AN INVENTORY OF PERCEIVED MANAGEMENT SKILLS OF PRACTICING SCHOOL SUPERINTENDENTS IN MICHIGAN

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ABSTRACT

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By

Donald L. Robson

Purpose of the Study

The purpose of this study was to assess the perceptions which practicing superintendents have of their own management skills as a vehicle to aid in the understanding of the practitioner's competencies and needs. Such knowledge was considered important for planners of pre-service and in-service training programs.

Methodology

This study was undertaken in cooperation with the Michigan Association of School Administrators. A survey instrument was developed with the help of the Professional Practices Committee of that organization. This instrument asked for data on the individual characteristics of the superintendent, the characteristics of the district, and 33 specific skills divided into five general areas. All superintendent members of MASA were asked to respond, providing a total population from which to collect data of 515. Questionnaires were mailed to superintendents in conjunction with their bi-monthly newsletter, Fortnighter. Follow-up articles and appeals for returns resulted in a total return of 285 usable responses.

Findings of the Study

Eight research questions were formulated prior to gathering the data for this study. The results of data analysis regarding these questions led to the following findings:

Research Question 1: Which skills do practicing superintendents perceive themselves to possess most frequently?

Research Question 2: At what levels of competence do practicing superintendents report that they possess various skills?

This was a sub-set of question 1, and the two are answered together. Planning skills were reported as the skills which superintendents possess most and at highest levels. These were followed by managing skills, communicating skills, decision-making skills, and finally evaluating skills.

Research Question 3: Which skills are reported by top-level managers to be of most importance in the performance of their jobs?

A similar pattern to current level of skill was reported in relation to importance of skills. Thus, planning, managing, communicating, decision-making, and evaluating skills were rated in that order.

Research Question 4: Will the pattern of skills reported to be possessed by superintendents vary according to personal or organizational characteristics of the superintendency?

Two demographic factors have an apparent effect on the pattern of skills possessed by superintendents. Degree status and political subdivision classifications show significant differences among sub-groups.

Research Question 5: Will the skills reported to be most important to superintendents vary according to environmental, personal, or organizational characteristics of the superintendent?

Degree status of respondents produced the greatest sub-group variation of any of the demographic variables employed.

Research Question 6: How important will top-level school managers perceive their formal training to have been in the acquisition of skills possessed?

The overall influence of formal training was rated as low. The pattern of skills differed from level and importance patterns. Evaluating, planning, decision-making, managing, and communicating was the order of skills perceived to have been most to least influenced by formal training.

Research Question 7: How important will top-level school managers perceive their formal training to have been in the acquisition of important skills?

Influence of formal training was perceived to be greatest in relation to skills perceived to be of least importance.

Research Question 8: Will the perception of superintendents with regard to the influence of formal training in acquiring skills vary according to environmental, personal, or organizational characteristics of the superintendency?

Only degree status appears to affect the perception of the acquisition of skills through formal training.

General Conclusions

1. The skills which superintendents perceive themselves to possess with the greatest degree of competence are planning skills.
2. The skills perceived to be possessed least by practitioners are evaluating skills and decision-making skills.

3. The superintendent's description of skills does not differ according to situational characteristics except by degree status categories.
4. Specific skill areas which the needs assessment shows to be most problematic for superintendents are technologically vague.
5. Program emphasis for training should be directed at closing the gap between high-level skills with low training influence.
6. Re-evaluation of training emphasis and practices may need to be done in relation to areas of high training influence but low skill competency.
7. Superintendents desire further training most in the areas of managing and planning skills.

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By

Donald L. Robson

A DISSERTATION

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To My Family:

This volume, as this life, is dedicated to the friendship and love of Rosalie. By her sacrifice and for her approval this work was begun, continued, and was completed.

Brad, Todd, and Sarah, of course, are never-ending sources of joy and love. Their goodness and affection constantly replenish and renew the spirit.

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Dr. Keith Anderson's thoughtful comments and warm humor made him a valued member of the doctoral committee.

Dr. Phil Marcus, as a committee member, provided research expertise and scholarship criteria which will serve as a model in the future. His was a special kind of help which is held in a special kind of esteem.

Members of the finest department of Educational Administration in existence who made my stay here a pleasant and intellectually profitable one also include Dr. Sam Moore, Dr. Stan Hecker, Dr. Lou Romano, Dr. Archibald Shaw, and Dr. Van Johnson.

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Dr. Phil Cusick has been and will continue to be my intellectual model. His love of scholarship and his intellectual curiosity will provide the scholarly example which I shall emulate to the best of my ability. His role has been chairman of the doctoral committee and major advisor, but just as frequently it has been friend and colleague.

With such models as these, success in the academic world is assured.

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CHAPTER I

STATEMENT OF THE PROBLEM

Introduction

The public school superintendency has undergone a gradual transformation which has accelerated in recent years. Community expectations of the educational enterprise have increased to include functions which once were reserved for the family, the church, and other social units. The school itself has been transformed as it sought to meet the ever-increasing diversity of expectations imposed upon it by a rapidly changing and diverse society. Management of the educational enterprise shifted from the board of education, made up of citizens who were volunteering a part of their time for public service, to a full-time, trained professional as small primary units were reorganized and consolidated.[1]

The superintendency has changed as the needs of the community and society have changed. Toffler refers to this alteration in the role of education and educators as an alteration in "time-bias."[2] Where once knowledge was transmitted from one generation to the next with a devotion to the past, the mechanical age made such a system obsolete. It demanded skills that neither family nor church could alone provide, and forced the development of a new time perspective. The new perspective, says Toffler, was the present. Education took on a vocational flavor, serving in large measure the

function of producing people who could participate in an industrial society.[3] Accordingly, the administrative hierarchy of education grew in the model of industrial bureaucracy. It became one function of education to prepare young people for the society in which they must perform. Thus, the focus of education shifted away from an emphasis on the past and toward the present.

Where once boards of education employed individuals who were frequently not trained educators to relieve them of minor clerical details, more complex organization forced them to rely on their superintendents for assistance with educational problems. The superintendent became chiefly an educator, often a recognized scholar. Continued growth and complexity plus the influence of the business and industrial culture created the need for a superintendent who could serve as a business manager.[4] As the educational organization continues to be defined, the superintendent has become not only the chief executive for the board of education, but the chief professional advisor in the school system, giving professional advice having to do with the purposes and procedures of education itself. Futurists like Toffler predict coming trends in the modification of the role of education and by implication in the role of the superintendent:

> It is no longer sufficient for Johnny to understand the past. It is not even enough for him to understand the present, for the here-and-now environment will soon vanish. Johnny must learn to anticipate the directions and rate of change. He must, to put it technically, learn to make repeated, probabilistic, increasingly long-range assumptions about the future. And so must Johnny's teachers.[5]

Educational institutions have attempted to prepare administrators to assume the responsibilities imposed upon them. Graduate programs in administration and supervision lead to master's degrees, specialist degrees, and doctorates in colleges and universities across the nation. Practicing superintendents are generally required to have attained at least a master's degree and to have had some administrative training or experience. In addition, the various professional associations recognize the need for continuing development of skills and competencies, and accordingly offer recurrent in-service workshops for administrators as well as members of boards of education.

Given a state system which has traditionally placed great emphasis on local autonomy, the demands of individual communities and specific interests within communities have shaped the modern superintendent's role. The extent to which individuals are able to apply general educational principles to specific local situations is often determined, not by individual knowledge and expertise as much as by the local pattern of expectations in a given community. It is pertinent to inquire into the relevance of training and preparation programs for such a task as this, since the average job tenure of the school superintendent approaches less than five years in any one position.[6] Further, according to a Michigan Department of Education report, nearly half of the more than 500 Michigan school districts changed superintendents during the five-year span from 1969-1974, representing an average annual turnover rate of 9 percent.[7] According to the report, this trend is not limited to Michigan, but is, in fact, nationwide.

Importance of the Study

The bureaucratic school organization has been most effective in training individuals for an agricultural economy and more recently for a production economy. Recent trends, however, indicate the emergence of a service economy with more than half of the employed population involved in service-oriented occupations. The burden of socializing young people for such occupations will continue to be that of the schools. The function of managing such an operation, including planning, organizing, monitoring, and evaluating programs and processes ultimately rests with the superintendent. To describe the skills which practicing superintendents perceive to be most important in the performance of this task is one method by which to gain a greater understanding of the position and its impact on the educational process in a variety of situations.

The educational structure represents, perhaps uniquely, the bureaucratic organization of professionals. It cannot be compared to the medical or legal professions, which rarely operate as large, complex organizations and which are highly selective in terms of entry into the profession. It cannot be compared to hospital administration in that hospital administration employs a differentiation of function wherein professional medical specialists administer the medical-technical delivery system while administrators manage only the maintenance system. Management of the educational organization requires a much greater diversity of skills than perhaps any other comparable position. If we are to train individuals to occupy such roles, we must be aware of their special problems and their particular

needs. In addition, we must develop an understanding from their perspective of the variety of demands with which they are confronted.

Such input should be important to training institutions where program planners must take into account the defined needs of those who will ultimately apply the product of their efforts to some specific reality. Their failure to consider this perspective will widen the gap between what practitioners now consider the metaphysics of theory and the reality of practice.

Such information feedback is also essential to help supply the training support required for skill upgrading of practicing administrators. The Michigan Association of School Administrators has recognized this need. The Educational Leadership Committee of the MASA has commissioned this study in an attempt to determine areas of interest and need among superintendents with a view toward increased relevance of future in-service offerings to members.

It is important to understand not only which skills practicing administrators perceive to be most necessary in the performance of their jobs, but also at what level of competence they currently possess those skills. Only then can pre-service and in-service planners clearly define the present state of the art in relation to perceived needs.

Finally, just as each community differs according to geographic and political consideration, school districts vary from community to community. Such considerations as population size, racial composition, political orientation, occupational emphasis, and comparative wealth combine to define the services demanded of the

school. It is important to understand the effects of such variation on the functioning of the superintendent in order that such exigencies as may be generalizable to various situations may be considered in training programs.

Purpose of the Study

It was the purpose of this study to assess the perceptions which practicing superintendents have of their own management skills. Specifically, the study attempted to determine those skills which the superintendent currently possesses as well as those skills which he perceived to be most important in the management of his organization. In addition, this study attempted to discern the perceived impact of formal training in the development of management skills and the administrator's desire for further formal training in important skill areas. Such information was solicited as a vehicle to aid in the understanding of the practitioner's competencies and needs in the technical-managerial skills of public school administration.

Research Questions to Be Analyzed

The following questions represented the primary thrust of this project. Given a range of specific technical-managerial skills:

1. Which skills do practicing superintendents perceive themselves to possess? That is, are some skills more frequently possessed than others among superintendents, and if so, which skills?

2. At what levels of competence do practicing superintendents report that they possess various skills? Specifically, with which skills do superintendents report the greatest to least competence?
3. Which skills will be reported by top-level managers to be of most importance in the performance of their jobs?
4. Will the pattern of skills reported to be possessed by superintendents vary according to environmental, personal, or organizational characteristics of the superintendency?
5. Will the skills reported to be most important to superintendents vary according to environmental, personal, or organizational characteristics of the superintendency?
6. How important will top-level school managers perceive their formal training to have been in the acquisition of skills possessed?
7. How important will top-level school managers perceive their formal training to have been in the acquisition of important skills?
8. Will the perception of superintendents with regard to the importance of formal training in acquiring important skills vary according to environmental, personal, or organizational characteristics of the superintendency?

Conceptual Framework and Delimitations

The fact that programs purport to prepare individuals to assume top-level positions in school management is prima facie

evidence of the general belief that there are discrete, generalizable, and teachable skills available to aspiring school administrators. What is problematic, however, is the order of importance or the combination of such skills necessary to meet differing situational demands.

Even more basic than the question of which skills are necessary is the general topic of which kinds of skills to consider. It is possible to study the management of educational organizations from a number of perspectives. The organization may be viewed independent of its environment to the extent that the management function is perceived only as the internal structure and control for an externally determined purpose. Management of the organization, thus, focuses on internal consistency, orderliness, and hierarchical coordination. Classical management techniques concerned with optimizing organization performance by optimizing structure or human relations techniques which are concerned with decentralization of authority, social engineering of work flow and job redesign, and communication network manipulation all focus on various structural components of the organization as the means of maintaining control or bringing about change.

Externally, organizations may be viewed relative to the goals toward which they work, or more generally, organizational interaction with the environment. In addition, social scientists and psychologists view organizations from the social-psychological perspective of individuals or groups within the structural or environmental milieu. Thus, one may be concerned with the structural

characteristics of the organization from either a classical management or a human relations perspective. One may be primarily concerned with the goals and purposes of the organization in society and the influences of the environment on the organization. Or one may seek to identify the impact of the organization on its members and the social-psychological factors which enable or inhibit organizational functioning.

This study was limited to the view of the educational organization from the classical management perspective, which seeks to optimize performance by optimizing structure. That is, for purposes of this study, the management skills which were assessed were those classical skills designed to faciliate planning, organizing, controlling, decision making, and evaluating. Such skills are further delineated in the literature of classical management found in Chapter II of this study. Human relations and social-psychological perspectives were not seen as offering any consistently identifiable set of important skills which could be generalized empirically. Indeed, Perrow, quoting Wilensky, who summarized the human relations research through 1957, cites this conclusion:

> All this suggests that, at minimum, the practitioner who wants to apply the human relations research has no clear directive as to what to do--and this is true not only of the findings on size of immediate work group, the character of informal work group solidarity, degree of identification with company goals, and type of leadership style as related to productivity; it applies also to the findings on the relation of "morale" (i.e., satisfaction with job and company) to all of these variables. The evidence is typically inconclusive, the interpretations sometimes contradictory.[8]

It is recognized that there are many skills needed to effectively manage the total educational enterprise and that not all

of these skills pertain directly to the optimizing of organizational structure. It was the contention, however, of this researcher that personal-social concerns, leadership and climate considerations, and methods of psychological manipulation related to motivation of employees and morale would be most accurately described as personal characteristics rather than skills of managers. Such characteristics may or may not accompany the development and use of technical-managerial skills, so that management personnel are perceived to possess varying degrees of "consideration" in their administrative functioning. In any case, for purposes of this study, human interaction is considered to be a reciprocal function of personality and role expectations, and as such, does not lend itself to isolation and abstraction for purposes of generalized training. Indeed, to the extent that such characteristics must be practiced and learned, they may be represented as manipulative and dishonest. Valued for their presence, abhorred for their absence, one is nevertheless not at liberty to feign such characteristics lest he be found out and branded a fraud. This is not to say that these factors are not important (though the satisfaction-productivity issue is taken up in Chapter II), but rather that for purposes of direct formal training, it is the task or production skills which will best answer the community insistence on a return to efficiency in education.

Procedural Steps and Methods

This study was commissioned by the Professional Practices Committee of the Michigan Association of School Administrators. The association's primary interest was to gather information from its

membership which would improve the relevance of in-service programs it offered. Up-grading skills is a vital concern among chief school administrators, many of whom are under constant pressure to justify programs and supply information to various groups.

The initial procedure in this study was to meet with the committee of ten superintendents to clarify their needs and develop an outline of expectations. During the preliminary phase of the study, the researcher was present at each of the meetings of the Professional Practices Committee.

From these gatherings and from meetings with individual superintendents as well as with Dr. Alexander Kloster and other professors of Educational Administration at Michigan State University, from the researcher's own personal and professional experience, and from an examination of the professional literature, a tentative list of skills was prepared. This list of skills was translated into a series of statements which were intended to reflect a wide range of technical-managerial activities. These statements were then reviewed for clarity and content by the members of the Professional Practices Committee.

At the same time, Dr. Philip Marcus of the Department of Sociology, Michigan State University, reviewed both the content and format of the proposed instrument. After several revisions, a 16-page instrument was developed which contained 33 statements to which the respondent was asked to respond four separate times.

Members of the superintendent's committee were requested to provide a cross-section of superintendents from their area of

representation to respond to the developed instrument in a field test. Thirty-five names were provided from all areas of the state. Questionnaires were mailed along with a general letter of instructions. In addition, each member of the committee provided a cover letter to be used with the people from his area and several followed up with personal calls to assure response. Twenty-one of the 35 test superintendents responded.

The superintendents participating in the field test were requested to: (1) respond to the instrument completely in its present form; (2) evaluate each individual item in terms of its applicability to the superintendent's role; and (3) provide views, concerns, questions, and criticisms.

From the field test and continued meetings with the committee, a final format change was effected whereby the instrument was reduced in length and a more space-efficient, though abstract, system was employed. Several specific skill items were either changed or deleted and the instrument was again submitted to the superintendent's committee.

After consultation with Dr. Donald Currie, Executive Secretary, MASA, the completed instrument was submitted to the MASA executive board for approval for use with the entire membership. In addition, the board agreed to sponsor the cost of printing, mailing, data processing, and analyzing. In exchange, the association would receive the services of the researcher in collecting, analyzing, and reporting the data as well as the developmental work done with the instrument.

The completed instruments were then mailed to all members of the Michigan Association of School Administrators while at the same time notice was printed in Fortnighter, the MASA bi-monthly newsletter. In addition, the two subsequent issues of Fortnighter carried progress reports and reminders to members about the project. Finally, a final appeal for returns was made through the newsletter and responses were collected. All responses were anonymous and were returned to the MASA office in Lansing, Michigan.

Definition of Important Terms

Superintendent of schools: One who is employed by a local board of education as its chief executive officer.

Technical-managerial skills: The skills of management identified from "classical management" literature, consultation with practicing administrators, and the researcher's personal experience. These are the skills which are also referred to in this study and in the literature as task skills, initiating structure, or classical management skills. The skills of interest for purposes of the study, as grouped from the survey instrument, represent the areas of planning, organizing, decision making, controlling, evaluating, and communicating. Such skills relate specifically to technical competence as opposed to personal-social competence.

Planning: The process of determining organizational goals and how they are to be achieved.

Organizing: Those attempts by management to structure activities and relationships which will realize optimum spans of

management. Thus, it involved grouping activities and individuals, structuring the environment to achieve some desired result.

Decision making: Those activities directed at gathering information and selecting alternative courses of action in relation to progress (or lack thereof) toward goals.

Controlling: Frequently referred to as directing or managing, this function has to do with monitoring activities and people in pursuit of the organization's goals. Within this definition, there is room for motivational techniques, work-flow procedures, leadership style, conflict resolution, and the influence process. The key element in this definition is getting people to work toward the organizational goal and monitoring their progress. These are maintenance activities.

Evaluating: The formalized and scientific process of assessing progress toward stated goals.

Organizational characteristics: Organizational variables included for purposes of this study are (1) size of student population, (2) comparative wealth of district, (3) racial composition of student body, and (4) bureaucratization of hierarchy.

Bureaucratization of hierarchy: A ratio of the number of staff administrators employed by the system to the number of line administrators employed by the system. Thus, bureaucratization = staff ÷ line. A measure of organizational complexity.

Environmental characteristics: District variables included for purposes of this study are (1) political identification, (2) political orientation, and (3) educational-philosophical orientation.

Political identification: Determined according to state assessment criteria of classification--metropolitan core, city, town, urban fringe, and rural designations.

Political orientation: A general classification of perceptions according to whether the respondent viewed his board of education as predominantly conservative on most issues or predominantly liberal on most issues.

Educational-philosophical orientation: A general classification of perceptions according to whether the respondent viewed his board of education to be educationally traditional or educationally conservative on most issues.

Skills level: A measure of the perceived level of skill possessed by the respondent in relation to a given specified task requirement. Respondents were given a 1 to 5 scale ranging from 1=very low to 5=very high.

Skill importance: A measure of the perceived level of importance of a given skill in the performance of the respondent's job. Respondents were given a 1 to 5 scale ranging from 1=very low to 5=very high.

Personal characteristics: Characteristics relative to the respondent rather than to the organization or to the environment. For purposes of this study, these include: age, longevity in position, total years of experience, and highest degree attained.

Overview

The questionnaire will provide the reader with an overview of the study as it relates to the variables and to the specific

skills inventoried. Chapter II reviews the related literature with respect to the topic, while Chapter III spells out in detail the essential elements of the research in a fashion which will allow for maximum clarity and understanding of the analysis of results to be found in Chapter IV. A summary with conclusions based upon the results of the analysis will follow in Chapter V. In addition, it is in Chapter V that hypotheses which suggest possible further research may be found.

Footnotes--Chapter I

[1]Thomas M. Gilland, The Origin and Development of the Powers and Duties of the City Superintendent (Chicago: University of Chicago Press, 1935).

[2]Alvin Toffler, Future Shock (New York: Random House, Inc., 1970), p. 399.

