society.

The report of the American Association of School Administrators' Commission for the study of the preparation of professional school administrators is relevant to the needs of the vocational segment (Whigham, 1969). The report develops a background for projected changes and points to areas of commission concern. These include: strategies for managing change;

theories of system organization and structure; information systems; master plans for program evaluation; new technologies for managing school operations; and comprehensive planning as a basis for resource allocation. Each of these areas should prove fruitful in studying the specific applications to leadership needs in vocational education.

The areas of program, organization, operation, and finance are focal points for a series of papers (Morphet, 1968). The first paper outlines the primary goals of an educational program and considers implications for curriculum instructional practices, supporting services, evaluation, teacher education, and continuing education. The second paper analyzes basic issues and decision-making aspects of operational problems. The third paper reviews the local school system and presents five organizational models for educational governance. The state educational organization, forces influencing decision-making, and the functions of a state educational department are included in the fourth paper. The fifth considers economics and financing of education and describes eight alternative models for state participation in public school financing. Each paper presents an emerging design for education and has obvious implications for leadership preparation in all areas.

State leadership and teacher education are the targets of several future-oriented studies and reports. Extensive treatment of the emerging role of state education agencies and their leadership in improving education is the subject of *Emerging State Responsibilities for Education* (Morphet, 1970).

Major roles of the state agency include establishing goals, policies and priorities; planning; and evaluation. Specific leadership functions are: focusing on people; improving the organization, operation and support of education; carrying out research, development, demonstration and dissemination activities; and evaluating education in a changing society.

Magisos (1968) examined the change orientation of the state supervisor of vocational education in a role perception study. He reported a number of factors related to the more dynamic supervisors and suggested that further research be conducted to identify, cluster, and measure independent variables within this and other theoretical frameworks for the study of orientation, behavior, and interaction of supervisors. Rice and Roth (1967) detailed conference results which conceptualize the emerging role of state education departments and identify implications for division of vocational education.

The preparation of professional personnel for vocational and technical education received attention at a national seminar for college deans (Dillon and Horner, 1969). Challenges facing teacher-educators in vocational and technical education were included in the conference reports. In addition, task force reports dealt with administrative organization for development of professional personnel, strategies to meet common professional education program goals, techniques for personnel selection and recruitment, and implications of federal programs.

Another national seminar focused on emerging teacher education curricular models in vocational education (Ferguson, 1971). The leadership role in implementing a core-based vocational and technical education curriculum and implementing teacher education curriculum improvements were included in the

seminar objectives. The research reported at the seminar has now become the basis for a comprehensive core curriculum project in teacher education funded through The Center for Vocational and Technical Education at The Ohio State University.

A more specific application of the same principle involved in the comprehensive core curriculum project is found in Crawford's research project, "A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education," (1967). Teacher education programs and local vocational curriculum developments require close coordination and simultaneous installation to be most effective.

Leadership personnel must not only be prepared to work in new programs, but there must be a sensitivity to trends in education and industry great enough to achieve program transition and modification. The guide prepared by the Connecticut State Department of Education (1970) for administrators of vocational and technical education presents topics useful to leaders with this sensitivity. Leadership, personnel matters, supervision of instruction, managerial and operating responsibilities, and public relations and issues which are treated in this publication represent emerging and growing concerns of leadership in the educational community.

Summary

The process of examining functions and roles of leaders in vocational education has begun. In reality, little is known about the training needs of leadership personnel in vocational education. It is possible to list activities under broad categories, such as: administration, coordination, supervision, financing, planning, budgeting, writing reports and proposals, public relations, setting priorities, *ad infinitum*. While it is necessary that planners of leadership programs be aware of categorical lists, more detailed knowledge about specific application within these roles is necessary.

Leadership development programs have to move beyond folklore. They must be based on the common functions of all leaders in vocational education, yet provide opportunities to prepare for specific roles and to develop weak or lacking competencies. To accomplish this goal, detailed and exacting studies of leadership roles in vocational education deserve priority attention. These studies should concentrate on present job and task requirements together with emerging roles and job needs. Failure to anticipate future oriented needs can result in leadership unprepared to cope with vocational education's expanding role.

Not only should studies examine leadership roles in vocational education for commonalities, but also for unique functions at each level. State, university, post-secondary and local needs vary and leadership development programs must provide for these variations as they prepare leaders for these various roles. Without detailed studies of competency requirements, leadership development programs are less likely to accomplish both theirs and the learner's purposes.

