A MODEL FOR ELECTRONIC LINKAGE OF ORGANIZATIONAL COMMUNICATION IN LARGE HIGH SCHOOLS

A Dissertation
Presented to
The School of Graduate Studies
Drake University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Joseph M. Pacha
September 1986
A MODEL FOR ELECTRONIC LINKAGE OF
ORGANIZATIONAL COMMUNICATION IN
LARGE HIGH SCHOOLS

by

Joseph M. Pacha

Approved by Committee:

James Halvorsen, Chair

Charles Greenwood

Douglas Hillman

Dr. George S. Lair, Dean
Graduate School of Education and Human Services
A MODEL FOR ELECTRONIC LINKAGE OF ORGANIZATIONAL COMMUNICATION IN LARGE HIGH SCHOOLS

An abstract of Dissertation by
Joseph M. Pacha
September 1986
Drake University
Advisor: James Halvorsen

The problem. The problem of this study was to investigate the organizational communication models of large high schools. The purpose was to develop a model for electronic linkage of organizational communication in large high schools.

Procedure. A thorough review of the literature in 1) management and educational administrative theory, 2) educational administrative communication theory, and 3) organizational communication theory, was conducted in order to determine what administrative communication or organizational communication models existed for use by practicing educational administrators of large high schools (defined as schools with enrollments with 1000 or more students). Since no adequate models were found, the relatively new field of Organizational Communication was studied for the purpose of finding models in management that could be adapted for use in the educational setting. Using information, models, and ideas from the Organizational Communication field, the Model for Electronic Linkage of Organizational Communication in Large High Schools (ELOC Model) was developed.

Findings. The ELOC Model uses the physical linkage of computer networking as its' basis for completing organizational communication. Schools have daily repetitive communication events such as attendance, grading, scheduling, discipline, and announcements which the model addressed. Since each teacher acts as a middle manager in large high schools, the computer linkage allows communication to and between any staff member and the administration. Other organizational communication uses or functions are: 1) organizational functions such as curriculum, testing, activities, budget, and personnel uses; 2) communication both formally and informally; 3) human input of information for the organizations goals. The ELOC Model also addressed twelve organizational communication problems prevalent in most organizations, showing how it could eliminate each of the twelve.

Conclusions and Recommendations. The ELOC Model has promise as a means of solving the organizational communication needs of large high schools. The model must be implemented and evaluated before any conclusions can be drawn. However, large high schools are large organizations and as such must move from the bureaucratic age to the information age. The Model for Electronic Linkage of Organizational Communication in Large High Schools is a total environment organizational communication model adapted to the structure and needs of large high schools and can be continually expanded as technology expands our environments and communication capabilities.
# Table of Contents

List of Figures and Tables ................................................. iv

Chapter

1. **Introduction** .......................................................... 1
   Statement of the Problem ............................................. 3
   Purpose of the Study ............................................... 4
   Definition ........................................................................ 4
   Introduction to Subsequent Chapters .............................. 4

2. **Survey of Related Literature** .................................... 7
   Management and Educational Administration .................. 7
   Educational Administration Communication Theory ........ 43
   Organizational Communication ...................................... 77
   Conclusions ................................................................. 98

3. **A Model for Electronic Linkage of Organizational**
   **Communication in Large High Schools** ....................... 102

4. Evaluation ................................................................. 124

5. Conclusions ............................................................... 130
   Implications .................................................................... 132

BIBLIOGRAPHY ............................................................... 133
List of Figures and Tables

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Maslow's Hierarchy of Needs</td>
<td>19</td>
</tr>
<tr>
<td>2. Laswell Model of Communication</td>
<td>57</td>
</tr>
<tr>
<td>3. Modified Laswell Model of Communication</td>
<td>58</td>
</tr>
<tr>
<td>4. Modified Shannon Weaver Information Theory Model</td>
<td>58</td>
</tr>
<tr>
<td>5. Modified Weiner / Berlo Model of Communication</td>
<td>59</td>
</tr>
<tr>
<td>6. Completed Model of Communication</td>
<td>60</td>
</tr>
<tr>
<td>7. The Organizational Communication System</td>
<td>88</td>
</tr>
<tr>
<td>8. Internal System of Organizational Communication</td>
<td>95</td>
</tr>
<tr>
<td>9. Electronic Linkage of Organizational Communication in Large High Schools</td>
<td>112</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tables</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Motivation and Hygiene Factors</td>
<td>25</td>
</tr>
<tr>
<td>2. Communication Contingencies</td>
<td>93</td>
</tr>
</tbody>
</table>
CHAPTER I
Introduction

Large high schools are large organizations. The essence of any large organization is its ability to communicate within and outside of itself. "Communication is the critical process in organizations because organizations consist of people who spend the majority of their time communicating."¹

Some writers believe that interpersonal communication by the principal is the major contributing factor to high school organizational success. Communication is one of the chief concerns of secondary school principals, and they recognize that effective communication is a key to their success as administrators.²

Others such as Abrell, speak of communication in a high school organization as a vague system. "Successful communication by frontline administrators is the very warp and woof of a productive educational organization. In fact, some people believe that communication and leadership are practically synonymous. Managing, motivating,


persuading, facilitating, and helping are largely dependent upon the successful flow of communication.¹

But what is communication? Webster's Third New International Dictionary defines communication as, "the act or action of imparting or transmitting; information communicated; a verbal or written message; a process by which information is exchanged between individuals through a common system of symbols, signs, or behavior."² Shirley Boes Neill writing for the National Association of Secondary School Principals describes communication as "the process in human relations of passing information and understanding from one person to another."³

Communication is one of those concepts which assumes different meanings depending upon the context of use. Dance reviewed a large body of literature and found 15 separate definitions of the term "communication" which in his estimation, represented 15 distinct underlying conceptual themes ranging from power to understanding. We define communication as the interaction of one or more humans where information is exchanged that ultimately has meaning to the participants.

Effective communication in large high schools has long been identified as a problem. The study of administrative communication... reveals a minimal amount of research related to the process of administrator communication and the skills which underlie the process.⁵

---

⁴ Culnan and Bair, p. 216.
Furthermore most large high schools operate with narrow, faulty, one-way channels of communication.¹

Because large high schools are typically flat organizations, communication within the organization is difficult.² For the principal and all staff members to communicate on a daily basis is nearly impossible. To elicit input from all staff members many times takes days. First the message must be planned. The medium for disseminating the message must be developed and put into motion. Time must be given for receipt of the message, evaluation, and return of the response desired. Then the responses must be tabulated and formulated into an overall response. This is not a very effective or efficient method of communication. Perhaps this is why Kusimo and Erlandson say that "most attempts by subordinates to shape policy are in private communication with the leader. As a result, organizational policy often is a result of sequential, sometimes conflicting, decisions that are made in response to the demands of particular areas of responsibility rather than to the needs of the organization as a whole."³

Statement of the Problem

The organizational communication needs of large high schools must be improved. Can a model for electronic linkage of Organizational Communication in large high schools be developed to meet the organizational communication needs of large high schools?

² Kusimo and Erlandson, p. 18.
³ Ibid., p. 18.
Purpose of This Study

It is the purpose of this study to create a model for electronic linkage of organizational communication in large high schools.

Definitions

1) The term "interactive computer system" refers to a network of linked computers that have the capability to communicate with each other through software similar to electronic mailing.

2) The term "organizational communication" is defined as:

an interchange of information between systems or parts of systems where: (1) output information from one or several control systems causes work processes in one or several other control systems, and (2) the communication process interfaces organizational systems in different contingencies, so that they are able to function as a social system in a compatible and coordinated fashion to achieve organizational and individual goals.

3) The term "large high school", shall refer to high schools with enrollments larger than 1,000 students.

Introduction to Subsequent chapters

The discussion of a model for electronic linkage of organizational communication in large high schools (ELOC) commences with Chapter II with a review of the literature of: 1) management and educational administration theory, 2) educational administrative communication theory, and 3) organizational communication theory.

Why have an overview of management and educational administration theory? Educational administration theory is heavily based upon and influenced by management theory, practices, and principles. In order to

---

better understand educational administration it must be viewed in light of its sources. The overview of management theory will also help establish the role of communication in large organizations. The knowledge obtained concerning communication can be used to establish the relevance and practicality of the ELOC model.

A review of the literature of educational administrative communication theory will provide the research background and knowledge base for the exposition of a model for electronic linkage of organizational communication in large high schools. With that knowledge the model will have a basis of information and a research background that will establish its functionality, practicality, and need.

Finally an overview of organizational communication will be used for the knowledge base that it can contribute to the ELOC model. Because of the relative newness of this field of study, its timely research, studies, and knowledge certainly must be included in any organizational communication study.

With the review of the literature providing a base of information and knowledge Chapter Three will show the basis in need and will develop the model for electronic linkage of organizational communication in large high schools (ELOC). The ELOC model will be supported from communication theory, organizational communication, high school organization, and management theory. The model will then be used to address organizational communication needs and problems found in most large high schools.

Chapter Four will present a methodology for evaluating the ELOC model. Ethnographic studies will be described and their relation to the evaluation of the model will be discussed. How an ethnographic evaluation could be conducted to evaluate the ELOC model will also be
presented.

Chapter Five will present the conclusions drawn from the model and make recommendations for further study in this new area of study.
CHAPTER II

Survey of Related Literature

In this chapter literature and research will be reviewed in relationship to three major areas related to the model: 1) management and educational administration theory, 2) educational administration communication theory, and 3) organizational communication. The ELOC model must be viewed from an overall organizational perspective and it is for this reason that these three areas must be reviewed in order to show the development and background upon which the model is based.

Management and Educational Administration

An understanding of an organizational communication model for large high schools can only be envisioned through a knowledge and understanding of the background of educational communication theory and educational administration theory. These in turn are based upon management theory. Therefore a brief overview of management and educational administration theory will be presented as the cornerstone for understanding educational administration communication theory and its business correlate organizational communication theory.

Management theory has evolved from the writings of various individuals especially in the last century. Today's management theorists group these writers into three schools or groups of scholars who share a common viewpoint about organizational behavior. These three
The Scientific Management School originated in 1911 and was popular until the 1930s; the Human Relations School then predominated until the 1960s, when the Systems School became preeminent. While each of the first two approaches to organizational theory had its "day," neither has faded completely from sight nor been completely replaced by the school that followed it. In fact, there are still followers of the Scientific Management School today, and the Human Relations School has by no means been made completely obsolete by the Systems viewpoint. Indeed, each of the earlier schools had a strong influence on the now-dominant Systems School.

Educational Administration theory has its foundations in management theory. Almost all of the best known textbooks in educational administration review for the reader management theory in treating the historical development of views of the worker in the organization and of organizational management theory.

The major contributors to the Scientific Management School are Frederick Taylor, Henri Fayol, and Max Weber. In 1911 Frederick Taylor published his influential book entitled Scientific Management. His major premise was that work operations could be broken down analyzed and then the best possible method devised to complete the work in the most efficient and effective manner. His book describes the five basic principles of Scientific Management:

1. To gather all traditional knowledge and classify,"

---


2 Ferguson and Ferguson, pp. 2-3.

tabulate, and reduce it to rules, laws, and formulas so as to help workers in their daily work.

2. To develop a science for each element of man's work to replace the rule-of-thumb method.

3. To scientifically select and then train, teach, and develop the worker.

4. To cooperate with workers to ensure that work is done according to developed scientific principles.

5. To effect an almost equal division of work and responsibility between workers and managers; that is, managers are to be given work for which they are best fitted, as are employees.

Taylor believed that each worker was basically irrational but with the proper training and monetary rewards the worker could be developed to maximum potential.

The function of the manager or leader under Scientific Management was to set up and enforce performance criteria to meet the goals of the company or organization. The main focus was on the needs of the organization and not the needs of the individual.

Frederick Taylor had little to say about communication since his emphasis was on organizational structure and individual worker behavior. To Taylor, communication was formal, hierarchial, and planned. Its purpose was to get the work done, increase productivity, and to increase efficiency. Taylorism viewed communication as one-sided, vertical (top-down), and task related.

What effects did Taylor's work have upon educational administration? Certainly administrators were also looking for

---


punctuality, standardization of work, specialization, and efficiency. During this time period large high schools were being established in many larger cities. Efficiency was established by maintaining large class sizes of specialized subjects. One teacher taught several groups of students or sections of the same subject—thus greater efficiency, less planning was needed, standardization of work was achieved, and time standards could be maintained. The beginnings of the modern high school organization came into being. Management theory in education took its cues from private business which was experiencing change at a faster rate than were the traditional school.¹

About the same time that Taylor was being recognized in America for his book on Scientific Management, Henri Fayol was writing in France. His book entitled Administration Industrielle et Generale was published in 1916. In it he described what he considered to be his five tasks of management: 1) planning - developing the strategy of the organization to achieve its goals through the assessment of markets, economy, labor, and materials; 2) organizing - combining the materials, labor, and equipment to efficiently achieve the goals of the organization; 3) commanding - carrying out the goal-oriented activity of the organization; 4) coordinating - unifying the efforts of the organization; 5) controlling - seeking compliance with the rules and procedures of the organization.

Fayol concentrated his efforts on explaining the workings of the administrative levels of the organization. He maintained that it was possible to devise a set of principles of administration that could be universally applied in order to improve the practice of management. As a result of his belief and study (conducted primarily in the coal mining

¹ Jon Wiles and Joseph Bondi, Principles of School Administration (Columbus, Oh.: Charles E. Merrill, 1983), p. 10.
industry), Fayol formulated fourteen principles of management that he believed would improve the state of the art of management practice. He held these principles to be universal; i.e., they could be applied in any type of organization. This was, perhaps, the first notion of universality introduced into the literature of management and organization theory.

The major emphasis given to management from Fayol was the division of work and the authority of management to run the organization. Furthermore, Fayol advocated complete subordination of everyone's individual interests to the general interest of what is best for the total organization.

Henri Fayol clearly elaborated on the role of communication flow in the organization and the restrictions placed upon communication by the organizational structure. Fayol illustrated this problem in the following manner. If communication were required between two people in the same organizational level but in different departments, they could only formally contact each other by sending a message up through their superiors who must pass it to their superiors etc. until it reached the highest level and then the communication came back to the other via the same route. It would obviously be much simpler for each worker to contact the other directly. Fayol argued that such direct communication ought to be allowed in an organization, at least in crisis situations when rapid action was essential. This special communication by-pass system bears his name "Fayol's Bridge" and it represents the beginning of recognition by the Scientific Management School that the formal structures they had built impeded good communication flow.

Fayol's influence on educational management can still be seen today

---

and may be more visible now than during the period when they were introduced into this country. Today we have a definite division of labor and administration as evidenced through collective negotiations. Authority is maintained by a "head" or principal in each building who maintains the "unity of command" as the major supervisor in a school building. The businesslike and orderly climate of a school building is attributed in literature to the function of the principal. Stability in most schools is maintained through the continuous employment of the same teachers over time. Thus many of the general principles of organizations advocated by Fayol have filtered into schools and still exist today.

Max Weber, a German sociologist was also studying and writing during this period. He was the first to define concepts of authority in organizations which he called bureaucratic authority. Weber's concentration on the bureaucracy as the ideal form of organization was built around rational decision making. The bureaucratic organization was based on the following principles:

1. A division of labor existed in which authority and responsibility were clearly defined for each member and were legitimatized as official duties.

2. The offices or positions would be organized in a hierarchy of authority resulting in a chain of command or the scalar principle.

3. All organizational members were to be selected on the basis of technical qualifications through formal examinations or by virtue of training or education.

4. Officials were appointed, not elected.

5. Administrative officials worked for fixed salaries and were career officials.

6. The administrative official was not an owner of the unit being administered.

7. The administrator would be subject to strict rules,
discipline, and controls regarding his conduct while performing the official duties. These rules and controls would be impersonal and uniformly applied in all cases.

Max Weber and others who followed his bureaucratic structure distinguished between the communication functions of "line" and "staff". Staff officials were usually specialists in certain areas (like personnel, accounting, and supply), and their communication was thought to consist of persuading their executive head to accept their advice. Line officials were thought of as cogs in the chain of command, and their function was to communicate orders from their boss to their subordinates and to see that their instructions were properly carried out.

What has Max Weber contributed to educational administration? During the early part of the 1900's most school districts in the United States were patterned after the best management theory, thus most school districts took on a bureaucratic organizational structure designed in many ways according to the seven principles listed above. Specialists, such as business managers, curriculum directors, supervisors of maintenance and transportation, are all good examples of positions that are directly related to the bureaucratic structure which exist still today.

The Scientific Management School was mainly interested in the nonhuman elements of the organization in order to increase maximum productivity and efficiency.

Overall, the Scientific Management School did not accord a very significant role to communication, and it conceived of communication as limited to command and control through vertical, formal channels. This viewpoint assumed that those at the top possessed all the relevant information, and the

---

1 Hodge and Anthony, p. 25.
function of communication was to disseminate their knowledge.¹

What have these three Scientific Management School theorists given to educational administration?

The scientific management advocated by Taylor, the universal principles of Fayol, and the bureaucracy designed by Weber culminated in an administrative arrangement dominated by its concern for structure. The least complex formal organization was the line organization, so named because of the direct lines of authority between administrative officers. Line organizations have no staff, advisory, or auxiliary officers. A second type of formal organization has line relationships as well as staff members who are not links in the chain of authority. A third, and more complex, type of formal organization might have both line and staff personnel, plus technical (functional) specialists, who service several layers of the administrative hierarchy. Where there are many layers of the hierarchy in an organization, it is known as "tall", while an organization with few layers and wide spans of control is known as a "flat" organization.

During the early years of this century, most school districts in the United States were organized in a highly structured manner, according to the best available administrative theory. Today, most school districts employ a modified bureaucracy, which they find more flexible and responsive to a changing educational environment. Even in the large city systems, where bureaucracies are still entrenched, we see the emergence of technical specialists (such as computer programmers) who break down the monocratic structure with the influence of their expertise rather than political influence. Perhaps the greatest conflict for an individual administrator in a bureaucratic educational structure is that between loyalty to administration and professional loyalty to issues and products.²

The second management school of thought that greatly influenced administration and organizations was the Human Relations School. Major contributors to this school are: Chester Barnard, Elton Mayo, Abraham Maslow, Douglas McGregor, Frederick Herzberg, and Rensis Likert.

Chester Barnard, depending on his extensive and insightful experience as a top executive of the New Jersey Bell Telephone Company,

¹ Ferguson and Ferguson, p. 9.
² Wiles and Bondi, p. 12.
wrote *The Function of the Executive*. Barnard was not satisfied with the Scientific Management definition of an organization. He felt the most critical characteristic of any organization was communication. He gave considerable attention to not only the formal but also the informal aspects of communication in organizations.

Communication, cohesion, and protection of individual integrity are the main functions of informal organization. Barnard was one of the first organization theorists to give importance to human motivation as a crucial factor in production, and to recognize that economic motives were sometimes of minor significance.

Barnard envisioned an essentially cooperative relationship between the individual and the organization. There are certain needs that any given individual cannot attain alone, hence he or she must cooperate with others in an organized way to achieve them. So the organization simply helps the individual do what he or she could not otherwise accomplish.

The publication of Barnard's book marked the beginning of the realization of the importance of communication in organizations. Barnard contended that the first function of executives is to develop and maintain a system of communication. Although he emphasized the need of communication, Barnard's concept was limited to focusing on its use by authority. Barnard's communication was mainly what a source (usually a manager) did to a receiver (a subordinate).

How have Barnard's principles and ideas influenced educational administration? The idea of employee participation in education has a long standing bias. The first large schools, which could be termed large organizations, were based upon teacher autonomy and a single "lead" teacher who in conjunction with peers ran the school. Since employee unions and collective bargaining the separation of administration and teachers has become highly formalized. However,

---

1 Ferguson and Ferguson, p. 16.
every good principal must work "with" their staff members as a whole and individually for greater staff participation and unity.

Perhaps now more so than ever before the whole idea of the informal structure of the school organization is extremely relevant to school administrators. In educational settings informal structures may comprise long term collegial associations shared by members of the staff and perhaps a group of parents who attend the same church. These various informal structures must be understood along with their influences and the ways in which they operate if a school administrator is to be successful today.

With today's focus on accountability, Barnard's definition of effectiveness has a direct meaning in educational administration. More and more administrators are working to clearly define their business and what they are about in order to be able to clearly show the public that today's schools are completing their mission.

Just as Barnard's view of effectiveness is relevant to today's educational setting so is his definition of efficiency. Efficiency, the satisfaction of the personal motives of the members of the organization, would be termed in educational jargon today as the answer to teacher burnout. Today's educational administrators must, as Sharon Roberds-Baxter says, "get things done; and much of their success lies in being able to assess the strengths of their staffs, assign tasks, appoint committees, and relate to teachers in ways that enhance their potential and motivate them to work toward common goals."

Finally, Barnard's first executive function of developing and

maintaining a system of communication continues to be of primary importance to educational administrators. As Stephen J. Knezevich writes, "Communication is the vital link and dynamic connection between all persons, parts, and activities. It is a part of and influences all administrative processes. Without the establishment of formal and informal communication networks, information essential to the decision process as well as the dissemination of directions and activities related to the choice determined would not be transmitted."¹

Working at the same time as Barnard was Elton Mayo. Mayo is known extensively for his research in the Hawthorne plant of the Western Electric Company that revolutionized conceptions of human behavior and motivation in organizations.