[3]Ibid., p. 400.

[4]Raymond E. Callahan, Education and the Cult of Efficiency (Chicago: University of Chicago Press, 1962).

[5]Toffler, Future Shock, p. 403.

[6]Laurence Innaccone, Politics in Education (New York: The Center for Applied Research in Education, 1967).

[7]Michigan Department of Education, "Superintendent Turnover Averages Nine Percent Annually" (January 1975), p. 1.

[8]Charles Perrow, Complex Organizations (Glenview, Ill.: Scott, Foresman and Company, 1972), p. 119, quoting Harold L. Wilensky, "Human Relations in the Workplace," in Research in Industrial Human Relations: A Critical Appraisal, ed. Conrad Arensberg et al. (New York: Harper & Brothers, 1957), p. 34.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

The review of related literature is organized under three major headings. The first section deals with the evolving role of the superintendent. This section describes two historical influences (environmental change and management ideologies) which have had important impact on the definition of the superintendent's role. Important societal changes are described in terms of their influence on the superintendency. The second part of the review, Theories of Leadership and Management, describes the influence of the major theoretical concepts both in defining the superintendent's role and in developing a basis for the study of task-oriented management. Finally, the third section, Technical-Managerial Skills, defines the task-oriented skills of classical management literature used in the development of the questionnaire employed in this study. A summary of each section identifies in capsule form the major points from research.

The Evolving Role of the Superintendency

The role of the superintendent of schools is still in the process of being defined. This definition is the product of at least two major influences, environmental change and ideological conflict. Environmental influences in this regard pertain to societal changes

and the impact of those changes on the educational organization in general and the superintendency in particular. The chronicling of such changes occurs in part in the historical developmental literature relative to schools and the superintendency (see Gilland [1935], Reller [1935], Frost [1947], Butts and Cremin [1953], and Campbell [1968]), and in general historical references. Ideological conflicts have directly affected the operational definition of management since the early part of the century. A major dichotomy has evolved between the scientific management philosophy of Frederick W. Taylor[1] and the philosophy which has evolved in response to the work of Elton Mayo and the Harvard School of Business Group, commonly referred to as human relations in management.[2] At various periods in our history, each ideological perspective has been adopted by management as the predominant view, and today elements of each philosophy occur together in most management processes.

As a result of these basic influences, the organization of American education has not been static and inflexible, but rather has been forced to adapt to changing conditions. John Gardner, former U.S. Secretary of Health, Education, and Welfare, describes the "self-renewing" organization as one that constantly changes its structure in response to changing needs.[3] He refers to a "crisis of organization" in government and suggests that, both in public and private sectors, most organizations have a structure that was designed to solve problems that no longer exist. That the educational enterprise has been subjected to constant pressures for change is an unassailable proposition. From small, undifferentiated

units which reflected socially homogeneous rural-agricultural communities, schools have emerged in less than 150 years as complex bureaucratic organizations serving a complex, largely urban, highly pluralistic society. The development of the educational organization has responded to the same social forces which have shaped our modern society in general. Schools came into being as a result of the ideological and practical demands of the society and have continued to be influenced and altered by those demands over time.

Just as early colonial life was dominated by religion, so too was colonial education. When Massachusetts created the first American tax-supported schools in 1647, the Bible and Shorter's Catechism served as the "core" curriculum.[4] In 1800, Massachusetts had only eight different religious sects, but by 1936, there were 56 denominations.[5] Meiklejohn observes that the shift from church to state in the control of education was made with the consent, even with the initiative, of churches themselves, which were not opposed to religious instruction but were opposed to sectarian teaching.[6] During our early history, school management was a function performed by lay citizens. With the growth of cities and the merger of schools within cities, the problems of school administration became too demanding and time consuming for part-time, lay board members. This led to the creation of the office of the superintendent of schools.[7] Similarly, Gilland cites two movements which were responsible for creating the need for a superintendent of schools.[8] The first was the reorganization of school districts (consolidation), and the second was the increasing urbanization of America (growth of

cities). According to Reller, the first superintendents were appointed in Buffalo, New York, and Louisville, Kentucky, in 1837, and by 1860, 27 cities had established the office.[9] It was not until the twentieth century, however, that the superintendency spread to noncity areas. Most rural schools of the time were one-room affairs run either after the fashion of earlier lay control or under the minimal supervision of a county superintendent. Suburbanization and the need for high school programs in the public schools were the forces which Bateman identified as those responsible for establishing the need for the superintendency outside the cities.[10]

With the acceptance of high school as a valid educational responsibility, the one-room, eight-grade structure was no longer viable. Thus, by the early 1900's, not only city but also rural areas began to consider means by which high school opportunities could be made available to all youngsters. This need to proliferate the organization, combined with the movement of population around the central cities, increased the complexity of school district organization, thereby creating greater demand for supervision and coordination.[11] As a consequence, then, in rural, consolidated school districts and in most of the newly formed suburban school districts, the board of education found it desirable to employ a local superintendent of schools. "The concept of the position in these more recent organizations has undoubtedly been influenced by the concepts which first developed in the city superintendency."[12]

Campbell et al. identify four stages in the development of the superintendency: the clerical phase, the educator phase, the

business manager phase, and, finally, the chief executive phase.[13] Initially, the office was essentially a clerical one with the board of education needing someone to relieve it of minor details. It was not uncommon for superintendents to be untrained in the field of education. The added complexity of the systems and programs forced lay boards to rely more heavily on their superintendents for advice and assistance with educational problems, and during this second stage, the superintendent was expected to be chiefly an educator. Because of the influence of the business culture in America, Callahan points out the need for school managers to attend to budgets, facilities, property tax levies and bond issues.[14] Thus, the superintendent in the third phase of development was expected to be a business manager more than anything else. Ultimately, elements of all three phases persist into the current stage of development. Thus, the superintendent has become the chief executive and chief professional advisor in the school system.

Environmental Influences

In addition to changing expectations in terms of the role of the superintendent, there were changing expectations with respect to the role of the school. Whereas the socialization of youth was once the primary responsibility of the family, that task has been more recently assigned to the educational establishment. According to Coleman, "When ours was still an agrarian society, . . . the task of socialization was resolved by early and continual interaction with parents and near-by adults."[15] In the modern era, however, "the occupational structure became progressively more a matter of

movement into activities different from those of the parents." It therefore became impossible for the old institutions to do the job of socializing young people, and new institutions evolved. Specifically, schooling to an advanced age became compulsory, laws were passed against child labor, and minimum wages were established. In order to respond to these new demands, education became increasingly systematized. Coleman cites three influences which contributed to the systematization of education: (1) population concentration, (2) industrialization, and (3) immigration.[16]

Immigration brought together a polyglot population of varying ethnic, cultural, and language characteristics, and it became the job of the schools to "standardize" these people into Americans. With industrialization, jobs became more and more specialized, making it impossible for families to provide young people with career information. At the same time, the nation was in transition from rural to urban as great concentrations of population centered in the cities, creating new ways of life.

The National Education Association and the American Association of School Administrators have pointed out the changing role of the superintendent by citing rapid changes in modern civilization. The factors they describe are the knowledge explosion and its impact on life, the population explosion, rural depopulation and urban growth, technological progress, and widespread demands for equal opportunity.[17] Further, they name the five most important aspects of the role of the superintendent as: (1) supervision of the instructional program, (2) school district management, (3) administration

of the budget, (4) the solution of day-to-day problems, and (5) the practice of the art of human relations.[18] Exactly how "management" and "solution of day-to-day problems" differ is not clear from this report, but it is clear that the duties delineated are all-encompassing.

In a 1969 issue of Nation's Schools, the managing editor, Russell J. Huff, ranked five major problems as reported in a survey of how superintendents see themselves. The problems reported were school finance, curriculum development, personnel management, school-community relations, and provision of adequate facilities.[19] Goldhammer et al. indicate five categories of responsibility reported by superintendents from 42 states.[20] According to this study, superintendents pointed to the necessity of dealing with the problems of bringing about educational changes in their districts, dealing with increasing teacher militancy, handling instructional and curricular concerns, acting on and reacting to changing and critical social issues, and securing and allocating financial resources for their districts. Campbell proposes the following three major functions of the superintendent: (1) to help define and clarify the purpose and direction of the school, (2) to establish and maintain the organization to work toward these purposes, and (3) to secure and allocate resources needed for that organization.[21]

Burbank describes the modern superintendent as an individual whose personal influence is waning.[22] As districts increase in size, he has fewer personal relationships with employees. As board members become more articulate and well-educated, his advice must be

legitimized by expertise rather than position and professional degree status.

A recent University Council for Educational Administration conference was held to honor Roald F. Campbell. The conference included a consideration by scholars and practitioners of the past development of educational administration and the direction for the future. Major points were made by speakers in relation to environmental factors affecting educational administration.[23] David Tyack of Stanford University described the social environment prior to 1954 as one which permitted the depoliticization of the schools and the development of the administrative role as a profession. He characterized the 1954-1975 period as being dominated by a series of social crises which impacted economic, political, and social institutions. Bernard C. Watson, Department of Urban Education and Professor of Social Foundations at Temple University, noted the emergence of pluralism and a concurrent crisis of meaning and belief that challenged basic assumptions about the worth of the American experience. He pointed to the Vietnam War, the ensuing student revolt, the civil rights movement, the press for equal opportunity, and social mobility as variations in a social revolution which politicized education. Keith Goldhammer of Michigan State University described the transformation of the school from a state of equilibrium to one of turbulence. The factors which were instrumental in this transformation, according to Goldhammer, were: an aggressively pluralistic society demanding diversified programs; the school functioning as a frontline agency coping with conflict

generated by militant groups; legal restraints limiting the discretionary power of administrators; professional associations assuming unprecedented control in the decision-making process; local districts increasingly relying on the largess of state and federal government to bolster faltering financial structures; school board members representing the interests of community factions to the disservice of the system as a whole; and litigation on the rights of teachers, students, parents, and public absorbing institutional time and energy. Virginia Davis Nordin, Professor of Law, University of Wisconsin, spoke on the relation between the court and educational administration during this period. She characterized the interaction of the law and the schools as one of systematic conflict. The courts' concern for the Constitutional rights of individuals was reflected in decisions in cases of desegregation, academic freedom, exercise of religion, and the civil rights of students and teachers. Thus, the court exercises its power to design solutions tailored to specific circumstances and reluctantly got into the business of educational administration. School governance, financing, personnel practices, school-community relations, and policy making were targeted by the court for change while the burden of implementing effective programs in response to these challenges is left to the school administrator.

The conference report concludes:

> Scarcity of resources, multiple demands by a multitude of interest groups, conflict between boards of education and professional associations, internal politics of boards of education, declining enrollments, pressure for accountability will condition the environment and make courage and fortitude the sine qua non for would-be masters of the system.

Pressures on the institution will persist. The school will survive, resist, and accommodate the demands of a changing environment.

Summary

It seems clear that as schools are influenced by changes in the greater society, so too is the role of the superintendent who must help provide direction, establish and maintain the organization, and labor to gather resources from the environment to support the organization. In general, then, his role is to be responsible for everything connected with the educational enterprise within his community. It is also clear that the demands of society on school superintendents are increasing. Schools have become instruments of social policy as in the civil rights movement of recent years. Social scientists, such as Coleman, Jencks, and others, have adopted advocacy positions relative to various issues, and these positions have frequently been translated into governmental policy or judicial dictum. Tenure laws, collective bargaining laws, increasing militancy among teachers' unions, increasing population, decreasing population, accountability emphasis, vocational education emphasis, inflation, recession, unemployment, teacher surplus, post-Watergate disillusionment, decline in respect for authority, the Vietnam involvement, and a myriad of other environmental influences have impacted and continue to impact the superintendency.

Because of the susceptibility of the superintendent to such transitory influences, the role must continue to shift and change with the times. The traditional differentiation of function between the board and the superintendent was a simple one: The board was to

formulate policy while the superintendent was to administer it. It is apparent from the literature, however, that most superintendents influence policy and that most boards take some hand in administration. In a study of why Michigan superintendents were fired or encouraged to leave their positions from 1965 to 1975, Fultz concluded that while the general reason given most by board members was "poor community relations," superintendents were actually dismissed for reasons having to do with board-superintendent relationships.[24] Thus, this basic dichotomy of policy maker-administrator was not sacred nor practical. The three specific reasons given most for releasing the superintendent were: (1) refusal to seek and accept criticism, (2) lack of harmonious working relationships with the board, and (3) failure to support board policy and follow the instructions of the board.

It is apparent that the environmental influences have a significant impact on the direction and goal-setting activities of the educational enterprise. The purposes of education are continually juxtaposed to the current needs and wants of the society which it serves. It is in the area of organizing and maintaining the organization that other influences become felt. The most important of these influences to be dealt with in this review have to do with theories of leadership and management ideologies which have impacted the role of the school manager in the past and which continue to do so today. Essentially, management ideologies have been formulated as rationale for strategies designed to increase productivity. The literature is permeated with adherents of one

philosophical position or another regarding the nature of man and the system of management necessary to control him in order to achieve the goals of the organization. As new and more popular managerial philosophies arose to replace the old ones, the nature and mode of organizational leadership was altered. School managers were as susceptible to these influences as were the managers of other organizations. Indeed, Callahan suggests the inability of school managers to resist such movements, proposing a thesis of school administrator vulnerability.[25]

Theories of Leadership and Management

Campbell, Cunningham, and McPhee describe three historic movements which have had major influences on the concept of the superintendency. These movements, which have been indicative of attempts to professionalize the position, include: (1) the "scientific management" movement, (2) the "human relations" movement, and (3) the "social science" movement.[26]

That the principles of scientific management formulated by Frederick W. Taylor had an influence on the superintendency was first evidenced by Franklin Bobbitt in 1913 in a yearbook of the National Society for the Study of Education. Bobbitt attempted to apply Taylor's principles directly to public school administration.[27] Callahan's analysis is the most directly relevant discussion of the impact of Taylorism on the theory and practice of educational administration. He points out that the efficiency ideology was adopted wholeheartedly by school boards, the press, and the public in general between 1910 and 1929.[28]

In addition, for many years organizational analysts were guided by the set of assumptions laid down by Weber in his discussion of bureaucracy.[29] These assumptions postulate a rational organization with a primary purpose (objective, task, goal, function, or mission). To reach this purpose, according to Cook, subgoals must be established and specific means chosen for their attainment.[30] This, in turn, requires a differentiation of such subfunctions which must be carried out individually, but as a coordinated whole. Along with officially assigned duties and written rules and regulations, a control system is established whereby the various positions are linked together by a chain of command so that authority and responsibility of each position is unambiguous. Because of the increasing complexity of the educational system and because of the influence on that system of the efficiency philosophy, these assumptions had an important impact on the management of the enterprise.

Management Ideologies

A major historical controversy has raged around the theoretical foundations of control. Whereas classical theorists adopted the position that organizational control is a function of asymmetric, one-way control from a single source at the top of the organization, there are those who espouse a philosophy of management which emphasizes individual needs, informal groups, and social relationships as the bases of control. Haire traces the origin of this human relations philosophy of organizational management to the work of Elton Mayo[31] in 1927 and to the interpretations of that work by

Roethlisberger and Dickson.[32] Further systematic extensions of this position have been offered by Argyris,[33] March and Simon,[34] McGregor,[35] Likert,[36] and others. It is perhaps understandable that such loyalty to democratic principles and the importance of the individual should be so prominently expressed and espoused in this political system and during the period from 1930 to 1950. Indeed, the influence of the human relations philosophy has been so pervasive as to assume predominance even despite Wilensky's conclusions.[37] Perrow outlines the progression of the human relations model as follows: High morale leads to high productivity; good leadership (democratic leadership, good human relations, consideration, etc.) leads to high morale (and thus, to high productivity); effective leadership (combining a concern for people with a concern for task effectiveness) leads to high morale and/or high productivity; effective leadership has to be tailored to the group situation (e.g., group tasks, structure, member relationship, timing, stress, etc.).[38]

The most voluminous and substantial part of the literature on organizations is concerned with this attempt to link morale and leadership to productivity. No other school of organizational thought has been so well critiqued and so thoroughly studied as this social-psychological approach over the past 40 years. Though the claims of the human relations advocates have been widely disputed (see Wilensky [1957],[39] Korman [1966],[40] Perrow [1972][41]), there can be no doubt that this philosophy has greatly affected the management of all types of organizations. That this philosophy was

incorporated into the system of thinking of educators is evidence of the vulnerability noted by Callahan[42] and is typified by the basic principles of democratic administration spelled out in 1943 in a volume titled Democracy in School Administration. According to the authors of this work, those basic principles were:

1. To facilitate the continuous growth of individual and social personalities by providing all persons with opportunities to participate actively in all enterprises that concern them.
2. To recognize that leadership is a function of every individual, and to encourage the exercise of leadership by each person in accordance with his interests, needs, and abilities.
3. To provide means by which persons can plan together, share their experiences, and cooperatively evaluate their achievements.[43]

Following the growth of these two major schools of thought, and incorporating elements of each, has come the systematic study of organizations typified by the social science attempts to build theories relative to organizational behavior. Beginning with Barnard as early as 1938, stress began to be placed upon the need for theories of administration.[44] Combining both the influences of scientific management and human relations, Barnard wrote in terms of effectiveness and efficiency. He viewed effectiveness as pertaining to organizational goals and their achievement (organization oriented), while he saw efficiency as having to do with worker satisfaction (person oriented). Thus, the dialectic is completed as Barnard recognizes the interrelationship between the two foregoing dimensions. Other social scientists have attempted to extend and expand this field of endeavor. Simon, in 1945, recognized the need to develop greater understanding of the underlying principles of administration.[45] In his book, Administrative Behavior, he contended

that the way to improve administration was to increase the rationality of decision making. He set about the analysis of the administrative process through the study of decisions made by administrators. Other social scientists have developed theoretical models which have been applied to the practice of educational administration. In 1955, Coladarci and Getzels attempted to point out instances of the use of theory in educational administration.[46] In 1957, Campbell and Gregg, writing for the National Conference of Professors of Educational Administration, synthesized the research findings to that date relative to theory in educational administration.[47] In 1958, Halpin edited Administrative Theory in Education for the newly formed University Council for Educational Administration.[48] Griffiths identified and described eight theories of administration in 1959.[49] A 1964 yearbook of the National Society for the Study of Education updated a similar publication in 1946. This work is indicative of the impact of social science on administration. Most recently, Halpin and Hayes cited five studies as substantial products of the new partnership between the social sciences and administration: Halpin's The Leadership Behavior of School Superintendents; Getzels and Guba's analysis of the nomothetic and ideographic dimensions of administrative behavior; Hemphill, Griffiths, and Frederickson's Administrative Performance and Personality; Carlson's study, Executive Succession and Organizational Change; and Halpin and Croft's work, The Organizational Climate of Schools.[50] To what extent these theoretical formulations are known and used by superintendents in analyzing their own situations can only be

guessed; however, it is clear that increasing knowledge about schools and their relationship with the larger society is constantly being accumulated.

Leadership Studies

Research concerned with the study of leadership is indicative of the dialectic development discussed earlier. Studies of leadership had their beginning at the Ohio State University in the late 1940's and early 1950's under the direction of Dr. Carroll Shartle.[51] This work resulted in a series of studies and monographs, the purpose of which was to describe the characteristics of leadership in various organizations and situations. The primary conclusion of these studies was that leadership is composed of two independent factors called initiating structure and consideration.[52] Leader behavior has been studied by the Ohio State group in order to describe rather than evaluate it. The emphasis, therefore, of most of these studies has been the relationship between leadership behavior and situational factors internal to the organization under study, and though there have been no elaborate claims of causality made between these intra-organizational factors and any particular leadership style, the clear implication is that leader behavior is a function of the demands placed upon the leader within the organization. According to Stogdill and Coons, Halpin, Rush, Hemphill, Seeman, Fleishman, Bass, and Stogdill et al. have extended and developed the concepts of leader behavior and have tested these concepts in a wide variety of organizational settings ranging from military organizations to religious, educational, industrial, business, and sales organizations.[53]

Initiating structure and consideration, the central dimensions coming out of the Ohio State studies, are considered to be independent factors. That is, leaders could exhibit one characteristic more predominantly than the other, or they could possess both leadership characteristics. Thus, each factor is considered to be free to vary and the extent to which a leader uses one of them does not help to predict the amount of the other he is using. In these studies, initiating structure was considered to be planning as well as organizing work and tasks. In literature not associated with the Ohio State studies, initiating structure is sometimes equated with autocratic, restrictive, and directive patterns of behavior. Stogdill, however, defines initiating structure as behavior which lets followers know what is expected of them and what they can expect of the leader. He states that such behaviors are "neither autocratic, restrictive, directive, nor task pressure oriented."[54] Similarly, in Halpin's study of the leadership behavior of combat air-crew commanders, initiating structure is characterized as organizing the job properly. He describes the behavior of the leader who scores high in initiating structure as one who:

> . . . organizes and defines the relationship between himself and the members of his crew. He tends to define the role which he expects each member of the crew to assume, and endeavors to establish well-defined patterns of organization, channels of communication, and ways of getting jobs done.[55]

Blake and Mouton, using similar factors, dichotomize the major dimensions of leadership as "concern for people" and "concern for production."[56] These factors are also considered to be independent and free to vary from leader to leader. Thus, when represented

on a grid, Blake and Mouton's leader who is high (9) in concern for production and low (1) in concern for people (9,1) produces efficiency in operations as a result of arranging the conditions of work in such a way that human elements interfere to a minimum degree.