EDUCATIONAL LEADERSHIP AND VOCATIONAL EDUCATION

Changes occurring in vocational education are placing new demands on educational leaders at all levels. These changes require a different breed of leadership -- leadership representing a multiplicity of divergent interests and decision-making skills. Leaders who operate by fiat with only a view from the chair behind the office desk are now faced with quandaries differing from those of the past. People in and outside of education are asking to be included before decisions are made. It is encouraging to note that programmatic efforts have been directed toward helping present leaders become a part of the new breed.

One of the quandaries facing educational leadership today considers the role and relationship of vocational education to the total elementary and secondary program. The 1969 leadership development seminar for state directors of vocational education examined this issue together with new and emerging philosophies of vocational education (The Center for Vocational and Technical Education, 1969). Similarly, Flanagan (1968) indicated that each school's educational objectives should include three major types of goals for each individual, the first of which is preparation for an appropriate occupational role. This goal means change in so-called comprehensive high schools if they are to be truly comprehensive.

The role of the high school principal in moving vocational education from a "status quo" position to one of rightful partnership with other areas of the curriculum in the comprehensive high school is presented by the Nevada Occupational Research Coordinating Unit (1968). Attitudes held by the secondary school administrator and his board of education are a major determinant in effecting the comprehensive high school. Divita (1968) presented the results of a study which examined major issues and concomitant attitudes of these two groups. In presenting the means of implementing evaluation findings, Hull (1970) indicated that the disposition of the chief school administrator can enhance or retard the implementation process.

The urban school faces the same issue of comprehensiveness but under grossly differing circumstances and needs than non-urban schools. The scope of the responsibility of vocational education in large cities was the theme of a recent national seminar (Mason, 1969). The major purposes of the seminar were: (1) to identify and analyze problems confronting vocational education related to effectiveness of inner-city youth for job competition; (2) to exchange ideas and examine trends that make vocational education the vehicle to translate training into job securement; and (3) to develop strategies of action leading to improvement of vocational and technical education.

Any strategies of action leading to improvement of quality in vocational and technical education for either the urban or rural school has to involve the

administrator. A conference devoted to the description, demonstration and evaluation of innovative programs in vocational and technical education dealt with this issue (San Francisco State College, 1966). Discussions focused on making education relevant, the role of the administrator and the high school principal, implications for junior college programs, and teacher education. Each of these affects the leadership roles.

The specific needs of public school administrators facing issues involving vocational education has resulted in a number of responses by those serving the education profession. The simulation materials developed by Sybouts (1967) are designed to prepare school administrators to exert more effective leadership in conceptualizing, analyzing, organizing, and administering public school vocational and technical programs.

In a more recent effort, Sybouts and Krepel (1969) conducted a study to prepare a descriptive analysis of the relationship existing between vocational education and administrators in Nebraska, in order to prepare materials for preservice and in-service education of school administrators. It is through programs of this type that the greater relevance in preparation programs for urban school administrators, as called for by Cunningham (1969), will be provided.

The University Council for Educational Administration and the National Academy for School Executives are also struggling with the professional development of educational leaders, and it should be expected that their programs will bear on current vocational education issues facing their clientele (Farquhar, 1970b; Knezevich, 1970).

State advisory councils on vocational education have also expressed an interest in professional development programs for school administrators. A report from North Carolina State Advisory Council on Vocational Education (1970) expressed a strong desire for a continued, expanded and more encompassing professional development program. The report further suggested recent thrusts and modifications in vocational education which have implications for professional development of personnel. This report also offered recommendations to the state board of education, the state board staff, colleges and universities with vocational teacher education, guidance, and administration programs for the improvement of leadership serving education.

Summary

While it is possible to dismiss the needs of educational administrators and leaders as being the responsibility of preparatory programs in educational administration, the needs of vocational education demand that vocational education leadership programs take a positive stance in assuming responsibility to see that all educational administrators and leaders are prepared to exercise leadership in vocational education, not necessarily a strong and demanding role, but certainly one that is informed and supportive. The shadows of the future are discernible, and the expanding role of vocational education as an integral part of the total mix in education is predictable. Concerns and views on career education expressed by U.S. Commissioner of Education Sydney P. Marland, overlay those of many local educational administrators and leaders. The School

Based Career Education Model I Project contracted to The Center for Vocational and Technical Education will have still further impact on the views of these and other educational personnel. Vocational education leadership programs will need to stand ready to assist and direct programs to prepare such personnel to meet the nation's educational commitment.