The Hawthorne studies marked an important intellectual watershed in conceptions of organizational behavior, leading to an entire recasting of assumptions about human behavior in organizations. The resulting new paradigm was called the "Human Relations" School, because of its emphasis on employee relationships as the determining factor in production. Concepts like worker satisfaction and morale rose to the fore in this school, which was individual-centered rather than organization-oriented.

In contrast to the Scientific Management School's conception of the worker as an economic man who responded directly to monetary incentives, the Human Relations School perceived the worker as a social man, responding to the interpersonal influences of the informal work group.²

Elton Mayo, as an early proponent of the Human Relationist approach to management and administrative principles, recognized the alienation of workers created by the overzealous use and attempts of the scientific method studies. He was one of the first to offer

² Ferguson and Ferguson, p. 12.
communication as a means of breaking down this alienated barrier that had been established. Mayo recommended the use of small groups aimed at problem solving and honest face-to-face communication processes as the ways to overcome the machine-like structure of the scientific methodology.

How has Elton Mayo's research influenced educational administration? Human relations as a way of looking at the life and work of people in organizations continues to show influence in training programs for executives and supervisors. The importance of the Hawthorne studies is that they pioneered exploration of new dimensions of organizational management which had been either ignored or minimized by Scientific Management theorists. The new direction that Mayo pointed administrators was away from man as a machine to a person-centered dimension including such factors as social and emotional elements in motivation, the role of group interaction, and communication.

While Barnard and Mayo are the founding fathers of the Human Relations Schools, others like Abraham Maslow, Douglas McGregor, Frederick Herzberg, and Rensis Likert made important contributions in expanding and refining many of the key elements of the Human Relations movement.

Another major contributor to the Human Relations School of Management theories was Abraham Maslow. Maslow's major contribution was in the field of motivation theory.

Maslow proposed that man's needs are arranged in a hierarchical order. Maslow's concept of this order is depicted in Figure 1.

1 Boyan, p. 24.
The physiological needs are shown at the top of the hierarchy because they tend to have the highest strength until they are somewhat satisfied. These are the basic human needs to sustain life itself—food, clothing, shelter. Until these basic needs are satisfied to the degree needed for the sufficient operation of the body, the majority of a person's activity will probably be at this level, and the others will provide little motivation.

Once physiological needs become gratified, the safety, or security, needs become predominant. These needs are essentially the need to be free of the fear of physical danger and deprivation of the basic physiological needs. In other words, this is a need for self-preservation. In addition to the here and now, there is a concern for the future. Will people be able to maintain their property and/or job so they can provide food and shelter tomorrow and the next day? If an individual's safety or security is in danger, other things seem unimportant.

Once physiological and safety needs are fairly well satisfied, social or affiliation will emerge as dominant in the need structure. Since people are social beings, they have a need to belong and to be accepted by various groups. When social needs become dominant, a person will strive for

---

1 Ibid., p. 27.
2 Ibid., p. 27.
meaningful relations with others.¹

After individuals begin to satisfy their need to belong, they generally want to be more than just a member of their group. They then feel the need for esteem—both self-esteem and recognition from others. Most people have a need for a high evaluation of themselves that is firmly based in reality-recognition and respect from others. Satisfaction of these esteem needs produces feelings of self-confidence, prestige, power, and control. People begin to feel that they are useful and have some effect on their environment. There are other occasions, though, when persons are unable to satisfy their need for esteem through constructive behavior. When this need is dominant an individual may resort to disruptive or immature behavior to satisfy the desire for attention—a child may throw a temper tantrum, employees may engage in work restriction or arguments with their coworkers or boss. Thus, recognition is not always obtained through mature or adaptive behavior. It is sometimes garnered by disruptive and irresponsible actions. In fact, some of the social problems we have today may have their roots in the frustration of esteem needs.²

Once esteem needs begin to be adequately satisfied, the self-actualization needs become more prepotent. Self-actualization is the need to maximize one’s potential, whatever it may be. A musician must play music, a poet must write, a general must win battles, a professor must teach. As Maslow expressed it, “What a man can be, he must be.” Thus, self-actualization is the desire to become what one is capable of becoming. Individuals satisfy this need in different ways. In one person it may be expressed in the desire to be an ideal mother; in another it may be expressed in managing an organization; in another it may be expressed athletically; in still another by playing the piano.³

The way self-actualization is expressed can change over the life cycle. For example, a self-actualized athlete may eventually look for other areas in which to maximize potential as his or her physical attributes change over time or as his or her horizons broaden. In addition, the hierarchy does not necessarily follow the pattern described by Maslow. It was not his intent to say that this hierarchy applies universally. Maslow felt this was a typical pattern that operates most of the time. He realized, however, that there were numerous exceptions to this general tendency. For example, the Indian

¹ Hersey and Blanchard, p. 28.
² Ibid., p. 28.
³ Ibid., pp. 28-29.
leader, Mahatma Gandhi, frequently sacrificed his physiological and safety needs for the satisfaction of other needs when India was striving for independence from Great Britain. In his historic fasts, Gandhi went weeks without nourishment to protest governmental injustices. He was operating at the self-actualization level while some of his other needs were unsatisfied.¹

The recognition of this hierarchy and the effect that it had on behavior was an important facet of understanding human behavior and how it related to management theory. With a greater knowledge of human needs and how they influence behavior, managers could develop better methods and principles for worker motivation and behavior.

The value of Maslow's work for educational administrators was significant. Much of what he proposed has been used to help administrators in the area of motivation and goal-directed activity. Because it is an aspect of personality, motivation is a complex combination of forces, drives, tensions, and expectations. The cognitive approach to motivation assumes that people choose the most satisfying course of action when presented with alternatives.² Because schools are social systems, the work of Maslow has helped educational administrators to better deal with the worker and how his surroundings influence his behavior.

Douglas McGregor, a professor of management at the Alfred P. Sloan School of Industrial Administration at the Massachusetts Institute of Technology and former President of Antioch College, felt that management strategies could be grouped into two basic camps based upon the way management personnel viewed human nature and behavior. That is why he

¹ Hersey and Blanchard, p. 29.
called his assumptions Theory X–Theory Y.

Theory X parallels the beliefs of Taylor, Weber, and Fayol. It is based upon the assumption that most people prefer to be directed, are not interested in assuming responsibility, and want safety above all else. Along with this rational is the belief that people are motivated by money, fringe benefits, and the threat of punishment.

After describing Theory X, McGregor questioned whether this view of the worker was correct and he cited as an example our democratic society and whether or not people were capable of more mature behavior. "Management by direction and control may not succeed, according to McGregor, because it is a questionable method for motivating people whose physiological and safety needs are reasonably satisfied and whose social, esteem, and self-actualization needs are becoming predominant."¹

McGregor felt that management needed principles based upon an understanding of human nature and motivation. Therefore, his Theory Y assumes that people are not by nature lazy and unreliable and can be self-directed and creative at work if properly motivated.

The following list of assumptions about human nature underlie McGregor's Theory X and Theory Y:

Theory X

1. Work is inherently distasteful to most people.
2. Most people are not ambitious, have little desire for responsibility, and prefer to be directed.
3. Most people have little capacity for creativity in solving organizational problems.
4. Motivation occurs only at the physiological and safety levels.

¹ Hersey and Blanchard, p. 48.
5. Most people must be closely controlled and often coerced to achieve organizational objectives.

Theory Y

1. Work is as natural as play, if the conditions are favorable.
2. Self-control is often indispensable in achieving organizational goals.
3. The capacity for creativity in solving organizational problems is widely distributed in the population.
4. Motivation occurs at the social, esteem, and self-actualization levels, as well as physiological and security levels.
5. People can be self-directed and creative at work if properly motivated.

McGregor's Theory X and Theory Y is an attempt to distinguish between leadership styles for the leader or manager. Theory X and Theory Y are attitudes or predispositions toward people. Although the best assumptions for a manager to have may be Theory Y, it may not be appropriate to behave consistently with those assumptions at all times. Managers may have to be very directive and controlling as if they have Theory X assumptions, for a short time to help people grow up to become Theory Y people. Theory X-Theory Y management assumptions gave new meanings for interpersonal communication techniques. Suddenly not only "what" was said was important but also "how" the manager said the what. According to Maslow the needs such as esteem and self-actualization seemed to become more important as people matured.

How has the McGregor theory influenced educational administrators? By following the tenets of both Theory X and Theory Y, school administrators could base their management practices upon a more

1 Hersey and Blanchard, p. 49.
accurate understanding of human nature and motivation. Most school administrators recognized that Theory X and Theory Y were attitudes or predispositions about or toward workers. Therefore the "best" assumptions for an administrator to make would be toward Theory Y however it might not always be appropriate for an administrator to behave consistently with that assumption at all times. School administrators found that it was necessary to behave in a very directive, controlling manner with some people for a short period of time to help them grow in a developmental sense. Thus a congenial combination Theory X-Theory Y evolution came into being which would help lead to a greater participatory management style in educational administration.

Frederick Herzberg, a social science researcher, building upon Maslow's work created the job enrichment model known as the Motivation-Hygiene Theory.¹

Out of his studies Herzberg developed a theory of work motivation that had broad implications for management and its efforts to effectively utilize human resources.

Through extensive interviews with workers, Herzberg determined that some job characteristics led to job satisfaction, while others led to job dissatisfaction. Characteristics which led to job dissatisfaction were called "hygiene factors" (salary, work conditions, job security), because they were contestual and always in need of replenishment. Contrasted with hygiene factors were "motivators" (recognition, responsibility, possibilities for growth), which satisfied the individual's need for self-actualization at work. Herzberg's work

¹ Wiles and Bondi, p. 17.
approached prescription for administrators working in organizations with the so-called "human factor."

Table 1
Motivation and Hygiene Factors

<table>
<thead>
<tr>
<th>Motivators</th>
<th>Hygiene Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Job Itself</td>
<td>Policies and administration</td>
</tr>
<tr>
<td>Achievement</td>
<td>Supervision</td>
</tr>
<tr>
<td>Recognition for accomplishment</td>
<td>Working conditions</td>
</tr>
<tr>
<td>Challenging work</td>
<td>Interpersonal relations</td>
</tr>
<tr>
<td>Increased responsibility</td>
<td>Money, status, security</td>
</tr>
<tr>
<td>Growth and development</td>
<td></td>
</tr>
</tbody>
</table>

Source: Hersey and Blanchard, p. 58.

In recent years motivation-hygiene research has been extended to include every level of an organization. This research has developed guidelines and concepts by which managers can evaluate and put into perspective the constant barrage of helpful hints from employees and if utilized serves to increase the workers feelings of competence, self-confidence, and autonomy.

Herzberg's work signaled a new approach not only in management theory and thinking but also in educational administration. The task of the educational administrator was no longer one of supreme decision maker, autocratic ruler, and keeper of the keys of the educational system. Instead he found that he must find ways in which people can begin to satisfy their esteem and self-actualization needs by participating in the planning, organizing, motivating, and controlling of their own tasks.

This signaled a new dilemma for administrators. How to include

---

1 Wiles and Bondi, p. 17.
personnel (namely teachers) in a participative management style which came about through the needs of the personnel involved. Herzberg's studies strongly suggested that for group members to feel motivated toward high productivity and be satisfied in their jobs, the work itself must be rewarding. The job must provide opportunity for growth, responsibility, recognition, and advancement.

Rensis Likert, a professor at the University of Michigan, implemented organizational change programs in various industrial settings which emphasized the need to consider both human resources and capital resources as assets needing good management principles. The apparent attempt was "intended to help organizations move from Theory X to Theory Y assumptions, from fostering immature behavior to encouraging and developing mature behavior, from emphasizing only hygiene factors to recognizing and helping workers to satisfy the motivators."¹

Likert and his associates were pioneers in developing means of measuring human variables in organizations. They studied how some manager's behaviors were more effective than other managers in achieving organizational objectives. Likert classified managers into two major categories: job centered and employee-centered. He and his colleagues constructed a questionnaire managers could complete. This data was interpreted into an organizational profile. The profile described the prevailing management style of the organization which would generally fall into one of the following four systems:

System 1 - Exploitive Authoritative.

Management is seen as having no confidence or trust in subordinates, since they are seldom involved in any aspect of

¹Hersey and Blanchard, p. 63.
the decision-making process. The bulk of the decisions and the goal setting of the organization are made at the top and issued down the chain of command. Subordinates are forced to work with fear, threats, punishment, and occasional rewards and need satisfaction at the physiological and safety levels. The little superior-subordinate interaction that does take place is usually with fear and mistrust. Although the control process is highly concentrated in top management, an informal organization generally develops in opposition to the goals of the formal organization.

System 2 - Benevolent Authoritative.

Management is seen as having condescending confidence and trust in subordinates, such as master has toward servant. The bulk of the decisions and goal setting of the organization are made at the top, but many decisions are made within a prescribed framework at lower levels. Rewards and some actual or potential punishment are used to motivate workers. Any superior-subordinate interaction takes place with some condescension by superiors and fear and caution by subordinates. Although the control process is still concentrated in top management, some is delegated to middle and lower levels. An informal organization usually develops, but it does not always resist formal organizational goals.

System 3 - Consultative.

Management is seen as having substantial but not complete confidence and trust in subordinates. Broad policy and general decisions are kept at the top, but subordinates are permitted to make more specific decisions at lower levels. Communication flows both up and down the hierarchy. Rewards, occasional punishment, and some involvement are used to motivate workers. There is a moderate amount of superior-subordinate interaction, often with a fair amount of confidence and trust. Significant aspects of the control process are delegated downward with a feeling of responsibility at both higher and lower levels. An informal organization may develop, but it may either support or partially resist goals of the organization.

System 4 - Participative.

Management is seen as having complete confidence and trust in subordinates. Decision making is widely dispersed throughout the organization, although well integrated. Communication flows not only up and down the hierarchy but among peers. Workers are motivated by participation and involvement in developing economic rewards, setting goals, improving methods, and appraising progress toward goals. There is extensive, friendly superior-subordinate interaction with a high degree of confidence and trust. There is widespread responsibility for the control process, with the lower units fully involved. The informal and formal
organizations are often one and the same. Thus, all social forces support efforts to achieve stated organizational goals.

In using his questionnaire instrument Likert found that the closer the management style of an organization approaches system 4, the more likely it was to have a continuous record of high productivity. Similarly, the closer the style to System 1, the more likely it was to have a continuous record of low productivity. Certainly then, the management behaviors of managers and leaders affected the achievement of organizational goals. It is important to note the changes in the communication structure and style in each of Likert's systems. System 1 is highly structured with communication from the top-down. System 2 is not much different. System 3 communication is seen as two way, both down and up. However informal communication is ignored. System 4 utilizes the informal and formal structure and communication systems to achieve the goals of the organization. The focus of Likert was upon superior-subordinate interaction and it seems as though communication became synonymous with motivation and leadership.

Likert called for management to modify the rigid communication patterns of many organizations and link formal and informal groups for greater productivity and effectiveness. Suggesting that people with membership in overlapping groups within an organization can play a critical role in promoting better communication, Likert developed his "linking pin theory" for modifying formal organization.

The name "human organization" was coined by Rensis Likert. In essence, a human organization is a participative organization in which

---

1 Hersey and Blanchard, pp. 63-64.
2 Wiles and Bondi, p. 19.
there is emphasis on such things as supportive relationships, group loyalty, high goals, cooperation, open communication, a sense of confidence and trust among organizational members, participation by various groups in the decision-making process (including setting the goals), and shared responsibility for maintaining an effective organization. This does not mean there are no conflicts or problems or struggles in the organization.¹

How can Likert's linking pin theory and human organization be used in educational administration? Hampton and Lauer are specific in relating it directly to school organizations:

First, school policies and practices must be based on a communications system that allows both students and parents to share in the decision-making process. In particular, students and parents must share in those decisions which affect the educational program of the students.

Second, the school's curriculum must be organized to provide clearly defined options as well to offer those courses of study required by state law. It is true that the curriculum must be "closely related to the aims and purposes of secondary education, for it is through the learning experiences and activities that the purposes are attained." But since one of the aims is self-actualization through participation, the interests and goals of parents and students help shape the curriculum.

Third, the administrative role is based upon shared decision making, a commitment to students' personal growth, and the use of feedback in planning for the future. Administration must be viewed in terms of managing a human organization.

The threefold design involves greater participation in the educational process by teachers, students, and parents than the more traditional models allow. The design also maximizes communication among the various involved groups. At the same time, it allows for the exercise of leadership by administrators. A participatory school is not one in which teachers, students, and parents have usurped all of the power

once held by administrators. Rather, a participatory school is one in which all involved parties have responsibility, involvement, a real (rather than apparent) voice in the decision-making process, and, consequently, a personal investment in the outcome.

Fredrick Fiedler built upon Likert's four systems or styles of management. However unlike Likert he suggested that there was no single best style of leadership which is universally successful. According to Fiedler, "it is not a matter of the best style but of the most effective style for a particular situation. The suggestion is that a number of leader behavior styles may be effective or ineffective depending upon the important elements of the situation."²

According to a Leadership Contingency Model developed by Fred E. Fiedler, three major situational variables seem to determine whether a given situation is favorable to leaders: (1) their personal relations with the members of their group (leader-member relations); (2) the degree of structure in the task that their group has been assigned to perform (task structure); and (3) the power and authority that their position provides (position power). Leader-member relations seem to parallel the relationship concepts discussed earlier, while task structure and position power, which measure very closely related aspects of a situation, seem to be associated with task concepts. Fiedler defines the favorableness of a situation as "the degree to which the situation enables the leader to exert his influence over his group."

In this model, eight possible combinations of these three situational variables can occur. As a leadership situation varies from high to low on these variables, it will fall into one of the eight combinations (situations). The most favorable situation for leaders to influence their group is one in which they are well liked by the members (good leader-member relations), have a powerful position (high position power), and are directing a well-defined job (high task structure); for example, a well-liked general making inspection in an army camp. On the other hand, the most unfavorable situation for leaders is one in which they are disliked, have little position power, and face an unstructured task, such as an unpopular head of a voluntary hospital fund-raising committee.

¹ Hampton and Lauer, p. 23.
² Hersey and Blanchard, p. 94.
Having developed this model for classifying group situations, Fiedler has attempted to determine what the most effective leadership type--task-oriented or relationship-oriented--seems to be for each of the eight situation. In a reexamination of old leadership studies and an analysis of new studies, Fiedler has concluded that:

1. Task-oriented leaders tend to perform best in group situations that are either very favorable or very unfavorable to the leader.

2. Relationship-oriented leaders tend to perform best in situations that are intermediate in favorableness.

The unique contribution that Fiedler makes is that he does not endorse a single particular leadership style for every situation. Thus organizations must recognize the management styles of their leaders and do one of two things: either the organization must engineer management positions that fit the various managers' styles or it must train managers to utilize the appropriate style for the appropriate situation.

How can educational administrators use the Leadership Contingency Model? Certainly all organizational situations that would arise in industry management could also happen in the organizational management of schools. If principals can be taught the various management styles and how to use them with the appropriate situations, then most certainly our schools will run more effectively and efficiently.

With the Hawthorne studies came the realization that informal group communication and functioning was a very important part of a total organization. The Human Relationists saw communication as much more important than did the Scientific Managers. They saw communication not just as a means of giving orders to workers, but of management listening to what the workers were actually saying. Their view of the worker and

1 Hersey and Blanchard, pp. 94-95.
on satisfying his or her needs as a means of achieving higher production lead to their taking the worker's view of the organization and of organizational communications as well. The Human Relation School focused attention on informal communication among peers in an organization.¹

In the 1960s and 1970s a combination of the Scientific Management and Human Relations Schools began to emerge as many began to realize that assumptions about the first school best fit some types of organizations while the assumptions of the second school seemed better for other organizations. The Systems School that emerged represented the selection of the best from both schools with a more encompassing viewpoint. General systems theory views an organization as a system of interrelated components and stresses the intermingling of these parts as the key to maximizing performance.

The basic tenant of the systems viewpoint is that the whole is more than the sum of its parts. Systems theory is holistic. To be understood, entire systems must be studied holistically as systems.

An organization is a system composed of a set of subsystem components that each serve certain functions, and that are each in interaction with the other subsystems. An organization inputs information and matter—energy from its environment, and, after processing these elements, outputs them. Thus changes in the environment have a continuous impact on the organization, so that it is constantly adjusting to environmental change; contrariwise, the organization's internal changes have a continuous impact on its environment.²

General systems theorists such as Kenneth Boulding and Ludwig von Bertalanffy have suggested that organizations be considered as systems

¹ Ferguson and Ferguson, p. 19.
² Ibid., p. 24.
of resources combined in a fashion aimed at accomplishing some purpose. Thus they saw organizations as being made up of an integrated set of components each with a particular job to do.