Reddin[57] summarizes other studies which have resulted in similar dichotomies, namely those of the University of Michigan Survey Research Center typified by Katz and Kahn[58] and the small group studies of Bales and others at Harvard.[59] The University of Michigan studies result in a continuum with the polar leadership dimensions labeled as "employee centered" and "production centered," while the Harvard small group studies define the two group leader styles as "socio-emotional leader" versus "task leader." Reddin then adds his own dichotomy, naming the basic dimensions of leadership "relationship orientation" and "task orientation."[60] His task orientation recognizes the implicit importance of job knowledge and technical skill. Thus, he defines task orientation as: "The extent to which a manager directs his own and his subordinates' efforts; characterized by initiating, organizing, and directing." "It is difficult," says Reddin, "to imagine a manager lacking such skill [technical skill] and being able to make any kind of attempt at initiating, organizing, and directing his own work, let alone that of others."

Benne and Sheats described the two basic types of leader roles as task roles and as group building and maintenance roles.[61] Task roles, they say, are related to the direct accomplishment of group purpose. In addition, Homan's concept of the leader "originating

interaction" corresponds to that of initiating structure.[62] Perhaps it is because the initiation of structure dimension (task orientation, production emphasis) has typically been juxtaposed to consideration (relationship orientation, people emphasis) that the former has been so roundly denounced as autocratic, authoritarian, and restrictive.

Consideration is described by Halpin as being associated with behavior indicative of friendship, mutual trust, respect, and a certain warmth in the relationship.[63] It should be noted that those leaders who were rated low in consideration were not necessarily rated high in initiating structure. It was low consideration which characterized commanders who were authoritarian and impersonal, not necessarily high structure. Consideration, then, referred to the extent to which the leader, while carrying out his leadership functions, was considerate of his followers. On the managerial grid, a leader described as low in concern for people (1) and high in concern for production (9) would pay thoughtful attention to the needs of people in order to develop satisfying relationships and a comfortable, friendly organization atmosphere and work tempo.[64] Such an individual would be (1,9) manager.

Bales' socio-emotional leader was represented as one who makes it easier for others to talk and who offers psychological support, while the opposite extreme of the production-centered leader for the University of Michigan group is the employee-centered leader.[66] Similarly, Reddin's relationship-oriented leader promotes personal job relationships characterized by listening, trusting, and

encouraging,[67] and Benne and Sheats'[68] group building and maintenance roles are concerned with integration and solidarity through encouraging, harmonizing, compromising, and reducing conflict.

Summary

In addition to environmental influences, theories of management and leadership have impacted the role of the superintendent. Scientific management, human relations, and social science theory have been of major importance historically, with elements of the two former movements being often used as the theoretical foundation of studies of the administrative process. The studies most directly relevant to this review are those concerned with leadership. Like managerial philosophy, which dichotomized the available choices (scientific management and human relations), leadership studies have paralleled those concepts with those of initiating structure and consideration. Pervading the research literature is a basic distinction between group activities directed to one or the other of these two types of roles performed by leaders. There can be no doubt that the extent to which the superintendent adheres to one management philosophy or the other will affect his leadership style accordingly, or conversely, the extent to which he practices one basic style of leadership or the other may play a significant part in determining which management ideology he adopts.

This study has placed major emphasis on those elements of leadership herein described as initiating structure, task emphasis, production orientation, or that which Barnard spoke of as effectiveness.[69] The following section will detail the rationale for this

limitation and will explicate the classical foundations upon which much of this study rests.

Technical-Managerial Skills

This study is built on the premise that the stimulus provided by the leader structures the group behavior. Stogdill refers to a number of theorists who have defined leadership in a similar fashion, viewing it as the chief variable which gives rise to differentiation and maintenance of role structures in groups.[70] Smith (1934),[71] La Piere and Farnsworth (1936),[72] Gouldner (1950),[73] Homans (1950),[74] Hemphill (1954),[75] Stogdill (1959),[76] and Bavelas (1960)[77] all define leadership in terms which predicate the group structure on the influence of the leader. Thus, leadership is defined as originating interaction, or "engaging in actions which initiate a structure in the interaction as part of the process of solving a mutual problem."[78]

This view of leadership, while it recognizes the existence of both formal and informal leaders and while it acknowledges the importance of the informal group structure, places the responsibility for structuring all the organization's resources, both human and capital, in such a way as to achieve the organization's goals. As we have seen, a number of studies, particularly in the area of leadership, lead to the general conclusion that there is no one optimum type of management system. Such theorists advocate a contingency approach to management. This approach would attempt to alter the behavior of the leader to match the changing task requirements of the situation.[79] These theoretical formulations, like the

human relations ideology which came before, are based on the general notion that improved morale will lead to improved productivity and that effective leadership is considerate leadership. There is, however, a considerable disparity of agreement on this point.

Edwin M. Bridges, professor of education at Stanford University, criticizes the design and content of training programs for school administrators.[80] Bridges claims that "trained incapacity" is an accidental product of attitudinal and socio-technical socialization inherent in training programs. While formal training prepares the leader for brave deeds, real administrative power is limited by diminished authority to select or deselect personnel, to grant or withhold monetary rewards, to assign or alter work schedules. The style of conflict management, communication, and interpersonal relationships of the successful student, says Bridges, are incompatible with administrative functioning.

In order to guard against such a contingency, an interest group of the National Council of Professors of Educational Administration has formed a Competency-Based Curriculum Group which communicates program, practice, and research information via the CCBC Notebook.[81] A number of university programs function on the competency-based model. Patterned after the American Association of Colleges of Teacher Education (AACTE) Performance-Based Teacher Education Project, the central premise of this group is that the competencies necessary for successful school administration may be generalized to the variety of administrator situations. Training is then planned in these functional areas or any combination of areas

with stress dependent upon the individual administrative situation. Elements of task emphasis as well as relationship emphasis occur in these models also.

This study has de-emphasized the stress which most programs place on the group building and maintenance activities commonly referred to as consideration, relationship orientation, concern for people, etc. This de-emphasis is not intended to infer that carrying out the functions of administration should or can be accomplished without regard to the interactions, feelings, and needs of the people involved. Simple humanity and common sense dictate such basic consideration. Indeed, much of the research in this area concludes that paying attention to such concerns results in increased satisfaction, improved morale, or happier workers. Our concern, however, is with what is usually referred to as productivity.

Basic human relations ideology, growing out of the Hawthorne studies referred to earlier, was grounded on the premise of making effective use of the informal group structure and the informal group leader as alternatives to the use of classical management techniques. This approach was viewed as a more effective method of achieving management goals in terms of productivity. Widely adopted by management and implemented in organizations of all types, the human relations research has not been successful at demonstrating empirically the efficacy of its claims of improved productivity. Stogdill summarized a number of studies which used the two-factor analysis of leadership (consideration and initiating structure). He concludes that group productivity is more highly related to structure

than to consideration. Member satisfaction, on the other hand, was somewhat more highly related to consideration than to structure. Indeed, a further conclusion of his review is that person-oriented behaviors, more often than work-related behaviors, were negatively associated with productivity.[82] Perrow draws upon a number of reviews of various aspects of the human relations model in his scathing critique of that managerial philosophy.[83] He cites the re-examination of the Hawthorne data by Michael Argyle[84] and later by Alex Carey[85] as descriptive of a discrepancy between the evidence and the conclusions contained in Mayo's seminal work. Brayfield and Crockett's survey of 50 studies in 1954 failed to uncover any evidence of a relationship between workers' attitudes and performance.[86] Similarly, Lawler and Porter (in a survey of 30 studies) conclude that if there is a relationship between satisfaction and performance, it is that high performance yields satisfaction, not vice versa.[87] Citing Korman's review of a large number of studies relating leadership to performance,[88] and Hulin and Blood's analysis of a large number of studies concerned with job enlargement,[89] Perrow ultimately is led to agree with the conclusion reached by Wilensky almost 20 years ago: "The evidence is typically inconclusive, the interpretations sometimes contradictory."[90]

Having decided, however, that such factors as morale, satisfaction, and consideration in leadership would improve performance and therefore productivity, the advocates of this managerial philosophy have espoused attempts to train leaders to exhibit these qualities. Among the most prevalent of such attempts has been the

general movement known as sensitivity training. Kurt Back describes the history and workings of this social movement and assessed the results of such training in terms of empirical evidence.[91] His searching inventory of the movement traces a gradual change in emphasis from a scientifically based, empirically verified study of leadership in small groups to a popular movement of immediate and intense sensation with fewer and fewer claims of long-range effect or lasting benefit beyond personal benefit to participants. Richard Farson, former director of Western Behavioral Sciences Institute and an activist in the encounter movement in industry, says:

> The whole notion of sensitivity training, the whole concept of training, period, which has been with this thing from the start, has unfortunately been hooked up with change. I think that's been a big bugaboo. It does not change people.[92]

The research of Lieberman, Yalom, and Miles suggests that the overall effect of sensitivity training compared with control groups was not significant.[93] What was found was that the leader and his personality were more significant than the particular brand of sensitivity training used. Odiorne analyzed 51 books and 68 journal articles published between 1948 and 1961.[94] He found no evidence that laboratory training changes behavior back on the job. A similar conclusion was reached by Dorothy Stock, who reviewed the research on sensitivity training in 1964.[95] Stogdill's review of studies of this method led him to the following conclusion: "Considering the research that used adequate controls, it is to be concluded that the sensitivity training of leaders is associated with decreased group productivity and increased cohesiveness."[96] Further, he concluded

that the research on leadership training is generally inadequate in both design and execution. Says Stogdill:

> Perhaps the finding that sensitivity trained leadership tends to be associated with depressed group productivity explains the unwillingness of researchers to use legitimate criteria of the results of training and their reluctance to report the results when such data are collected.[97]

While attention to the feelings of employees, their needs for recognition, autonomy, belongingness, independence, etc. may or may not result in improved group cohesiveness, higher morale, or greater satisfaction, it seems clear that such attention will not necessarily result in improved group performance or increased group productivity. Further, efforts to train leaders in humanistic or sensitivity techniques do not appear to have any effect beyond a personal one. Thus, our discussion of training skills needed by top-level school managers, while it recognizes the advantages of maintaining group cohesiveness and happy employees, does not confuse these advantages with influences on performance. This study, therefore, emphasizes the technical-managerial skills found in the classical management literature.

In order to discover which technical skills practicing superintendents possessed and which ones are most important in the performance of their jobs, a questionnaire (Appendix A) was developed. This instrument was based on the skills delineated in the classical literature as well as those proposed by the researcher's own experience as an administrator. In addition, and perhaps more importantly, consultations with a committee of practicing superintendents and with professors of educational administration at

Michigan State University extended and refined this basic list.

Bennis has predicted the demise of bureaucratic organization as we know it.[98] Pointing out that bureaucratic organization is most suited to a highly competitive, undifferentiated, and stable environment such as that during the time of the Industrial Revolution, he bases his prediction on the notion that the environment has changed in just those ways that make the bureaucratic mechanism the most problematic. Stability has vanished. The new organizational structure envisioned by Bennis will be a temporary one. This will be its main characteristic. Thus it will be adaptive, rapidly changing, and easily dismantled or modified. Management in such an organization, it would seem, would take on the characteristics of what we now think of as project management. Much of the classical management literature coincides with the skills described in writings in project management. Both sources were used in the compilation of the skills surveyed. Finally, Halpin, in speaking about "initiating structure," says, "This factor probably represents a basic and unique function of leadership. It is possible that other factors, including consideration, primarily represent facilitating means for accomplishing this end."[99]

Classical Management Principles

The literature of management theory is rife with assertions of specific management skills. Fayol is considered a pioneer in administrative theory by most writers in the classical literature.

His five elements of administration are: (1) planning (prevoyance), (2) organization, (3) command, (4) coordination, and (5) control.[100]

Other writers have added to or modified this basic list, but current classical theory still universally recognizes planning, organization, and control as useful classifications for studying management. Gulick's POSDCORB is an acronym for planning, organizing, staffing, directing, coordinating, reporting, and budgeting.[101] Mooney and Reily[102] in this country and Oliver Sheldon[103] in England added to and extended the basic foundations of management theory. Operations research and information-processing techniques (MIS) have many parallels to these classical approaches. Further, heuristic methods of problem solving involving computer-based technology for the purpose of simulation represent another of the technical approaches to management. Virtually all writing on the management or administrative process is organized to some extent around similar managerial skills.

Newman, writing in 1950 on the principles and techniques of administration, divides his volume into the following sections: (1) Planning, (2) Organizing, (3) Assembling Resources, (4) Directing, and (5) Controlling.[104] A 1955 Yearbook of the American Association of School Administrators (AASA) lists five crucial activities of the administrative process:

1. Planning or the attempt to control the future in the direction of the desired goals through decisions made on the basis of careful estimates of the probable consequences of possible courses of action.

2. Allocation or the procurement and allotment of human and material resources in accordance with the operating plan.
3. Stimulation or motivation of behavior in terms of the desired outcomes.
4. Coordination or the process of fitting together the various groups and operations into an integrated pattern of purpose-achieving work.
5. Evaluation or the continuous examination of the effects produced by the ways in which the other functions listed here are performed.[105]

Their use of the term "stimulating" rather than Fayol's "commanding" or Gulick's "directing" reflects the more recent concern with human relations in management.

Litchfield, in 1956, pointed out the importance of the evaluation process in the administrative function.[106] It was his thesis that the administrative process is cyclical, and that "reappraising" as the end of the process brings the sequence substantially back to the starting point. He includes the following activities in the process: decision making, programming, communicating, controlling, and reappraising. Further, Litchfield proposes that each of the activities in the administrative process is independent and may be applied heuristically to an individual problem or to the activity of the entire organization.

Gregg, in applying classical management theory to educational administration, lists seven components.[107] They are: decision making, planning, organizing, communicating, influencing,

coordinating, and evaluating. According to Sears, the process includes planning, organizing, directing, coordinating, and controlling.[108]

Griffiths, following the earlier work of Simon, asserted that decision making is the central component of the administration process and that the function of administration is directing and controlling the decision-making process.[109] His list of activities is more prescriptive and detailed than those previously cited. The process calls for the administrator to:

1. Recognize, define, and limit the problem.
2. Analyze and evaluate the problem.
3. Establish criteria and standards by which the solution will be evaluated or judged as acceptable and adequate to the need.
4. Collect data.
5. Formulate and select the preferred solution.
6. Put into effect the preferred solution.
    a. Program the solution.
    b. Control the activities in the program.
    c. Evaluate the results and the process.[110]

Campbell et al. define the administrative process as "the way by which an organization makes decisions and takes action to achieve its goals."[111] Their selection of terms to delineate the administrative process is eclectic, drawing from the literature of classical management. The major activities named are: decision making, programming, stimulating, coordinating, and appraising.

Summary

This study has incorporated the concern for human needs into the process of management as a part of all activities rather than attempting to treat it as though these were independent factors. Thus, this consideration of the elements of the administrative process deals with the classical principles of administration, leaving aside separate consideration of the human interaction process. Indeed, studies of leadership and programs which attempt to train leaders from the social-psychological perspective have been unable to demonstrate empirically the advantages of such training in terms of organizational productivity, though such claims have been widely made.

A review of major writers in the classical mold reveals considerable agreement regarding the principal elements of the administrative process. Though there is a good deal of semantic interplay, with each researcher selecting his own terminology, there is even more conceptual overlap between these authors. It is because of the clarity with which the process elements emerge that the present study is organized around the following elements of the technical-managerial process:

1. Definition and clarification of the direction and purpose of the organization.
    a. Analysis of needs
    b. Consideration of alternatives
    c. Setting of goals

2. Establishment and maintenance of the organization to work toward defined purposes.
    a. Decision-making activities
    b. Organizing activities
    c. Controlling activities
    d. Coordinating activities
3. Restructuring and redefining organizational needs, direction, process.
    a. Evaluation activities (appraising, assessment)
    b. Decision-making activities
    c. Planning

For purposes of the present study, planning, decision making, managing, evaluating, and communicating are the terms utilized to include these activities. The following chapter will define these terms and will detail the items in the questionnaire which were designed to apply to each component.

Footnotes--Chapter II

[1]Frederick W. Taylor, "The Principles of Scientific Management," in Scientific Management (New York: Harper and Row, 1947).

[2]F. J. Roethlisberger and William J. Dickson, Management and the Worker (Cambridge, Mass.: Harvard University Press, 1941).

[3]John Gardner, Self Renewal (Evanston, Ill.: Harper, 1963).

[4]Henry Suzzallo, The Rise of Local Supervision in Massachusetts (New York: Columbia University, 1906), in Christian Weber, Basic Philosophies of Education (New York: Holt, Rinehart, and Winston, 1960).

[5]Clyde L. Hay, The Blind Spot in American Public Education (New York: Macmillan and Co., 1950), p. 18.

[6]Alexander Meiklejohn, Education Between Two Worlds (New York: Harper, 1942), p. 7.

[7]Paul R. Pierce, The Origin and Development of the Public School Principalship (Chicago: University of Chicago Press, 1934).

[8]Thomas M. Gilland, The Origin and Development of the Powers and Duties of the City-School Superintendent (Chicago: University of Chicago Press, 1935).

[9]Theodore L. Reller, The Development of the City Superintendency of Schools in the United States (Philadelphia: published by the author, 1935), in Roald F. Campbell, Lavern L. Cunningham, and Roderick F. McPhee, The Organization and Control of American Schools (Columbus, Ohio: Merrill, 1965).

[10]E. A. Bateman, Development of the County-Unit School District in Utah (New York: Bureau of Publications, Teachers College, Columbia University, 1940), in Campbell, Cunningham and McPhee, The Organization and Control of American Schools.

[11]Roald F. Campbell, Superintendency of Schools (Danville: Interstate Printers, 1968).

[12]Ibid.

[13]Roald F. Campbell, Lavern L. Cunningham, and Roderick F. McPhee, The Organization and Control of American Schools (Columbus, Ohio: Merrill, 1965), p. 191.

[14]Raymond E. Callahan, Education and the Cult of Efficiency (Chicago: University of Chicago Press, 1962).

[15]James Coleman et al., Youth: Transition to Adulthood, Report of the Panel on Youth of the President's Science Advisory Committee (Chicago: University of Chicago Press, 1974), p. 1.

[16]Ibid., p. 20.

[17]Educational Policies Commission of the National Education Association and the American Association of School Administrators, "The Unique Role of the Superintendent of Schools" (Washington, D.C.: 1965), p. 1.

[18]Ibid., p. 3.

[19]Russell J. Huff, "How Superintendents See Themselves," Nation's Schools 84 (November 1969): 35.

[20]Keith Goldhammer, William Aldridge, John Suttle, and Gerald Becker, Issues and Problems in Contemporary Educational Administration (Eugene, Oregon: University of Oregon Press, 1967), p. 10.

[21]Roald F. Campbell, "The Changing Role of the Superintendent," Contemporary Education 39 (May 1968): 249.

[22]Natt B. Burbank, Superintendent of Schools (Danville, Ill.: Interstate Printers, Inc., 1968), p. 25.

[23]Deborah Hart, "Conference Report," UCEA Review (Columbus, Ohio: University Council for Educational Administration) 17 (October 1975): 1-4.

[24]David A. Fultz, "A Study of the Reasons Why Michigan School Superintendents Were Dismissed or Encouraged to Leave Their Positions Between 1965 and 1975 (Ph.D. dissertation, Michigan State University, 1975), p. 132.

[25]Callahan, Education and the Cult of Efficiency.

[26]Campbell, Cunningham and McPhee, The Organization and Control of American Schools.

[27]Ibid., p. 200.

[28]Callahan, Education and the Cult of Efficiency.

[29]Max Weber, The Theory of Social and Economic Organization, translated by A. M. Henderson and Talcott Parsons (Oxford University Press, 1947).