In short, school administrators who make decisions determining the direction and future of vocational education need to understand career education and its dimensions. The probability that this will happen cannot be left to chance. Vocational education must take an aggressive role in seeing that school administrative preparatory programs prepare personnel for educational roles in the new career oriented education.

LEADERSHIP DEVELOPMENT PROGRAMS

The climate for developing leadership to serve vocational education has never been more favorable. Sections 552 and 553 of Part F of the Education Professions Development Act (EPDA) have, for those willing to act, provided a source of funds to implement leadership programs together with direction and limitations as to the ingredients for these programs (U.S. Congress, 1967). Yet, for others willing to act but not meeting training grant criteria, it has provided added stimulus to move ahead on their own. The willingness to act, however, must be closely followed with an examination of the myriad of alternative solutions to each of a similar number of goals.

At this point in time, the training of educational administrators is still primarily an apprenticeship in folklore. There is a need to be able to distinguish the executive function, the administrative function and the managerial function as they apply to leadership roles. James (1970) provides a basis for these distinctions. However, distinguishing functional differences in the leadership role does not insure that the myopic vision of the past has been corrected. Existing evidence seems to favor the systems approach in overcoming this shortsightedness (R. Miller, 1969; Wiggins, 1970; and Culbertson, et al. 1968b). One other important factor remains for consideration in the development of leadership programs, the human element. Leadership training must take into account the environment in which the leadership is to occur together with the social and psychological aspects of transforming behavioral science knowledge into effective practice (Olmstead, 1967; Eidell, 1968; and ERIC Clearinghouse on Adult Education, 1967).

Alternative Procedures

Patterns for offering leadership training have emerged from education and industry. Some are short-term programs with limited aims, while others extend for at least a year and deal with more global leadership needs. The following section presents selected examples from education which represent a variety of formats in developing education leadership -- both in and out of vocational education.

Simulation

Simulation is used to create interaction in a "real world" setting to solve problems designed to produce desired skills. Generally simulation involves short-term programs focusing on unique aspects of the leadership role. Simulation has been used in the training of research and development project managers (Dillman, 1969); vocational education decision-makers at all levels (Meckley, et al., 1970); administrators of special education programs (Hudson, 1968); educational supervisors (Lucio, 1969); secondary school principals

(Sybouts and Norton, 1968); elementary school principals (Pharis, 1966); and educational administrators at various levels of responsibility (Piele, 1968, Culbertson, 1967). It is not unusual for simulation training to involve the use of games and role-playing activities (Sybouts, 1967; Abt, 1965; and Culbertson, et al., 1968b).

The Center for Vocational and Technical Education has developed materials directed toward the development of personal and technical skills of supervision and decision-making (Rice and Meckley, 1970). Other materials focus on planning vocational education programs and facilities (Meckley, et al., 1970). Both utilize simulation techniques and are designed around state agency oriented problems; however, resultant skills and techniques have general application to multi-level leadership needs of vocational education. Sybouts (1967) has simulated materials which instruct school administrators in the area of occupational education. Designed to prepare persons to exert more effective leadership in conceptualizing, analyzing, organizing and administering public school vocational and technical programs, they are developed in the form of three "in-baskets" but utilize small groups, alternative solutions, group discussion, role-playing and facing consequences resulting from decisions made.

Two nationwide surveys on the use of simulated materials in the preparation of school administrators provide a wealth of information on this technique (Broadhead, 1963, Weinberger, 1965). The Broadhead study provides information on 61 institutions using simulation procedures in educational administration preparatory programs together with procedures in planning and evaluating these programs. Recommendations are given to improve the use of simulated materials as a method of instruction. The later study by Beach produced a list with an increased number of institutions using simulation (90), and outlined evaluation procedures, making recommendations which specify ways to improve the use of simulation.

Laboratory Training

Training groups and sensitivity training are familiar techniques in educational programs. Thomas (1969) has studied the effects of laboratory training on elementary school principals. A before/after control group design was used to determine job-related interpersonal behavior changes of elementary school principals as a result of such training. The experimental group showed more change toward (1) being considerate to the individual needs of the staff, (2) use of tact, (3) a more collaborative approach to decision-making, and (4) increased leadership for improving staff performances. The staff of the experimental-group principals showed more change toward high group morale, and their schools changed toward more open organizational climates. Sensitivity training has also been employed to improve leadership skills of new junior college deans of instruction (Chadbourne, 1969).