The systems view, in short, is a means of appreciating how organization parts fit together and how organizations interact with their environment and with other organizations. It is a broad perspective that makes room for the application of both behavioral and quantitative methods to the study of the components of organizations which is largely traceable to the work of the Classicists and modified by the Behaviorists. Thus, the Systems School can be considered a contribution in itself and also a means of more fully utilizing the contributions of the Classical and Behavioral Schools.

It hardly seems worthwhile in a Systems point of view to concentrate on organizational analysis of a single organization. Organizations must interact with their environments if they are to survive over time.

This interaction of the organization with its environment is controlled by systems concepts and principles. The approach is to keep the organization in a state of dynamic equilibrium with its environment which is a condition that is essential for modern organizations.

One aspect of equilibrium is control. This function has been greatly enhanced by cybernetics, an essential component of Systems theory. Norbert Weiner and Stafford Berlo are notable contributors to the application of cybernetics, the aspect of control of a system through the use of feedback from the environment of the system itself.

An outgrowth and part of the Systems School is the theory put forth by Warren Bennis called Organizational Development (O.D.). According to Bennis, Organizational Development is a response to change, a complex educational strategy intended to change the beliefs, attitudes, values,

---

1 Hodge and Anthony, pp. 40-42.
and structure of organizations so that they can better adapt to new technologies, markets, and challenges, and the dizzying rate of change itself."¹

Organizational Development can best be seen through the following procedural guidelines. An O D manager would proceed by:

1. Working with the people who are affected by particular proposed changes in the organization.

2. Linking to all those who can influence the outcome.

3. Forming a tentative general goal which, by joint process, will convert to a specific group goal.

4. Working on changing the quality of relationships from one in which the individual is conditioned to isolation, destructive competition, and interpersonal conflict ("I'm up-you're down") to one of collaboration and healthy competition ("we"). To bring about such a change, managers must encourage direct and open communication, and set an example themselves.

5. Building active feedback loops from all knowledgeable sources so that they can perceive the shape of events as realistically as possible, and so as to monitor their organization's progress.²

The Systems viewpoint emphasized the interrelationships and exchanges between an organization and its environment. The Scientific Management and Human Relations Schools often studied management and organizations as an isolated entity unto itself looking within the organization for the keys to correct organizational behavior. The Systems School added a major new component, the outside organizational environment.

Just as the Systems School recognized the need to study interactions of the subsystems in an organization, so it also focuses on

² Fordyce and Weil, pp. 20-21.
communication as the key to analyzing and understanding organizations as social systems. Therefore, communication and information theories are central in the development of systems theory.

Communication is the basic process facilitating the interdependence of the parts of the total system; it is the mechanism of coordination. The role of communication is to be a harmonizer of the organization, an orchestrator of its parts.¹

Information was seen by Systems theorists as the glue that holds organizations together. In fact, information processing came to be seen by the Systems School as the main function performed by all organizations, organizational systems were essentially communication systems.²

Since much has been borrowed in educational administration from the Scientific Management Theorists and the Human Relationists, so also there have been contributions made by the Systems School.

The Human Relationists viewed organization as social units which were purposefully constructed to meet goals. These goals provided an identity to the organization and communicated the organization's purpose to everyone. In times of substantial change organizations that do not maintain a clear goal and who fail to see themselves as a functioning unit, soon become obsolete.

In this way, the study of the systems approach to organizations came from need because the bureaucratic organization proved to be unable to monitor and incorporate major changes in the environment.

In educational organization, the highly structured

¹ Ferguson and Ferguson, p. 26.
bureaucracy had trouble dealing with a number of forces, including a changing mission with expanding boundaries, control of school resources by varying levels of government, and growing public access to educational decision making. Educational organizations responded by creating specialists and staff officers to perform the many peripheral roles associated with running the schools.

Systems theory, a product of the physical sciences, provided the concept of interdependence in organizations and explained why changes in one part of an organization affected other parts or the whole of the organization. A system is simply a group of objects treated as a unit. With the adoption of systems theory in educational administration, all the important processes of operating a school or school district could be seen holistically.

In modern organizational theory, the systems concept describes administration as the central force in organizations—a force that coordinates and relates activities. Such a role calls for insight by the administrator and skill in conceptualizing relationships.

In school settings, a system might be defined as any set of components organized in such a way as to result in accomplishment of a goal. Thus, school programs are systems comprised of facilities, materials, funds, teachers, testing, and a host of other contributing variables for the purpose of educating children. The real value of a systems perspective for administrators is as a means of identifying noncontributing conditions or bottlenecks in the flow of activity. Once identified, the system deficiencies can be targeted for redesign. Systems can also help the educator build models of preferred conditions for learning.

Before ending the exploration of the three major management schools of thought and their effect upon educational administration and theory, the study of leadership theory must be reviewed. Whereas this has not been a single focal point of management theorization because it is consistently included as a management process; educational administration has certainly identified educational leadership as a major focus in the past five to seven years.

1 Wiles and Bondi, p. 13.
2 Ibid., p. 16.
James Slezak in his book *Odyssey to Excellence* has the following ideas about leadership: "You lead people; you manage things. The ideal leader brings out the best in a group, an organization, or country. A leader inspires cooperation within a team of winners rather than within only the few who tend to rise to the top. A leader energizes the system, generates the magic that makes everyone want to do something extra, and exhibits the optimism it takes for progress to occur. A leader imagines that every employee is wearing the sign: 'Make me feel important.' He does."¹

Two very important positive elements identify the ideal leader. First, he is concerned with self-development in the best sense; namely developing one's reasoning and talents, health, well being, and life. Second, the ideal leader is willing to share power with those he leads.²

What skills must the ideal leader possess:

**INTRAPERSONAL SKILLS**

The ideal leader has the ability to:

1. Live with ambiguities, change, conflict and consensus.
2. Be patient.
3. Be objective.
4. Understand, appreciate, and respect all people.
5. Trust others.
6. Make difficult decisions.
7. Perceive the personal values and the perspectives which shape actions and decisions.

---

¹ James Slezak, *Odyssey to Excellence* (San Francisco: Merritt, 1984), p. 3.
² Ibid., pp. 3-4.
8. Listen.

9. Assess one's performance realistically and to sustain oneself with less praise than is deserved.

INTERPERSONAL SKILLS

The ideal leader has the ability to:

1. Develop an atmosphere conducive to growth, personal development, and goal achievement.

2. Involve individuals and groups in the decision-making process.

3. Develop positive, open relationships which encourage people to feel free to examine problems, personnel, and institutions, and to express opinions with reference to them.

4. Accurately assess group perceptions, relationships, and attitudes which shape actions and decisions.

5. Create satisfactory working relationships among groups with different functions, but with common purposes—students, faculty, administrators, and the school community.

There are basically three types of leadership behavior: attempted, successful, and effective. Attempted leadership is any effort made by the leader to influence superiors, associates, or subordinates. Successful leadership is the ability to get done what the leader intends or wants to be accomplished. The job may be accomplished but the needs of other people are ignored. Effective leadership is the ability to complete a task in enthusiastic accord with the others who are involved toward mutually acceptable goals.

Before turning to the next major issue of this chapter, one final educational administrative issue must be addressed.

Karl E. Weick presented the idea of looking at organizations,

1 Slezak, pp. 4-5.

2 Slezak, p. 6.
especially large schools, as "loosely coupled" organizations instead of essentially bureaucratic organizations. Weick himself describes the phrase "loose coupling."

The phrase "loose coupling" has appeared in the literature (Glassman, 1973; March and Olsen, 1975) and it is important to highlight the connotation that is captured by this phrase and by no other. It might seem that the word coupling is synonymous with words like connection, link, or interdependence, yet each of these latter terms misses a crucial nuance.

By loose coupling, the author intends to convey the image that coupled events are responsive, but that each event also preserves its own identity and some evidence of its physical or logical separateness. Thus, in the case of an educational organization, it may be the case that the counselor's office is loosely coupled to the principal's office. The image is that the principal and the counselor are somehow attached, but that each retains some identity and separateness and that their attachment may be circumscribed, infrequent, weak in its mutual affects, unimportant, and/or slow to respond. Each of those connotations would be conveyed if the qualifier loosely were attached to the word coupled. Loose coupling also carries connotations of impermanence, dissolvability, and tacitness all of which are potentially crucial properties of the "glue" that holds organizations together.

Glassman (1973) categorizes the degree of coupling between two systems on the basis of the activity of the variables which the two systems share. To the extent that two systems either have few variables in common or share weak variables, they are independent of each other. Applied to the educational situation, if the principal-vice-principal-superintendent is regarded as one system and the teacher-classroom-pupil-parent-curriculum as another system, then by Glassman's argument if we did not find many variables in the teacher's world to be shared in the world of a principal and/or if the variables held in common were unimportant relative to the other variables, then the principal can be regarded as being loosely coupled with the teacher.

A final advantage of coupling imagery is that it suggests the idea of building blocks that can be grafted onto an organization or severed with relatively little disturbance to either the blocks or the organization. Simon (1969) has argued for the attractiveness of this feature in that most complex systems can be decomposed into stable subassemblies and that these are the crucial elements in any organization or system. Thus, the coupling imagery gives researchers access to one of the more powerful ways of talking about complexity
Weick lists seven potential functions that could be associated with loose coupling. They are listed below:

1. The basic argument of Glassman (1973) is that loose coupling allows some portions of an organization to persist. Loose coupling lowers the probability that the organization will have to—or be able to—respond to each little change in the environment that occurs.

2. A second advantage of loose coupling is that it may provide a sensitive sensing mechanism.

3. A third function is that a loosely coupled system may be a good system for localized adaptation. If all of the elements in a large system are loosely coupled to one another, then any one element can adjust to and modify a local unique contingency without affecting the whole system.

4. Fourth, in loosely coupled systems where the identity, uniqueness, and separateness of elements is preserved, the system potentially can retain a greater number of mutations and novel solutions than would be the case with a tightly coupled system.

5. Fifth, if there is a breakdown in one portion of a loosely coupled system then this breakdown is sealed off and does not affect other portions of the organization. Previously we had noted that loosely coupled systems are an exquisite mechanism to adapt swiftly to local novelties and unique problems.

6. Sixth, since some of the most important elements in educational organizations are teachers, classrooms, principals, and so forth, it may be consequential that in a loosely coupled system there is more room available for self-determination by the actors.

7. Seventh, a loosely coupled system should be relatively inexpensive to run because it takes time and money to coordinate people."

Robert E. Herriott and William A. Firestone argued that one of the major tasks of contemporary research in educational administration is to


2 Weick, pp. 15-17.
discover, develop, and refine "images" of what schools are like as social entities. They gave considerable research attention to two images: the rational bureaucracy and the anarchy or loosely coupled system.¹

The bureaucracy, as defined by Herriott and Firestone, is a formally organized social structure with clearly defined patterns of activities in which every series of actions is functionally related to the goals of the organization. Three characteristics are highlighted: (1) a bureaucracy has a single set of goals, (2) a bureaucracy has a formal control system, which includes the specification of required behavior through rules, (3) bureaucracies are assumed to be highly integrated with each of the separate parts or departments contributing in a different way to the organization's overall goals.²

The anarchy or loosely coupled system image describes an organizational setting in which goals are ambiguous, hierarchies of authority are not effective mechanisms of integration, technologies are unclear, and participation is fluid. Some characteristics of a loosely coupled system are: (1) an absence of clear goals, (2) collective choices are relatively rare; individuals work in solitary settings in which they are free to make the important decisions guiding their work on their own, (3) the glue that holds the system together is the "logic of confidence."³

In assessing their research, Herriott and Firestone found that in


² Herriott and Firestone, pp.42-43.

³ Ibid., pp. 43-44.
their study of 100 randomly selected schools, by partitioning each variable into intervals of one-half standard deviation units on either side of the mean and computing the number of schools that fell into each "block" of the resulting 90-block image space, a cluster type analysis could be seen. The results revealed two distinct clusters with very little ambiguity regarding which schools belong most appropriately to which cluster. Cluster A contained 22 senior high schools, 17 junior high schools, and one elementary school. Cluster B contained 0 senior high schools, 5 junior high schools and 55 elementary schools. Thus there seemed to be a major boundary between elementary and senior high schools as social entities based upon three variables: goal consensus, centralization of influence, and school level. From the data it was concluded that elementary schools tend to be more rational bureaucracies while senior high schools resemble more closely the anarchy or loosely coupled image.¹

Norman Boyan sums up the idea of loose coupling when he writes:

The notion of coupling between levels, functions, offices, and persons is not a new one. In his 1965 essay on the school as a formal organization, Bidwell identified "structural looseness" as a singular characteristic, made necessary to provide sufficient teacher autonomy to cope with the inescapable variability among students that teachers face every hour of every day. The press from the bureaucratic side (the need to move cohorts in orderly fashion through progressive stages) confronts the professional press (the adaptation too variable needs, within which a nurturant orientation also surfaces) so as to yield internally loose articulation of units. In short, structural looseness and teacher autonomy have long appeared in the litany of organizational characteristics of schools.²

Three main schools have been identified in an overview of

¹ Herriott and Firestone, pp. 47-54.
² Norman J. Boyan, p. 34.
management and educational administrative theory: Scientific Management; Human Relations; and the Systems School.

The Scientific Management School, initiated by Frederick W. Taylor gave organizational managers guidelines and principles by which they could manage. They viewed workers as parts of the factory motivated only by economic incentives.

The Human Relations School was founded by Chester Barnard and Elton Mayo. The importance of informal work groups inside organizations was brought out by the Hawthorne studies. The Human Relations School emphasized a social view of man with his informal groups, needs and job satisfaction, participation in decision making, and motivation from social needs and peer group relationships.

The Systems School argued for a science of wholeness. A system is a set of units that has some degree of structure but is separated from the outside environment by its boundary. An open system continuously exchanges information with its environment.

Educational Administrative theory grew from the best of management theory. Schools adapted many theories to meet their needs and because of this evolved into a separate area of study.

Having examined management and educational administrative theory, the review of educational administrative communication theory can be examined using these two principles of ideas as a basis for understanding.

Educational Administration Communication Theory

Communications sharpen the "eyes and ears" of administrators, who, because of the nature of the positions, are unable to be every place to see and hear everything first hand. Up to this point in time the design
and operation of effective communication systems are the least understood dimensions of educational institutions.\(^1\)

Communication has many meanings and definitions. In educational institutions the use of the term takes on more specific meanings but these are shrouded by the many aspects in which communication can be used. The purpose of this review is to determine what communication theory or theories are used by educational administrators of large high schools and what communications problems exist for educational administrators.

Many authors such as Knezevich believe that "communication is the vital link and dynamic connection between all persons, parts, and activities. It is a part of and influences all administrative processes. Without the establishment of formal and informal communication networks, information essential to the decision process as well as the dissemination of directions and activities related to the choice determined would not be transmitted."\(^2\)

The survival of an organization would be nearly impossible without an exchange of messages, purpose, ideas, and directions. Communication is the glue that holds, molds, shapes, and continues to redefine an organization.

Further communication definitions appropriate to educational institutions are:

To some the term communication suggests the media for mass communication such as radio, television, newspapers, and magazines. It may also be considered synonymous with public

---

1 Knezevich, p. 77.

2 Ibid., p. 74.
relations. Thus, the failure of a superintendent "to communicate effectively" with school patrons or the public in general is primarily a public relations problem, according to some.

The many definitions of communication consider it (1) imparting or exchanging attitudes, ideas, and information through the use of human abilities or technology; (2) transmission and reception of ideas; (3) the broad field of interchange of thoughts and opinions among humans; or (4) a process of giving and receiving facts feelings, and ideas. There is a degree of similarity among all.

Another approach is necessary to conceptualize the process from an operational point of view that could facilitate analysis of its operational dimensions and point to ways of improving upon it. The process demands at least two persons with different roles to play. One person sending a message must have means to transmit the message as well. The person sending is identified by the term communicator. The second receives the message and is called the communicatee. A fairly simple operational definition of communication would be: Communication is the process in which a communicator attempts to convey a message, or image, to a communicatee. The definition does not indicate the means of transmission, whether the communicatee actually received the message or was made aware that someone was trying to communicate, or what the interpretation or impact of the message reception was.

The message or image is a representation of the communicator's intent or purpose. It may be an idea, a signal, a statement, a picture, a diagram, a bit of information, an attitude, or an emotion. The act need not be confined to oral or written language; there are nonverbal expressions such as "body language" or voice tone.

The conveyance of the message or image can be divided into two parts, namely, the instrument and the channel. The instrument which encodes the message could be a pen or a typewriter. It is then sent or actually transmitted through some channel: the mails, by radio, by TV, by computer, and so on.

The receipt of the message in its precise or distorted form is determined on the communicatee's side of the equation.

The operational dimensions of the communication process may be outlined as follows: communicator--image (message or information)--instrument (transmitter such as voice or writing)--channel (the medium of transmission)--communicatee
(receiver)--impact. The preceding outline does not show whether any noise (such as static or other interference or distractions) cluttered the communication process. What was encoded as a set of ideas prior to transmission through some channel by the communicator may not be what was decoded and interpreted after reception by the communicatee.

The many dimensions of complex communications activities may be analyzed further and in greater detail by examining: the organization's structural factors (how parts or positions are linked in the communication network); organizational functions and goals; the contents of communications moving through the organization; the psychological concomitants of the communication process; and other properties of communication activities.

Jerry Pulley believes that "effective communication is essential for the maintenance of positive relations between human beings."\(^2\)

Hampton and Lauer view schools as "human organizations" as coined by Rensis Likert in the human relations perspective, and in so doing view communication as the linking element which brings together the interlocked functioning groups of an organization. All groups within the organization must be linked together in a communication network, and communication and influence must be able to flow "up" as well as "down" through the hierarchy of authority.\(^3\)

Hoy and Miskel have the following ideas and definitions in regards to communication in schools:

Communication permeates every process of school life. Teachers instruct using oral, written, and other media such as video tapes, computers, and art forms. Students demonstrate their learning through similar media. In a sense, students, teachers, and administrators earn their living in the school by communicating. Communication, therefore, is a central

\(^1\) Knezevich, pp. 74-75.


\(^3\) Hampton and Lauer, p. 12.
concept in the study of educational administration because it offers an additional concept for examining the school as a social organization.

Attempts to define communication for universal application have been frustrated by its multifaceted nature. It is characterized by subtlety, variety, and ubiquity. The many scientific approaches—mathematical, social-psychological, linguistical—further obscure definition. Willard V. Merrihue's definition is useful for our purposes. He defines the concept as "any initiated behavior on the part of the sender which conveys the desired meaning to the receiver and causes desired response behavior from the receiver." Similarly, Davis defines communication as "the process of passing information and understanding from one person to another."

Schools depend on human action to accomplish goals. Goal-directed behavior is elicited through communication. Therefore, the more clarity, the more likely teacher and student actions will proceed in fruitful directions. When viewed this way, communication is beneficial because it facilitates the goals of the school.

Jerome P. Lysaught also attempts to put meaning to that which has eluded understanding.

As vital as communications is to all human behavior, there is no single, commonly accepted definition of the process or its key elements. Dance has compiled a collection of almost one hundred attempts to define the term, and he, himself, has settled for a helical model of the process which suggests that the most pervasive characteristics of communications are a constant movement both forward and backward along an enlarging orbital pathway which (shades of Heraclitus!) keeps passing over its starting point but at greatly expanded content levels which press onward toward infinity.

If this model seems a bit breath-taking, one might settle at the operational level for the more behavioral, and pedestrian, formulation of Herbert Lasswell which suggests the importance of Five W's: "Who, says What, to Whom, in Which channel, with What effect?" This approach emphasizes several particular elements in the process of communications: a transmitter, a receiver, a message, a medium, and a result or outcome. As Severin and Tankard point out, however, even these reference points are not universally accepted. Those

---

1 Hoy and Miskel, pp. 238-40.
authors suggest that the many approaches to defining communications have so few points in common that one can only classify the consensual agreements in the following ways:

1. Those definitions which stress the sharing of meaning.

2. Those definitions which stress intentional influence toward a response or effect.

3. Those definitions which stress a response or effect even without particularized intentions.

In their abbreviated taxonomy, it is possible to see that many definitions which stress meaning without concern for explicit outcomes are unacceptable to those who emphasize results, while even the latter differ in important ways depending on the specificity of the outcomes obtained. What one theorist defines as a form of communications might be viewed by another as an exercise in information transmission simply because there are no definable results obtained. Similarly, what might be defined by one observer as a failure in communications because intended outcomes were not realized might be seen as successful by another due to the occurrence of unintended responses not anticipated by the speaker. These differences are very real and emphasize how far the field is from a common concept of interpersonal or organizational communications.

If the definition for communication seems to be difficult to find agreement upon, perhaps a better understanding of the theories, models, and elements in the dynamics of communication will help enlighten the communication definition problem.

Hoy and Miskel propose six generalizations that relate to their communication theory. They are:

Generalization I. Communication is purposive. Lee O. Thayer lists four primary functions of administrative communication: informing someone, instructing or directing someone, evaluating someone or something, and influencing another's thought or behavior.