[30]Desmond L. Cook, Educational Project Management (Columbus, Ohio: Charles E. Merrill Publishing Co., 1971).

[31]M. Haire, "Industrial and Social Psychology," in Handbook of Social Psychology, ed. G. Lindzey (Cambridge: Addison-Wesley, 1954), pp. 1104-23.

[32]Roethlisberger and Dickson, Management and the Worker.

[33]C. Argyris, Personality and Organization (New York: Harper, 1957).

[34]J. G. March and H. A. Simon, Organizations (New York: Wiley, 1958).

[35]Douglas M. McGregor, The Human Side of Enterprise (New York: Wiley, 1958).

[36]Rensis Likert, New Patterns of Management (New York: McGraw-Hill, 1961).

[37]Perrow, Complex Organizations, p. 119.

[38]Ibid., p. 118.

[39]Harold L. Wilensky, "Human Relations in the Workplace," in Research in Industrial Human Relations: A Critical Appraisal, ed. Conrad Arensberg et al. (New York: Harper & Brothers, 1957).

[40]Abraham K. Korman, "Consideration, 'Initiating Structure,' and Organizational Criteria--A Review," Personal Psychology 19,4 (1966): 349-61.

[41]Perrow, Complex Organizations.

[42]Callahan, Education and the Cult of Efficiency.

[43]G. Robert Koopman, Alice Miel, and Paul J. Misner, Democracy in School Administration (New York: Appleton-Century-Crofts, Inc., 1943), p. 107.

[44]Chester I. Barnard, The Functions of the Executive (Cambridge, Mass.: Harvard University Press, 1938).

[45]Herbert A. Simon, Administrative Behavior (New York: The Macmillan Co., 1945).

[46]A. P. Coladarci and J. W. Getzels, The Use of Theory in Educational Administration (Stanford, Calif.: Stanford University Press, 1955).

[47]R. F. Campbell and R. I. Gregg, eds., Administrative Behavior in Education (New York: Harper & Row, 1957).

[48]Andrew W. Halpin, ed., Administrative Theory in Education (Chicago: Midwest Administration Center, University of Chicago Press, 1958).

[49]Daniel E. Griffiths, Administrative Theory (New York: Appleton-Century-Crofts, Inc., 1959).

[50]Hart, "Conference Report."

[51]C. L. Shartle, Executive Performance and Leadership (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1956).

[52]R. M. Stogdill and A. E. Coons, eds., Leader Behavior: Its Description and Measurement (Columbus, Ohio: The Ohio State University, Bureau of Business Research, 1957).

[53]Ibid.

[54]R. M. Stogdill, Handbook of Leadership: A Survey of Theory and Research (New York: The Free Press, 1974).

[55]Andrew W. Halpin, "The Leadership Behavior and Combat Performance of Airplane Commanders," Journal of Abnormal and Social Psychology 49 (1954): 19-22.

[56]R. R. Blake and Jane S. Mouton, The Managerial Grid (Houston: Gulf Publishing Co., 1964), p. 10.

[57]William J. Reddin, Managerial Effectiveness (New York: McGraw-Hill Book Company, 1970), p. 23.

[58]R. L. Kahn and D. Katz, "Leadership Practices in Relation to Productivity and Morale," in Group Dynamics, ed. D. Cartwright and A. Zander (New York: Harper and Row, 1960), pp. 612-28.

[59]R. F. Bales, "The Equilibrium Problem in Small Groups," in Working Papers in the Theory of Action, ed. T. Parsons, R. F. Bales, and E. A. Shills (New York: The Free Press of Glencoe, 1933).

[60]Reddin, Managerial Effectiveness.

[61]K. D. Benne and P. Sheats, "Functional Roles of Group Members," Journal of Social Issues 4 (Spring 1948): 41-49.

[62]G. C. Homans, The Human Group (New York: Harcourt, Brace, 1950).

[63]Halpin, "The Leadership Behavior and Combat Performance of Airplane Commanders."

[64]Blake and Mouton, The Managerial Grid.

[65]Bales, "The Equilibrium Problem in Small Groups."

[66]Kahn and Katz, "Leadership Practices in Relation to Productivity and Morale."

[67]Reddin, Managerial Effectiveness.

[68]Benne and Sheats, "Functional Roles of Group Members."

[69]Barnard, The Functions of the Executive.

[70]Stogdill, Handbook of Leadership: A Survey of Theory and Research.

[71]M. Smith, "Personality Dominance and Leadership," Sociology and Social Research 19 (1934): 18-25.

[72]R. LaPiere and P. R. Farnsworth, Social Psychology (New York: Harper and Row, 1950).

[73]A. W. Goudner, Studies in Leadership (New York: Harper and Row, 1950).

[74]Homans, The Human Group.

[75]J. K. Hemphill, A Proposed Theory of Leadership in Small Groups (Columbus: The Ohio State University, Personnel Research Board Technical Report, 1954), unpublished, in Ralph M. Stogdill, Handbook of Leadership (New York: The Free Press, 1974).

[76]Ralph M. Stogdill, Individual Behavior and Group Achievement (New York: Oxford University Press, 1959).

[77]A. Bavelas, "Leadership: Man and Function," Administrative Science Quarterly 4 (1960): 491-98.

[78]Hemphill, A Proposed Theory of Leadership in Small Groups.

[79]Reddin, Managerial Effectiveness.

[80]Hart, "Conference Report."

[81]The CCBC Notebook is a quarterly newsletter publication of the Committee for Competency-Based Curriculum in Educational Administration of the National Council of Professors of Educational Administration. This interest group began in 1972. Notebook publishes an editorial comment, original papers and reports, commentary on experiences, references and sources, and notes of interest.

[82]Stogdill, Handbook of Leadership, pp. 403-404.

[83]Perrow, Complex Organizations, pp. 97-143.

[84]Michael Argyle, "The Relay Assembly Test Room in Retrospect," Occupational Psychology 27 (1953): 98-103.

[85]Alex Carey, "The Hawthorne Studies: A Radical Criticism," American Sociological Review 32 (June 1967): 416.

[86]Arthur H. Brayfield and Walter H. Crockett, "Employee Attitudes and Employee Performance," Psychological Bulletin 52,5 (1955): 396-424.

[87]Edward E. Lawler III and Lyman W. Porter, "The Effect of Performance on Job Satisfaction," Industrial Relations 7 (October 1967): 20-28.

[88]Korman, "Consideration, 'Initiating Structure,' and Organizational Criteria--A Review."

[89]Charles L. Hulin and Milton R. Blood, "Job Enlargement, Individual Differences, and Worker Responses," Psychological Bulletin 69,1 (1968): 41-55.

[90]Wilensky, "Human Relations in the Workplace."

[91]Kurt W. Back, Beyond Words (New York: Russell Sage Foundation, 1972).

[92]Ibid., p. 194.

[93]M. Lieberman, I. Yalom, and M. Miles, "The Group Experience Project: A Comparison of Ten Encounter Technologies," in Encounter: Confrontations in Self and Interpersonal Awareness, ed. L. Blank, G. Gottsegen, and M. Gottsegen (New York: Macmillan, 1971).

[94]G. S. Odiorne, "The Trouble With Sensitivity Training," Training Director's Journal 17,10 (1963): 9-20.

[95]Dorothy Stock, "A Survey of Research on T-Groups," in T-Group Theory and Laboratory Method, ed. L. P. Bradford, J. R. Gibb, and K. D. Benne (New York: Wiley, 1964).

[96]Stogdill, Handbook of Leadership, p. 192.

[97]Ibid., p. 199.

[98]Warren G. Bennis, Changing Organizations (New York: McGraw-Hill, 1966).

[99]Halpin, "The Leadership Behavior and Combat Performance of Airplane Commanders."

[100]Henri Fayol, General and Industrial Management, trans. from French edition (Durod) by Constance Stours (London: Pittman Co., 1949).

[101]L. Gulick and L. Urwick, eds., Papers on the Science of Administration (New York: Columbia University, Institute of Public Administration, 1937).

[102]J. D. Mooney and A. C. Reily, The Principles of Organization (New York: Harper, 1939).

[103]Oliver Sheldon, The Philosophy of Management (London: Pittman Co., 1923).

[104]William H. Newman, Administrative Action (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1950).

[105]American Association of School Administrators, Staff Relations in School Administration (Washington, D.C.: AASA, 1955), Chapter 1.

[106]Edward H. Litchfield, "Notes on a General Theory of Administration," Administrative Science Quarterly (June 1956): 3-29.

[107]Russell T. Gregg, "The Administrative Process," in Administrative Behavior in Education, ed. Roald F. Campbell and Russell T. Gregg (New York: Haper & Brothers, 1957), Chapter 8.

[108]Jesse B. Sears, The Nature of the Administrative Process (New York: McGraw-Hill, 1950).

[109]Daniel E. Griffiths, "Administration as Decision-Making," in Administrative Theory in Education, ed. Andrew W. Halpin (Chicago: Midwest Administration Center, The University of Chicago, 1958), Chapter 6.

[110]Griffiths, Administrative Theory, p. 94.

[111]Roald F. Campbell, Edwin M. Bridges, John E. Corbally, Jr., Raphael O. Nystrand, and John A. Ramseyer, Introduction to Educational Administration (Boston: Allyn and Bacon, Inc., 1971), p. 189.

CHAPTER III

DESIGN OF THE STUDY

Introduction

This study is organized around four basic questions with regard to management skills of school superintendents. Those questions are: (1) How much of a certain skill do superintendents perceive themselves to possess? (2) How important are these skills in the performance of the job? (3) What impact or influence did formal education have in the development of these skills? and (4) How much interest or desire does the superintendent have in further formal training in these skills?

This chapter will describe the organizational format used to gather, process, and analyze the data which support the answers to these questions. The major divisions of this description are: population, instrumentation, research questions, and analysis of data.

Population

The Michigan Association of School Administrators is a statewide subgroup of the American Association of School Administrators. The state organization is comprised of top-level school management personnel, including local superintendents of schools, intermediate school superintendents, and associate, deputy or assistant superintendents. Included in the membership of MASA are approximately

515 local school superintendents. In addition, the Association has nearly 230 deputy, assistant, or associate superintendents on its rolls. Finally, 58 county or intermediate superintendents account for the remainder of the nearly 800 MASA membership.

There are in Michigan approximately 530 local school districts. The universe of interest for purposes of this study included only the superintendents of these units. Because MASA expressed an interest in surveying its membership regarding management skills and because the local superintendent component of that membership comprises nearly 97 percent of the total universe of interest, it was decided to utilize this group as the population for this study. Thus, the total 515 local superintendent members of the Michigan Association of School Administrators (97 percent of the total population of superintendents in Michigan) served as the population considered in this study.

Instrumentation

Due to the large number of superintendents in the population and the decision to compare their responses in relation to a large number of variables of interest, a mailed questionnaire was chosen as the most effective and efficient means of gathering the desired data. It was necessary, therefore, to select an instrument which would accomplish this purpose, or to develop one. After carefully considering several existing instruments, used in program and staff development projects, it was decided that none of these directly answered the needs of the proposed research without significant modification. It was, therefore, necessary to develop an instrument

which both dealt with the technical-managerial skills of interest and asked the specific questions desired regarding those skills. The instrument finally developed (Appendix A) represents an eclectic product of a general survey of several instruments which addressed certain aspects of the topic.

In addition to this input, the development of the instrument represents the convergence of a number of other sources. As previously stated, this study was commissioned by the Michigan Association of School Administrators. Specifically, the MASA committee on Educational Leadership had adopted as one of its goals an inventory of the training needs of school superintendents to be used in planning and presenting projected in-service programs for members. The Educational Leadership Committee is composed of ten superintendent representatives (one from each MASA region in the state) and an ex-officio Executive Board member representative. The experience and expertise of this 11-member committee of practitioner-scholars was a major source of information input for the design and construction of the questionnaire. Initial categories and specific skills statements grew out of individual and group contacts with this body. In addition, the committee served to review and critique the instrument as development proceeded.

Conceptually, the survey instrument is an attempt to span a wide variety of administrative skills necessary to the internal administration of the educational enterprise. In all, there are 33 skill statements, each of which is examined in the context of the four different questions.

The questions to which superintendents were asked to respond were:

1. What is your current level of skill in this area? This question was intended to assess the individual's perception of his own ability in relationship to each of the 33 skill statements. Thus, it represents a statement of the superintendent's current level of skill. It is a basic assumption of this study that given the opportunity, superintendents will objectively and accurately assess and report their real capabilities.

2. What has been the influence of formal training in the development of this skill? This question was intended to determine those skills, reported to be possessed by administrators, which had been most directly the product of formal training. Thus, pre-service and in-service program planners might assess the kinds of experiences which they provide to the individuals with whom they deal in light of the impact those experiences appear to have on the development of various skills.

3. How important is this skill in the performance of your job? Superintendents were asked to evaluate the relative importance of each of the 33 skills in terms of their own unique circumstances. This question is distinct from question 1, in that the object of this query is to determine what skills are most needed, regardless of which ones are actually possessed. Thus, a discrepancy analysis between the actual state and the desired state becomes possible.

4. What is your desire for further training in this skill area? This question, perhaps most closely related to question 3, is

an attempt to discern the level of commitment to further formal training by practitioners. It was pointed out most emphatically by the members of the Educational Leadership Committee that members often respond that they have certain needs but may not be sufficiently interested to participate in a training program. This query addressed itself, therefore, directly to the question of willingness or desire to participate in formal training programs.

Responses were coded on a 1 to 5 scale, where 1=very low, 2=low, 3=medium, 4=high, and 5=very high. Respondents were asked to circle the response which best indicated their perceptions of their own situations. The instrument was labeled M.A.S.A. Members Needs Assessment.

The instrument contains two major divisions: a section dealing with demographic data and a section dealing with the specific skills of interest. It was planned thereby to compare various patterns of skills possessed or deemed important with various situational aspects of the superintendency.

Demographic Data

The demographic data are organized in two separate components. These are personal characteristics of the superintendent and organizational characteristics of the district. The personal characteristics of the superintendent about which data were requested included: age, years in current position, degree status, most recent previous experience, total years in education, and whether or not this was a first superintendency. The following questions were thus included to obtain this personal information:

1. What is your age? (check one)

   ( ) above 60
   ( ) 55-60
   ( ) 50-54
   ( ) 45-49
   ( ) 40-44
   ( ) below 40

2. How many years have you held your current position? (check one)

   ( ) less than 5
   ( ) 5-10
   ( ) 11-15
   ( ) 16-20
   ( ) more than 20

3. What is your highest degree attained? (check one)

   ( ) post doctorate
   ( ) doctorate
   ( ) education specialist
   ( ) post masters
   ( ) masters degree
   ( ) less than masters

4. What was your most recent previous experience?

   ( ) superintendency?
   ( ) central office (not superintendent)
   ( ) secondary administration
   ( ) elementary administration
   ( ) classroom teaching
   ( ) other _____

5. How many total years have you been in education? (write in)

   _____ years

6. Is this your first superintendency? (check one)

   ( ) Yes
   ( ) No

The organizational characteristics about which demographic data were requested included: size of district, wealth of district, political subdivision of district, political orientation of the board of education, educational orientation of the board of education,

racial composition of district, number of staff administrators, number of line administrators. The questions asked to obtain these data were:

1. What is your current student population (Fourth Friday count)? (check one)

   ( ) above 10,000
   ( ) 7,000-9,999
   ( ) 5,000-6,999
   ( ) 3,000-4,999
   ( ) 1,000-2,999
   ( ) below 1,000

Thus, size of student population was used as the indicator of district size. This was an arbitrary decision based on the assumption that student population size determined need for services and thus organizational size.

2. What is your current SEV/pp? (check one)

   ( ) above 25,000
   ( ) 20-25,000
   ( ) 15-19,999
   ( ) 10-14,999
   ( ) 7- 9,999
   ( ) below 7,000

SEV per pupil is a measure of the amount of tax base available for every child which the district must educate and represents a standard measure of district wealth.

3. According to state assessment criteria, in what political subdivision is your district?

   ( ) Metropolitan core
   ( ) City
   ( ) Town
   ( ) Urban fringe
   ( ) Rural

All Michigan school districts have been defined as belonging to one or the other of these categories by the state Department of

Education, for purposes of the Michigan Assessment of Basic Skills program.

4. How would you characterize the political orientation of your board? (check one)

   ( ) Predominantly conservative
   ( ) Predominantly liberal
   ( ) It varies from issue to issue

This variable, which is hereafter referred to as political orientation, was consistently mentioned by practitioners in committee meetings, interviews, and the subsequent field test as a major factor in determining how the superintendent must function, and therefore, what skills he must possess.

5. How would you characterize the educational orientation of your board? (check one)

   ( ) Predominantly traditional
   ( ) Predominantly progressive

Like political orientation, educational orientation was postulated as a major determinant of administrator action. Perhaps closely related to political orientation, this variable was nonetheless included to test the notion that administrators from districts with different educational orientations will require different sets of skills.

6. What is the racial composition of your current student population? (check one)

   ( ) All white
   ( ) Predominantly white
   ( ) About evenly mixed
   ( ) Predominantly black or other minority
   ( ) All black or other minority

This variable was included to test the voracity of the popular conception that the presence of a racial mixture or the necessity of dealing with a predominantly minority clientele will dictate

the need for different skills than other administrators need. It is, however, recognized that this variable may be contaminated by virtue of the fact that most districts with predominantly minority student populations are also core city districts and, therefore, are also very large districts. It becomes problematic as to whether size, urbanity, or the minority status of the students influences the skills needed by the administrators.

7. How many staff administrators does your district employ? (write in)

   _____ staff administrators

8. How many line administrators does your district employ? (write in)

   _____ line administrators

Questions 7 and 8, when combined into a ratio, may be used to compare the relative complexity of the administrative unit of the district. This is done by dividing the number of line administrators by the number of staff administrators. Thus, if a district employed two assistant superintendents and nine principals, the relationship would be 10:2 or 5:1. A district of 23 principals might employ only three assistant superintendents, giving a line-to-staff ratio of 24:3 or 8:1. The second district, even though larger in size with a larger administrative component, would be less complex in terms of the structure of the administrative hierarchy. It was anticipated that superintendents in districts with a more complex administrative structure would need different skills than those who are required to do more of the actual maintenance system work themselves.

Though no formal theoretical principles were formulated to be tested, the questions asked and information sought presumed that inherent in the data would be an evident structure which would provide logic to the seemingly random information. Examination and analysis of the data should disclose essential relationships which exist in reality. In a sense, then, there were a priori assumptions which may be said to have been tested. The decision to ask certain questions and not others presumes a vested interest in certain information. Thus, throughout the survey, the assumption which comes through is that administrators with differing personal and organizational characteristics will require different managerial skills. Or, put another way, personal and organizational characteristics will determine to some extent the skills needed by superintendents. In addition, the assumption is made that the administrative process is finite and identifiable in the sense that there are specific skills which are summative in defining the process. The nature of this assumption is more specifically spelled out below in the section on skills assessment data. In essence, however, the additive components of the process for purposes of this study are assumed to be: planning skills, managing skills, decision-making skills, evaluating skills, and communicating skills.

It is thus assumed that superintendents of differing ages, years in position, degree status, previous experience, total years in education, or number of previous superintendencies will report differing patterns of skills possessed, skills of importance, influence of training, and desire for further training. Similarly, the

assumption is made that superintendents from districts of varying size, wealth, political identification, political orientation, educational orientation, racial composition, or complexity will require different skills, etc. The null hypothesis is, of course, most appropriate for purposes of testing statistically. Accordingly, it may be stated as follows:

$H_0 : u = u_0$ and $H_1 : u \neq u_0$ where no directionality is predicted. The skills against which to compare these characteristics were obtained from the skills data section of the questionnaire.

Skills Assessment Data

The assessment of the perceptions of practicing superintendents regarding their technical-managerial skills was developed around five classical management components which are presumed to represent the broad spectrum of the administrative process. These five elements were: (1) planning, which includes needs assessment, goal identification and setting, and budgeting skills; (2) managing, which includes such concepts as organizing, controlling, coordinating, etc.; (3) decision making, which involves the monitoring processes; (4) evaluating, which involves scientific analysis considerations; and (5) communicating. Each of these components will be considered separately along with the items from the questionnaire which were intended to scan the perception of superintendents.