Internships and Field Experience

During the last decade the use of field-based or field-oriented programs in educational leadership development has shown a marked increase. However, there is some difficulty in finding a precise definition of internships, particularly as they apply to education. What one institution or researcher refers to as a field

experience, another will call an internship. It would seem desirable to arrive at some common understanding of these terms.

In looking to the medical field where internships have long been utilized, they connote an assistant resident. Translated and applied to education the term could easily identify any person serving as an assistant to one holding a position similar to the one for which the intern was training. Generally this would involve residence for at least one academic year in order to provide a full cycle of experiences. Anything less, then, would be considered a field experience. Even a cursory review of the literature cited will show that these definitions are not now generally accepted. Also, there is no serious attempt to define the terms of internship or field experience.

One of the earliest records of internships in education relates to the administrative internship in the secondary school sponsored by the National Association of Secondary School Principals. McGrew's (1966) study attempted, through a detailed examination of the professional literature, to establish a set of criteria for those practices considered to be desirable to the operation of an administrative internship. As a result, nine criteria in three broad categories were presented: the relationship of the internship to the university; university supervision of internship; and internship experiences in the cooperating school. In a case study approach it was found that the criteria were met most successfully in those areas in which the cooperating schools held the major responsibility and least successfully where the cooperating university held it.

Based on preliminary findings of a Ford Foundation inter-university internship program, Hartley (1968) presented the primary aspects of the educational administrative internship together with an historical development of the intern concept in other fields. The final report on this same project (Cornell University, 1969) outlined the six-year project and concluded with 13 recommendations including a suggested model of guidelines for an internship program and a general sequence of experiences for the university staff, interns and school administrators. The intern follow-up questionnaire and related items are appended.

Preparatory programs for adult educators served as the vehicle for another study of internships and field experience programs (A. Miller and Gillie, 1970). This comprehensive nationwide survey and in-depth study of selected internship programs presents 11 guiding principles for the establishment of internship programs. The progress report of the administrative internship program at the University of Pittsburgh (1969) also presents guidelines, policy statements and a model for internship programs.

Descriptive and statistical information from school systems with enrollment over 12,000 which operate formal internship programs for potential administrators among their own employees has been compiled by Stemnock (1968). Program information includes: (1) administration of the program, (2) qualifications for the position, (3) selection process, (4) title, (5) areas of internship, (6) length, (7) salary, (8) year initiated, and (9) participation. This report also includes information on the National Association of Secondary School Principals program and that of the Learning Institute in North Carolina. An extensive survey within the California State Colleges (Johns, 1966) provided

40 criteria for a high-quality field-experience program. These criteria are in three groupings -- organizational, supervisory, and administrative.

A multi-cultural community provided the setting for a three year pilot project in the preparation of educational administrators (Holemon, 1968). The design was to prepare administrators who could serve as agents for constructive educational change in communities with sizeable proportions of Spanish and Indian as well as Anglo-American members and made use of internship and field experience concepts.

Higher education has also adopted the internship approach in the preparation of administrative personnel (Manion, 1967; Culbertson, et al., 1968a). The design of these programs varies from most others in that the entire program is internal and does not require cooperation or coordination with outside agencies. Culbertson, though, did suggest the development and organization of a differential training program for professors of educational administration and educational administrators. He worked from the basic question, "How should preparatory programs for prospective school superintendents and professors who plan to specialize in educational research differ?" This question was examined in relation to (1) recruitment, (2) curriculum content, (3) working relationships with professors, (4) kinds of "reality oriented" learning situations provided, (5) internship experiences, and (6) culminating program activities such as theses or projects.

In North Carolina, administrative internships have been used to provide leadership for the state's community colleges (Adams, 1967). A cooperative effort of the university, the state agency and local community colleges, this program contains four phases -- orientation, identification and analysis of problematic areas, major problem study, and administration practice. Supporting work was drawn from sociology, anthropology, political science, economics, psychology and philosophy to make this an interdisciplinary program. The University of California (1969) also has a junior college leadership program which includes the preparation of administrators through an internship period. Moore (1969) related the community college internship experience as a way of life while learning.

A survey of 18 universities with accredited programs for school administrator preparation (DeLacy, 1966) was undertaken to ascertain how the social science disciplines have been integrated into their programs, and to evaluate the hypothesis that increased emphasis upon an interdisciplinary approach would produce more effective school administrators. Tangential information indicated that a relatively consistent pattern exists among the schools with respect to the field experiences, internships, seminars, course work, statistics and dissertation research.