Generalization II. Meanings of messages are in people and not necessarily in the intended content. All of us have an

1 Jerome P. Lysaught, "Toward a Comprehensive Theory of Communications: A Review of Selected Contributions," Educational Administration Quarterly, 20, No. 3 (Summer 1984), 102-03.
intuitive grasp of what is meant by a certain word or expression. The so-called semantics problem in administration arises because the same word means different things to different people. Strictly speaking, an administrator cannot convey meaning, only words. Yet these same words may suggest quite different meanings to different people.

Generalization III. Feedback is essential for high levels of understanding. Feedback essentially is a process of correction. In the broadest sense, it refers to any response from someone who has received a message. Based on the response (feedback), the communicator can repeat, elaborate, or explain the message.

Generalization IV. Formal and informal communication channels exist in all organizations. Formal communication channels traverse the organization through the hierarchy of authority. Barnard calls these channels "the communication system." The system's purpose is coordinating the organization's parts. He suggests that several factors must be considered when developing and using the formal communication system: (1) the channels of communication must be known; (2) the channels must carry to every member of the organization; (3) the line of communication must be as direct and as short as possible; (4) the complete line of communication typically is used; and (5) every communication is authenticated as being from the correct person occupying the position and within his authority to issue the message.

Informal communication channels commonly called grapevines, also exist in spite of an elaborate formal system. Facts, opinions, attitudes, suspicions, gossip, rumors, and even directives flow freely through the grapevine. The informal channels are built around social relationships among the school members. These develop for such simple reasons as common office areas, similar duties, shared coffee breaks and carpools, and friendships.

Generalization V. The formal and informal communication channels are potentially complementary. Amitai Etzioni distinguishes between the substance (instrumental-expressive) and direction (vertical-horizontal) of the communication networks. Instrumental communication distributes information and knowledge that affect cognitive orientations. Administrative directives, policies, curricular objectives and materials, and attendance data are typical examples. The purpose of instrumental communication is to develop consensus about methods and procedures. Expressive substance changes or reinforces attitudes, norms, and values. Appropriate affective orientations toward students, militancy, discipline, and organizational rewards are typical examples.

Generalization VI. The messages carried by verbal and nonverbal media must be congruent for effective understanding. The best-known method of human communication is speech, which
uses the best-known type of human signals, the sounds that constitute words. Primary oral communication consists of making sounds that are transmitted directly in face-to-face situations, or that are transmitted indirectly through such electronic devices as telephones and tape recorders. Secondary verbal communication consists of written word signals transmitted through such devices as letters and memos.

Bill Hampton and Robert Lauer propose an organizational model of a high school based upon a phrase coined by Rensis Likert and other human relationists. This view of school as a "human organization" places a great deal of emphasis upon communication. According to Hampton and Lauer, a threefold design is necessary for creating a human organization in a high school:

First, school policies and practices must be based on a communications system that allows both students and parents to share in the decision-making process.

Second, the school's curriculum must be organized to provide clearly defined options as well to offer those courses of study required by state law.

Third, the administrative role is based upon shared decision making, a commitment to students' personal growth, and the use of feedback in planning for the future. Administration must be viewed in terms of managing a human organization.

The threefold design involves greater participation in the educational process by teachers, students and parents than the more traditional models allow. The design also maximizes communication among the various involved groups. At the same time, it allows for the exercise of leadership by administrators.

In the "human organization" Likert identified several organizational variables that Hampton and Lauer apply to the human organizational school. Emphasized is "character of communication process:" (1) amount of interaction and communication aimed at

1 Hoy and Miskel, pp. 240-48.

2 Hampton and Lauer, p. 23.
achieving organization's objectives (both individuals and groups)—rated highest on the scale; (2) direction of information flow (down, up, and with peers)—rated highest on the scale; (3) extent to which downward communications are accepted by subordinates—generally accepted, but if not, openly and candidly questioned; (4) accuracy of upward communication via line—accurate.  

Because communication is viewed as so important in the human organizational high school, it would seem that a defined theory and model of communication would be espoused. This is not the case. Continual references to "open communication" are made, however, no specific models, theories, or organizational examples are cited by Hampton and Lauer.

John T. Dorsey, Jr. constructed a communication model for school administrators. Dorsey defined a simplistic administrative theory focused on the decision-making process, in its simplest form, made up of several or many interwoven series of interrelated decisions. Therefore decisions may be conceived of as a communication process or a series of interrelated communication events. A decision occurs when some kind of communication is received, consisting of a complicated process of combining communications from various sources, and it results in the continuation of further communication.

Dorsey continues with further definitions and his communication net model:

If administration is defined as a process consisting

---

1 Hampton and Lauer, p. 23.

elementally of decisions and if decisions are essentially communication phenomena, it follows that administration can be viewed as a communication process.

Structurally, administration can be viewed as a configuration of communication patterns relating individuals and collectivities of varying sizes, shapes, and degree of cohesion and stability. Dynamically, administration appears as a patterned swirl and flow of communications, many of them channeled through transactional "circuits" between persons and persons, persons and groups, and groups and other groups.

While single communications are important in historical and case studies, it is apparent that for purposes of generalization and prediction it is necessary to consider patterns of communication. For interpersonal communication is seldom random—or rather, the persons among whom communication occurs are seldom randomly related. Instead, most communication (with the exception of an indeterminate amount of mass communication) is exchanged between persons grouped in relatively stable collectivities. Such collectivities range from vaguely defined publics through various forms of associations and informal groups to highly formalized and intricately patterned bureaucracies and interrelated institutions. In these patterns some persons in central communication positions initiate a higher proportion of authoritative and influential communications to others than they receive from others. The orders, instructions, requests, and suggestions they make often result in other persons' issuing further orders, instructions, reports, and so on, or they affect the influence of such communications transmitted by others.

The fact that communication is the process by which such a system is established and through which it continues its existence reinforces the previous suggestion that more complex social systems can be defined in terms of communication. The feasibility of such a definition can be recognized in the behavior of people who work in administrative organizations, who find that the overwhelming proportion of their actions are communicative. If not immediately engaged in face-to-face discussions or conferences, they are preparing communications (reports, instructions, policy statements, letters, memoranda), processing or distributing communications, or receiving and reading communications. As Roethlisberger has observed, a large part of an executive's environment is verbal.

This conception of organization as a system of communication, plus the foregoing reduction of decision making and politics to communication processes, suggests that it might be possible to construct a model which would represent in manageable simplicity and generality the essential features of political grouping and formal organization in which the political and administrative processes are manifested. The
The basic idea for such a model is at hand in the concept of the self-steering, self-correcting, self-modifying communication network, or "learning net." Such a model would serve as a mental "picture" of, or conceptual substitute for, these kinds of social structures, pulling together and codifying concepts of the relevant variables in a way that would permit the derivation of propositions stating relationships of functioning and change. The communication net model is free of certain limitations of the older mechanistic and organic models, such as the one-to-one relation between force and reaction and the unevolving structure of the former and the teleological "life-force" attributes and incapacity for internal self-modification of the latter. Instead, the concepts of "feedback" and homeostasis, applied to the communication net model, permit it to accommodate such features of political and administrative existence as goal-oriented behavior, change in goals, personnel, internal structure and process, and adaption to a changing environment.

In what follows, an attempt has been made to outline what seem to me to be the basic elements of a model based on the learning net concept:

(1) The net (which represents group or organizational components and relationships) consists physically of a complex of decision centers and channels which seek, receive, transmit, subdivide, classify, store, select, recall, recombine, and retransmit information. In a group or organization these centers and channels consist first of the nervous systems of persons and second of such nonhuman aids as written documents and photographic films of various kinds, electronic receiving, recording, processing, calculating, and transmitting devices, and filing systems. The net is formed by the arrangement of decision centers and channels into systems or patterns of varying degrees of stability.

(2) Information is "a patterned relationship between events" which can be transmitted through a sequence of channels by a series of codifications and by which one type of event is substituted for another in such a way that the event substituted in some sense stands for the other. Broadly speaking, information is "that which is communicated." Thus it includes orders, instructions, directives, suggestions, requests, inquiries, reports, and so on—all of which are simply the forms in which information can be transmitted. The form used, incidentally, often serves the metacommunicative function of providing information as to how the communicator intends the information it carries to be interpreted.

(3) Action by the net is the manipulating and processing of information by the operations listed in (1) above as the information circulates more or less continually through the net. The arrangement of decision centers and channels into patterns permits the operation of screening, evaluating, priority, routing, and monitoring mechanisms. The structuring
or "setting" of these mechanisms is arranged to encourage the development or maintenance of certain kinds of communication events or relationships (both--or either--internal to the net and/or in its environment) and to avoid or discourage others. Through the mechanisms mentioned above, feedback operates as the results of outgoing communications are observed and corrections are made in subsequent communications. In addition to this self-correction, the net can modify its internal relationships and processes in the light of comparison of present with previous experience evaluated and stored in the net's "memory" and in the light of environmental changes--hence the term self-modifying or "learning net."

(4) The above-mentioned encouragement and/or discouragement of certain kinds of communication events and relationships is a way of describing what are more abstractly referred to as the "purposes" or "goals" of the group or organization. Ideally all, but normally only some, of the net's action occurs with reference to these "goals," which are selected and set in the net by, with the participation of, or for the net--and may later be modified in the same way. The action of the net in relation to "goal" events and relationships is homeostatic; it tends to seek them by manipulation of the environment, or internal modification, or both.

(5) Individual decision centers and channels are specialized as to the kinds of information they handle and the ways in which they handle it. The characteristic action patterns of each center and channel constitutes their roles in the net. Individuals functioning as components in the net come to expect themselves and others with whom they communicate regularly to behave in certain ways in given situations (or at least within certain limits); it is evident that if persons in a group or organization wish to coordinate their actions for some purpose, each must know something about what the others expect him to do and what actions he can expect from others. The expectations concerning the behavior of a given member of the group or organization are called role expectations, and they maintain a certain degree of stability. Behavior of course may not always conform precisely or fully with that expressed or implied in role expectations, but a minimum degree of correspondence, and thus predictability, is necessary for any cooperative action.

(6) In complex nets the roles of individual decision centers and channels are clustered and interrelated to make up subpatterns within the larger network. As communication nets themselves they receive, process, store, and transmit information with varying degrees of autonomy from the larger net of which they are components. Their action in relation to this over-all system also possesses role characteristics, and they generate role expectations as to their functions in the net. These are simply expectations that a group or organization, or one or more of its components, will act in a
given way in a given type of situation. Such expectations are ordinarily called policies. The types of situations which occur frequently or repetitively in a net's relations with its environment or components, or between segments of the net, are the situations concerning which policies exist or are consciously developed. They merely express, implicitly or explicitly, what the observer can expect the organization to do in a given type of situation.

Dorsey's self-modifying communication net can truly be termed an administrative communication model. It is based upon logically drawn conclusions and assumptions and attempts to put forth a workable solution to communication problems in school settings that could be utilized by any administrator.

Jerry L. Pulley proposes that school administrators who bemoan communications problems take a look at the classic linear model of communication to find out what points of interference correspond to the basic components of the communication process.

The five components of the communication model consist of (a) the source, (b) the message, (c) the medium, (d) the receiver, and (e) the reaction. While each of these serves a primary function in the communication process, they can also be responsible for a critical breakdown in the communication process. Pulley identifies each of the five components and how they can be sources of interference.

**Source**

First, the principal himself (source) may serve as point of interference. For example, it is common knowledge that the position of the principalship is perceived differently by different groups. Some view the principal with fear, some see him as a threat, and others as a tool of the superintendent and board of education. . . . The fact that the principalship is shrouded in controversy and is viewed by individuals and groups in a wide variety of ways is sometimes an inhibiting factor in the transmission of messages to their intended destination.

---

1 Dorsey, pp. 255-65.
Message

The next possible point of interference is in the message itself and the manner in which it is constructed or encoded. Most educators (principals included), are guilty of the overuse of education jargon, or "pedagouses" when communicating with laymen. Often, too little attention is given to the level of understanding and technical expertise of the audience for whom we wish to share information. And, sadly, we sometimes attempt to impress rather than communicate.

Medium

The third critical phase of the communication process at which point messages may be distorted or impeded is the medium or channel. Many factors are involved in selecting the appropriate medium—available time, cost, size and geographical location of the audience, the media at our disposal, and our expertise in the use of the media. A question that must be answered is, "Will the selected medium actually transmit the message to its intended destination?" If the answer to that question is yes, the next question is, "Will the message capture the attention of the audience?" Principals should keep in mind that a multitude of individuals and groups are simultaneously competing for their attention.

Receiver

The next interference point in the communication process is that stage when the receiver interprets the message. The number of possible interpretations of an identical message is probably equal to the number of persons who receive the message. People also interpret messages in a manner in which they want to interpret them. For example, communications to parents that indicate their children are having academic or behavioral problems at school are sometimes misinterpreted because the parents don't wish to admit their children's inadequacies or mistakes.

Reaction

The final component of the communication model, which coincidentally serves as an obstacle to effective communication, is the reaction of the receiver to the message. All too frequently, receivers react to messages in manners that are totally unexpected—sometimes for the better, sometimes for the worse.

Pulley "concludes by stating," an awareness by the principal of

1 Pulley, pp. 51-53.
these points of interference ... should assist him in the construction of a more effective communication system and serve as a basis for the analysis of communications that go awry.\(^1\) That conclusion seems extremely optimistic and misguided since no previous material presented by Pulley mentioned or eluded to a communication system. Once again common sense remedies are passed off as theoretical assumptions, systems components, and models to be followed.

Jerome Lysaught proposes a modified enlarged model of the communication process built upon theory from communication behavioral scientists. The basis of the model is the naturalistic view of communications:

![Modified Laswell Model of Communications](image)

**Figure 2**

Modified Laswell Model of Communications

Source: Lysaught, p. 104.

In the 1940's, Harold Laswell added two elements to be considered with this basic model. The first element was which channel or medium was used to transmit the message; face-to-face communication, newspaper, personal note, etc. The second element added by Laswell was what effect the message had upon the listener. Lysaught states that there is not common agreement upon the second. Therefore he proposed the following modified model:

\(^1\) Pulley, p. 54.
Claude Shannon and Warren Weaver using an information theory approach added the concepts of source, destination, and noise to the Laswell model. The source of the information or material to be communicated may be outside the transmitter; similarly, the intended destination of the message may be beyond or outside the receiver. Noise represents both the natural static within the communication lines and processes as well as competing signals and variant information transmissions.¹

¹ Lysaught, p. 104.
encoding, decoding, and feedback. Encoding refers to the choice of the "language" together with cognate and affective referents to designate a "feeling" as well as the literal meaning of the words. The process of decoding is a reversal of the encoding process. Feedback is the completion of the communications loop and conveys in the concepts of system theory the capability of interactive modification and control processes that permit the original receiver to become the transmitter in order to verify, enlarge, or correct the original message.\(^1\)

Figure 5

Modified Weiner/Berlo Model of Communication

Source: Lysaught, p. 105.

Lysaught completes the enlarged model of the communication process by including the work of theorists Anderson and Schramm. Anderson suggests that there is a specific setting which impacts the communication process along with a much broader, binding context often described as the cultural surroundings. Schramm proposes further that

\(^1\) Lysaught, p. 104.
individuals each bring their own past fields of experience which shade the communication process even more. This can be compared to the Gelzels-Guba-Thelen formulation of three organization behaviors: the idiographic field of the participants, the nomothetic field of the specific organization or institution, and the general cultural or societal contest in which both the individuals and the organization are to be found and in which they function.¹

Figure 6

Completed Model of Communication

Source: Lysaught, p. 108.

Lysaught concludes that even though the study of the field of communication is young, there is still much that can be used by educational administrators. First, there is a common (if not unanimously accepted) model for communications that proceeds from information theory which can detail essential elements for understanding communications. In addition the following can be used:

1. An examination of the language-culture interface within

¹ Lysaught, p. 107
the institution or organization based on the insights of linguists and semantics. The applied school of general semanticists offers a concrete set of guides for the clarification of communications.

2. The enhancement of interpersonal communications through the insights of the group dynamics and the transactional analyses approaches to improve the quality of communications stimuli, response, and "level" of understanding and empathy.

3. The improvement of organizational concepts using the insights and the evidence of theorists who have advocated the fundamental contribution of communications to organizational cooperation, effectiveness, and growth.

4. The application and redirection of analytic tools such as content analysis, communications surveys, and attitude surveys to organizational units of observation and analysis.

Lysaught further contends that much more has been learned than has actually been put into practice. The primary emphasis now should be for specific organizations and institutions to generate new methods and working translations of these theories into working practices in conjunction with research.

Hoy and Miskel, Hampton and Lauer, Korsey, Pulley, and Lysaught have all proposed models or theories for educational administrators to use in formulating communication practices. Are there others? Many so-called "models" are simply descriptive "how to do" presentations. They are not research based. They are an authors' prescriptive methodology to deal with a problem. While these may be good prescriptors and practices for administrators to follow, they present a hit-and-miss approach to the communication problems facing school administrators. No overall encompassing plan is presented. Examples of this type of presentation are prolific in the literature and will be presented to show the extent of the shallowness and lack of basic research in

---

1 Lysaught, p. 107.
educational communication.

David Nelson and William Heeney project a model for improved administrative communication called "directed listening." They present eleven specific listening skills, 9 barriers to effective listening, and directed listening as an administrative strategy.\(^1\) Granted, listening skills are an important part of the communication process; however, the information presented by Nelson and Heeney is only a small part of the total communication process.

Kusimo and Erlandson propose to impact one-way, faculty, narrow channels of communication with instructional communications. Through a study of four large urban high schools the authors sought to discover the nature and adequacy of the channels by which communication about instruction flowed. A summarizing of their findings states that narrow, faulty, one-way channels tend to prevail in schools, and are simply not adequate to serve instructional requirements. If instruction is to be effectively served, the schools organizational structure must support communications that readily flow upward, downward, and horizontally over multiple channels that are designed to carry them.\(^2\) Once again a single facet of the communication process is laden with the burden of proof for remedying the total process. Even withstanding this type of fallacy, nothing is given as a remediation for the problem.

Gelms proposes that building--level publications are the

---


\(^2\) Kusimo and Erlandson, pp. 18-24.
overlooked communications tool that will solve communications problems in administration. Nineteen separate publications are proposed for building--level principals to produce and disseminate to teachers, staff, students, and parents. While certainly ideal, it would take a staff of two specialists and an even larger production crew to compile, complete, and continually update these communication items. And even if the capabilities to do this kind of operation were possible (and for most schools it is not) once again we are addressing only one issue of the communication process.

Kersting contends that too many administrators have allowed their speech patterns to become laden with vague, inflated diction, and that the only way to move toward effective communication would be to eliminate the use of administrative and educational jargon.2

Goldstein provides his readers with a list of do's and don'ts for correct writing in order to communicate with simplicity and clarity. He further contends that school people should communicate frequently and well, orally and in writing, but only when they need to do so since needless communication is useless communication.3

Both Kersting and Goldstein give one-sided simplistic options to a multi-faceted global problem. This should not be interpreted to mean that what they have presented is not worthwhile because it certainly is. However, their articles are limited in what they present toward an


Ron Abrell presents a working model to help educational leaders determine the cause of communication breakdowns so that corrective measures may be taken. Abrell's model is an extension of the work of Wilbur Schramm, Rudolph Verderber, and James Polczynski, and focuses on the major areas where failures in communication most frequently occur. The variables that cause communication breakdowns according to Abrell are: sincerity, empathy, self-perception, role-perception, efforts to distort the message, images, vehicle for the message, ability to communicate, listening ability, cultural heritage, tradition, conditioning, noise, and feedback. After explaining briefly how each variable affects the communication process and how that variable can be aided toward bettering communication skills, Abrell concludes:

The model is designed to raise the level of awareness of educational leaders as to where communication breakdowns occur. The model can be used in training prospective administrators by such methods as role playing, case studies, and simulation.

The model can also be used by practicing leaders who must communicate on a daily or periodic basis with their followers. As communication problems take place, the model can be used to spot what pitfall has caused or contributed to the breakdown. Once the cause has been located, corrective action can then be taken.

Action, of course, must be taken because it is the task of all education to communicate with accuracy, clarity, and meaning. It is especially the task of educational leaders to communicate with those they serve and with whom they work.

The model presented by Abrell is based upon widely accepted interpersonal communications theory. His descriptions of the variables

---

1 Abrell, pp. 97-104.
accurate; however, his prescriptors for helping those who are experiencing problems with each of the variables are less than overwhelming. Once again this model presents only one aspect the total communication process that faces educational administrators on a daily basis.

Walter St. John gives some sequential steps to follow in planning a communications system for a school. The major areas to be considered according to St. John are: (1) what are the key goals of the communication program; (2) How to make a communications needs analysis; (3) who should be responsible for the school communications program; (4) the importance of communication's credibility and how it is developed; (5) the 14 key communications attitudes needed by administrators; (6) 17 steps in planning a schoolwide communications program; (7) what communications networks (channels) should be used; (8) key communications policies to adopt. St. John concludes his article by saying:

If high school principals and their assistants reserve time for carefully planning their school communications program and follow recommended planning strategies they should see a significant improvement not only in communications, but in general school climate as well as staff morale and job satisfaction. Since school communications are so vital to the success of all educational pursuits, the communications program deserves a top priority from every member of the administrative team—especially the principal.