1. Planning involves forecasting the future either in terms of predicting outcomes or defining desires. The instrument contained 11 items which directly pertained to this functional principle. Those items, as they occurred in the questionnaire, were:

a. Ability to predetermine the flow of activities and responsibilities within your organization.
b. Ability to identify institutional goals based on community needs.
c. Ability to write policy statements which operationalize institutional goals.
d. Ability to identify community needs.
e. Ability to initiate action rather than reacting to situational demands only.
f. Ability to gain subordinate acceptance for institutional goals.
g. Ability to prepare an adequate financial plan.
h. Ability to identify major activities to implement organizational goals.
i. Ability to locate and use available funding sources.
j. Ability to allocate limited resources to priority goals.
k. Ability to gain community acceptance for institutional goals.

2. Managing includes such concepts as control, coordinating, and organizing. It relates to planning in that it has to do with the operationalization of the plan. Another word for managing might be implementation. This is a general concept into which many different styles, philosophies, and ideologies may be fit. For this reason, managing may not be a discrete administrative process but rather several alternative processes. The items included in the instrument which relate to managing were:

a. Ability to criticize performance of subordinates to affect positive change.
b. Ability to inspire and influence subordinates through various motivational techniques.
c. Ability to develop individual potential for positions of responsibility.
d. Ability to use third-party intervention in problem solving.
e. Ability to use different management styles in different situation for maximum effect.
f. Ability to monitor the progress of assigned activities without interfering with the process.
g. Ability to get maximum effectiveness from individuals on the management team.
h. Ability to reduce conflict in favor of cooperation.
i. Ability to organize your time for maximum efficiency.

3. Decision making represents the end product of a process of gathering and analyzing information for the purpose of monitoring the system. Five items were included in the instrument which related directly to this component. They were:

a. Ability to use theoretical principles of complex organizations.
b. Ability to identify and select alternative courses of action to achieve goals.
c. Ability to use formal methods of gathering opinions and judgments.
d. Ability to make maximum use of management information systems.
e. Ability to make maximum use of data processing and computer technology.

4. Evaluation is another process of gathering and analyzing information but is a more discrete entity than decision making and is, thus, considered separately. The purpose of evaluation is to assess progress toward achievement of the plans or goals of the organization. Through evaluation and decision making, the organization is continually restructured where needed or plans are changed to reflect reality. The specific items included relative to evaluation were:

a. Ability to understand and use statistical analysis procedures.
b. Ability to understand and use appropriate sampling procedures.
c. Ability to develop appropriate evaluation designs to assess organizational effectiveness.
d. Ability to use scientific procedures for collecting information about the results of programs.
e. Ability to state evaluation objectives in measurable terms.

5. Communication is, of course, an integral part of every process involved in dealing with people. Three items, however, were

included which deal with the concepts of what might be called the science of communication. These items are:

a. Ability to recognize the extent and direction of communication distortion in your system.
b. Ability to identify communication networks within your organization.
c. Ability to manage communication flow within your organization.

The 33 skill statements are intended to be representative of the process of administration. This process is conceived to represent at least three principal functions for the superintendent. The superintendent is expected to assume leadership in defining and clarifying the direction and purpose of the organization. He is further responsible for the establishment and maintenance of the organization to work toward those purposes. In addition, he must be professionally competent to take the lead in restructuring and redefining organizational needs, direction, and processes where necessary. The format of skills statements, based as it is on this triad of functioning, is in agreement with the theoretical postulates of Litchfield, who views the administrative process as cyclical. The evaluation component (reappraisal) brings the entire administrative process back to its beginnings. The elements of the entire process, however, notwithstanding Litchfield's pronouncements, appear to this researcher to be interdependent, with formative evaluation processes comparing planned progress (coordination and control) to planned objectives for the on-going process of decision making. It is thus an assumption of this instrument that, similar to the notions of Simon, Griffiths, and Campbell, decision making is the

underlying thread in the administrative process. Further, the other elements are either contributors to or results of administrative decision making. More specifically, planning and evaluation are seen as the tandem elements which provide input to the decision-making process, while coordination, control, and organization are viewed as the products of the decision-making process, both aspects being served by the vehicle of communication. The structure of the instrument, the questions asked, and the assumptions made will determine the nature of the analysis of the data.

Research Questions and Analysis of the Data

Eight research questions were formulated prior to collecting the data for this study. While no conceptual theoretical framework is used to develop specific hypotheses against which to test empirical findings, the very act of devising an instrument presumes a preconceived perspective which may be confirmed or rejected. Thus, the eight research questions are used as a guide to analysis of the data, but in addition, a priori assumptions upon which some questionnaire items are based are also tested. The research questions are considered in order and various related assumptions are included in the discussion of the question to which they are related.

Basic to the entire study are three general assumptions: (1) that the membership of the Michigan Association of School Administrators (representing 97 percent of the total population of Michigan superintendents) is a more than adequate sample from which to draw inferences of a general nature; (2) that superintendents would objectively evaluate and honestly report both the level of their

skill and the importance of those skills to the performance of their jobs; and (3) that the skills represented in the instrument are in fact important skills and sufficiently inclusive to represent the range of skills of the administrative processes considered. While these assumptions are not testable in the sense of establishing probability relationships which confirm or deny conclusions, certain indications of validity may be obtained from the quantity and distribution of responses.

Because this study did not set out to test any specific hypotheses, but, rather, attempted to discern patterns which may be inherent in the data, descriptive statistics and measures of central tendency were appropriate to much of the analysis. Frequency distributions, means, standard deviations, cross-tabulations, and correlations allowed comparisons to be made from one population subgroup to another. The following research questions may be answered by using such descriptive statistics:

> Research Question 1: Which skills do practicing superintendents perceive themselves to possess?
>
> Research Question 2: At what levels of competence do practicing superintendents report that they possess various skills? This question is a subset of question 1.
>
> Research Question 3: Which skills will be reported by top-level managers to be of most importance in the performance of their jobs?
>
> Research Question 6: How important will top-level school managers perceive their formal training to have been in the acquisition of skills possessed? This question is a subset of question 1.
>
> Research Question 7: How important will top-level school managers perceive their formal training to have been in the acquisition of important skills? This question is a subset of question 3.

The initial analysis procedure involved use of a factor analysis in an attempt to empirically verify the dimensionality built into the instrument. This data-reduction technique, however, failed to confirm the five factors (planning, managing, decision making, evaluating, communicating) as independent dimensions of the administrative process. Because the procedure used (verimax rotation) establishes orthogonal factors, it was decided to factor analyze again using a procedure which defines clusters of variables which may be correlated with one another (oblique rotation). The variables which comprised each factor identified were not substantially different between the two factor analysis procedures, and in neither case did the isolated factors conform to those upon which the instrument was built. Two limiting concerns, however, should be noted.

First, factor analytic techniques require a large number of responses per variable in order to adequately ascertain underlying patterns in the data. The gross rule of thumb requires at least 20 respondents per variable, which in this case would necessitate approximately 660 responses (33 variables x 20 respondents). This questionnaire was returned completed by 285 superintendents. Thus, the N in the analysis may not have been sufficient to divulge the true underlying pattern of factors implicit in the data.

Second, the response scale built into the instrument allowed for a range of from one to five. This range may not have been adequate to allow sufficient variability among responses to produce discrete factors.

Because of the foregoing, the factor analysis procedure was not used either to confirm or deny the presence of the five dimensions of the instrument. While the analysis did produce from three to five factors in each response category, those limiting concerns which precluded eliminating the original dimensions also prevent acceptance of the new ones. Thus, the researcher was left with a choice: either to accept the results of the factor analysis (even though flawed) and proceed to compare the new factors against the demograhpic data, or to disregard the results of the factor analysis and proceed to compare summated variables reflecting the original factors against the demographic data. While the researcher believes that factor analytic techniques can produce the dimensions sought, the second choice was made due to the limitations mentioned. Thus, responses pertaining to each dimension were summed and divided by the number of items in that factor, giving a summated dimensions score for each individual respondent. These elements were then compared to subgroups of the population of respondents. In addition, inter-item correlations were produced to determine the relative relationship which items so grouped would have. Pearson's product-moment correlation coefficients for summary dimensions may be found in Appendix B. The indication is that items so grouped are sufficiently related to support the structure of this instrument. Cross-tabulations with population subgroups and analysis of variance were used in these comparisons. The following research questions were analyzed via these processes:

Research Question 4: Will the pattern of skills reported to be possessed by superintendents vary according to environmental, personal, or organizational characteristics of the superintendency?

Research Question 5: Will the skills reported to be most important to superintendents vary according to environmental, personal, or organizational characteristics of the superintendency?

Research Question 8: Will the perception of superintendents with regard to the importance of formal training in acquiring important skills vary according to environmental, personal, or organizational characteristics of the superintendency?

Analysis of the data will be reported in Chapter IV. It was expected that patterns of response could be determined through these procedures. The purpose of these analyses was to determine meaningful differences among the responses and to report them according to how these differences pertain to the research questions.

CHAPTER IV

ANALYSIS OF RESULTS

Introduction

This chapter presents the data as they pertain to the research questions and assumptions upon which the study is based. It also interprets those data in terms of general and specific results which provide answers to or statements about those questions and assumptions. The following chapter will draw further conclusions and make recommendations based upon these interpretations and findings.

Because this study does not deal with a randomly selected sample group, inferential statistics were considered inappropriate. Rather, analyses were based on descriptive statistics such as mean scores and frequency distributions. Rank orderings by mean and by percentage response are also employed.

A major problem in dealing with large amounts of data, such as this study employs, is that of data reduction for the purpose of analysis. The discussion in Chapter III of the factor analysis limitations indicates one such attempt to reduce the mass of data to a manageable, manipulable number of variables from which to extract inherent patterns. It was necessary to reduce the 132 skills variables to a smaller number in order to compare them with the demographic characteristics of the superintendents. Factor analysis is one method which may be employed and which represents an important

and needed area of further research as a means of developing an instrument which may reasonably measure the managerial skills employed by practitioners. It was not, however, the purpose of this study to make such a measurement. This study was intended as a measure of perceptions rather than actual skill levels, with the assumption being that, given the opportunuty, superintendents would report accurately and objectively their level of competence. It is recognized that this measure of perception may be considerably different from a measure of skill, and it is, therefore, not represented as such. The same may be said of the other three questions relative to the skills statements. The measure of superintendents' perceptions of the influence of formal training may be quite different from a measure of the actual influence, just as their perceptions of the importance of various skills may differ from the importance of those skills in actual practice. Definitive measures of these areas (skill level, skill importance, and influence of formal training) cannot be claimed until an instrument is developed with appropriate reliability.

Because factor analytic techniques could not be adequately utilized, the logic built into the questionnaire was utilized to reduce the data. That is, the five dimensions of planning, managing, decision making, evaluating, and communicating were computed as new variables. This was done by combining the skills statements considered to relate to each area into a summary index and calculating the mean score for that new variable. These summary variables may be found in Table 1. Thus, rather than 132 skills variables (33

statements x 4 questions), we now are dealing with 24 skills variables (6 summary scales x 4 questions).

Table 1.--Twenty-four new variables: summary dimensions.

Level of Planning Skill	Importance of Planning Skill	Influence of Training on Planning Skill	Desire for Further Training in Planning
Level of Managing Skill	Importance of Managing Skill	Influence of Training on Managing Skill	Desire for Further Training in Managing
Level of Decision-Making Skill	Importance of Decision-Making Skill	Influence of Training on Decision-Making Skill	Desire for Further Training in Decision Making
Level of Evaluating Skill	Importance of Evaluating Skill	Influence of Training on Evaluating Skill	Desire for Further Training in Evaluating
Level of Communicating Skill	Importance of Communicating Skill	Influence of Training on Communicating Skill	Desire for Further Training in Communicating
Total Level of Skill	Total Importance of Skill	Total Influence of Formal Training	Total Desire for Further Training

In this way, it is possible to describe the current level of planning skills of superintendents, the importance of planning skills in the performance of their jobs, their desire for further training in planning skill areas, and the influence of formal training in the development of planning skills. Bearing in mind that what we have measured is the superintendents' perceptions, and that each administrative dimension is defined by the skills statements

contained in the instrument, similar analyses of managing, decision making, evaluating, and communicating may be developed.

In addition, it becomes possible to compare mean scores of various subgroups from the population to determine where differences might lie in relation to skills possessed, deemed important, influence of formal training, or desire for further training.

A consideration of the responding population will first be reported. This will be followed by responses to each of the eight research questions.

The Population

The population of interest to this study was the superintendent membership of the Michigan Association of School Administrators. This group comprises the largest element of the MASA, which also includes intermediate district superintendents and some assistant superintendents. There is a total of 515 superintendents on the mailing list of the association. Of the 570 superintendents in the state, these comprise 90 percent. The total return from superintendents was 285, a return percentage of 55 percent of the MASA superintendents and exactly 50 percent of the superintendents in the state.

The instrument was designed to obtain information on personal characteristics of the superintendents as well as district characteristics. Personal characteristics selected as relevant were age, years in current position, highest degree attained (degree status), most recent previous experience, total years in education, and whether or not the individual is in his/her first superintendency.

Aside from comparing these data with skills only, some subcategories of personal information were cross-tabulated with others. Thus, age was compared with years in position to better describe the composition of the population of respondents. This information had not beem compiled in this fashion prior to this time, or at least does not exist in any document known to the researcher.

Age of Superintendents

The age of superintendents was originally conceptualized as a possible factor in determining the skills employed by and thought to be important by superintendents. It was assumed perhaps more strongly that age would determine the desire for further training and the perception of the influence of formal training on the development of skills.

In response to the question, "What is your age?" the following result was obtained:

Above 60	4%
55-60	12%
50-54	22%
45-49	29%
40-44	22%
Below 40	16%

It can readily be seen that the bulk of the respondents were between the ages of 40 and 55, with as many below age 40 as above age 55 and about one-third of the respondents in their mid- to late forties. The question of the possible influence of the age of the superintendent on the skills, importance, impact of training, and desire for further training will be taken up as each research question is considered later in this chapter.

Years in Current Position

Information was requested regarding longevity in position based on the assumption that newer superintendents would need different skills, see different skills as important, have different training desires, and perceive differences in the influence of formal training from superintendents who had been in the position longer. The response to this assumption will be taken up in dealing with research questions number 4, 5, and 8.

The responses to this question obtained the following result: How many years have you held your current position:

Less than 5	44%
5-10	38%
11-15	12%
16-20	4%
More than 20	2%

It is this result which causes concern among superintendents, has been the motivation for several studies of superintendent dismissal, and in large part provided the impetus for this study. That 82 percent of the respondents had less than ten years in position, and that 44 percent had less than five years in position is cause for alarm when this result is compared to other factors. For example, 58 percent of the respondents reported that they were in their first superintendency. Assuming that some time is needed to become fully acclimated to the district and to institute program and procedural functions which are particular to an individual administration, a large proportion of superintendents may not have the time to learn the job before being given the opportunity to move on.

This factor (years in current position) was checked against age categories to determine if any subgroup of superintendents was differentially affected. It is to be expected that younger superintendents will have less longevity in position than older superintendents and this is borne out. Thus, 87 percent of the superintendents with five years or less in position were under 50, whereas only 30 percent of those with 11-15 years in position were under 50 years of age.

Degree Status of Superintendents

In addition to age, years in position was compared with the degree status of superintendents to determine whether or not higher degree status may result in greater longevity in position. The result was that, in general, superintendents with less positional seniority held higher degree status than those with greater tenure in position (see Table 2). Thus, of the 44 percent (146 respondents)

Table 2.--Years in current position compared with degree status.

Years	Post-Doc.	Doc.	EDS	Post-MA	MA	Less MA	Total
Below 5	4%	30%	23%	28%	14%	1%	44%
5-10	4%	11%	28%	41%	16%	--	38%
11-15	--	15%	28%	18%	39%	--	12%
16-20	--	--	31%	46%	23%	--	4%
Above 20	14%	14%	14%	29%	29%	--	2%
Totals	4%	19%	26%	33%	18%	--	--

with five years or less in position, 57 percent had an EdS or above, with 34 percent having a doctorate or above. Of those with 5 to 10 years in position, 43 percent possessed an EdS or above, while only 15 percent held a doctorate or more. Of those with 11-15 years in position, the picture is similar to the 5-10 years group except that none of these respondents reported post-doctoral work. In the 16-20 year seniority group, 31 percent reported EdS degree status, with no doctoral or post-doctoral status reported. The group above 20 years in position included only 2 percent of the total population (seven respondents). They were distributed across the whole range of degree categories. Most superintendents (33 percent) had completed degree work beyond the masters level. Twenty-six percent of the respondents had completed the EdS degree, while 19 percent held a doctorate. The highest degree status among the newest superintendents was the doctorate, while the post-masters status was the most frequently reported category among the 5-10 year group. The masters degree was the most frequently reported status among the 11-15 year subgroup.

It may be seen from this information that increasingly superintendents are being required to have more formal training than in the past and that the degree status requirement is moving toward the EdS and doctorate levels. The following result was obtained with respect to degree status:

What is your highest degree attained?

post-doctorate	4%
doctorate	19%
education specialist	26%
post-masters	33%
masters degree	18%
less than masters	1%

Most Recent Previous Experience

It appears also to be true that the route to the superintendency is changing. Thus, the experiential background of various seniority subgroups differs (see Table 3). The most recent previous experience for superintendents with five years or less in position was a central office job (assistant superintendent) or another superintendency. Among the 5-10 year longevity group, the most recent previous experience was rather evenly distributed between a former superintendency, a central office position, or a secondary school administrative position. The most recent previous experience of those from the 11-15 year seniority group, however, includes only a very small percentage of central office backgrounds, and the 16-20 year group includes 62 percent secondary school experience. Apparently, while the superintendency continues to be the preferred experiential background for subsequent superintendencies, increasingly the assistant superintendency (central office position) leads to the top management spot, while the high school principalship appears to be decreasing in frequency as a stepping stone to the superintendency. The following results were obtained in response to the question, "What was your most recent previous experience?"

Superintendency	36%
Central office (not superintendent)	30%
Secondary administration	22%
Elementary Administration	7%
Classroom teacher	2%
Other	4%

Table 3.--Years in position compared to most recent previous experience.

Years	Supt.	Central Office	Sec. Admin.	Elem. Admin.	Classroom	Other
Less than 5	34%	40%	16%	7%	--	2%
5-10	33%	27%	24%	7%	--	7%
11-15	59%	8%	26%	3%	5%	--
16-20	15%	8%	62%	8%	8%	--
More than 20	29%	14%	14%	14%	14%	--
Total	36%	30%	22%	7%	2%	4%

Total Years in Education

Because school managers have historically been hired from among the ranks of educators, it is to be expected that those reaching the status of superintendent will be those who have been in the field for some time. In fact, in terms of length of educational service among respondents, 95 percent of the superintendents had more than 15 years experience. The necessity for previous administrative experience as well as advanced degree status requires a considerable investment in years prior to assuming such a position. As education begins to look outside the manpower pool found among the teaching

ranks for its administrative personnel, this picture may be altered. An increasing number of noneducator specialists are being employed in staff capacities at the central office level. Accountants, data-processing managers, and other business-oriented individuals are finding their way into educational management positions, particularly in large districts. Thus, specialization may decrease the salience of the experiential background among administrators of the future.

Previous Superintendency

The last question relative to personal information about superintendents had to do with whether or not the individual was in his first superintendency. Responses to this query provided the following result:

Is this your first superintendency?

Yes	58%
No	42%

To summarize, then, the majority of respondents are in their first superintendency, they have less than ten years in the same position (most have less than 5), and the majority are under 50 years of age. In addition, they are increasingly better educated and they come to the superintendency out of another superintendency, the central office, or the high school principalship.

Size of District

In addition to data concerning individuals, information was requested relative to the organizational characteristics of the districts in which respondents found themselves. The size of the

district was defined as the number of pupils served as determined by the Fourth Friday count.

School district data of this type are available and may be compared against the percentages of responses for each size category reported in this study. While numeric categories differ somewhat, a compilation of district size subgroups done by Dr. Carl Brautigam of the Michigan State University Placement Office provides such a comparison (see Table 4). Responses in terms of district size yielded the following result:

What is your current student population? (Fourth Friday count)

Above 10,000	10%
7,000-9,999	6%
5,000-6,999	8%
3,000-4,999	20%
1,000-2,999	42%
Below 1,000	14%

These numbers are translated to be roughly equivalent to the categories used by Dr. Brautigam in his compilation.

Table 4.--Size of district: total population compared to survey respondents.

Total Population[a] Number of Districts = 570	Survey Population Number of Districts = 285
0-1,000 --19%	Below 1,000 --14%
1,001-2,500 --40%	1,000-3,000 --42%
2,501-5,000 --25%	3,000-5,000 --20%
5,001-10,000--10%	5,000-10,000--14%
Above 10,000-- 6%	Above 10,000--10%

[a]Compiled by Dr. Carl Brautigam, Michigan State University, 1975.