An entry level internship for secondary school administrators has been developed at the University of Tennessee (Hughes and Ubben, 1970). Based on the notion that leadership for the implementation of change is still a scarce commodity, this program has a goal of developing administrative initiative in utilizing instructional resources, assigning professional talent, allocating physical facilities and changing other elements to allow for significant instructional changes. The 15 month program combines "back home" internships with campus-based activities in meeting this goal.

The effect of administrative internship and role change has been reported (Ferreira, 1970). In interpreting data gathered in an administrative internship program, the author suggested that certain attitude changes, taken as an index of role shift, are associated with interaction patterns with other significant persons.

The National Aeronautics and Space Administration (NASA) also has been involved in the development of administrative management employees through internships (Pound, 1967). A review of this program suggests that successful development of managers is a function of the long-term care with which an agency pursues management intern programs. A recent study of separations from NASA indicates that the loss rate is highest among younger employees, particularly in administrative-management occupations.

At least three states -- Michigan, Oregon and Georgia -- have reported internships in vocational education leadership. The Michigan program evaluation was based on 71 graduates from the school years 1964-67 compared with the 48 member control group consisting of men interviewed but not selected for training (Wenrich, 1968). The leadership scores obtained indicated that the trained groups improved at a greater rate on the leadership variable measured than the control groups. It must be pointed out that it is impossible to separate the effects of training from the effects of selection when accounting for this improvement in leadership behavior.

Daugherty (1971) described the Oregon year-long internship program and related his own experiences as a participant. This program, which involves the state agency, teacher education and local agencies, has a record of successful placement into leadership position for the participants.

The Georgia program (Racster, 1969) began with 21 persons preparing as directors and coordinators of secondary and post-secondary vocational education programs entering a 20 month training period design divided into three phases. Each phase was organized in a different format with the final phase being a year-long internship.

In a paper presented at a national meeting for state directors of vocational education and institutional directors of EPDA 552 programs, Bjorkquist (1971) offered suggestions on the structure and administration of internships for advanced study programs in vocational education. His outline of topics includes: (1) objectives, (2) placement, (3) supervision, and (4) evaluation. In presenting major concepts of internships, the author also defined the varying levels of responsibility that should occur during the internship period.

Reports of the Second 552 EPDA programs are not available at this date; however, inclusion of an internship feature was one requirement of each program. The 18 programs currently in operation vary greatly as to the nature and length of the internship experience. As the reports and experiences based on these programs become available, they should prove an excellent source of information.

In-service

Educational development which does not require the participant to be away from his professional role on an extended basis is generally conceded to be

within the definition of in-service education. In practice, in-service programs vary as to total duration from a few hours to a full academic year.

A compilation of papers (Lynch, 1966) from a four-day conference provides an extensive overview of the institutional roles for in-service education of school administrators. Selected chapters include "In-service Education of School Administrators: Background, Present Status, and Problems," "Notes on Institutional Relationships in the In-service Education of the Professional Administrator," and "The Development and Implementation of A Residence Executive Development Training Program." Litwak (1970) has published a collection of papers resulting from a three-week in-service program for 19 mid-career school administrators. One of the topics presented deals with administrator in-service programs. The 90 page evaluation of this same program is also available (Eliason and Redfern, 1970).

In-service education of administrators has received too little attention according to Frasure (1968) who believes that recent developments in educational administration provide a means for improving in-service education, particularly in the area of leadership development. His paper presents various approaches to in-service education for administrators and makes specific recommendations for the improvement of programs in educational leadership development.

In-service leadership development for junior college personnel is described in the final report of such a project in Alabama (Auburn University, 1970). This program was designed to meet the immediate needs of leadership personnel in new and developing junior colleges. This project consisted of a series of seven conferences, each of two days duration, throughout the year. The report concludes with recommendations based upon the experiences and evaluation of this program.

Arkansas and Oregon have in-service programs called externships to develop leadership personnel at the secondary school level in vocational education. The Oregon program started in 1969 and has a format similar to the Alabama program -- 14 two-day, weekend field based seminars spread throughout the academic year. The Arkansas program started in 1970 with parallel goals and procedures. Each program represents a consortium of the state agency, teacher education, and local schools. Results and information on these programs have not been published, but information is available through the state agency for vocational education in each state.

Workshops, Seminars and Institutes

Reasonably large numbers of leadership programs in education have been operated under one or more of these three descriptive terms, all representing the in-service concept. There have been local, state, regional and national workshops devoted to developing educational administration and leadership capabilities. The same is true of seminars and institutes. Only the name seems to vary, not the events. Examples of programs in these areas include: (1) workshops for junior college administration and presidents (Medsker, 1967 and Luskin, 1967, and Malik, 1969); (2) seminars for elementary school principals (Peterson,

1968); and (3) national seminars for specialized areas in education (American Personnel and Guidance Association, 1968).