St. John's conclusions can hardly be argued against from the point of view of need. However the reality of the issue leaves much to be questioned. In St. John's "Seventeen Steps in Planning a Schoolwide


2 Ibid., p. 27.
Communications Program, steps three through five are: "fix responsibility; adopt a budget; hire a communications specialist if possible." With most school budgets already strained beyond capacity, it is certainly unlikely that further expenditures, which include the hiring of a specialist, would be done. Furthermore the fixing of responsibility falls directly back upon the principal. Without the principal's guidance, coercion, and direct support, a communications plan will fail. St. John's ideas and methodology for planning are excellent, but once again the realistic implementation viewpoint is totally missed. As a consequence, the realism of the plan quickly looses appeal due to its lack of relevance to the practitioner.

Having investigated the various models and theories of educational administration communication theory, what communication research has been conducted in educational administration? Are there specific studies that have identified specific educational administrative communication problems and specified solutions, methodologies, or skills that administrators can utilize?

Lloyd E. McCleary conducted a nationwide study of the practices and problems of communications in large secondary schools. The research population used was secondary schools that enrolled more than 1,000 students and in which the principals were members of the National Association of Secondary School Principals. More than 5,000 schools were available for the study. The focus of the study was to obtain information about methods and media of communication, characteristics of communications systems in operation, principals' perceptions of needs and priorities for improvement, and some evaluation of the effectiveness

1 St. John, p. 23.
of various practices.

The major findings of the study were:

The methods most frequently reported by principals for bringing the entire staff or significant parts of it together in face-to-face situations are listed... in order of the relative frequency with which they are seemingly used with some regularity; that is monthly or more often. General faculty meetings, department meetings principal's cabinet meetings, and meetings of department chairmen lead all other types of gatherings by a significant margin. Of these four, as might be expected, the principal assumes the least direct role in department meetings.

Individual, face-to-face communications represent the most perplexing dilemma for the principal of the large school. Repeatedly, respondents reported the frustration of too little time to confer adequately with individual staff members.

Written communications... regular bulletins; special bulletins and announcements; staff handbook or manual; staff newsletter; reports of work groups; polls of staff opinion; surveys of practices;... (are) most often used by principals arranged in descending order of frequency. Although the daily or weekly bulletin to the staff leads the list, it should be noted that in their comments principals expressed dissatisfaction with this means of communication far more frequently than with any other type in any category.

Writing can be of particular value in communicating information and directions, but it often is of limited value in communicating or in changing attitudes, opinions, and beliefs...

Principals cited as most effective the use of written media to reinforce announced decisions, to follow up discussions, and to disseminate results of studies and deliberations. Apparently principals who use written media effectively attempt to link them to other forms of communication and do not rely upon the written word alone to communicate changes in procedures or new ideas that run counter to current practices.

A primary interest in studying communications in the large secondary school was to learn the extent to which visual-electronic media are utilized to overcome the problems caused by size and complexity of operation in such a school. The results of the survey were disappointing in terms of the effectiveness of visual-electronic media. Seventy-four percent of the respondents reported that they use public address or intercom systems to communicate with staff on a daily or weekly basis; next most frequently used was the conference telephone. No more than five percent of the respondents reported the use of any other type of visual-
electronic media as frequently as weekly. 

One of the most common observations concerning ineffective administration is that there is a lack of follow-up on directives, announcements and administrative decisions. 

The greatest needs for improvement indicated by the comments of respondents centered upon the relationship of the principal and the staff. Most frequently reported was the need for time and help to increase personal contacts with staff, to work with new teachers, and to involve staff with planning and decision-making. Next most frequently reported was the desire to consult with staff in order to obtain feedback about the quality of teaching, problems of teacher-pupil and parent relations, and the interests teachers had in professional improvement.

Two other responses followed well behind those but were widely commented upon: (1) use of electronic media to expedite routine messages and information handling and (2) value of expert help to systematize and improve the quality of communications.

Among the communications methods best utilized at present, principals listed in this order: individual conferences, small-group planning meetings, faculty meetings, personal contacts, daily or weekly bulletins, and intercom systems.

McCleary's comments on the findings of the study are summarized in the following statements: principals should not blame all their problems or inability to solve problems on a failure in communications; communications should be considered not as a cure-all, but as (1) a system or network of obtaining and transmitting information and (2) a process for sharing understanding, diagnosing, deciding, and monitoring. In viewing communications as a system or network the school might need to set up devices such as bulletins, public address systems, conferences, group meetings, and the like. It is the administrators' task to see that the communication devices are sufficient to link together the individuals in the school organization. In regards to the

---

1 McCleary, pp. 50-57.
process of communication the principal should think of key administrative functions as a means of examining how he uses communication.¹

McCleary further suggests seven axioms for principals to follow. These axioms are divided into three administrative functions: the first three axioms are related to diagnosis; the next two with decision-making; and the final two with control.

**Diagnosis**

1. The principal needs to take into account the nature of this uncertainty as well as the value of the communication devices.

2. The principal must judge the communications devices he wishes to use on the basis of the fidelity required.

3. The principal should incorporate both wide-band and narrow-band devices into his communications system.

**Decision-Making**

4. Principals should be conscious of the approach they are taking and make use of appropriate communications devices for decision making—narrow-band devices for fidelity, wide-band devices for coverage.

5. As the principal makes use of communications devices in his decisions, he should make judgments about the accuracy of information they are providing.

**Control**

6. The principal needs to have a fully functioning communications system that provides continuous, accurate feedback.

7. The principal will need to decide what his communication system is to be sensitive to and how sensitive it shall be.²

What other research studies do educational administrators have to fall back upon for help in solving their communication problems? Wayne

---

¹ McCleary, p. 59.
² Ibid., pp. 60-61.
Hoy and Cecil Miskel cite several studies. One conducted by W. W. Charters in a laboratory high school and five elementary schools used a sociometric procedure to chart the communication networks. The findings of Charters' study are reported by Hoy and Miskel:

Charters found a gross difference between the high school and the elementary schools in the amount of communication. Elementary schools exhibited a much larger volume, with most teachers in direct contact with one another. In contrast, only 15 percent of the high school staff pairs interacted regularly.

This massive difference in communication volume is partially explained by staff size. The average number of contacts per staff member declined with increasing faculty size. Larger facilities and physical dispersion along with specialized personnel (guidance counselors or special teachers) who are not in the main flow of classroom instruction help explain the impact of size on communication volume. Charters did note that size alone does not account for the entire difference, however. Elementary school staffs communicate more than high school staffs.

Finally, an overarching stability in the communication patterns is related to the division of labor and physical proximity. Teachers in the same subject specialty and, to a lesser extent, those closer together form enduring communication networks. In summary, level and size of school, specialization, and proximity affect the horizontal communication patterns in schools.

Another research study cited by Hoy and Miskel was completed by James M. Lipham and Donald C. Francke.

They developed a typology for nonverbal behavior and subsequently used it to study promotable and nonpromotable principals. Their first category, structuring of self, includes self-maintenance, clothing, physical movement, and posture. The second category, structuring of interaction, includes greeting others, placement of others, interaction distance, and interaction termination. The third category, structuring of environment, includes environmental decor, neatness, environmental noise, and the use of status symbols.

Lipham and Francke found significant differences between promotable and nonpromotable principals on both structuring of

---

1 Hoy and Miskel, p. 249.
interaction and environment. For example, promotables tended to walk from behind their desks to greet visitors and take care of their coats and hats. Moreover, the promotable principals tended to seat visitors either alongside the desk or at the administrator's side of the desk at a distance of three to four feet. The nonpromotable, on the other hand, tended to position visitors in front and at the center of the desk at distances ranging from five to twelve feet. In structuring the environment, only the evidence of personal items distinguished between the groups. The offices of promotable principals, as compared to nonpromotables, contained numerous personal items—photographs, paintings, citations and assorted knickknacks. In addition, environmental noise and interruptions tended to be higher in the offices of the nonpromotables. Lipham and Francke noted that in some schools as many as a dozen students were sent to the office for misbehavior or errands finally, promotable principals differed from nonpromotables in the use of nameplates as status symbols. Although nameplates usually were in evidence in all offices, promotables used them in functional ways (e.g., as paperweights) rather than as status symbols.  

Hoy and Miskel believe that the lack of communication research may be related to the characteristics of the existing empirical methods. Good empirical research which would include content analysis, sociometry, and interaction analysis is both time-consuming and difficult to accomplish. Three measures have been developed however which could help contribute to theory and practice of communication in educational administration.

Cal W. Downs and Michael D. Hazen, using reviews of the literature, developed the Communication Satisfaction Survey (CSS) to measure employee perceptions of an organization's communication system. The questionnaire, which contains forty items representing eight factors, essentially asks its respondents how satisfied they are with the amount and quality of information in their organization.  

1 Hoy and Miskel, pp. 249-50.

2 Ibid., p. 250.
report the following concerning the CSS:

The CSS demonstrates a potential for useful research in the educational setting. The test-retest reliability is 0.94, the factor structure is stable over several different groups, and the validity is promising. The CSS also is a practical tool for balancing two somewhat contradictory components of communication effectiveness. More efficient authoritarian patterns tend to lessen professional employee job satisfaction. Therefore, the CSS can be used to monitor the satisfaction of employees with the communication system and make appropriate adjustments.

Keith Davis developed the Episodic Communications Channels in Organizations (ECCO) questionnaire which asks its respondents to indicate: (1) how much, if any, of a particular message was received; (2) when it was received; (3) the location where it was received; (4) from whom it was received; and (5) through what channels and media it was received.\(^1\)

The ECCO methodology calls for the serial administration of two or more questionnaires, each of which traces a different message through the same organization. Therefore, the technique is longitudinal and is responsive to the dynamic aspects of both communication and organization. Other advantages include (1) its economy of time and money; (2) its simplicity; (3) its high data yield; and (4) its ability to identify formal-informal and vertical-horizontal networks in the same organization.\(^2\)

ECCO analysis can provide an elaborate, insightful description of a school's stable communication patterns and how they accommodate different messages. For example, during contract negotiations, a study of information flow (networks) and sources of distortion could add to our theoretical and practical understandings of the negotiation and communication processes.

Jerry W. Valentine, Bradford L. Tate, Alan T. Seagren, and John A. Lammel, working as a research team under the direction of Seagren,\(^3\)

---

1 Hoy and Miskel, p. 252.
2 Ibid., p. 252.
3 Ibid., pp. 252-54.
developed the Administrative Verbal Interaction System (AVIS). The AVIS was originally designed to measure the verbal behavior of teachers and students in their leader-subordinate roles, was modified to measure administrators' interaction with students, teachers, parents, and other administrators. A study of secondary high schools using the AVIS was then conducted.¹

The findings of this study can be summarized in the following statements: (1) verbal behavior of administrators revealed significant relationships between what an administrator said and the climate of the administrator's school; (2) the more direct the principal, the more positive the attitudes of teachers, students, and parents; (3) the use of humor by the administrator and by those with whom he came in contact indicated a significantly relaxed, positive human-relations atmosphere; (4) the expression of personal values or opinions by administrators with those whom he works adds to a positive working relationship; (5) administrators were consistently direct or indirect in their verbal behaviors utilized; (6) the influence of the verbal behavior of the principal was stronger with teachers than with students or parents.²

But what does this study mean for the practicing school administrator? According to Valentine et al., the answer lies in two areas: (1) important specific behaviors which the administrator should be aware, and (2) implications of the study beyond specific behaviors.

First of all, specific behaviors. The choice of what behaviors are most significant should be made by the

² Ibid., pp. 72-73.
individual administrator as he assesses the types of outcomes he desires. This study, not intended to be prescriptive, does not spell out a cookbook approach to administrator verbal behavior. However, it does provide the practicing administrator with useful data for assessing his own situation and deciding what behaviors are appropriate in his situation.

The significance of the study beyond the realm of specific behavior can be more important to the practicing administrator than the specific study data. This is emphasized because the study has shown the feasibility of effectively studying an administrator's verbal behavior in a methodology that is within the reach of any practicing administrator. An administrator can study his own personal behavior, make comparisons of his own behavior with other data, and then make more meaningful decisions about his own behavior's appropriateness.

This concept of self-assessment is certainly not new to administrators, yet for so long as we have self-assessed more through visceral feelings than hard data. Are not both types of assessment appropriate? In teacher evaluation, providing information about performance in the form of feedback is important if behavior is to be modified or changed. For the administrator, such feedback occurs through self-analysis or, as administration moves more toward the "team" concept, more help can come from a fellow administrator. Regardless of where feedback comes from, administrators need it. They can now more accurately identify the specific verbal behaviors utilized and then make their own judgments as to whether the behaviors were appropriate or inappropriate. As organizations grow and become more complex, it is the astute administrator who pauses long enough to question and study his own communicative ability in light of the outcomes he feels are desirable.

Jerry Valentine later constructed a Likert-type instrument called the Audit of Administrator Communication (AAC) that could be used by school principals to quickly self-assess perceptions of their communicative ability, and by teachers to assess the principals' communication skills. The AAC evolved from its initial 40-item, 10-dimension instrument to 27 items and four factors.\(^1\)

---

1 Valentine et al., p. 74.

The four factors described in terms of their relationship to principal-teacher communication are:

1. Affective Involver--The administrator understands and accepts the feelings, thoughts, values of the teacher. The administrator seeks involvement in the personal, nonprofessional life of the teacher, and shares personal, nonprofessional interests with the teachers. The administrator seeks opinions and feelings on school-related issues and shares with teachers personal thoughts on school issues. Teachers feel comfortable discussing personal or professional problems with the administrator.

2. Informer--The administrator clearly communicated information, directions, and decisions to the teachers. Teachers feel they are well-informed. Teachers understand what is expected.

3. Developer--The administrator stimulates and encourages the teacher toward personal and professional growth. This involves establishing personal and professional goals coupled with a realistic assessment of present capabilities.

4. Encourager--The administrator utilizes positive rather than negative reinforcement. The administrator encourages teachers by showing an interest in teacher concerns and making the teacher feel those concerns are significant.

Valentine reported finds and insight derived from a completed study of 30 randomly selected secondary schools using the AAC.

A study of the four factors of the instrument supported the item analysis. The highest scoring factor was that of Informer, followed in order by Developer, Encourager, and Affective Involver. A study of the item by item responses and the factors reflect high level skill in task-oriented, decision-making types of communication and raise a significant concern over the more negatively perceived skills in the humane, interpersonal affective domain.

Other findings of interest to the practicing principal indicated the overall communicative ability of principals was most favorably rated by those teachers with: (1) fewest years of experience; (2) fewest graduate hours; (3) fewest years working with their current principal; and (4) administrative responsibilities, such as department heads. Teacher perceptions of administrators were consistently similar regardless of whether they were hired by the principal they

---

1 Valentine, "Do Your Teachers Understand You?" p. 36.
were assessing or a previous principal and regardless of the sex of the teacher.

This study of 30 secondary schools represents findings congruent with other research of principal communication using the AAC. Collectively, principals can be pleased with the skills of clear, precise communication of decisions, information, and expectations; and concerned about the absence of strength in the affective areas of communication.

Valentine's efforts should be lauded and encouraged because he is one of the few researchers in the educational administration communications field. However, once again his findings and research are limited to only one aspect of the total organizational communications field: interpersonal communications.

Perhaps the entire issue of educational administration communication is best summarized by Jerry Valentine when he writes:

Communication is an essential tool for the educational administrator. Research indicates that supervisors spend at least 70% of their time involved directly in the process of communication (Miltz, 1977, p. 1). Seventy percent reflects a significant portion of an administrator's time and thus a skill which must not be overlooked. The study of administrator communication, however, reveals a minimal amount of research related to the process of administrator communication and the skills which underlie the process. Rather, what typically appears in the literature is summarized by the following paragraph on the inside promotional jacket cover of a recently published book on administrator communication:

These days crystal-clear communications are vital to your success as an administrator, and now this practical manual provides you with hundreds of proven, successfully tested ways to strengthen, polish and improve all the various levels on which you must skillfully communicate. (Goldstein, 1977, p. 31)

Initial reaction to this how-to-do-it or recipe literature easily can be negative. But in light of how relatively meager effort has been exerted to clarify the importance of effective communication by administrative behaviorists and theorists, we must not be too quickly critical. Perhaps a dissection of the how-to-do-it literature

1 Valentine, "Do Your Teachers Understand You?" p. 37.
could provide us with a clearer insight into the process itself. The most appropriate insight into the question of administrator communication, however, comes not from the educators but from communicative behavioral scientists.

With this caveat it seems only appropriate to turn to the behavioral scientists for a total picture of how administrators can use communication effectively to help their organizations. With this view as a goal the area of organizational communication will be reviewed for ideas, research findings, and recommendations that can be implemented in the educational administration field.

Organizational Communication

Recently the American public has been alerted to the fact that organizational communication may well be the key to our national economic success in the eighties. We are described by John Naisbitt (1982) in Megatrends as no longer an industrial society, but instead an information society. He describes the vertical to horizontal power shift, the transition from hierarchies to networks based on and in rich communication within America's corporations. Peters and Waterman (1982), in their recent bestseller, In Search of Excellence, identify intense, informal communication as the key to corporate excellence in America.

If organizational communication is the key to our national economic success in the eighties, certainly it must be an enlightening and worthwhile subject to study for what it may have to offer educational administrators. Large high schools are certainly large organizations with budgets in the millions of dollars. Yet many high school organizations are still bureaucratically administered as they have been for the past 40 and more years with slow, tedious, and faulty

---


communication structures. This has already been pointed out. Since Staley and Shockley-Zalabak, Naisbitt, and Peters and Waterman have so forcefully stated, organizational communication must hold great promise for future organizational success. Volard and Davies further accentuate the promise of organizational communication:

The COMMUNICATION PROCESS in formal organizations has attracted some considerable attention from researchers and practitioners alike. "The last ten years or so have been marked by a fairly sizeable volume of research related to communication in organizations".

Therefore a brief review of the literature concerning organizational communication will be undertaken to investigate what theories and models could be applied to the study of educational administration theory and educational administrative communication theory.

The best way to begin is by finding an agreed upon definition of what organizational communication is. Because of its relative infancy as a field of study of the social sciences, organizational communication has many varying definitions.

Redding and Sanborn (1964) defined organizational communication as the sending and receiving of information within a complex organization. Their perception of the field (as evidenced by their sourcebook-reader) included internal communication, human relations, management-union relations, downward, upward, and horizontal communication, communication skills (speaking, listening, writing), and communication program evaluation. Katz and Kahn (1966) perceived organizational communication as the flow of information (the exchange of information and the transmission of meaning) within an organization. Using the general systems model developed for the physical sciences by von Bertalanffy (1956, 1962) and others, Katz and Kahn define organizations as open systems and discuss such properties as the importing of energy from the environment, the transformation of this energy into some product or service which is characteristic of the system, the exporting of that product or service into the environment,

and the reenergizing of the system from energy sources found once again in the environment. Zelko and Dance (1965) primarily discuss the "skills" of communicating in businesses and professions (speech-making, listening, interviewing, counseling, conferences, selling, persuading, etc.). They perceive organizational communication as interdependently including both internal (upward, downward, and horizontal) and external (public relations sales, advertising) communication. Lesikar (1972) shares Zelko and Dance's perceptions of internal/external communication and adds a third dimension—personal communication (the informal exchange of information and feelings among organizational members).

Thayer (1968), also using the general systems approach to communication, refers to organizational communication as "those data flows that subserve the organization's communication and intercommunication processes in some way." He identifies three communication systems within the organization: operational (task- or operations-related data); regulatory (orders, rules, instructions); and maintenance/development (public and employee relations, advertising, training). Bormann et al. (1969) limit their study of organizational communication to "speech communication" (as opposed to written communication) within a system of overlapping and interdependent groups. They emphasize the communication skills of listening, meeting in small groups, and speaking to persuade. Huseman et al. (1969) edited a reader which limited the field of organizational communication to organizational structure, motivation, and such communicative skills as listening, speaking, writing, interviewing and discussing. Several writers (e.g., Lesikar, 1972, Schutte and Steinberg, 1960, and Vardaman and Vardaman, 1973) emphasize in their study of the field the written media of communication (reports, letters, memos, bulletins, proposals, etc.).

Greenbaum (1971, 1972) perceives the field of organizational communication as including the formal and informal communication flow within the organization. He prefers to separate internal from external organizational communication and views the role of communication primarily as one of coordination (of the personal and organizational objectives and problem-generating activities). Witkin and Stephens (1972) define an organizational communication system as "those interdependencies and interactions among and within subsystems, through the act of communication, which serve the purposes of the organization." Haney (1973), using a general semantics approach to communication, defines organizational communication as the coordination (by communication) of a number of people who are interdependently related.

1 Gerald M. Goldhaber, Organizational Communication (Dubuque, Ia.: Wm. C. Brown, 1974), pp. 8-10.
Goldhaber, however, offers his own definition based upon three common elements: (1) organizational communication occurs within a complex open system which is influenced by and influences its environment; (2) organizational communication involves messages, their flow, purpose, direction and media; and (3) organizational communication involves people, their attitudes, feelings, relationships, and skills.\footnote{Goldhaber, p. 11.}

Organizational communication is the flow of messages within a network of interdependent relationships. This perception of the field of organizational communication includes four key concepts. messages, network, interdependent, and relationship.