Table 4 indicates the representativeness of the response return for this study, showing the returns to closely approximate the actual count in terms of subcategories of district size.

District Wealth

Districts were classified according to state equalized valuation per pupil, a common measure of relative welath. With the average SEV/pp at $20-25,000, the following results were obtained: What is your current SEV/pp?

Above 25,000	36%
20-25,000	22%
15-19,999	26%
10-14,999	13%
7-9,999	2%
Below 7,000	1%

This classification scheme breaks down the poorer districts (those below the state average), while lumping those above average together. The intent was to see if increasing means would necessitate differences in skills among superintendents. This question will be dealt with in consideration of research questions 4, 5, and 8.

Political Subdivision of the District

Because school districts exist in a variety of community environments, it was presumed that the relative degree of urbanization might affect the operation of the schools, and therefore the skills needed and possessed by the superintendent. One convenient classificatory scheme which identifies districts in terms of their political system of government is that employed by the state

assessment program. Since this system has been employed for a number of years, all superintendents are familiar with it. The following result was obtained in response to this question:

According to state assessment criteria, in what political subdivision is your district?

Metropolitan core	3%
City	7%
Town	14%
Urban fringe	31%
Rural	44%

Rural districts are, of course, the most numerous since school districts are organized among community patterns more than population patterns. A large number of separate communities exist around the large metropolitan areas. Thus, urban fringe districts are the second most numerous in terms of political identification. Metropolitan core, city, and urban fringe categories were considered to be more urbane than rural and town categories.

Political Orientation of the Board of Education

It was assumed that superintendents serving politically conservative boards of education would require different skill patterns and expectations than those serving more liberal or variable boards of education. Thus, respondents were asked to rate their board's political orientation. This question resulted in the following distribution:

How would you characterize the political orientation of your board:

Predominantly conservative	50%
Predominantly liberal	6%
Varies from issue to issue	44%

The classification of political subdivision was compared with political orientation to attempt to better describe the environment in which superintendents find themselves. The assumption about urbanization appears to be supported by this comparison. Thirty percent of the metropolitan core, city, and urban fringe superintendents report predominantly conservative boards of education, while 52 percent of the superintendents from the town category report conservative boards and 66 percent of those from rural districts perceive the board to be predominantly politically conservative.

Educational Orientation of the Board

In addition to the board's political perspective, it was felt that their educational orientation would have an effect on the functioning of the superintendent. In this case, educational orientation was defined as either traditionalist or progressive with respect to programs, practices, and procedures. The following distribution was produced in response to this item:

How would you characterize the educational orientation of the board?

Predominantly traditional	72%
Predominantly progressive	28%

Quite obviously, and perhaps not surprisingly, the great majority of the educational philosophical context in which the superintendent finds himself is traditionalist in nature. This appears to be true no matter which political subdivision his district is in. There are no significant variations in the reported

amount of traditionalism vis-à-vis progressivism when political subdivision categories are compared against educational orientation.

Other Organizational Data

Three other questions were asked but were not used in the data analysis. These were racial composition of the district, number of staff administrators, and number of line administrators employed.

Racial composition was included in an attempt to investigate possible differences in skills patterns reported by superintendents of districts with varying minority populations. The response to this item, however, indicated that the 285 respondents were not typical in this regard since 97 percent of the superintendents reported either all white or predominantly white student populations. Only 1 percent reported an even mixture and 2 percent predominantly minority student population. The responding population, then, was virtually homogeneous in terms of racial composition.

With respect to line and staff administrative positions, the research instrument was inadequate and the responses were inappropriate. It was originally intended that a measure of district complexity could be obtained by comparing the line/staff ratios. Accordingly, the questions were asked:

> How many staff administrators does your district employ?
> How many line administrators does your district employ?

Unfortunately, specific criteria were not built into the instrument which would provide guidelines for superintendents in responding consistently to these items. The definition of line and

staff designations is apparently not shared universally among practitioners, some of whom responded "none" to the line administrator query. Thus, it was determined that the reported numbers were not reliable in terms of common classification and this measure was, therefore, disregarded.

Summary

The population of respondents has been viewed from at least two separate perspectives in this study. Individual superintendents' personal characteristics have been classified, and some organizational characteristics of their districts have been examined. These data will be used later in this chapter in comparison with various skills patterns in consideration of research questions 4, 5, and 8.

Skills Assessment Data

Research Question 1: Which skills do practicing superintendents perceive themselves to possess? That is, are some skills more frequently possessed than others among superintendents, and if so, which skills?

This research question may be combined with research question 2, which is a subset of question 1.

Research Question 2: At what levels of competence do practicing superintendents report that they possess various skills?

Thus, the restated question becomes,

With which skills do superintendents report the greatest to least amounts of competence?

This question deals only with the current level of skill response category. Analysis is done in terms of individual skill

statements as well as summarized skill classifications. Rank ordered by mean score, the 33 skill statements are examined first, followed by the summary category rankings and a table of percentages of response in each summary skill area. Table 5 lists the 33 skill statements in the questionnaire, displays the summary categories into which they are grouped, and reports the ranking of each statement in relation to each of four queries. This table will be referred to in consideration of research questions 1, 2, 3, 6, and 7. Column 2, Skill Level, reports the rank ordering of the various skill statements in terms of the superintendent's perception of his current level of competency with that particular skill. These skills are ranked by mean score for all those responding to that item. "Ability to prepare an adequate financial plan" was rated highest by most superintendents and "ability to make maximum use of data processing and computer technology" was rated lowest by most superintendents. There were differences among mean scores for skills, with the highest ranked skill obtaining a mean score of 4.02, while the lowest rated skill obtained a mean score of 2.97. The overall mean level of skill reported by all superintendents on a scale from 1 to 5 was 3.5.

By combining the individual mean scores of those skill statements grouped under the headings of Planning, Managing, Decision-Making, Evaluating, and Communicating, general statements may be made about these data. These summary skills may then be rank ordered by mean in the same way that individual statements in Table 5 are.

Table 5.--Summarized rankings of skills statements by perceived level of competence, importance of skill, desire for further training, and influence of formal training on skill development.

Skill Statements	Skill Level	Skill Importance	Training Desire	Influ. of Training
I. Planning Skills	(1)	(1)	(2)	(2)
1. Ability to prepare an adequate financial plan.	1	1	10	6
2. Ability to identify major activities to implement organizational goals.	18	16	20	9
3. Ability to allocate limited resources to priority goals.	2	10	11	28
4. Ability to predetermine the flow of activities and responsibilities within your organization.	4	8	30	15.5
5. Ability to identify institutional goals based on community needs.	12	12	13.5	5
6. Ability to write policy statements which operationalize institutional goals.	17	17	19	11
7. Ability to initiate action rather than reacting to situational demands only.	9	11	15	19
8. Ability to gain subordinate acceptance for institutional goals.	7	13	18	19
9. Ability to gain community acceptance for institutional goals.	10.5	6	3	23
10. Ability to identify community needs.	8	14	16.5	7.5
11. Ability to locate and use available funding sources.	15	15	6	32
II. Managing Skills	(2)	(2)	(1)	(4)
1. Ability to inspire and influence subordinates through various motivational techniques.	14	7	7	12.5
2. Ability to develop individual potential for positions of responsibility.	13	19	21	21
3. Ability to use different management styles in different situations for maximum effect.	21	20	13.5	14
4. Ability to get maximum effectiveness from individuals on the management team.	5	2	2	12.5
5. Ability to criticize performance of subordinates to affect positive change.	10.5	4	8	15.5
6. Ability to monitor the progress of assigned activities without interfering with the process.	16	23	27	26

Table 5.--Continued.

Skill Statements	Skill Level	Skill Importance	Training Desire	Influ. of Training
7. Ability to organize your time for maximum efficiency.	22	3	1	29
8. Ability to reduce conflict in favor of cooperation.	6	5	4	22
9. Ability to use third party intervention in problem solving.	24	29	28	30.5
III. Communicating Skills	(3)	(3)	(3)	(5)
1. Ability to identify communication networks within your organization.	19	21	25.5	17
2. Ability to manage communication flow within your organization.	20	18	25.5	24
3. Ability to recognize the extent and direction of communication distortion in your system.	23	22	22	30.5
IV. Decision-Making Skills	(4)	(4)	(5)	(3)
1. Ability to use theoretical principles of complex organization.	32	33	33	10
2. Ability to identify and select alternative courses of action to achieve goals.	3	9	16.5	3
3. Ability to use formal methods of gathering opinions and judgments.	25	30	29	4
4. Ability to make maximum use of management information systems.	28	26	23	19
5. Ability to make maximum use of data processing and computer technology.	33	28	12	33
V. Evaluating Skills	(5)	(5)	(4)	(1)
1. Ability to develop appropriate evaluation designs to assess organizational effectiveness.	29	24	5	27
2. Ability to use scientific procedures for collecting information about the results of programs.	31	27	24	7.5
3. Ability to state evaluation objectives in measurable terms.	26	25	9	25
4. Ability to understand and use statistical analysis procedures.	30	31	31	2
5. Ability to understand and use appropriate sampling procedures.	27	32	30	1

It can be seen from Table 5 that, in general, planning and managing skills are ranked highest, while evaluating and decision-making skills are ranked lowest. After summarizing the statements and rank ordering these summary variables, the following result is obtained:

1.	Planning skills	mean = 3.75
2.	Managing skills	mean = 3.63
3.	Communicating skills	mean = 3.52
4.	Decision-making skills	mean = 3.25
5.	Evaluating skills	mean = 3.12

While no great differences appear to exist among the various categories of skills which superintendents perceive themselves to possess, the order of competence may be important. Because measures of central tendency often tend to obscure subtle differences in favor of global patterns, it was decided to look at this summary ranking in greater detail. Mean score rankings may be compared for congruence or discrepancy. Rank order correlations give an indication of the agreement or commonality (concordance) which the rankings show across the four areas of inquiry. Kendall's W coefficient of concordance indicated the following rank order agreement:

All 33 items	= .64
Planning items	= .77
Managing items	= .65
Decision-making items	= .49
Evaluating items	= .16
Communicating items	= .20

Thus, respondents who rated planning levels of skill high tended to rate importance, influence of training, and desire for further training in planning skills as high also. There was less agreement in managing rankings and decreasing agreement in

decision-making, communicating, and evaluating rankings. Overall, the coefficient of concordance was .64, indicating inter-category or structural agreement on the instrument.

It was possible, in addition, to focus more closely on individual categories of rankings to assess areas of greatest and least commonality. Thus, one may determine how much the ranking on one variable agrees with the ranking on one other variable. Using the Spearman rank order correlation, the four indices of perceived level of skill, importance of skill, influence of training on the development of skills, and desire for further training were tested against one another and correlations were obtained between the rankings of these items. The six matrices obtained using this procedure appear in Table 6. Thus, it may be seen that there is a high correlation (.85) between the ranking of items having to do with the current level of skill (Lev.) and items having to do with the importance of these skills (Imp.). Referring to the Kendall W correlations, when all 33 items are used the correlation is .64. The Spearman correlations show the nature of that agreement to be in the relationship between level of skill and importance of skill (.85) as well as importance and desire for further training (.69). Thus, overall, if one tended to respond high to level of skill items, the response to importance items was also high. If one tended to respond high to importance items, the desire for further training was also high. Other relationships of a similar nature may be seen from an examination of Table 6.

Table 6.--Spearman rank order correlations for summary variables.

All 33 Items:

	Lev.	Imp.	Des.	Inf.
Lev.		.85	.29	.10
Imp.			.69	-.03
Des.				-.18
Inf.				

Planning (11 items):

	Lev.	Imp.	Des.	Inf.
Lev.		.76	.15	-.02
Imp.			.43	-.03
Des.				-.20
Inf.				

Managing (9 items):

	Lev.	Imp.	Des.	Inf.
Lev.		.60	.42	.60
Imp.			.92	.40
Des.				.34
Inf.				

Decision Making (5 items):

	Lev.	Imp.	Des.	Inf.
Lev.		.50	-.10	.90
Imp.			.70	.20
Des.				-.30
Inf.				

Evaluating (5 items):

	Lev.	Imp.	Des.	Inf.
Lev.		.10	.30	-.10
Imp.			.90	.80
Des.				-.90
Inf.				

Communicating (3 items):

	Lev.	Imp.	Des.	Inf.
Lev.		.50	.60	1.0
Imp.			.60	.50
Des.				.60
Inf.				

Key: Lev. = Level of Skill; Imp. = Importance of Skill; Des. = Desire for Further Training; Inf. = Influence of Training on Skill Development.

Table 7 shows the breakdown of responses by percentage of respondents in relation to each summary category. This table shows the summated factors in relation to the percentage of respondents who reported their skills at the various levels. The skills are listed in order of precedence, showing that respondents consider planning to be their highest skill, followed by managing, communicating, etc. This conclusion may best be illustrated by a consideration of the column which displays the percentage of those

reporting a high level of skill. Thus, planning skills are reported high by 71 percent, managing skills by 60 percent, communicating by 49 percent, decision making by 29 percent, and evaluating skills by only 22 percent. It should be noted, however, that 53 percent of the superintendents rate their level of skills as high, and 95 percent rate them moderate to high. Thus, the differences in percentages are accounted for by those rating the level of their skills in the medium range, not in the low range. Only 3 percent rated their overall level of skill as low. It may be that superintendents were not as objective in their ratings as the researcher had assumed they might be.

Table 7.--Level of competence in relation to summary skills.

	V. Low	Low	Medium	High	V. High
Planning level	1%	2%	22%	71%	4%
Managing level	--	3%	33%	60%	4%
Communicating level	2%	3%	42%	49%	5%
Decision-making level	1%	8%	61%	29%	2%
Evaluating level	--	14%	61%	22%	2%
Total skill level	--	3%	42%	53%	1%

Research Question 3: Which skills will be reported by top-level managers to be of most importance in the performance of their jobs?

Table 5, (pp. 95-96), Column 3, Skill Importance, shows the 33 separate skills rank ordered in terms of those considered by

the respondents to be most important in the performance of their jobs. Again, "Ability to prepare an adequate financial plan" ranked most important by most respondents. When considered in summary form, a pattern similar to the reported level of competence is apparent. The rank order of importance of summary skills is as follows:

1. Planning importance mean = 4.05
2. Managing importance mean = 4.01
3. Communicating importance mean = 3.78
4. Decision-making importance mean = 3.51
5. Evaluating importance mean = 3.43

The relative importance of the summary skills categories may also be broken down in terms of the percentage of responses at each level. Table 8 shows this breakdown.

Table 8.--Importance of skills by percentage of responses.

	V. Low	Low	Medium	High	V. High
Planning	1%	2%	7%	72%	18%
Managing	1%	2%	9%	71%	17%
Communicating	1%	3%	24%	58%	13%
Decision-making	--	5%	40%	52%	3%
Evaluating	1%	5%	48%	42%	4%
Total importance	1%	2%	15%	76%	6%

A comparison of Tables 7 and 8 indicates that the general pattern of skills possessed and skills considered to be important is the same. That is, planning skills are perceived by superintendents as most important in the performance of their jobs and

at the same time planning is perceived to be that area with which they possess the greatest competence. In both perceived level of competence and level of importance, planning skills are followed in order by managing skills, communicating skills, decision-making skills, and finally, evaluating skills.

There are, however, a few individual differences which occur between the rankings of level of competence and level of importance. These differences may be seen in Table 5 by comparing those skills ranked as highest level of importance with those ranked as lowest level of competence. By subtracting the rank value of Column 2 from the rank value of Column 3, a difference value may be obtained. In this way, a discrepancy analysis may be performed to determine which skills superintendents rank highest in importance but lowest in level of possessed competence. The results of such a contrast are seen in Table 9.

Using this difference score, the assumption may be made that a high positive score will indicate that a specific skill has been rated low in terms of level of skill possessed and high in terms of relative importance. Such information should be of value to program planners, representing as it does the essence of the needs assessment. With this method, three specific skills statements produce substantial differential scores.

1. Ability to organize your time for maximum efficiency. This skill statement was ranked number 22 in terms of level of competence, but was rated as the third most important skill among practitioners.

Table 9.--Level of skill rankings contrasted with importance of skill rankings.[a]

Skill Level Rank		Skill Importance Rank		Difference Score	Skill Level Rank		Skill Importance Rank		Difference Score
1	-	1	=	0	22	-	3	=	19
18	-	16	=	2	6	-	5	=	1
2	-	10	-	-8	24	-	29	=	-5
4	-	8	=	-4	19	-	21	=	-2
12	-	12	=	0	20	-	18	=	2
17	-	17	=	0	23	-	22	=	1
9	-	11	=	-2	32	-	33	=	-1
7	-	13	=	-6	3	-	9	=	-6
10.5	-	6	=	4.5	25	-	30	-	-5
8	-	14	=	-6	28	-	26	=	2
15	-	15	=	0	33	-	28	=	5
14	-	7	=	7	29	-	24	=	5
13	-	19	=	-6	31	-	27	=	4
21	-	20	=	1	26	-	25	=	1
5	-	2	=	3	30	-	31	=	-1
10.5	-	4	=	6.5	27	-	32	=	-5
16	-	23	=	-7					

[a]Rankings taken from Columns 2 and 3 of Table 5, pp. 95-96.

2. Ability to inspire and influence subordinates through various motivational techniques. This skill area was rated among superintendents as fourteenth in terms of skills possessed but seventh in terms of importance to the performance of their jobs.
3. Ability to criticize performance of subordinates to affect positive change. This skill was ranked 10.5 (tie for tenth) in level of competence and fourth in importance.

It is possible to generalize from these rankings, and some conclusions will be drawn in Chapter V from these contrasts. What is intended, however, is to attempt to view the world of administration from the practitioner's perspective. Given such an intent, these rank orderings and contrasts should be taken at face value and interpretation of meaning must necessarily be limited. What is important is which skills practitioners possess and which ones they feel they need. Interpretation beyond ranking is purely speculative.

Research Question 4: Will the pattern of skills reported to be possessed by superintendents vary according to personal or organizational characteristics of the superintendent?

In order to investigate this question, one-way analysis of variance was used to compare the mean scores for various demographic subgroups in relation to summary skills categories. Thus, for example, the mean of the various age classifications in relation to planning skills is compared against the total planning mean to

determine if a significant difference exists for any subgroup. With an alpha level of .05, the Scheffe post hoc analysis was used to analyze the nature of any differences. Table 10 indicates the areas in which one-way analysis of variance shows a significant difference among subgroups.

Table 10.--Significant differences among demographic subgroups with respect to reported level of competence.

	Plan. (3.75)	Man. (3.63)	D-M (3.25)	Eval. (3.12)	Comm. (3.58)	Total (3.52)
Age	X	X				
Yrs. in Pos.			X			
Degree Status	X	X	X	X		X
First Supt.?						
Size		X	X			X
Wealth						
Pol. Subdiv.		X	X	X		X
Pol. Orient.						
Educ. Orient.						

Table 10 indicates that two demographic factors (one individual and one organizational) have an apparent effect on the pattern of skills possessed among respondents. Degree status subgroups show significant differences in all skills areas, except communicating skills, and political subdivision classifications show differences among subgroups in three of five areas.

Degree status subgroups show significant differences in terms of total skills possessed. Superintendents with masters degree status reported a mean level of skill of 3.33, significantly lower than those with the doctorate degree status who reported a mean level of skill at 3.68, and post-doctoral superintendents who report a 3.99 level of skill. This result is not surprising since higher levels of training should result in greater skill acquisition. We will have more to say about this in consideration of the influence of formal training on the development of skills (research question 6).

In addition to the fact that superintendents with higher degree status rated their overall level of skills significantly higher, there were also differences to be noted in terms of the percentage of those individuals who rated specific skills areas highly.

Table 11 illustrates the percentage of respondents, according to degree status, who rated their level of skill in each summary area to be high or very high.

It can be seen from Table 11 that respondents with the degree status doctorate and post-doctorate rated their evaluation skills substantially higher than the other degree status groups. In addition, as a general pattern, greater percentages of respondents reported higher levels of skills as the degree status increased.

In addition, Table 10 indicates that significant skills differences are found among degree status subgroups in all areas except communicating. With respect to planning skills, there are

significant differences only between the masters degree status vis-à-vis the post-doctoral respondents. That is, post-doctoral superintendents report their level of planning skill to be 4.16 while M.A. status superintendents report their level to be 3.57.

Table 11.--Percentage of degree status respondents rating skill levels high to very high.