Vocational education has also had its share of leadership development activities in these categories. The Center for Vocational and Technical Education has sponsored a national leadership development seminar for state directors of vocational education on an annual basis (Allen, 1968; and Ward and Miller, 1969). Each of these seminars has specific objectives developed from pressing issues in vocational education. Topics have included: problem identification and solution; developing interpersonal competencies; assisting in group formation; long-range planning; planning, programming and budgeting systems; and the delphi technique.

Federal grants supported institutes for new and inexperienced technical education administrators and were designed to develop and improve the participants' understanding of the philosophy of technical education, the technical education leadership role, and how this role related to program planning and development of continued leadership potential through in-service training (A. Miller, et al., 1969). A formal evaluation of the participants indicated an acquired ability to plan for implementation of positive program change, and the intent to provide a continuation of leadership development activities. A more extensive project (Worthington, 1970) sponsored a series of regional institutes and training programs designed to help develop and train, on a long-range basis, a cadre of project directors, who, in turn, would design and direct training projects for experienced vocational educators.

Other seminars have been held to further develop the knowledge and understanding of selected federal, state and local educators who have responsibility for vocational and technical programs. This was accomplished by presenting information concerning vocational education programs and procedures and providing opportunities for participants to observe and practice specific leadership skills (Green, 1966). Similarly, leadership development seminars were held on the University of Maryland campus (Seland, 1969), at Oregon State University (Matthews, 1969), and University of Missouri (1967).

Preservice and Undergraduate

While it might be assumed that programs have been developed at the undergraduate level for preparing vocational leadership personnel, these have not been reported in the literature reviewed. The possibility of having preparation programs designed for leadership roles, programs which would not have prior teaching experience as a basic requirement, should be examined. It has the potential of preparing younger leaders as well as converting leaders from other fields to serve the needs of vocational education.

Summary

Many types of leadership programs are available for the development of educational personnel to meet new demands and functions. Each offers positive gains toward the leadership goals in education; however, consideration of the

limitations need to be considered in juxtaposition with the gains. Internships provide the opportunity for comprehensive personnel development, but the time requirements and costs are high when compared with other procedures. Short term in-service programs are less costly, but they are usually faced with severe limitations determined by the scope of such programs.

Which is more effective and what are the associated cost-benefit ratios? It appears that researchers have not dealt with these questions. In fact, while most leadership programs do have some elements of evaluation built into the design, it is questionable in many cases, if these procedures meet criteria for good research. One element in particular is lacking, pre- and post-assessment with later follow-up.

As program planners move ahead in the area of leadership development, more concern should be expressed in evaluation based on measurable goals. Program objectives for both product and process need explication that allows for measurement in assessment and circulation processes.

RECRUITMENT AND SELECTION FOR LEADERSHIP DEVELOPMENT PROGRAMS

Recruitment

Recruitment is basic to leadership development programs. It also merits far more attention than it has received to this point. A recent national recruitment effort for the EPDA Part F, 552 program resulted in filling the 160 openings although it appears that information about the program failed to come to the attention of many who might have desired to apply. Conversations with persons who should be considered prospective candidates for new openings in the program indicate a general lack of information about this program. It does not seem unreasonable to assume that the same conditions exist for other leadership programs in vocational education.

Farquhar (1968) described current recruitment efforts in educational administration as limited and unsystematic. He pointed out five significant obstacles to effective recruitment: (1) the lack of information about educational administration among potential recruits; (2) the occupations' low perceived career status; (3) entry restrictions into the occupation; (4) the problems of graduate study for persons already established; and (5) the low general opinion of preparation programs in educational administration. Farquhar also provided a number of steps to overcome these factors. In a later paper, Farquhar (1970a) suggested that recruitment and selection of students for doctoral programs in educational administration be a function requiring active and productive school district-university cooperation.

Selection

The selection process is clouded with many issues: what is leadership, what are the personal skills, traits, aptitudes, and the like, associated with leadership, can we identify and isolate those components of leadership to be developed? These questions persist while leadership development programs continue to operate without complete answers. Any selection process should at least consider questions such as these together with others determining the content and direction of the program.