Sanford, Hunt, and Bracey define organizational communication through its various functions. They "assume that communication does certain tasks, or functions, for an organization. Each function makes a unique contribution to the organization and results only through communication."\footnote{Ibid., p. 11.} These functions briefly outlined are:

1. Integration--involves taking the ideas, products, and contributions of others, generated elsewhere, and utilizing them in one's own task. Integration suggests that all individuals in the organization operate within a framework of mutual dependency.

2. Maintenance--Like all living organisms, the organization must maintain itself within an environment of limited resources. Informational inputs are processed to allow the system to adapt to changing conditions. These changing conditions must be observed early and information about them must be transmitted to the primary decision makers in the organization so that adjustments in operating procedures can be made. If the organization does not have some mechanism to do this, it cannot survive.

3. Orientation--Within any organization, there is a need to

\footnote{Aubrey C. Sanford, Gary T. Hunt, and Hyler J. Bracey, Communication Behavior in Organizations (Columbus, Oh.: Charles E. Merrill, 1976), p. 11.}
disseminate work-related information to the members of the organization, or orient them. Without some degree of knowledge about the job, the individual cannot perform the task. Often, fullscale orientation programs are structured into the operating procedures of the organization. At other times, orientation is accomplished through work manuals or job descriptions. The need for orientation is continual within the organization since preparations must always be made to accomplish new tasks.

4. Member Growth--The extent to which our own individual goals overlap with our organization's, we will be committed to the success of the organization. The individual may be able to grow and develop as a person through his or her association with the organization. However, this occurs only when information about opportunities for growth are transmitted to him or her. As the individual is made aware of the opportunities, seeing how the opportunities enable him or her to reach a personal goal, he or she may be motivated to take advantage of them. The transmission of information about promotion, tenure, training, educational advancement, travel, and the like becomes an important use of the organizational communication system.

5. Decision Making--Organizations are continually required to make decisions to resolve apparent conflict. Alternative courses of action provide a source of ambiguity for the organization. To reduce the ambiguity, a particular action is selected and the organization attempts to implement it. Good decisions are made when good information is transmitted to decision makers. Inadequate information produces poor decision making.

John E. Baird contends, as do many other writers, that "ours is an organized society. We are born in organizations, educated by them, and spend most of our lives working for them."\(^2\) Baird defines organizational communication through the process and dynamics of communication in an organization.

According to Baird "one must consider first the subsystems of which organizations are composed. The most basic unit or subsystem of the

---

1 Sanford, Hunt, and Bracey, pp. 11-12.
organization is the individual. . . . The ways in which individuals receive, interpret, and transmit messages and the ways in which those messages affect the individuals' motivations are therefore the factors central to organizational communication."\(^1\)

The next subsystem of the organization is the dyad. This is formed when two people meet in conversation. This is an important organizational element since informal conversations occur continuously within an organization.\(^2\)

The third subsystem is comprised of three or more organizational members who interact. This is called a group. The amount of work accomplished and individual satisfaction is often communicated and determined in informal groups. Formal groups usually make policies and contribute to the decision making governance of the organization.\(^3\)

The final communication subsystem involves all three previous subsystems and more. This is the organization's hierarchy. Leadership communication is the largest subsystem of organization communication.\(^4\)

The entire system that makes up the subsystems is the organization. At this level there are identified channels and networks which connect all of the subsystems together. These networks may be formal or informal.\(^5\)

The final element of organizational communication according to Baird is the fact that organizations are open systems and that they must

---

1 Ibid., p. 33.
2 Ibid., p. 33.
3 Ibid., p. 33.
4 Ibid., p. 34.
5 Baird, p. 34.
constantly interact with their environment. Organizational communication takes place not only within the boundaries of an organization but also across those boundaries with the outside environment.¹

Cal Downs, David Berg, and Wil Linkugel believe that organizational communication must be envisioned through an examination of the organization as a whole. Therefore the organization can be looked upon as a complete communication system. Each system is part of a suprasystem or total environment in which a number of systems operate. What happens in the suprasystem affects the internal workings of the system. An example might be; if a business closes in a community, that not only affects the economy of that community it also affects the school system since some people may leave. This would mean fewer students, less money for schools, teacher lay-offs and faculty morale problems in the schools. The reverse could take place if a new business opens in a community.²

Downs et al. further contends that each system or organization builds communication networks designed to monitor the organizations relationship with its suprasystem. Each network is divided into several subsystems which Downs et al. classifies by: (1) communicative functions; (a) informative, (b) persuasive, (c) command/regulative, and (d) integrative; (2) kind of network; (a) formal and (b) informal; and (3) organizational direction; (a) downward, (b) upward, and (c) horizontal.³

¹ Baird, p. 34.
³ Ibid., pp. 20-30.
Each organization is a unique communication system made up of several different subsystems, each processing different kinds of messages and perhaps performing different kinds of communicative functions. Ultimately, however, organizations must be interpreted in terms of people—people interacting in various kinds of groupings.

Goldhaber, Dennis, Richetto, and Wiio believe that to understand organizational communication, researchers should not be looking for a grand, all inclusive, theory as so many researchers do. The belief that if research is conducted accurately and instruments are refined enough then luckily one day the hidden theory will suddenly be disclosed which explains all organizational communication behavior in all situations. 2

We are willing to stick our necks out to say: forget it. It is very likely that we will not find the underlying explanation for organizational communication behavior. There is no "clarifying perspective" that remains hidden to "make the pieces fall more simply into the whole" to paraphrase Guetzkow.

Instead, we suggest that a more fruitful approach would be to start with Guetzkow's (1965, p. 569) first notion that communication in organizations is an area of study "in which there is a special richness in contingent, interactive effects." Or, if we adhere to the idea of a unified explanation, then the "contingency approach" to organizational communication, the interaction of organizational and communication effects in different situations, may be most appropriate. This model has been suggested in Wiio (1975, 1978) and Goldhaber, Dennis, Richetto, and Wiio (1979). Organizational communication effects can be explained only, in the context of the constraints of different contingencies. 3

So what is organizational communication according to Goldhaber et al.?

Any understanding of our contingency approach to

1 Downs, Berg, and Linkugel, p. 30.

2 Goldhaber et al., p. 334.

3 Ibid., p. 334.
organizational communication requires a conceptual clarification of the concept of organizational communication. In much of the discussion so far communication in organizations has been treated on the same level with such behavioral variables as motivation, leadership, and job satisfaction.

We suggest that organizational communication cannot be compared with other organizational variables: it makes all the other variables possible. Without communication there can be no motivation, no leadership, no productivity, and no organization. Organizational communication is an interfacing variable; the process of matching of two systems so that they are able to function in a coordinated way. Wio (1978, p. 40) has suggested the following definition of organizational communication:

Organizational communication is such an interchange of information between systems or parts of systems where: (1) output information from one or several control systems causes work processes in one or several other control systems, and (2) the communication process interfaces organizational systems in different contingencies, so that they are able to function as a social system in a compatible and coordinated fashion to achieve organizational and individual goals.

Wherever two systems—persons, departments—meet in an organization there has to be communication if the systems are to cooperate towards common goals. For optimum results there has to be a proper match between the systems through communication. The success of the interfacing depends on four major components: (1) structure and size of the communication system, (2) quantity of information exchange in the system, (3) content of the messages, and (4) timing of the communication process.

When these contingencies change the output of the organizational communication process changes. Communication behavior can, perhaps, be predicted in specific contingencies. On the other hand, differences in contingencies may and do explain some of the conflicting research results described by earlier writers.

It is quite evident that there is no commonly agreed upon definition of organizational communication. There are consistent terms, concepts, and processes that each author(s) and researcher proposes to

---

1 Goldhaber et al., pp. 334-35.
deal with the problems related to organizational communication.

Gordon L. Lippitt and a colleague of his for many years, Leslie This, have identified some of the barriers and problems that managers face in all types of organizational communication.

Distance. In some complex organizations, supervisors are physically at a distance from those supervised. Infrequent face-to-face supervision creates difficulties. Often, managers spend much time seeking gadgets, gimmicks, techniques, and systems to overcome this communication problem. There is no easy solution—improvement is bought at a heavy price.

Distortion. When communication problems come to the attention of the manager, they are frequently quite complex and diffused. Too often they are not perceived while still simple, readily identifiable, and remediable. When finally grasped, so many persons have said so many things over so long a period of time that it becomes extremely difficult to separate factual data from feelings, emotions, and psychological distortions. It is helpful for the manager to recognize that sometimes, in communication, management is not of people, processes, materials or functions but rather of the perceptions, needs, and prejudices of people.

Lack of Leveling. Subordinates usually find that it is hard to "level with" their manager. If the actions of the manager have resulted in faulty operations, it is difficult to communicate this information without fearing how the manager will react.

Lack of Trust. What will consistently be communicated is in large part dependent upon what the subordinate believes the manager has done with previously reported information. If, for example, bad news previously reported resulted in a "dressing down," little future bad news will be reported. Or if the subordinate senses that submitted reports are not acted upon few, if any, reports are likely to be made voluntarily.

Inaccessibility. If the manager is inaccessible, physically or psychologically, communication attempts will fall off.

Type of Organization. The nature of the organization will affect communication. For example, the distance between the policy formulators and the action implementers may be too great. Or those who implement a policy or decision may have no role in establishing the policy or making the decision, and thus feel little responsibility for it.

Communication Gap. There may be a defect in the formal network of communication. The organization and its system of communication may be large and complex. Sometimes there is a
gap in the communication chain that has gone undetected. One element in the "chain" that has fallen down on its communication job creates a gap. This gap will need to be bridged to make communication function properly.

Lack of Clear Responsibilities. There may be status and role ambiguities. When we feel that we have low status, we may become overly critical of our ideas and tend to inhibit them. Conversely, if we have high status, we may fail to listen to and weigh carefully the ideas of others. If we are inconsistent in our leadership roles, we are apt to find that this lack of predictability creates confusion and errors of response. The manager can check distribution of responsibilities and job description. Many role problems can be traced to lack of clarity, either written or verbal.

Paper Channels. A study of the organizational chart may be in order to determine which formal channels are being used and which exist only "on paper." As a general guide, the informal and work-relationships communication networks can often give ideas for analyzing and modifying the formal network. In some instances, these networks can form the basis for new channels or groupings in the formal network.

Semantic Differences. There may be language or semantic differences. Sometimes we are blocked by our failure to understand clearly the words or terms used. There are the different connotations and meanings accorded words in various sections of the country, and by different racial, occupational, and other groups. Even within a single organization, these factors often blur understanding between occupational and professional groups. The manager can alert staff to these differences and review terminology used in communications to the different occupational groups—such as written forms, meeting formats, and the type and extent of verbal orders.

Personal Incompatibility. Sometimes subtle personality clashes create communication blocks; sometimes issues are personalized, rather than being treated in terms of organizational or task needs. Sometimes there are power struggles to gain control of a group or a situation, with the result that true communication becomes almost nonexistent. The manager can identify and analyze stress points (noticeable tension or open conflict) to determine causes. It is important to remember that although some conflicts are conscious, many are not consciously recognized by the participants.

These organizational communication problems certainly make formidable reasons why the organizational communications theorist and researcher studies and works. Because organizations and their environments are growing and changing with extreme rapidity, theories and techniques to deal with these organizational communication problems have been and continue to be developed.

What theories do the organizational communication scholars propose that would be beneficial for investigation by educational administrators? Certainly most schools could be equated with large organizations. Just as large organizations, schools also exist on communications, procedures and policies. Schools also have many organizational communication problems. More effective means of communicating changes, policies, expectations, and addressing communication problems would certainly enhance learning and the desired outcome of the school organization.

Sanford, Hunt, and Bracey offer three components to their organizational communication system: (1) the formal subsystem, (2) the climate in which organizational communication takes place, and (3) the interpersonal skills of organization members.

![The Organizational Communication System](source: Sanford, Hunt, and Bracey, p. 184.)
Since this model represents human organizational communication, we expect failures in each subsystem. No organization can create a perfect communication system, because people must operate the system. A rational approach to organizational communication would be to expect the system to operate effectively to the extent to which its human operators are effective. As humans fail, the system will fail.

Sanford, Hunt and Bracey further define each of the three components of their organizational communication system.

**The Formal Communication Subsystem**

Structure is important in the organization, and it helps determine the patterns of interaction among members. The official communication linkages from the top of the structure to the bottom constitute the formal communication subsystem.

The decision makers at the top of the structure create a variety of positions which are assigned specific organizational tasks, or jobs. The hierarchy develops relationships ("above," "below") which accompany each of these positions.

As each position in the structure is created, there is an accompanying need for communication associated with that position. The person in the position, in order to perform his or her job adequately, needs information from positions above, below, and equal with his or her own. This need exists because the organization operates as a social system with each position influencing each other position. To illustrate, let us examine the role of the teacher in a typical high school organization. If the school board adopts a new policy on teacher grooming, the policy will affect teachers and they need to know about it. Organizations, recognizing this inherent need for communication, create a variety of formal techniques, or channels, which are used by the structure to transmit information to all positions. The school board may use the teacher's supervisor (the assistant principal) and the weekly employee newsletter to communicate the new grooming policy. There is a wide variety of available mechanical (newsletter) and human (supervisor) channels within the formal subsystem.

In an organization, there is an established formal communication subsystem which is one component of the organizational communication subsystem which is one of the consists of all the official and recognized communication components of the organizational communication system. It

---

1 Sanford, Hunt, and Bracey, p. 184.
channels in the organization, including the interpersonal relationship between superiors and subordinates. The formal subsystem is most widely used for the transmission of work-related information to various positions throughout the structure.

The Climate in the Organization

The concept of climate refers to the attitudes held by members about the immediate environment in which communication takes place within their organization. In interpersonal situations, the individual's communication is greatly influenced by the behavior occurring around him or her. This behavior is part of the climate of the organization.

We assume that people will have very strong feelings about their organizations, and we assume that those feelings will have an impact on the organizational communication system. Attitudes about the organization held by members can be said to significantly influence the information transmitted on the formal subsystem.

Climates are part of the composition of every work group, operating division, and organization. Sometimes the climate of a particular work group is better (or worse) than the climate of the organization as a whole.

As with the formal subsystem, climate becomes part of the organizational communication system by composing its attitudinal component. As the formal subsystem transmits work-related information, climate provides the background in which individuals formulate a reaction to the information they receive. The same message transmitted will probably have different effects on each member of the intended audience. Climate is but one of a number of variables likely to influence this effects.

Interpersonal Skills in the Organization

There are several ways in which interpersonal skills influence organizational communication:

(1) Individuals must make decisions about which messages are to be transmitted through the formal subsystem. A member at a strategic position in the hierarchy must decide which messages are sufficiently important to transmit. This decision is based on the individual's sensitivity and perceptions about the needs of his or her organization.

(2) Individuals must make decisions about which medium or channel is most satisfactory for message transmission. A variety of channels, ranging from the grapevine to an official interoffice memorandum, are available to the communicator for message sending. The member must decide which channel is likely to produce the appropriate response to his or her
message. This decision should be based on his or her understanding of the function of each of the available channels and the requirements of the message (speed, accuracy, size of intended audience, and so on.)

(3) Individual receivers must be able to interpret and apply a message which has been communicated. The individual, in the organization, is exposed to many potential messages. Those messages which are most meaningful to him or her will be processed, but he or she must also apply them to his or her unique organizational situation. The individual's skill at accomplishing this task will depend on his or her perceptual and listening abilities.

(4) The accuracy of information transmission will depend upon the individual's abilities to articulate an understandable message. The individual who sends a score of memoranda about a pressing organizational problem will have no impact unless his or her memoranda are understood by potential receivers. Message articulation is a product of the sender's skill at analyzing the needs and requirements of the intended audience(s).

As with the formal subsystem and climate, the combination of interpersonal skills demonstrated by members is an important component of the comprehensive organizational communication system. The formal subsystem constitutes the mechanism of official information within the organization while the climate involves the attitudes of members toward that information. Interpersonal skills determine the degree of effectiveness of the formal subsystem for transmitting the information. When the formal subsystem is operated by skillful communicators, it should communicate understandable and trustworthy information, influencing the climate and, in turn, help achieve organizational effectiveness. All three subsystems are integrally linked and must operate at relative peak efficiency to produce an effective organizational communication system.

The organizational communication system facilitates two important organizational processes: decision making and producing. Good decision making depends upon complete and accurate information flowing through the organization to the appropriate decision makers. In order for this to be achieved all three subsystems must operate properly. The second organizational process strengthened by the organizational communication

---

1 Sanford, Hunt and Bracey, pp. 184-88.
system is the satisfactory production of the organizations product. This can only be completed if people know what they are to do and want to do it. A breakdown in any of the three subsystems can result in lost production.¹

Another organizational communication theory is presented by Goldhaber, Dennis, Richetto, and Wlio. Their theory is based upon Lawrence and Lorsch’s contingency theory which suggests that since factors in the environment are changing so rapidly, there is no single best way to run an organization.

The contingency view seeks to understand the interrelationships within and among subsystems as well as between the organization and its environment and to define patterns of relationships or configurations and attempts to understand how organizations operate under varying conditions and specific circumstances. Contingency views are ultimately directed toward suggesting organizational design and managerial actions most appropriate for specific situations.²

Just as there is no single best way to manage, so also there is no one best way to communicate. Goldhaber et al. propose that the communication process is influenced by many internal and external constraints of the organization and its subsystems. These constraints determine the status of the organization or its subsystems at any given time and are dependent upon the state of the environmental suprasystem and the states of the subsystem.³

Those internal and external contingencies which most directly affect the communication system (communication variables—personal variables, relational variables, and organizational variables)

---

¹ Sanford, Hunt and Bracey, p. 188.
² Goldhaber et al., p. 39.
³ Ibid., p. 39.
ultimately affect the amount of organizational intelligence in a system. When the effectiveness of an organization's communication system is maximized, the organization is optimally positioned to cope with any potentially unstable environment either external or internal to the organization.

Table 2 explains the communication contingencies.

Table 2
Communication Contingencies

<table>
<thead>
<tr>
<th>Internal Contingencies</th>
<th>External Contingencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Structural: degree of formality and type of structure chosen to organize the functions and relationships in the organization.</td>
<td></td>
</tr>
<tr>
<td>2. Outputs: amount of diversity and degree of quality in the products/services.</td>
<td></td>
</tr>
<tr>
<td>3. Demographic: degree of variation among employees in such characteristics as age, sex, education, tenure, supervisory status.</td>
<td></td>
</tr>
<tr>
<td>4. Spatiotemporal: degree of variation in both spatial (design, amount, location, distance) and temporal (timing, timeliness) matters.</td>
<td></td>
</tr>
<tr>
<td>5. Traditional: degree of conformity with organizational norms, history, and script.</td>
<td></td>
</tr>
<tr>
<td>1. Economic: amount of stability in current market/competition.</td>
<td></td>
</tr>
<tr>
<td>2. Technological: degree of innovation with equipment, science, research and development.</td>
<td></td>
</tr>
<tr>
<td>3. Legal: local, state, and federal regulations, guidelines, and laws.</td>
<td></td>
</tr>
<tr>
<td>4. Socio/political/cultural: social, cultural, and political considerations.</td>
<td></td>
</tr>
<tr>
<td>5. Environmental: climate, geography, population density, and availability of energy.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Goldhaber et al., p. 42.

1 Goldhaber et al., pp. 40-41.
As can be seen in Table 2 the amount of intelligence needed by an organization depends upon the status of the contingencies. In times of rapid change more organizational intelligence is required. The quality of the organization's communication system will produce the amount of known intelligence; the lower the quality the less known intelligence.

The gap or difference between the intelligence needed and the intelligence possessed is the information power gap; the greater this gap, the less the manager's chances for coping with the environment. The condition of maximum danger to the organization occurs when a high rate of change in contingencies is coupled with an ineffective communication system. This condition results in the largest gap between intelligence needed and intelligence possessed, greatly reducing the information power the organization has to cope with its probably overloaded state.¹

What then do Goldhaber et al., using the contingency viewpoint, suggest as the organizational communication design and the methodology for recommending appropriate managerial actions for specific situations? The internal system of organizational communication that they propose is the Functional Analysis System Technique (FAST).² Figure 8 depicts the FAST system.

Figure 8 shows that FAST looks very much like a PERT (Program Evaluation Review Technique) program except that FAST is function-bound and PERT is time-bound. Just as in a PERT, the FAST program requires that the key program concepts be sequentially distinguished.

In our case, we have identified the most basic function of any organization as making some kind of output (in the form of a product or service to others); this we have labeled (A). Next to this most basic function, we identify (B) primary

¹ Goldhaber et al., p. 41
² Ibid., p. 171.
The most basic function and the required secondary functions form the critical path of the FAST program. In order for this critical path to be valid, it must meet a two-way test of logic. First, from left to right, a "How?" test must be
applied; and then, for the program to remain intact, from right to left, a "Why?" test must succeed. Specifically, How do we produce organization output? Through the use of primary information events. How do we make use of primary information events? Through systems of organizational communication. How do we make use of these systems? Through human input.