Degree Status	H/VH Level Plan. Skill	H/VH Level Man. Skill	H/VH Level D-M Skill	H/VH Level Eval. Skill	H/VH Level Comm. Skill	Number of Respond.
Post-Doc.	83%	75%	58%	75%	75%	12
Doctorate	81%	70%	53%	44%	52%	64
Ed.S.	74%	63%	28%	22%	57%	86
Post-M.A.	77%	63%	25%	14%	53%	108
M.A.	62%	55%	18%	15%	48%	60
Less than M.A.	--	--	--	--	--	--

This appears to be true of the level of managing skills among superintendents also; however, the post-hoc analysis fails to define the exact nature of the difference. In terms of decision-making skills, the post-doctoral group reports a significantly higher level of skill than the M.A., post-M.A., and Ed.S. subgroups. And in the area of evaluating skills, the post-doctoral and doctoral groups report significantly greater competence than the M.A. group.

The organizational variable which produced the greatest differences in skills levels was political subdivision. In this area, the overall level of skills as well as managing, decision-making, and evaluating skills differed for specific political subdivision groups. While the one-way analysis of variance indicated significant differences among subgroups, the post-hoc analysis failed to identify the nature of those differences. Mean scores, however, in all cases showed metropolitan core and urban fringe respondents to report higher mean levels of skill than town and rural respondents.

In direct response to research question 4, the degree status of respondents is the greatest determinant to the level of skills. That is, in general, the more formal training reported, the greater the level of skill reported by respondents. In addition, the more urbane the school district, the higher levels of skill reported by respondents. Urban fringe and metropolitan school districts tend to require higher degree status among superintendents than rural and town districts which may account for the level of skills reported.

Whether or not an individual is in his first superintendency does not seem to affect his perceived level of skill in any area. In addition, neither the political orientation of the board (conservative-liberal), nor its educational orientation (traditional-progressive) is reported as having an effect on the perceived levels of skill in any category. Further, the relative wealth of the district does not produce subgroups of varying skill levels and the

number of years in position provides no substantial variation in any of the five skills areas.

> Research Question 5: Will the skills reported to be most important to superintendents vary according to environmental, personal, or organizational characteristics of the superintendency?

This question deals with those skills which superintendents reported as most important to them in the performance of their jobs. Again, one-way analysis of variance was used to compare mean scores reported by superintendents of various subgroups according to the demographic variables selected. Table 12 shows the demographic variables which included subgroups which produced statistically significant variations in the reported importance of the skills categories used. It can be seen from this table that, like the reported level of skill, degree status of respondents produces the greatest subgroup variation of any of the demographic variables employed. These variations occur in the areas of managing, decision making, evaluating, and overall importance of skills. In each case, the doctoral and post-doctoral degree levels ascribe greater importance to these skill areas than the other subgroups, while masters degree respondents perceive them to have less importance. No differences between degree status categories exist in terms of the reported importance of planning skills or communicating skills.

In terms of different age groups, some variations can be seen to exist in the areas of total importance of skills, planning skills, and managing skills. In each case, the exact nature of the differences is not evident, though the pattern seems to be similar for each skill classification. In all cases, the respondents in

the age groups between 45 and 55 rated these skills (planning and managing) more important than other age groups, and the respondents in the age group from 40 to 44 rated these skills at lower levels of importance. As in level of skill, no differences were reported by subgroups in the level of importance of skills when grouped according to years in position, whether or not this is the first superintendency, the political orientation of the board, or the educational orientation of the board. No systematic differences appear to occur according to any other demographic subgroup classification.

Table 12.--Significant differences among demographic subgroups with respect to reported importance of skill.

	Plan. (4.05)	Man. (4.01)	D-M (3.51)	Eval. (3.43)	Comm. (3.78)	Total (3.84)
Age	X	X				X
Yrs. in Pos.						
Degree Status		X	X	X		X
1st Supt.?						
Size			X			
Wealth			X	X		
Pol. Subdiv.			X		X	
Pol. Orient.						
Educ. Orient.						

There is a degree of similarity in the overall response pattern of level of skill perceived and the importance of skills in the performance of the job. It may be that superintendents who responded high on one skill in terms of the current level of competence responded high in relation to the perceived importance of that skill. Overall, importance levels were generally higher than competence levels, but the patterns did not appear to vary independently. Thus, skills were ranked in order of planning, managing, communicating, decision making, evaluating both in terms of current competency as well as importance. While the possibility of the contamination of importance responses by competency responses cannot be overlooked, the effect of such contamination would be to diminish the contrast which might exist between skills considered to be possessed and those considered to be important. Thus, such contrasts as do exist would of necessity be more marked by virtue of having survived the contamination. Those discussed in relation to research question 3 may be given greater validity by virtue of such effects.

The last three research questions have to do with the influence of formal training on the acquisition and importance of technical-managerial skills.

> Research Question 6: How important will top-level school managers perceive their formal training to have been in the acquisition of skills possessed?

Referring again to Table 5, pp. 95-96, the rank of influence of formal training in relation to each skill statement as well as each summary skill area may be found in Column 5. The overall

perception of respondents regarding the influence of their formal training on the development and acquisition of their skills is that it is comparatively low. That is, on a 1 to 5 scale, the overall rating of influence was 2.72. Rank ordered by mean, the influence of formal training in relation to summary skills is as follows:

1. Evaluating mean = 2.84
2. Planning mean = 2.74
3. Decision making mean = 2.69
4. Managing mean = 2.63
5. Communicating mean = 2.58

Thus, not only is the level of influence rated by respondents as low, but the pattern of skills is different from those perceived to be possessed or most important. Table 13 compares the mean response scores for each skill area in relation to each query of interest. Whereas evaluation skills were perceived to be possessed least and of least importance, these are the skills perceived to be most influenced by formal training. Thus, it would seem that training programs have their greatest perceived impact in the skill area, which is perceived to be least important to practitioners.

Table 13.--Mean scores of summary skills by level of skill, importance of skill, influence of formal training, and desire for further training.

	Skill Level	Skill Importance	Training Desire	Influence of Training
Planning	(3.75)	(4.05)	(3.51)	(2.74)
Managing	(3.63)	(4.01)	(3.54)	(2.63)
Decision making	(3.25)	(3.51)	(3.25)	(2.69)
Evaluating	(3.12)	(3.43)	(3.27)	(2.84)
Communicating	(3.52)	(3.78)	(3.37)	(2.58)
Totals	(3.52)	(3.84)	(3.43)	(2.72)

Because this research question was intended to describe the practitioner's view of his formal training with respect to the skills which he possesses, a contrast of rankings in these two dimensions was done. The same process of comparison was employed as that used in the discussion of research question 3 (page 100). That is, each individual skill statement was compared in terms of its ranking with respect to the current level of that skill and the influence of formal training in the development of that skill. The rank of influence was subtracted from the rank of skill level. Thus, a contrast wherein a high level of skill is perceived to have been influenced very little by formal training will result in a high negative number. Conversely, low levels of skill compared with high influence resulted in positive numbers. Table 14 shows the contrasts obtained from this process. Contrasts of interest from this table include those which show a high influence of formal training on high levels of skill, and high influence of formal training on low levels of skill.

Such items as "ability to identify and select alternative courses of action to achieve goals," which was ranked high in terms of current level and high in terms of influence of formal training, may indicate training areas which have been most beneficial to practitioners. Contrasts such as this are represented by either positive or negative numbers which approach zero, and tend to represent a measure of the appropriateness of training emphasis. Thus, "ability to make maximum use of data processing and computer technology" is reported by practitioners as the lowest ranking

Table 14.--Influence of formal training compared to current level of skill rankings.

Skill Level Rank		Rank of Influence of Training		Difference Score	Skill Level Rank		Rank of Influence of Training		Difference Score
1	-	6	=	-5	22	-	29	=	-7
18	-	9	=	-9	6	-	22	=	-16
2	-	28	=	-26	24	-	30.5	=	-6.5
4	-	15.5	=	-11.5	19	-	17	=	2
12	-	5	=	7	20	-	24	=	-4
17	-	11	=	6	23	=	30.5	=	-7.5
9	-	19	=	-10	32	-	10	=	22
7	-	19	=	-12	3	-	3	=	0
10.5	-	23	=	-13.5	25	-	4	=	21
8	-	7.5	=	0.5	28	-	19	=	9
15	-	32	=	-17	33	-	33	=	0
14	-	12.5	=	1.5	29	-	27	=	2
13	-	21	=	-8	31	-	24	=	7
21	-	14	=	7	26	-	25	=	1
5	-	12.5	=	-7	30	-	2	=	28
10.5	-	15.5	=	-5	27	-	1	=	26
16	-	26	=	-10					

skill in their repertoire. Similarly, it is reported to have been the least influenced by formal training. Respondents, it would seem, indicate by such rankings that, while this skill is not a product of their formal training, neither is it a skill that they have developed through experience or other means. It may, perhaps, then, be appropriate to assume that this particular skill has not represented a consistently salient need of practitioners. Similar findings may be observed regarding skills ranked number 6, 7.5, 12.5, 17, 24, 27, and 25 in column 5, Table 5, pp. 95-96.

Contrasts shown on Table 14 resulting in higher negative numbers may represent a much different perception among respondents. These contrasts result from a perception of high levels of skill compared with low levels of training influence. Thus, one might assume that the respondents felt needs were in areas not appropriately addressed by training programs. Again, Table 14 shows the contrast in rankings which are derived from columns 2 and 5 of Table 5.

That skill rated second in terms of current level of competency (column 2, Table 5) may be seen to rank twenty-eighth in terms of influence by formal training. "Ability to allocate limited resources to priority goals," it would seem, is a skill which respondents perceive themselves to have developed to a comparatively high degree with relatively little formal training assistance. Such contrasts as these may then represent areas in which formal training is inadequate either because of a lack of program emphasis, or because such skills may not lend themselves

to classroom teaching. Examination of these high negative contrasts may lead to support for both interpretations. That is, "ability to reduce conflict in favor of cooperation" and "ability to gain community acceptance for institutional goals" both show high negative contrasts. Though conflict resolution and public relations are popular areas of managerial training, no specific technological process has been identified which may be abstracted for teaching purposes and prescriptively generalized. Vague principles are taught and application is left to be determined by context. Such skills may not, therefore, be seen as having been "learned" in formal training, since the critical skill involved is the timely application of a vague principle which is dependent upon contextual circumstances. "Ability to predetermine the flow of activities and responsibilities within your organization" and "ability to locate and use available funding sources" may represent areas of training which are not as effective or as highly emphasized as they might be, thus resulting in low influence. A careful examination of these contrasts may provide program planners with valuable clues to perceived areas of training productivity. Depending upon the interpretation given to such contrasts, program emphasis may be altered to close the gap between perceived levels of skill and perceived influence of formal training.

Finally, contrasts between skills reported to be possessed least and influenced most by training may be seen. These contrasts result in high positive numbers and show the greatest differences of all contrasts considered. Thus, the skills reported as ranking

twenty-seventh, thirtieth, thirty-second, twenty-fifth, and twenty-eighth in current level of competence are rated first, second, tenth, fourth, and nineteenth in terms of influence of training. It is possible that training emphasis is perceived as being misplaced, with greatest areas of skill not being produced by training experiences.

Research Question 7: How important will top-level school managers perceive their formal training to have been in the acquisition of important skills?

This query is similar to research question 6, and is intended to describe the practitioner's perception of his formal training in regard to the skills most important in the performance of his job, regardless of his level of competence with those skills. Table 13, page 112, shows the mean summary responses for skill categories. A comparison of the influence of training with the level of importance produces the result shown in Table 15.

Table 15.--Rankings of skills' importance compared with rankings of influence of formal training.

Skills	Importance of Skill	Influence of Training
Planning	4.05	2.74
Managing	4.01	2.63
Decision Making	3.51	2.69
Evaluating	3.43	2.84
Communicating	3.78	2.58
Totals	3.84	2.72

As with the level of skill possessed, the influence of formal training is reported to be greatest for evaluation skills. These skills were reported to be of least importance to superintendents in the performance of their jobs.

Contrasts similar to those employed in research questions 3 and 4 may also be used here. These contrasts may be used to add information to that provided by prior contrasts. That is, it is possible to consider the additional factor of perceived importance of various skills as well as reported levels of competence when discussing the influence of formal training. Contrasts of this nature may be found in Table 16.

Skills reported to be of highest importance but influenced least by formal training result in high negative numbers. Those of low importance and high influence result in high positive numbers. Those approaching zero would seem to be most appropriately weighted according to the perceptions of practitioners.

Referring again to Table 5 (column 3 minus column 5), it can be seen that that skill ranked third in terms of importance is ranked twenty-ninth in terms of influence of formal training. Thus, it would seem that "ability to organize your time for maximum efficiency" is a skill which program planners may wish to consider for greater emphasis in training, since practitioners also report relatively low levels of competency in this area. "Ability to allocate limited resources to priority goals" was reported as a high competency skill of practitioners which was not seen as a product of formal training. This skill is also perceived to be of

Table 16.--Influence of formal training compared to importance of skill rankings.[a]

Skill Imp. Rank		Influence of Training Rank		Diff. Score	Skill Imp. Rank		Influence of Training Rank		Diff. Score
1	-	6	=	-5	3	-	29	=	-26
16	-	9	=	5	5	-	22	=	-17
10	-	28	=	-18	29	-	30.5	=	-1.5
8	-	15.5	=	-7.5	21	-	17	=	4
12	-	5	=	7	18	-	24	=	-6
17	-	11	=	8	22	-	30.5	=	-8.5
11	-	19	=	-8	33	-	10	=	23
13	-	19	=	-6	9	-	3	=	6
6	-	23	=	-17	30	-	4	=	26
14	-	7.5	=	6.5	26	-	19	=	7
15	-	32	=	-17	28	-	33	=	-5
7	-	12.5	=	-5.5	24	-	27	=	-3
19	-	21	=	-2	27	-	7.5	=	19.5
20	-	14	=	6	25	-	25	=	0
2	-	12.5	=	-10.5	31	-	2	=	29
4	-	15.5	=	-11.5	32	-	1	=	31
23	-	26	=	-3					

[a]Rankings taken from Columns 3 and 5 of Table 5, pp. 95-96.

relatively high importance (tenth). Accordingly, a skill of high importance, possessed by practitioners at a relatively high level, ought to be considered carefully by those who would provide training to school managers. Similar analysis of these contrasts may be done for high negative contrasts.

High positive contrasts would indicate areas of low importance which are most influenced by training experiences. Contrasts with numbers approaching zero indicate more appropriate training influences. Again, there seems to be a high negative correlation between those skills perceived to be of least importance and greatest training influences. The dual possibility exists that either (1) the most important skills of school managers do not readily lend themselves to formal training experiences, or (2) formal training experiences do not adequately address the most important skills required by school superintendents.

> Research Question 8: Will the perception of superintendents with regard to the influence of formal training in acquiring skills vary according to environmental, personal, or organizational characteristics of the superintendency?

This final question was formulated to attempt to discern whether the individual context in which the superintendent functions might have an impact on his perception regarding the influence of his formal training experiences.

One-way analysis of variance was used to analyze the responses, with the Scheffe post-hoc analysis used to define the specific nature of differences. Table 17 shows the demographic variables selected for consideration and the summary skills with which they were compared.

Table 17.--Significant differences among demographic subgroups with respect to influence of formal training.

	Plan. (2.74)	Man. (2.63)	D-M (2.69)	Eval. (2.84)	Comm. (2.58)	Total (2.72)
Age			X			
Yrs. in Pos.						
Degree Status			X	X		X
1st Supt.?						
Size						
Wealth						
Pol. Subdiv.				X		
Pol. Orient.						
Educ. Orient.						

Perhaps it is because of the overall low rating reported universally by respondents regarding the influence of formal training that so few significant variations are reported by subgroups. Wide general agreement, however, is apparent.

Only in degree status does any consistent variance occur in reported influence of formal training between subgroups. As with the reported importance of skills and the perceived level of skills, in general the higher the degree status the greater the perceived importance of formal training. This result was contradictory to the overall pattern of low influence of formal training found in consideration of overall mean scores in Table 13, page 112. That is, whereas the generally reported perception of respondents

is that formal training rates low in comparison to skills possessed and skills perceived as important, the population subgroups consistently report higher influences of training with greater acquisition of degree status. Such a finding may have implications for lower level degree programs which are consistently perceived as having less influence than higher level programs. No other factor produces subgroups which vary according to perceived influence of training.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

It was the purpose of this study to assess the perceptions which practicing superintendents have of their own management skills. Specifically, the skills of interest were those which the practitioner currently possesses and those which he perceives to be of most importance in the performance of his job. In addition, this study attempted to describe the perceived impact of formal training in the development of skills. This information was solicited as a vehicle to aid in the understanding of the practitioner's needs in terms of training either for pre-service or in-service preparation of school managers. Further, in pursuit of this end, superintendents were asked to respond in terms of those skills areas in which they would desire further training. Several conclusions have already been drawn in the treatment of the analysis of results in the preceding chapter. It was assumed that each of the areas of inquiry would be related and that results of each would support the others. This did, in fact, prove to be true. Superintendents generally perceived the skills which they possessed to be the skills which were most important in the performance of their jobs. In addition, the greater the level of skills possessed, the higher was the level of influence of formal training reported by the respondents.

It is important to note that the results of this study may only be used to provide a description of the practicing superintendent's view of his skills, and may not be safely assumed to represent a real measure of that skill. Accordingly, conclusions drawn from these data are interpreted only as indicators of possible areas of interest to planners of in-service or pre-service training functions. These results may act as red flags to alert such planners to general areas toward which to consider directing program goals. Specific implementation of program emphasis may take many forms and may include many individual skills for development. Those skills and skill categories included in this study served only for convenience of data reduction and analysis. Any user of this information should undertake a thorough understanding of the parameters of the terms utilized. Only in this way may contextual translations be reliably done.

The following conclusions are based upon the evidence obtained in this study. The inference is made that if the data are valid for superintendents who responded to the questionnaire, the data are also valid for superintendents in similar situations who did not respond.

1. <u>The skills which superintendents perceive themselves with the greatest degree of competence are planning skills</u>.

Respondents universally rated their competence highest in relation to planning skills. Seven of the ten highest ranked skills were from the group of statements defined as planning skills. The mean score for level of planning skill possessed was 3.75,

compared to managing (3.63), communicating (3.52), decision making (3.25), and evaluating (3.12). The highest rated planning skills were:

1. Ability to prepare an adequate financial plan.
2. Ability to allocate limited resources to priority goals.
3. Ability to predetermine the flow of activities and responsibilities within your organization.
4. Ability to gain subordinate acceptance for institutional goals.
5. Ability to identify community needs.

These skills, overall, rated 1, 2, 4, 7, and 8, respectively, in terms of skills possessed at highest levels of competence by respondents. The ranking of perceived competence may be used to describe the current skills situation. No attempt was made to determine cause and effect. Why certain skills appear to be more universally possessed than others may only by the subject of speculation in this study. The assumption is made, however, that these are the skills most used by superintendents and, therefore, represent the highest levels of competence.

2. The skills perceived to be possessed least by practitioners are evaluating skills and decision-making skills.

There was consistent agreement among all groups of superintendents in their rankings of the five skill areas. Evaluating skills and decision-making skills never failed to be rated lowest. All of the five statements defined as evaluating skills and four of the five decision-making statements were ranked in the bottom ten skills.

Because these skills involved handling and analyzing information for the purpose of problem solving or assessing effectiveness in a formal and scientific manner, a technology is implied with which respondents report less facility than other skills. Since all skills were rated at least moderate (3) or above in importance, these skills would seem to indicate a possible area of training need.

3. The superintendent's description of skills does not differ according to situational characteristics except by degree status categories.

In general, as degree status goes up, so too does reported skill level, skill importance, and influence of formal training. Despite this factor, descriptions of skills do not vary sufficiently to justify differential training needs for specific management situations of superintendents. It would seem that similar skills are required of those who must function in very different situations.

4. Specific skill areas which the needs assessment shows to be most problematic for superintendents are technologically vague.

Skills seen as having the greatest importance were also seen as being influenced least by formal training.

1. Ability to organize your time for maximum efficiency.
2. Ability to inspire and influence subordinates through various motivational techniques.
3. Ability to criticize performance of subordinates to affect positive change.

Superintendents perceive these skills to be important in the performance of their jobs but do not see them as developing out of formal training. The conclusion is that the essence of such skills may not be adequately taught in a classroom setting. At least, they are not perceived to be taught there. Nevertheless, program goals should take these concerns of practitioners into account since they represent those skills which are important to them. New training techniques and experiences should be devised which will improve the relevance of both pre-service and in-service programs.

The implications of this conclusion are that pre-service and in-service programs need to address with high priority the general areas of time management, personnel management, and techniques of supervision in new and more effective ways.