A variety of definitions for leadership exist. They range from the very simple view adapted for The Ohio State Leadership Studies of a leader being a person who holds an official office or position (Guetzkow, 1951) to that of Tannenbaum (1958) who envisions leadership as "interpersonal influence, exercised in situations and directed through the communications process, toward the attainment of a specified goal or goals."

Most definitions center around the question of behavior. Fiedler (in Petrullo and Bass, 1961) sought the elusive leadership effectiveness trait, which he felt could be defined as a consistent, reliable and measurable personality trait

to differentiate effective from ineffective leaders. Leadership has also been viewed as demanding behavior in a social role tied to some specific situation (Gibb, 1947).

Frequently the behavioralists relate leadership to outcomes in terms of group goals (Tead, 1935; Cartwright and Zanders, 1968; Bernard, 1948; and Hemphill, 1949). To them, leadership is concerned with reaching group goals and achieving member satisfaction. This position is summarized best when leadership is defined as "the ability to create group action toward an organizational objective with maximum effectiveness and cooperation from each individual" (Freeman and Taylor, 1950). A review of findings based on this definition (Casello, 1970) indicated that the failure of the leadership trait approach has led to "situationalist" methodology and more recently to the "behavioralists," focusing on the behavior exhibited by a leader in any given situation.

The struggle among these three schools is inconclusive. In fact, the most accepted version (Bird, 1940; Hemphill, 1949; Lindsey, 1954; Stogdill, 1948; and Gibb, 1947) is that all schools are partially correct and that leadership is a combination of: (1) the leaders' traits and behaviors; (2) the needs and drives of the group members with whom he is working; (3) the particular situation or environment in which the group is functioning; and (4) the particular task being attempted (Casello, 1970). Rowland (1966) has combined the situationalist and behaviorist approaches in investigating a number of suggested determinants of effective leadership in formal organization; however, leader behaviors and characteristics were treated as the major determinants of effective leadership.

Approaches to the study of leadership which tend to obscure the importance of personal skills, traits, and aptitudes have not been able to destroy the fact that such personal characteristics contribute significantly to the emergence and maintenance of leadership status. Casello (1970) presented an extensive review of these personal skills, traits, and aptitudes as they relate to the leadership role. He went on to develop a new design for grouping the personal characteristics associated with leadership -- personality factors, aptitudes and technologies (skills). He concluded that, while nearly all listed characteristics can be measured, those grouped under technologies are probably the easiest to teach and, therefore, it seems sensible to concentrate on listed skills as those most likely to be incorporated into a leadership development program. Conversely, it must be said that the other two categories, personality and aptitude, should play a strong role in the selection process.

Another review of research on leadership (Lucio and McNeil, 1969) presents implications for the selection of educational supervisors which may prove useful in selecting personnel for leadership training programs.

Standardized Tests

Standardized tests have not had a great impact on leadership development selection procedures for vocational education. The Michigan experimental program for the identification, selection and development of leaders for vocational education did make use of standardized tests for selection purposes (Hodges and Wenrich, 1966). However, they concluded that there was yet much

to be learned about the value of standardized tests for selection purposes and that there was a need for a longitudinal study to validate selection criteria.

The EPDA 552 program at Oregon State University is continuing study and standardization of tests which may offer guidance in the selection process. These include the Dogmatism Index Scale modified from the California K. Scale and a Styles of Leadership Survey.

Use of tests for selection of administrators also has been investigated (Boyce, 1960). Using the "Miller Analogies Test," "Minnesota Teacher Attitude Inventory," "F-Scale," "Allport-Vernon-Lindzey Study of Values," and "Edwards Personal Preference Schedule," the researcher undertook a statistical examination of the validity of these tests as a part of a standardized test battery to assist in the initial screening of administrative candidates. The criterion instrument employed was the "Purdue Rating Scale for Administrators and Executives." It was concluded that these scales are generally useful as measures for screening potentially successful school administrators, but selection procedures should be directed at situational factors which may affect both performance and criteria determination.

Applications and Interviews

Firsthand knowledge and contact with a variety of leadership programs for vocational education indicates that all programs have some basic selection procedures. Generally, these include an application form asking for personal and historical data including references. Locally developed reference forms or reference letters are also included in most selection procedures. The length and content of these forms vary greatly as do other elements. Some require personal interviews with a committee, some require lengthy written statements on given topics, and yet others limit themselves to a review of academic work with little concern in other directions.