The "Why?" test works similarly. Why do we make use of human input? To provide systems of organizational communication. Why do we have systems of organizational communication? To use primary information events. Why do we use primary information events? To produce organization output.

Although these logic tests may appear tedious, they insure that (a) functions have not been assigned a critical path priority which should be realistically subordinated elsewhere in the FAST program, and that (b) other functions have not been inadvertently excluded from the critical path sequence. Together, then, with the logic tests appropriately applied, we can conclude that our components of the internal system of organizational communication fit a composite whole. Altogether, we believe that the critical path functions derived through this FAST procedure offer a convenient model for any manager who is embarking upon a critical analysis of his organization's system of internal communication.

Other implications for the FAST program described in Figure 8 are:

1. A problem with any one component on the FAST critical path line will undoubtedly provoke problems for one or more of the neighboring FAST components.

2. The quality and quantity of organizational output increases to the extent that the critical path functions are highly integrated with one another.

3. The system has a built-in self-correcting feature which any management can employ to reestablish itself on a desired course of organizational progression from which top management perceives it has deviated.

4. Management can exert some control over "occurrences happening all the time the critical path functions are taking place"—but not total control.

5. It is the combination of occurrences happening all the time and those occurrences happening some of the time the critical path functions are taking place that places

1 Goldhaber et al., pp. 172-73.
information-overload stress on the organization.  

In summary, the individual parts that constitute the whole of an organization's internal communication system are intricately bound to one another. When a problem with the system occurs, the manager should be equipped to ask, at minimum, the following questions:

1. What critical path function (or functions) is most directly affected by the problem?

2. Is the problem caused by, or coincident with, any one of the six occurrences that happen all of the time the critical path functions are taking place? Why?

3. Is the problem caused by, or coincident with, any one of the seven occurrences that happen some of the time the critical path functions are taking place? Why?

4. Is the problem caused by, or coincident with, a combination of one or more of the six occurrences that happen all of the time with one or more of the seven occurrences that happen some of the time? Why?

5. Is the problem caused by, or coincident with, a combination of two or more of the six occurrences that happen all of the time the critical path functions are taking place? Why?

6. Is the problem caused by, or coincident with, a combination of two or more of the seven occurrences that happen some of the time the critical path functions are taking place? Why?

In other words, the objective here is to locate and isolate the most probable problem source so that it can be treated and remedied without disturbing the remainder of the internal system of organizational communication.

Can organizational communication help educational administrators? If schools fall into the category of an organization engaged in a communication process than they most certainly could learn from organizational communication theory. Culnan and Bair’s statement rings

---

1 Goldhaber et al., pp. 174-75.
2 Ibid., p. 178.
truer now than earlier; "communication is the critical process in organizations because organizations consist of people who spend the majority of their time communicating." Schools spend all their time communicating.

Conclusions

This review of the literature and research in management and educational administration theory, education administration communication theory, and organizational communication has pointed to several important conclusions that can be related to an organizational communication model for large high schools.

Management theory has much to offer that can be included in the area of educational administration. Most large high schools still resemble the large bureaucracies that were prominent fifty years ago. Since then important management techniques and theories have evolved. Just as business must face the rapidly changing technologies and changes of the current times, so also must education change and look to the future if it is to keep current. The information age is upon us. "As the information society continues its growth, there will be increased public awareness of the importance of knowledge as capital. People will increasingly realize that knowledge is not the same as information." How are school leaders going to lead in the information society? What knowledge must they possess?

For school principals to be effective leaders and communicators of

---

1 Culnan and Bair, p. 215.
the future they must be aware of the management techniques that work with managing people today. Each school can be equated to an organization or system unto itself. Teachers are the middle managers in schools. If the leader of middle managers is not aware of the management techniques for good leadership, the system or organization will certainly have problems. Furthermore, how can a leader of managers identify the management techniques that are being used by middle managers if not knowledgeable about the subject and not able to give advice, expertise, and current trends on the subject.

Finally, why is it important to know management theory for a model computer linked organizational communication system? The entire basis of a communication system in management is based upon the theoretical principles of the leader. Bureaucratic managers, for example, believed only in downward communication. Using a computer as a means of organizational communication in a bureaucratic model is useless and would probably be less productive than using written communiques. On the other hand, in an open systems environment, where sharing of information is encouraged, where a flat organizational structure exists, where many people need access to quick decisions made at a juncture point of leadership, then the model to be presented in Chapter III will most certainly enhance the communication process.

Chapter II also reviewed the literature in educational administration theory and educational administration communication theory. What conclusions can be drawn from this review?

First of all, the review of educational administration theory reveals few systems, theories, or organizational approaches for school-wide communications. The authors agreed that "communication is one of
the chief concerns of secondary school principals, that it "permeates every process of school life," that it "is the essential tool for the educational administrator." But no one writer gave an overall systems approach or model that a practicing educational administrator could use. Single issue communication subjects were addressed by many writers such as preventing communication breakdowns, listening for better communication, planning an effective school communications program, etc. But these do not address the total picture. As Stephen J. Knezevich has written, "Up to this point in time the design and operation of effective communication systems are the least understood dimensions of educational institutions."

Secondly, in reviewing the literature of educational administrative communication theory, very little was contributed that could help the practicing administrator to design and operate an effective communications system for a school. Hoy and Miskel proposed six generalizations for principals to follow. That is the problem. They are generalizations and not complete designs of operational systems. Hampton and Lauer proposed a threefold design. The attempt is to be commended but it also fails the test of totality and design. Dorsey proposed a communication model that is as complete as any proposed. While completeness of design is essential, Dorsey's model fails in the aspect that it is built solely on a decision making basis. His concept of nets is very intriguing and shows some promise for future model

1 McCleary, p. 48.
2 Hoy and Miskel, p. 238.
3 Valentine, "Audit of Administrator Communication:"
designers. Overall, the literature review of educational administration communication does not reveal a design and complete operational model for an effective communication system in large high schools.

Because of the lack of a model and design for an effective organizational communication system for a large high school, the area of organizational communication was reviewed for help in establishing a basis of knowledge that could be used for the model that is to be presented in Chapter III. Although the field of organizational communication is relatively new, in the last thirty years it has made a significant impact upon the study of organizational structures, processes, management, and especially communication. Using organizational communication as the basis of knowledge, the model presented in the following pages will address the communication needs, problems, and processes of a large organization; specifically, organizational communication in a large high school.
CHAPTER III

A Model for Electronic Linkage of Organizational Communication in Large High Schools

Before proceeding into an explanation and discussion of the electronic linkage of organizational communication in large high schools, it would be appropriate to first become acquainted with the discipline of model building and how a model fits into the scheme of research and investigation.

Jenson and Clark use the term model as a part of theory building. They quote Griffith as saying "It is the aim of science to accomplish three things concerning subject matter: description, explanation, and prediction."¹

Explanation is the business of theory. The purpose of theory is to explain the interrelationships among phenomena. And why? To achieve the final aim of science—that is, prediction—to predict the anticipated and unanticipated consequences of a particular action or set of actions. Theory is the sine qua non of science. It is the element which transforms common sense and best guesses to predictive probabilities.²

But what is theory? According to Jenson and Clark, a theory is "essentially a set of assumptions from which a set of empirical laws (principles) may be derived."¹ Theory is not however a personal bias; a

² Ibid., p. 64.
dream or flight of fancy; it is not philosophy; nor is it a taxonomy. Theory is rather, an attempt to organize systematically the components of a science.²

Models have a significant relationship to theory and have a common, general, and a specific association with theory.

In its general sense, model can be used to connote a schema, paradigm, or classification which attempts to describe phenomena in a systematic manner through the use of symbols or classificatory categories, and which when applied to the study of the phenomena are designed to be productive of relevant, testable hypotheses.

Models may also be defined in terms of the isomorphic relation of phenomenon or concept to another. In this context, a model of a well-defined phenomenon or concept is employed to develop hypotheses, laws, or theories regarding a less well-understood area.

William Monahan has a different viewpoint of models and model construction. In general his belief is that models are a subject for something else when the concepts of both are isomorphic. This means that there is a one-to-one relationship between the concepts and assumptions of the model and that which it represents in the observed world and, furthermore, the relationships take on the same form.

Simply put, models allow us to characterize the phenomena in which we are interested in such a fashion that we can "see" most of the components, their interrelationships, and functions. The model lends itself to manipulation such that we can predict the consequences of manipulation; i.e., if we do something to component A we can "test" its consequences on components B, C, and so on. . . .

By empirical models, we refer to models that are based on already known aspects of reality and by which the theorist or researcher can be more cautious about overlooking the

---

1 Jenson and Clark, p. 68.
2 Ibid., p. 69.
3 Ibid., p. 69.
unintended consequences of some existing relationship or effect in the analysis. The heuristic model on the other hand does not take some existing and known pattern and miniaturize or otherwise reproduce it; this model is generated by the assumptions and postulates conceived by the theorist. The heuristic model is created whereas the empirical model is recreated.

Clearly it is impossible to build any kind of model totally de novo—a model by definition has to be a model of something. But the distinction we are making here is the extent to which the model builder is behaving a priori or a posteriori; that is, given that there have been public schools in this country for a great many years, if one wants to develop a kind of laboratory model (analytical and abstract or concrete and mechanical) of a school in order to study certain aspects of it more conveniently and intensively, he is likely to depend upon an empirical mode. But if there were no public schools and one wanted to initiate such an institution, he would be more dependent upon a heuristic mode. This is a grossly distorted example but if it is remembered that models, regardless of nomenclature, or structure, or function, are all constructed simplifications of reality (and sometimes distortions of important characteristics), then even this example suffices as a kind of model of a model.

It is important to remember that even though models are often used in the name of theory, and that sometimes an advanced theory in one area may act as a model for a less advanced area, theories and models are not equivalent. Whereas a theory is a logically related set of confirmed generalizations, a model is constituted of propositions confirmed for one set of problems but applied to another class of problems. The major difference is that empirical theories are first empirical laws from which more abstract relationships can be derived, whereas scientific models first consist of abstractions that are later interpreted into empirically testable hypotheses.

Models are immensely useful in explicating and illustrating theoretical systems and thereby helpful to the theorist in deducing productive hypotheses from the theory itself. It is for this reason that scholars sometimes say of a particular model that it "generated much research" but what they really mean is that the theory generated the research, whereas the model merely helped to clarify dimensions of the theory. In a similar vein, models are also useful in building theory because they can provide illumination of inconsistencies and ambiguities in the interrelationships among assumption, suppositions, postulates, and derivations.

Certainly Monahan's views of a model expand upon and add to the viewpoint of Jenson and Clark. However the differentiation of a model from a theory certainly leaves much to be questioned.

May Brodbeck further questions the relationship of model to theory.

The fact is that the term model is used most ambiguously. Nor is mathematical model any more precise since this term, too, covers different general use as a synonym for theory. A scientific theory is a deductively connected set of laws or generalizations, some of which, the axioms, logically imply others, the theorems. A theory may be well or ill confirmed, narrow or broad in scope, quantified or nonquantified. Model is now frequently used for those theories which are either highly speculative or quantified, or, most likely, both. Thus, a guess about the connections between quantified variables of an area, like psychology or economics, will frequently be called a mathematical model. Such hypotheses are mathematical only in the sense in which physics is mathematical. That is, they are empirical generalizations whose variables are quantified, so that we can say how much one variable changes with changes in others. They share the virtue of all quantified theories in permitting more precise deduction and prediction.

If the laws of one theory have the same form as the laws of another theory, one may be said to be a model for the other. This is the second most general meaning of the term. The laws of one area may suggest hypotheses about the form of laws in another area. The notion of model as isomorphism of laws is obviously symmetrical. However, when an area about which we already know a good deal is used to suggest laws for an area about which little is known, the familiar area providing the form of the laws may be called a model for the new area. Thus, the biological theory of evolution may be used as a model for social theory. Servomechanisms, like the automatic pilot or thermostat, are now frequently evoked models for learning and purposive behavior.

When a model, either empirical or arithmetical, is used as a source of hypotheses about the connections among the variables of another area, it does not explain these hypotheses. It merely suggests their form. If, however, these new hypotheses are confirmed, they may be used to explain and predict new knowledge.

Brodbeck's definitions suggest that a model gives form to complex hypotheses. It does not confirm or predict but helps to explain new knowledge gained from the use of the model.

Dennis Forceese and Stephen Richer put their definition of a model in a very basic manner: "a model is an imitation or an abstraction from reality that is intended to order and to simplify our view of that reality while still capturing its essential characteristics."¹

That definition almost makes a model seem like it has to be a three-dimensional structural imitation. However a model will often consist of symbols rather than physical matter. Explained another way, the characteristics of some phenomenon, including its variable components, and the relationships among these components, will be represented in the arrangements among the words or concepts agreed upon in the discipline.²

Models at various times have been termed taxonomies, conceptual frameworks, or typologies. "These are literally inventories of concepts relevant to some given phenomenon. They serve the function of pointing out distinctions among phenomena—identifying types."³

Because models include some suggestion of explanatory relationships, we may speak of them as explanation sketches or theory sketches (Dumont and Wilson, 1967, 43-44). Such sketches suggest possible explanatory relationships among variables—possible relationships rather than verified relationships.

The genesis of hypotheses is the more important function of a model. Models may organize our conceptual apparatus, but they also suggest relationships among these concepts and the

---

² Ibid., p. 38.
³ Ibid., p. 39.
phenomena the concepts represent. A model may also suggest
descriptive hypotheses in the sense of expectations as to what
phenomena a researcher might be expected to discover without
any attempt to explain these phenomena.

Thus, models serve a guiding and exploratory function. The
relationships comprising the model, built up through
cumulative observation and speculative logic, are
relationships which might be profitably tested in the "real
world. The relationships of the model are hypotheses—
sometimes stated in a general form meant to apply to a broad
range of behavior, such as deviance in general rather than
cheating in particular. Thus, the researcher can deduce
testable relationships among variables from a conceptual
model.

A model, therefore, is an inevitable perceptual filter.
It will shape research in a scientific discipline by governing
the kinds of research questions which will be posed, how they
are stated, and how they are examined.

Forcese and Richer are saying that models bring together
relationships about which descriptive hypotheses are used to explain
phenomena that might be expected. These models serve to guide and
explain these relationships which are built upon observations and
speculative logic. These models in turn are then scrutinized by
research and testing and when verified as true become theories.

The unsuccessful testing of a model may be due to several factors:
1) in actuality the model is wrong and needs to be restated; 2) the
concepts have been poorly operationalized and are not really being
tested; 3) an illogical deduction of hypotheses is made from the model;
4) the research format used to test the hypotheses fails due to
inadequate control of variables.

Scientists can never really test or prove an entire model.
However, by deriving hypotheses from a model, testing the hypotheses,

---

1 Forcese and Richer, pp. 39-44.
2 Ibid., pp. 44-45.
and verifying them, the verified outputs can become the building blocks of theory.

Finally Robert M. W. Travers points out that "models are convenient analogies. Models may sometimes provide a close representation of whatever they represent, as a globe does. These are called replica models. Models may be symbolic. The globe has some symbolic features, such as the little black circles that represent cities, but some models are completely symbolic, such as a table of organization showing the various positions, who occupies them, and the interrelationship of the positions."¹

"Models are very useful ways of thinking about complex phenomena. A good model can provide a very simple representation or quite complex happenings and make them more readily understood."²

Using the above stated knowledge concerning models, how does it apply to the electronic linkages model that will be proposed in the following pages of this chapter? Is the electronic linkage model analogic or symbolic? What complex phenomena will be more readily understood and what complex happenings will be simplified for easier understanding? What concepts will be operationalized and what hypotheses can be drawn from the model and the phenomena that it represents? These questions will be answered as the Model for Electronic Linkage of Organizational communication in Large High Schools is unfolded and explained.

Large high schools are large organizations. Organizational

² Ibid., p. 57.
communication in a large organization is at best very difficult. It has been said that large high schools operate with narrow, faulty, one-way channels of communication. This is further compounded by the fact that large high schools are typically organized as flat organizations. It is therefore imperative that a method of communicating within the large school organization be developed and be functional. Without a functional means of communicating within the organization that includes each participant, the organization's effectiveness, morale, and functions are greatly reduced.

In reviewing the literature concerning the educational models of organizational communication for large high schools, it was found that few models exist. Those models that were found; Hampton and Lauer, Hoy and Miskel, Korseney, Knezevich, Lysaught, and Pulley addressed the issue of communication but did nothing to present a functional methodology or practice for administrators to implement within their schools that could be utilized on a daily basis.

The discipline of Organizational Communication presented a model that is used by business and industry. That model, the Functional Analysis System Technique (FAST) is an internal system of organizational communication that is function-bound. The FAST program assumes that the basic function of an organization is the making of some kind of output (in the form of a product or service to others). The FAST program therefore requires that the key program concepts be sequentially distinguished.

This model contains the key components necessary for a large high school organizational communication model. One key element that must be accounted for however is the factor of sequential development. While most large high schools move forward in a sequential method through the
school's curriculum, each staff member is not coordinated with another. The usual reality of schools is that each staff member is teaching a curriculum totally different from another and that there are few sequential factors connecting the staff. Therefore, it is important to point out that each staff member exists as a middle manager in the large school organization. Each staff member has his/her own sequential development of curriculum that is followed. This curriculum sequential development is tied into the overall organizational picture of what is to be accomplished as an end product after four (or three) years of study at a large high school. Because this sequence is over an extended period of time, it is important that the organizational functions involved in schools be assessed in light of the organizational output.

Large high schools are involved in the following major functions:
1) Academics (curriculum) which include scheduling of classes, grading, discipline, and attendance; 2) Activities which include scheduling and transportation; 3) Management which includes budgeting and planning; and 4) Personnel which includes evaluation and supervision. It is through these major functions that students are taught and receive an education which is the organization's output. The major difference between a large business and a service organization is that certain sequential events are followed by an organization for the product or business service to be completed. In schools the major functions are on-going on a daily basis and not necessarily sequential functions.

In examining the FAST program of Goldhaber et al., Figure 8 the system of communication follows a linear pattern connected with the flow of the organizational output. Schools, on the other hand, function in a different organizational methodology. During each school day the major functions of the organization are occurring for each individual student
through each staff member. Because of this functional differentiation, the following model is proposed for organizational communication in large high schools. (See Figure 9)

The Electronic Linkage of Organizational Communication (ELOC) utilizes, as its medium for communication, Electronic Mail and a networked computer system. All personnel would be networked together through their own computer terminal on which they could communicate with everyone in the organization via the network computer system.

How would the ELOC create better organizational communication in large high schools? Examining the various organizational functions in relationship to the primary information events in the ELOC will give the best explanation of the model.

In the organizational day in nearly every large high school, students attend classes according to a set schedule. Teachers teach students according to this schedule. If there is to be any change(s) in that schedule ranging from the entire student body to just one student, that must be communicated to one, or as many as all, staff members. If an electronic means of communicating that information was not used, then one of the following methods would have to be utilized: 1) written notification; 2) oral communication; or 3) both. What kind of problems could be eliminated with an electronic medium to update schedule changes either on a mass basis or individual basis? Certainly the "lost paper" communication problem would be immediately eliminated; thus information would be more timely. Access to the information for rechecking or doublechecking would be spontaneous.

Another function involving academics and primary information that takes place on a daily basis in nearly every large high school is
Figure 9

Electronic Linkage of Organizational Communication in Large High Schools

Organizational Functions:
- Academics
- Activities
- Management
- Personnel

Primary Information Events:
- Schedules
- Grading
- Attendance
- Discipline

Systems of Organizational Communication
- Formal
- Emergent

Human Input
- Personal Characteristics
- Relational Characteristics

Using Computer Networking.
individual student classroom attendance. Using an electronic computer medium to link everyone to a centralized storage retrieval system would eliminate numerous problems now facing most large high schools. In most large high schools attendance is either written on a form or marked on an optical scan sheet. If there are 80 teachers teaching each class period, these eighty forms must be collected, collated, synthesized, and put into a reportable form. If a mistake is made, for instance the student comes into class after the attendance sheets have been picked up, then another piece of paper must be generated and sent to the attendance center to take care of the error. By utilizing an electronically networked computer attendance system, staff members could key in each student's attendance and send it electronically through the system. In the case cited above, the necessary changes could be made automatically when the event occurred. This would eliminate handling 80 pieces of paper multiplied by the number of class periods per day, 6 or 7, or approximately 500 pieces of attendance related papers per day. The probability for error would be greatly decreased. Staff members need a system to take care of attendance functions quickly and efficiently so as not to lose valuable teaching time.

A third function involving academics and primary information takes place on nearly a daily basis but not necessarily with each staff member. Disciplinary procedures and problems with students could be communicated to the proper school disciplinarians via electronic mail. If a student is sent from class and is to report to the office, instead of sending a note with the student, the staff member could notify the office that the student has been sent and the reason for the student's removal. This is also especially advantageous if immediate attention is needed for a student that is ill or injured. This immediate
communication linkage between staff members and the administration should make each staff member feel more a total part of the organization instead of being out somewhere in the building isolated from everyone else.