5. Program emphasis for training should be directed at closing the gap between high level skills with low training influence.

That is, skills reported to be possessed at high levels by superintendents were acquired somehow, either by formal training, job experience, or otherwise. Such skills which are also reported as having had little influence from formal training should be prime targets for program emphasis to increase the relevancy of such training. The assumption here is that skills possessed at high degrees of proficiency are those which have been developed out of practical need and ought, therefore, to be included in pre-service and/or in-service training. Skills thus identified include:

1. Ability to allocate limited resources to priority goals.
2. Ability to locate and use available funding sources.

3. Ability to reduce conflict in favor of cooperation.
4. Ability to gain community acceptance for institutional goals.
5. Ability to predetermine the flow of activities and responsibilities within your organization.

All but one of these skills (#3) are defined under the general classification of planning skills. Because planning skills were identified as those perceived to be most important in the performance of the superintendent's job, developing training objectives in this area would seem most appropriate.

6. Re-evaluation of training emphasis and practices may need to be done in relation to areas of high training influence but low skill competency.

Superintendents generally reported higher influence of training in the areas of evaluation skills and decision-making skills. These skills were those reported to be the lowest competencies of superintendents. The conclusion is that such skills may not be those most called upon by practitioners. This conclusion is supported by the ratings of skills which are considered most important in the performance of the job. Those skills rated twenty-seventh, thirtieth, thirty-second, and twenty-fifth in level of proficiency were also rated thirty-second, thirty-first, thirty-third, and thirtieth, respectively, in terms of importance. These skills, however, represented the areas of greatest perceived influence of formal training. Thus, formal training was generally perceived to result in comparatively low levels of skill in areas

which are comparatively unimportant. The specific skills in question are:

1. Ability to understand and use appropriate sampling procedures.
2. Ability to understand and use statistical analysis procedures.
3. Ability to use theoretical principles of complex organizations.
4. Ability to use formal methods of gathering opinions and judgments.
5. Ability to make maximum use of management information systems.

Program planners must decide the philosophical question as to whether such skills are truly important to practitioners even though they may not be called upon to use them very often or have little proficiency in their use. Viewed from the perspective of most practitioners, such skills do not appear to represent prime targets for emphasis. It should, however, be noted that those superintendents who possess such skills rate their value higher than those who do not. It would seem that higher levels of training result in greater competence with such "research" skills and that, conversely, lower levels of training do not produce proficiencies sufficient to be regarded as important. It is suspected from this study that the process is a circular one, whereby practitioners use the skills they have and perceive these skills to be most important. Thus, the development of new skills should change

the reported skills of importance. This conclusion is borne out by the apparent effects of degree status on the perceptions of respondents.

7. Superintendents desire further training most in the areas of managing and planning skills.

Ranked by mean score in terms of desire for further training, the ordering of skills categories occurred as follows:

1.	Managing	mean = 3.54
2.	Planning	mean = 3.51
3.	Communicating	mean = 3.37
4.	Evaluating	mean = 3.27
5.	Decision making	mean = 3.25

Specifically, time management was named as the area in which most superintendents were desirous of further training. This skill was also rated as the third most important skill while being reported as relatively low (twenty-second) in terms of competency possessed.

It seems apparent that skills which involve specific technologies such as statistical analysis procedures, computer utilization and data processing, management information systems, sampling procedures and those having to do with the gathering, processing, and evaluating of information are perceived to be most directly attributable to the influence of formal training. In general, however, those skills involving a more vague technological base such as conflict resolution, community relations, and goal-setting skills are not seen as having been developed primarily through formal training. The inference is that such skills have not been adequately adapted to the classroom to be seen as being primarily learned there. Such learning must be the product of experience

which may not be abstracted for the purpose of teaching in a setting other than its situation-specific context. While one may talk about the process of developing individual potential for positions of responsibility, one cannot do it in a classroom or in a workshop. Those skills perceived by superintendents as the most important skills were not the same skills which they perceived to have been developed through formal training.

One interpretation of this phenomenon is, of course, that formal training programs do not provide the administrator with important skills, that the really important skills are learned only through practical experience. An alternative conclusion is that the skills considered by practitioners to be important are not necessarily the same skills which make them effective and efficient managers of the educational enterprise. What has been most problematic for superintendents in recent years has been survival. Skills which allow the individual to survive in a largely political, often emotional, generally nonrational milieu may, in fact, not be skills which can be learned in any other way but by experience.

It is left to the individual to decide which skills he will need to develop, survival skills or managerial skills. It is left to the in-service and pre-service program planner to decide which emphasis to provide in training. The evidence of this study appears to indicate that current training emphasis is not perceived to meet the skill development needs of most superintendents which are

largely survival rather than efficiency needs. The question to be resolved is, should training emphasis change or should management emphasis change?

APPENDIX

PEARSON CORRELATION MATRICES

APPENDIX

PEARSON CORRELATION MATRICES

PLANNING: LEVEL OF SKILL

	016	040	044	056	068	076	084	088	108	128	140
016		.51	.46	.54	.47	.46	.36	.41	.30	.43	.38
040			.44	.63	.50	.51	.26	.38	.32	.41	.40
044				.43	.42	.38	.28	.37	.19	.33	.26
056					.47	.52	.32	.38	.33	.37	.43
068						.48	.29	.39	.29	.40	.36
076							.31	.39	.32	.33	.45
084								.51	.52	.57	.48
088									.54	.61	.56
108										.49	.48
128											.59
140											

PLANNING: INFLUENCE OF FORMAL TRAINING

	017	041	045	057	069	077	085	089	109	129	141
017		.49	.42	.45	.51	.52	.38	.44	.41	.43	.37
041			.55	.61	.49	.46	.36	.42	.37	.40	.39
045				.49	.46	.42	.33	.40	.38	.36	.41
057					.53	.58	.36	.46	.45	.43	.40
069						.63	.34	.46	.42	.47	.39
077							.41	.51	.47	.42	.45
085								.50	.55	.45	.43
089									.54	.56	.49
109										.53	.51
129											.62
141											

PLANNING: IMPORTANCE OF SKILLS

	018	042	046	058	070	078	086	090	110	130	142
018		.44	.38	.47	.43	.48	.23	.29	.25	.29	.34
042			.49	.54	.46	.47	.29	.36	.34	.38	.44
046				.45	.41	.47	.29	.41	.30	.33	.36
058					.51	.57	.26	.33	.30	.30	.37
070						.53	.29	.34	.27	.35	.39
078							.26	.41	.37	.29	.42
086								.51	.59	.48	.54
090									.57	.57	.67
110										.53	.61
130											.66
142											

PLANNING: DESIRE FOR FURTHER TRAINING

	019	043	047	059	071	079	087	091	111	131	143
019		.50	.49	.52	.49	.48	.32	.37	.28	.39	.42
043			.60	.69	.57	.64	.40	.51	.40	.51	.51
047				.59	.54	.57	.43	.50	.40	.48	.51
059					.54	.62	.40	.54	.41	.51	.49
071						.58	.45	.43	.37	.50	.45
079							.36	.56	.43	.56	.55
087								.58	.58	.58	.51
091									.54	.65	.67
111										.55	.55
131											.63
143											

MANAGING: LEVEL OF SKILL

	028	048	072	080	092	112	116	124	144
028		.57	.50	.33	.35	.36	.40	.44	.34
048			.47	.31	.38	.32	.43	.45	.27
072				.37	.41	.50	.37	.41	.36
080					.26	.30	.25	.32	.19
092						.51	.56	.59	.45
112							.60	.60	.55
116								.61	.48
124									.52
144									

MANAGING: INFLUENCE OF FORMAL TRAINING

	029	049	073	081	093	113	117	125	145
029		.57	.49	.39	.41	.33	.43	.40	.39
049			.46	.42	.43	.39	.46	.47	.36
073				.62	.45	.46	.50	.45	.42
081					.37	.35	.36	.39	.31
093						.53	.61	.55	.45
113							.66	.54	.48
117								.63	.51
125									.53
145									

MANAGING: IMPORTANCE OF SKILLS

	030	050	074	082	094	114	118	126	146
030		.57	.33	.19	.30	.37	.41	.40	.44
050			.38	.24	.32	.32	.42	.40	.41
074				.35	.30	.35	.26	.30	.25
082					.27	.27	.19	.20	.17
094						.60	.60	.58	.55
114							.60	.62	.62
118								.70	.67
126									.72
146									

MANAGING: DESIRE FOR FURTHER TRAINING

	031	051	075	083	095	115	119	127	147
031		.56	.47	.43	.37	.38	.49	.46	.45
051			.55	.52	.51	.43	.54	.49	.52
075				.52	.51	.53	.49	.44	.45
083					.48	.44	.44	.41	.37
095						.65	.64	.61	.58
115							.64	.61	.55
119								.66	.68
127									.59
147									

DECISION MAKING: LEVEL OF SKILL

	032	036	052	096	132
032		.34	.37	.35	.33
036			.40	.38	.19
052				.36	.17
096					.48
132					

DECISION MAKING: INFLUENCE OF FORMAL TRAINING

	033	037	053	097	134
033		.45	.48	.43	.35
037			.48	.38	.22
053				.38	.32
097					.45
134					

DECISION MAKING: IMPORTANCE OF SKILLS

	034	038	054	098	135
034		.26	.38	.31	.12
038			.46	.33	.15
054				.28	.16
098					.44
135					

DECISION MAKING: DESIRE FOR FURTHER TRAINING

	035	039	055	099	136
035		.46	.47	.39	.19
039			.56	.46	.23
055				.38	.25
099					.47
136					

EVALUATING: LEVEL OF SKILL

	020	024	104	120	136
020		.49	.18	.32	.32
024			.29	.41	.36
104				.58	.54
120					.57
136					

EVALUATING: INFLUENCE OF FORMAL TRAINING

	021	025	105	121	137
021		.64	.34	.43	.35
025			.30	.42	.35
105				.64	.61
121					.60
137					

EVALUATING: IMPORTANCE OF SKILLS

	022	026	106	122	138
022		.51	.23	.22	.30
026			.27	.35	.38
106				.53	.62
122					.61
138					

EVALUATING: DESIRE FOR FURTHER TRAINING

	023	027	107	123	139
023		.61	.33	.30	.31
027			.36	.41	.32
107				.56	.62
123					.56
139					

COMMUNICATING: LEVEL OF SKILL

	060	064	100
060		.56	.31
064			.33
100			

COMMUNICATING: INFLUENCE OF FORMAL TRAINING

	061	065	101
061		.62	.35
065			.48
101			

COMMUNICATING: IMPORTANCE OF SKILLS

	062	066	102
062		.65	.41
066			.39
102			

COMMUNICATING: DESIRE FOR FURTHER TRAINING

	063	067	103
063		.69	.40
067			.52
103			

BIBLIOGRAPHY

BIBLIOGRAPHY

American Association of School Administrators. Staff Relations in School Administration. Washington, D.C.: AASA, 1955.

Argyle, Michael. "The Relay Assembly Test Room in Retrospect." Occupational Psychology 27 (1953).

Argyris, C. Personality and Organization. New York: Harper, 1957.

Back, Kurt W. Beyond Words. New York: Russell Sage Foundation, 1972.

Bales, R. F. "The Equilibrium Problem in Small Groups." In Working Papers in the Theory of Action. Edited by T. Parsons, R. F. Bales, and E. A. Shills. New York: The Free Press of Glencoe, 1933.

Barnard, Chester I. The Functions of the Executive. Cambridge, Mass.: Harvard University Press, 1938.

Bateman, E. A. Development of the County-Unit School District in Utah. New York: Bureau of Publications, Teachers College, Columbia University, 1940.

Bavelas, A. "Leadership: Man and Function." Administrative Science Quarterly 4 (1960).

Benne, K. D., and Sheats, P. "Functional Roles of Group Members." Journal of Social Issues 4 (Spring 1948).

Bennis, Warren G. Changing Organizations. New York: McGraw-Hill, 1966.

Blake, R. R., and Mouton, Jane S. The Managerial Grid. Houston: Gulf Publishing Company, 1964.

Brayfield, Arthur H., and Crockett, Walter H. "Employee Attitudes and Performance." Psychological Bulletin 52,5 (1955).

Burbank, Natt B. Superintendent of Schools. Danville, Illinois: Interstate Printers, Inc., 1968.

Callahan, Raymond E. Education and the Cult of Efficiency. Chicago: University of Chicago Press, 1962.

Campbell, Roald F. "The Changing Role of the Superintendent." Contemporary Education 39 (May 1968).

_____. Superintendency of Schools. Danville, Illinois: Interstate Printers, Inc., 1968.

_____; Bridges, Edwin M.; Corbally, John E.; Nystrand, Raphael O.; and Ramseyer, John A. Introduction to Educational Administration. Boston: Allyn and Bacon, Inc., 1971.

Campbell, Roald F.; Cunningham, Luvern L.; and McPhee, Roderick F. The Organization and Control of American Schools. Columbus, Ohio: Merrill, 1965.

Campbell, R. F., and Gregg, R. I., eds. Administrative Behavior in Education. New York: Harper and Row, 1957.

Carey, Alex. "The Hawthorne Studies: A Radical Criticism." American Sociological Review 32 (June 1967).

Coladarci, A. P., and Getzels, J. W. The Use of Theory in Educational Administration. Stanford, California: Stanford University Press, 1955.

Coleman, James, et al. Youth: Transition to Adulthood. Report of the Panel on Youth of the President's Science Advisory Committee. Chicago: University of Chicago Press, 1974.

Cook, Desmond L. Educational Project Management. Columbus, Ohio: Charles E. Merrill Publishing Co., 1971.

Educational Policies Commission of the National Education Association and The American Association of School Administrators. "The Unique Role of the Superintendent of Schools." Washington, D.C.: 1965.

Fayol, Henri. General and Industrial Management. Translated from French edition (Durod) By Constance Stours. London: Pittman Co., 1949.

Fultz, David A. "A Study of the Reasons Why Michigan School Superintendents Were Dismissed or Encouraged to Leave Their Positions Between 1965 and 1975. Ph.D. dissertation, Michigan State University, 1975.

Gardner, John. Self Renewal. Evanston, Illinois: Harper, 1963.

Gilland, Thomas. The Origin and Development of the Powers and Duties of the City Superintendent. Chicago: University of Chicago Press, 1935.

Goldhammer, Keith; Aldreidge, William; Suttle, John; and Becker, Gerald. Issues and Problems in Contemporary Educational Administration. Eugene, Oregon: University of Oregon Press, 1967.

Gouldner, A. W. Studies in Leadership. New York: Harper and Row, 1950.

Gregg, Russell T. "The Administrative Process." In Administrative Behavior in Education. Edited by Roald F. Campbell and Russell T. Gregg. New York: Harper, 1957.

Griffiths, Daniel E. "Administration as Decision-Making." In Administrative Theory in Education. Edited by Andrew W. Halpin. Chicago: Midwest Administration Center, The University of Chicago Press, 1958.

_____. Administrative Theory. New York: Appleton-Century-Crofts, 1959.

Gulick, L., and Urwick, L., eds. Papers on the Science of Administration. New York: Columbia University, Institute of Public Administration, 1937.

Haire, M. "Industrial and Social Psychology." In Handbook of Social Psychology. Edited by G. Lindzey. Cambridge: Addison-Wesley, 1954.

Halpin, Andrew W., ed. Administrative Theory in Education. Chicago: Midwest Administration Center, University of Chicago Press, 1958.

_____. "The Leadership Behavior and Combat Performance of Airplane Commanders." Journal of Abnormal and Social Psychology 49 (1954).

Hart, Deborah. "Conference Report." UCEA Review 17 (October 1975). Columbus, Ohio: University Council for Educational Administration.

Hay, Clyde L. The Blind Spot in American Public Education. New York: Macmillan and Co., 1950.

Hemphill, J. K. A Proposed Theory of Leadership in Small Groups. Columbus: The Ohio State University, Personnel Research Board Technical Report, 1954. (Unpublished.) In Stogdill, Ralph M. Handbook of Leadership. New York: The Free Press, 1959.

Homans, G. C. The Human Group. New York: Harcourt, Brace, 1950.

Huff, Russell J. "How Superintendents See Themselves." Nation's Schools 84 (November 1969).

Hulin, Charles L., and Blood, Milton R. "Job Enlargement, Individual Differences, and Worker Responses." Psychological Bulletin 69,1 (1968).

Innaccone, Laurence. Politics in Education. New York: The Center for Applied Research in Education, 1967.

Kahn, R. L., and Datz, D. "Leadership Practices in Relation to Productivity and Morale." In Group Dynamics. Edited by D. Cartwright and A. Zander. New York: Harper and Row, 1960.

Koopman, Robert G.; Miel, Alice; and Misner, Paul J. Democracy in School Administration. New York: Appleton-Century-Crofts, Inc., 1943.

Korman, Abraham K. "Consideration, 'Initiating Structure,' and Organizational Criteria--A Review." Personal Psychology 19,4 (1966).

LaPiere, R., and Farnsworth, P. R. Social Psychology. New York: McGraw-Hill Book Co., 1963.

Lawler, Edward E. III, and Porter, Lyman W. "The Effect of Performance on Job Satisfaction." Industrial Relations 7 (October 1967).

Lieberman, M.; Yalom, I.; and Miles, M. "The Group Experience Project: A Comparison of Ten Encounter Technologies." In Encounter: Confrontations in Self and Interpersonal Awareness. Edited by L. Blank, G. Gottsegen, and M. Gottsegen. New York: Macmillan, 1971.

Likert, Rensis. New Patterns of Management. New York: McGraw-Hill, 1961.

Litchfield, Edward. "Notes on a General Theory of Administration." Administrative Science Quarterly (June 1956).

March, J. G., and Simon, H. A. Organizations. New York: Wiley, 1958.

McGregor, Douglas M. The Human Side of Enterprise. New York: Wiley, 1958.

Meiklejohn, Alexander. Education Between Two Worlds. New York: Harper, 1942.

Michigan Department of Education. "Superintendent Turnover Averages Nine Percent Annually." January, 1975.

Mooney, J. D., and Reily, A. C. The Principles of Organization. New York: Harper, 1939.

National Council of Professors of Educational Administration. CCBC Notebook. Committee for Competency Based Curriculum in Educational Administration, 1972.

Newman, William H. Administrative Action. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1950.

Odiorne, G. S. "The Trouble With Sensitivity Training." Training Director's Journal 17,10 (1963).

Perrow, Charles. Complex Organizations. Glenview, Illinois: Scott, Foresman and Co., 1972.

Pierce, Paul R. The Origin and Development of the Public School Principalship. Chicago: University of Chicago Press, 1934.

Reddin, William J. Managerial Effectiveness. New York: McGraw-Hill Book Company, 1970.

Reller, Theodore L. The Development of the City Superintendency of Schools in the United States. Philadelphia: Published by the author, 1935.

Roethlisberger, F. J., and Dickson, William J. Management and the Worker. Cambridge, Mass.: Harvard University Press, 1941.

Sears, Jesse B. The Nature of the Administrative Process. New York: McGraw-Hill, 1950.

Shartle, G. L. Executive Performance and Leadership. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1956.

Sheldon, Oliver. The Philosophy of Management. London: Pittman Co., 1923.

Simon, Herbert A. Administrative Behavior. New York: The Macmillan Co., 1945.

Smith, M. "Personality Dominance and Leadership." Sociology and Social Research 19 (1934).

Stock, Dorothy. "A Survey of Research on T-Groups." In T-Group Theory and Laboratory Method. Edited by L. P. Bradford, J. R. Gibb, and K. D. Benne. New York: Wiley, 1964.

Stogdill, R. M. Handbook of Leadership: A Survey of Theory and Research. New York: The Free Press, 1974.

_____. Individual Behavior and Group Achievement. New York: Oxford University Press, 1959.

_____, and Coons, A. E., eds. Leader Behavior: Its Description and Measurement. Columbus, Ohio: The Ohio State University Bureau of Business Research, 1957.

Suzzallo, Henry. The Rise of Local Supervision in Massachusetts. New York: Columbia University, 1906. In Wever, Christian. Basic Philosophies of Education. New York: Holt, Rinehart, and Winston, 1960.

Taylor, Frederick W. "The Principles of Scientific Management." In Scientific Management. New York: Harper and Row, 1947.

Toffler, Alvin. Future Shock. New York: Random House, Inc., 1970.

Weber, Max. The Theory of Social and Economic Organization. Translated by A. M. Henderson and Talcott Parsons. Oxford University Press, 1947.

Wilensky, Harold. "Human Relations in the Workplace." In Research in Industrial Human Relations: A Critical Appraisal. Edited by Conrad Arensberg et al. New York: Harper, 1957.