Summary

Recruitment and selection are basic to leadership development programs. Yet, these two elements remain largely unresearched and appear to be of only passing interest and concern to those responsible for the operation of such programs. Detailed study of recruitment procedures at the national, regional, state and local level would be useful in furthering the causes of vocational leadership development. Identification and standardization of appropriate leadership selection tests would help to reduce the amount of folklore surrounding current practices. Research on other elements of the selection process should prove of equal value.

Although this review and synthesis has been necessarily limited to research directed at the preparation of leadership for vocational and technical education, mention must be made of the vast numbers of resources in the field of business and personnel administration. Investigation of this material will show that the problems of recruitment and selection of competent leadership is universal, and not restricted to education alone.

Business research and processes can contribute significantly to the improvement of leadership development in vocational education, but because of the differences in their orientation and foundations, it is imperative that available knowledge be evaluated for its appropriate applicability to parallel conditions in education.

SUMMARY AND CONCLUSIONS

Much of the information on training and leadership needs in vocational education is descriptive. There is a need to utilize more sophisticated research techniques to assist in further analysis and program development. Leadership in educational administration is a closely related field and the literature and research in this area provide insight, concepts, and patterns useful to researchers in vocational education leadership development. The new dimensions of the EPDA 552 programs, together with emerging state and locally initiated programs, offer resources which should not be ignored -- much has been lost already.

Conclusions

The following conclusions were drawn from a review of the literature:

- 1) There seems to be no generally accepted definition of "leadership" as well as confusion about terms used to describe events and activities of persons serving as leaders in vocational education.
- 2) There is disagreement as to whether or not administrative roles are, or should also be considered leadership roles.
- 3) Studies of jobs, tasks, and competencies as they apply to leadership personnel in vocational education are very limited in number and scope.
- 4) Little research is available that compares various training procedures to the basic outcomes and relative cost-benefits.
- 5) Studies which have been conducted to determine leadership training needs have focused almost exclusively on what is presently being done with little attention to future oriented needs.
- 6) More studies about the influence of general educational administration have been completed than studies concerning the effects of various leadership roles within vocational education.
- 7) Vocational education should participate in the preparatory programs for general educational administrators.
- 8) Leadership development programs making extensive use of simulation and internships appear to provide greater relevancy than other leadership training methods, both as to present and future needs.
- 9) Follow-up is a missing element in many leadership development programs.
- 10) There are several leadership development programs in vocational education that are not reported in the literature. The EPDA 552 efforts are one important example. These programs should provide valuable information to guide leadership development programs.

- 11) Present selection procedures are not adequate to the goals of leadership programs in vocational education. Generally these procedures are not precise in their relationship to established program goals, and the characteristics, and past performance and abilities of those to be selected.

Recommendations

It is recommended that:

- 1) Terms describing functions related to leadership roles in vocational education at all levels need to be standardized. One hierarchy of terms which applies to solving problems involved in the satisfaction of human needs is: Jobs to be done which are detailed in terms of tasks to be performed at required competency levels. Programs with objectives defined in terms of expected levels of performance of job relevant tasks will reveal attainment of these competencies.
- 2) A matrix be followed in designing studies related to leadership development programs. If the program development model presented above is followed, a suitable matrix could be developed having two axes. One would contain levels within the field including the state agency, university, teacher education, post-secondary, intermediate or regional agency, and local education agencies. The second axis reflects various leadership functions which include: administration, supervision, coordination, teacher education, and consultation. It is possible to add a third dimension which would describe task categories as: personnel, priorities, programs, budgets, facilities, and financing.
- 3) Any future studies on jobs, tasks, and competencies consider not only an examination of what is now required, but also emerging leadership requirements in vocational education and career education.
- 4) Leadership development, instructional activities and procedures should be competency-based and not "course" oriented.
- 5) The efficacy of the internship to individualize learning experiences and meet individual learner goals needs further research. There is a further need to review the practices and principles that evolve from the internship and propose alternative models.
- 6) More precise selection tools including the use of already existing tests and procedures be adapted and/or standardized to use in the selection of candidates for leadership development programs in vocational education. It is a valid procedure to utilize these same materials in the recruitment process.
- 7) Consideration be given the establishment of preservice programs leading to direct placement in leadership roles in vocational education. (As used here, preservice means programs at the undergraduate level.) One model utilizing this concept would be the

procedures business and industry have utilized to prepare junior executives.

- 8) Baseline data be established on leadership development participants to provide a basis for longitudinal studies.
- 9) Vocational education as an evolving area should draw on programs designed to prepare educational administrators.
- 10) Programs preparing educational administrators include development of cognitive and affective domain competencies related to the administration of vocational education in a comprehensive school system.

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