A fourth function involving academics and primary information is used throughout the organization on a regular basis. Student grading on an electronically networked computer system would make it possible for staff members to: 1) keep current grades; 2) send out progress reports as needed based upon the grades; 3) eliminate the marking of numerous sheets or cards in order to transfer grades from gradebooks to a device for printing out grade reports; 4) give immediate access to grades for a parent conference; 5) make final grade reporting more accurate and easier to accomplish; and 6) store gradebooks on tape or floppy disks for easier retrieval purposes.

But more than these four primary information events, the ELOC model also would provide the following factors for total organizational communication that have been previously identified by Gordon Lippitt and Leslie This. Each of the eleven major barriers found in organizational communication will be addressed.

The first barrier to organizational communication is distance. The physical distance of principals and associate principals from the staff they supervise creates difficulties. In some large high schools this may even include being physically separated by different buildings. The ELOC model for organizational communication can close the physical barrier gap. Through the use of electronic mail, administrators can communicate with an individual staff member, several, or all. The advantage is that the sender need not necessarily wait for the receiver to "answer the caller" as would be the case through a phone message or
wait until the written message is delivered. If all staff were already communicating via the aforementioned primary information events, they would be on-line at a minimum of five to six times daily. Thus staff could check their "electronic mail" often enough to cross the void that now exists through physical distance.

The second barrier to organizational communication is distortion. So many times an issue is totally distorted because the problem cannot be quickly addressed to everyone in the organization. As a result, the issue or problem becomes complex and diffused before it can be adequately addressed. The ELOC model would certainly help principals and associate principals address issues or problems quickly and efficiently before they evolve into rumors with many humanly attached feelings, emotions, and psychological distortions. By being able to communicate with single, multiple, or all staff through electronic messages, everyone can be continually updated and informed.

The third barrier to organizational communication in large high schools is lack of leveling. Staff members usually find it hard to "level with" their administrators. They find it hard to communicate information for fear of how the administrator might react. This could be addressed by the ELOC model because more frequent, accurate, and timely information and direct communication from the administrator(s) over time will break down this barrier. The ELOC model using electronic mail will certainly give communication advantages that were previously never in place.

The fourth barrier is lack of trust. Trust can either be sharpened or dulled depending upon the communication from the administration. In a large organization the slowness of written communication makes timely communication almost impossible which in turn can effect trust. The
ELOC model certainly will allow speedy access to a communication device that all staff members will have access to on a daily basis.

The fifth barrier to organizational communication is **inaccessibility**. When administrators are inaccessible communication attempts will fall off. With electronic mail via a computerized network system, the sender can send a message to an administrator who can return the message when he is available or when attending to messages on his computer. Physical separations are eliminated. Inaccessibility is greatly reduced.

The sixth barrier to organizational communication is the **type of organization**. In many organizations, including large high schools, the distance between policy formulators and action implementers is great. Those who implement policy or decisions may have no role in establishing the policy or making the decision. However, by using the ELOC model, all staff can give accurate and speedy input to decision and policy development. Good communication between staff and administration can give to everyone in the organization ownership of policy making and decisions.

The seventh barrier to organizational communication is the **communication gap**. Most large high schools are organized in such a way as to best utilize personnel in the dissemination of vital information. This organizational method can be through department heads, elected representatives, or chosen representatives. Sometimes the department head or representative may miss a meeting. Thus a gap in communication is created. This problem can be easily addressed by the ELOC model. With every staff member connected via the network system, all important information and communications can be put on the system so that everyone
has access to and is notified of the communication. The communication gap that happens as a result of logistic problems can be solved via the ELOC.

The eighth barrier to organizational communication as proposed by Lippitt and This is lack of clear responsibilities. If there are changes in an ongoing system, many times staff question whether or not their responsibilities are to be changed also. In a large high school organization, these questions need to be answered in order not to create a chaotic situation. The ELOC model can easily deal with these situations and help speed communication to everyone throughout the system.

The ninth barrier to organizational communication is paper channels. Most large organizations have a formal channel of authority or formal organizational chart. Large high schools are often constructed in the same manner. This formal manner of dealing with people, problems, or ideas can create a large barrier to effective communication. However if all staff persons in a large high school were connected by an electronic mail system, the formal barriers would drop and information flow, give and take, would increase. The vital essence of every organization, the free flow of information, would be greatly enhanced in large high schools by the ELOC model.

The tenth barrier to organizational communication in large high schools is semantic differences. Connotations and different meanings to words can cause serious communication problems. If a principal were to put out a written memorandum to his staff which caused confusion due to the wording used, many times staff members will apply their own interpretation because it would take too long to check out the real interpretation. Using the ELOC model, semantic problems could be
greatly reduced. Because staff members could communicate quickly and efficiently with the principal, the correct interpretation could be given to all staff.

The eleventh barrier to organizational communication is personal incompatibility. Because we are human, sometimes subtle personality clashes create communication blocks. Sometimes issues are personalized instead of being treated in terms of organizational or task needs. Many times these personality clashes can be addressed at a different level. The ELOC model presents a different level of communication on which to communicate. By use of electronic means, face-to-face communication can be avoided and possibly the incompatible personality issues would be dropped also. ELOC certainly can help provide a means of communicating that could be less strained.

Are there other uses of the ELOC model that should be investigated? All possible means and methods of communication must be addressed.

Certainly one of the most vital uses of a networked computer system for schools would be in the area of curriculum. What better way to be able to share information, build upon what other areas are doing, or to fully coordinate and sequentially develop the learning experiences for students? Vital information, course objectives, daily objectives and lesson plans, tests, and extra information could be organized and kept but a few key strokes from the teacher's reach.

The whole area of curriculum and lesson planning would certainly be enhanced by computerization since substitutes could easily key in to the past, look at the present, and look at the future curriculum offerings to get a better grasp at what is offered for the students that day or longer when necessary.

A network computer system would also allow teachers to keep
individualized student educational plans. Students could be challenged with material that meets their educational needs and thus benefit from materials and objectives that promote learning but not be too easy nor too difficult to master. A tremendous advantage to this would be that students could work at their own rate of learning. Students would not have to be held back if they wanted to go ahead nor would they be forced to go faster than they are able.

An administrative advantage to having the curriculum on a networked system would be the capability to monitor what is being taught and to ensure some resemblance of quality control for all students. True equality in education can then be a reality instead of a philosophical statement.

The Electronic Linkage of Organizational Communication Model may appear to promote the idea that face-to-face communications would cease to be needed in large high school organizations. This is certainly farthest from the model's ideals. The ELOC Model would be an enhancement to and a clarification process for better face-to-face communication opportunities. If everyone in an organization can feel that they are better informed, a part of, and a contributor to the total organization, then face-to-face communication in the organization will be enhanced. Many times after a personal contact with a staff member, the principal needs to follow up with some type of message or request for further qualifying questions. The ELOC model would make it possible to communicate or find out clarifying questions that can help the principal make a better decision.

If a networked computerized organizational communication system were installed in a large high school, what implementation principles should be followed? Mary Culnan and James Bair have researched this
issue and propose the following principles in order to provide a smooth transition to new communication methods minimizing the possibility of user rejection.

1) An adequate level of usage must be maintained. Daily use is necessary if a system is to support interpersonal communication among members of an organization.

2) The equipment must be available to each user at all times during the day.

3) Co-workers must also be system users. It is difficult to resist using a system that is used by all of one's peers in an organization.

4) There must be a need to communicate within the user groups. When there is no explicit need to communicate, the use of a system designed to support interpersonal communication becomes meaningless.

5) To encourage acceptance of the system, there must be a critical mass of users with access to the system. Without such a critical mass, an individual still will be forced to rely on customary modes to communicate with those who are not using the system.

6) Adequate user support must be provided. This support should take two forms: first, to management support for the use of the system, and second, support for the individual user in the form of training, documentation, and on-going consultation related to the use of the system.¹

These general implementation principles, based upon the experiences of actual office system's implementation, should certainly be investigated before trying to implement the ELOC model. The very first principle would easily be addressed in the ELOC model when used in large high schools. The primary information events of the daily schedule and daily attendance would make it mandatory for every staff member in a large high school to use the computer system, thus making it more likely that each staff member would begin to find out the advantages of

¹ Culnan and Bair, p. 220.
electronic mail for communicating. Daily usage would be maintained by all staff members.

The second implementation principle that equipment must be available to each user at all times during the day would also be addressed by the ELOC model. Each staff member in the ELOC model would have at their teaching station and work area, an interactive terminal that is networked into the computerized system. Thus equipment would be readily available to all users at all times.

The third principle of implementation cited by Culnan and Bair is that co-workers must be system users. The ELOC model addresses this issue also; since every staff member is to be linked on the network system, all co-workers would be system-users. It is also vital for correct information flow, that all support personnel such as secretarial/clerical workers and the head custodian be linked on the network system in the ELOC model for large high schools. Because some work that must be carried out is handled by support personnel, they also must be included in the information flow.

The fourth principal, that there must be a need to communicate within the user groups, is easily defined by the needs of large high schools in the ELOC model. The communication of attendance, scholastic information, discipline incidents and follow up, announcements, and a continual list of messages either for students or staff members could be daily functions of all users. The daily need for all users on the system to use the system exists and can be taken advantage of quickly and efficiently.

To encourage acceptance of the system, there must be a critical mass of users with access to the system is the fifth implementation principle. It is the premise of the ELOC model for large high schools
that all staff be users with complete access to the system. Therefore
the critical mass of users will be all staff and because of the daily
nature of some of the information functions, all staff will become daily
users in the ELOC model.

The sixth principle of implementation that adequate user support
must be provided is probably the key to any computer network user
system. Without complete and on-going training and support, the system
users will never continue to investigate new added features of the
computer system. To encourage and model the use of the system, it is
imperative that the administrators in a large high school using the ELOC
model must also be totally committed to and be users of the system.
Without that modeling and support the system will soon be by-passed and
traditional modes of communication will be relied upon.

In summary, the Electronic Linking of Organizational Communication
in Large High Schools Model can be a very valuable methodology and
framework for the establishment of a total organizational communication
model for large high schools. Consider a large high school as a large
organization, and each staff member as a manager; the computerized
network using electronic mail and other information functions are
similar to a large corporation which has many plants spread out across
the country and communicates vital information on a daily basis via
modem and terminals. The major communication problem in large high
schools has been how to link all staff members together with a system
that is efficient and, at the same time, utilitarian. The ELOC model is
a physical linkage of communication which takes advantage of that
"efficient and, at the same time, utilitarian" principle and
incorporates primary information events that happen on a daily basis
with all staff for the continuous functioning of the goals of the total
organization, thus meeting the organizational communication needs of a large high school.
Chapter IV
Evaluation

How could the Electronic Linkage of Organization Communication in Large High Schools Model be evaluated? Should this evaluation process be implemented prior to implementation of the model? What designs could be used to fully evaluate the ELOC model?

Since the ELOC model is based upon a computer network linkage of all staff members in a large high school, it would be very difficult at this time to find a suitable site to implement the model without first incurring hardware and software computer costs that could run into thousands of dollars. Could an evaluation design be implemented that could test the model without first incurring a large cost for computer hardware and software?

One methodology would be to construct a survey of organizational communication problems in large high schools. Once constructed and validated through pretesting, the survey questionnaire could be administered to selected large high schools and the data concerning their organizational communication problems compared. Once the data has been compiled, the ELOC model could be compared to the survey findings to see what types of projected impact the model could have upon the identified organizational communication problems. Several problems exist with this type of evaluation method. First, the survey design could be constructed that would collect only data concerning organizational communication problems that the model would address.
Second, given that a valid survey could be constructed, the comparison of the model to the identified problems could easily be done even if the model could not meet the need in reality because of time, space, or other unforeseen people and mechanical problems that the model design can not address. For these reasons this evaluation design should be rejected.

A second evaluation design for the ELOC model could be termed as Experimental Design I. Since the major factor involved is the cost of computer hardware and software perhaps the model design could be tested by experimenting with one department.

How would the experimental design be set up? First an experimental group would be selected. This could be an English Department in a large high school. This group would first be pretested on their perceptions of methods used for organizational communication. This group would then be trained and the ELOC model implemented with this group linked via computers to the school's administrative offices and procedures as per the ELOC model design. A count would then be made of all the actual communication uses of the model design computer linkage. After an 18 week period, the control group would be post tested on their perceptions of methods used for organizational communication and the pre and post tests compared.

A second control group for Experimental Design I would need to be selected. This group should be an English Department in a similar high school with a similar organizational arrangement. This control group would be administered the same pretest and post test as the experimental group. A count would be made of the various organizational communication methods used and the frequency of the use during the experimental time period of 18 weeks.
The Experimental Design I methodology offers some valid research approaches to the study of the ELOC model. The major problem with this type of design is the fact that the scope and nature of the ELOC model is total organizational communication. The Design I approach does not take into account the fact that in large high schools there are many departments and each department functions differently from the others. It is these differentiations and the needs of each department that the ELOC model would hope to address. Therefore, Experimental Design I does not seem to meet the evaluation criteria needed.

Another approach to experimental research for the ELOC model would be the complete implementation of the ELOC model system into a large high school and, using the design methodology of Experimental Design I presented earlier, compare two similar large high schools' organizational communication systems. This type of experimental study would yield valuable data concerning the effectiveness of the ELOC model.

However, due to so many variables and the magnitude of the type of research being conducted, the best evaluative approach might be in the area of qualitative research such as educational ethnography.

What is the purpose of educational ethnography?

The purpose of educational ethnography is to provide rich, descriptive data about the contexts, activities, and beliefs of participants in educational settings. Typically, such data represent educational processes as they occur. The results of these processes are examined within the whole phenomenon; isolation of outcomes is rarely considered. Educational ethnography has been used for evaluation, for descriptive research, and for theoretical inquiry.

What can educational ethnography provide for researchers to look at?

Ethnography and its qualitative design variants provide educational and other social researchers with alternatives for describing, interpreting, and explaining the social world and the operation of educational phenomena with this world. Substantive constructs generated within the various social and applied sciences that influence educational ethnography provide diverse perspectives toward education and contribute to the authentic portrayal of a complex, multifaceted human society.

Educational ethnographers examine the processes of teaching and learning; the intended and unintended consequences of observed interaction patterns; the relationships among such educational actors as parents, teachers, and learners; and the sociocultural contexts within which nurturing, teaching, and learning occur. They investigate the variety of forms education takes across cultures and among subgroups within society, the manifest and latent functions of educational structures and processes, and the conflicts generated when socializing agents are confronted by rapid social change. They document the lives of individual teachers, students, and administrators for unique and common patterns of experience, outlook, and response.

The outcomes of educational ethnography contribute to improvement in educational and school practice in several ways. They strengthen the overall research upon which many innovations and policies are based.

Goetz and LeCompte further specify what a thorough report of an ethnographic or quasi-ethnographic study would include. They are: 1) the focus and purpose of the study and the questions it addressed; 2) the research model or design used and justification for its choice; 3) the participants or subjects of the study and the setting(s) and context(s) investigated; 4) researcher experience and roles assumed in the study; 5) data collection strategies used in the study; 6) techniques used to analyze the data collected during the study;

1 Goetz and LeCompte, pp. 31-32.
7) findings of the study and their interpretations and applications.¹

Why suggest using this method of evaluation versus the survey or experimental design structure when Goetz and LeCompte say that "educational ethnography is neither an independent discipline nor, as yet, even a well-defined field of investigation."² Perhaps, because even though not a well defined field of investigation, educational ethnography can give a more complete evaluation process to the ELOC model than any other research design.

The purpose of educational ethnography is to provide rich, descriptive data about contexts, activities, and beliefs of participants in educational settings. This data would certainly be more valuable to the ELOC model user than any survey finds or experimental design structure. The survey method will yield only data on those elements which are questioned. The experimental design process will yield data only on those variables which are designed to be studied. The educational ethnography approach takes a look at the entire educational setting, structure, and process. It will look at human variables as well as machine variables in conjunction with the entire model make up and design pattern. The approach of the educational ethnographer's report would be descriptive data that can be used for further model enhancement and reconstruction.

Perhaps the best way to utilize the ethnographic approach to evaluation of the ELOC model would be to use it in two phases. The first phase would be to study the organizational communication patterns

¹ Goetz and LeCompte, pp. 31-32.
² Ibid., p. 18.
and processes of a large high school before implementation of the ELOC model. All organizational communication aspects including the dynamics between people could be described through this evaluation methodology.

The second phase of a dual educational ethnographical evaluation of the ELOC model would be the study of the organizational communication patterns and processes after all staff members have been linked via computer networking as the ELOC model proposes. By using the ethnography approach, all phases of the ELOC model could be evaluated: the organizational functions; the primary information events; the system of organizational communication; and human input. Ethnography's descriptive data approach would provide greater detail and explanation of trends and events whereas a survey or experimental methodology does not give this dimension.

The final step in the two phase ethnographic evaluation approach would be to compare phase one with phase two. If the ELOC model is truly valuable and an asset for organizational communication and the goals of the organization, it will be pointed out in the second ethnographic report. Organizational communication problems pointed out in the phase one study should have been addressed by the ELOC model and the phase two study would report this finding.

In summary, the most valuable methodology for evaluating the ELOC model seems to be the educational ethnography approach. More valuable data would seem to be generated by this approach which could in turn be used for further model research and implementation.
Chapter V

Conclusions

Can a model for electronic linkage of organizational communication in large high schools be developed to meet the communication, information, and organizational communication needs of large high schools? It has been the purpose of this study to create the ELOC model. Through a review of the literature it was found that educational administration theory is based heavily upon management theory and that many educational administrative principles come directly from management theory.

In investigating educational administration communication theory, no significant theories or sets of principles were found which could guide practitioners of educational administration. How does a practicing high school principal establish a sound organizational communication system if there are no significant theories, models, or ideals on which to base that practice? However, many of the writers frantically acclaimed the need for a sound, efficient, and effective organizational communication system for high schools.

Since educational administrative theory gave few clues as to models and theories for organizational communication, the relatively new field of study --organizational communication-- was reviewed in order to more
fully investigate models for organizational communication in large high schools. Several models were reviewed for possible adaptation to the educational structure and environment. These models, their principles and objectives, were reviewed for ideas and principles that could be included into the model for electronic linkage of organizational communication in large high schools.

The ELOC model was created to meet the needs of organizational communication in large high schools. As the review of the literature pointed out few communication system models, let alone organizational communication, exist for practicing school administrators to follow or utilize. The ELOC model was able to address the eleven identified major problems in organizational communication. The model is practical in the sense that it can bring about a system of organizational communication to large high schools that has never existed previously. The ELOC model is utilitarian in the sense that it can be utilized not only for organizational communication needs but that it can also be continually expanded with increases in technology and information. The ELOC model is the only available model created for the educational structure of schools as they currently exist which can meet the organizational communication needs of the large high school operation. Large schools are large organizations and as such they need to move from the bureaucratic age to the information technology age. Finally the model for electronic linkage of organizational communication in large high schools is a total environment organizational communication model adapted to the structure and constraints of the large high school organization that can continually be expanded as technology expands our environments and our uses of information processing.
Implications

A model for organizational communication in large high schools has been identified. What other areas connected to the model need to be addressed in order for the model to be used?

One major consideration that must first be addressed in the ELOC model is the type of computer hardware and software to be utilized. If each staff member in a large high school is to have a personal computer terminal, then all the hardware and software must be compatible. The decision as to what hardware and software to use should best be left up to the individual needs and preferences of each large high school organization.

The second major factor that must be addressed is the cost of a complete interactive computer system that would link each staff member by means of electronic communication. Would the cost of such a system be realized through greater educational benefits to students? A thorough study of the ELOC model and its overall implications for education would need to be undertaken to answer this question. It is the belief of many writers that some type of overall use of the computer/information technology must soon be implemented by schools in order to keep up with the continually expanding information age.

The third major factor to be addressed is how to implement the ELOC model to staff members who probably have never used a computer. What type of implementation procedures must be used that would ensure that the system is not defeated by reluctant users? Several daily processes that are unique to schools such as attendance, grading, and daily announcements, can be used as processes for total staff implementation procedures.

Finally, how can the ELOC model be evaluated for possible use
without a full blown monetary investment and implementation of the model? Chapter IV has briefly addressed this issue. Perhaps comparisons of other organizational communication models in business and industry to the ELOC model in relation to large high school structures would give a meaningful initial appraisal of its' utility, practicality, and use as a total organizational communication system.

The model for electronic linkage of organizational communication in large high schools must have considerable further study. Many factors such as cost, implementation processes, and evaluation need to be addressed. However the ELOC model does provide a methodology and model to implement a structure which could take high schools and the educational process out of the bureaucratic age into the high technology information age.
BIBLIOGRAPHY
Bibliography


Allison, Derek J. "Toward An Improved Understanding of the Organizational Nature of Schools." *Educational Administration Quarterly,* 19, No. 4 (Fall 1983), 7-34.


Goldhaber, Gerald M. *Organizational Communication.* Dubuque, Ia.: Wm. C. Brown, 1974.


