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A STUDY TO EXAMINE BELIEF PATTERNS
ABOUT TEACHING, LEARNING AND CLASSROOM
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MANAGEMENT MODELS AND ELEMENTARY PRINCIPALS
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TEACHERS, ADMINISTRATORS ENGAGED IN

IMPLEMENTING RATIONAL MANAGEMENT

MODELS, AND ELEMENTARY PRINCIPALS

By

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ABSTRACT

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TEACHERS, ADMINISTRATORS ENGAGED IN
IMPLEMENTING RATIONAL MANAGEMENT
MODELS, AND ELEMENTARY PRINCIPALS

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Purpose

The purpose of this study was to examine points of differences
about teaching, learning, and classroom organization between some ele-
mentary classroom teachers and some school administrators who are
engaged in attempts to influence teaching, learning, and classroom
organization by the implementation of rational management models. In
addition, this study examined points of differences about the three
areas of concern between the same group of elementary teachers and
some elementary principals who are not engaged in rational management
model usage. A subpart of this study examined points of differences
about the three areas of concern between the two administrator
groups.

Two sociological concepts, gemeinschaft and gesellschaft,
provided the conceptual framework for the study--gemeinschaft being
associated with teacher classroom behavior opposed to gesellschaft,

which is associated with administrators' efforts to implement
rational management models in classrooms.

Methodology

A 47-item Q-sort instrument was developed, field tested, and
administered to 82 school personnel in Michigan. Among this group
were 47 elementary teachers, 12 administrators who are actively
engaged in model usage, and 23 elementary principals. All of the
47 items were statements of values and beliefs about teaching,
learning, and classroom organization.

A Q-analysis computer program analyzed the returns. Z-score
values of 1.0 and above and -1.0 and below were considered significant.

Results and Conclusions

The following exploratory questions guided the study:

1. Do these teachers' value and belief patterns about the
areas of concern differ from those of administrators who are actively
engaged in rational management model usage? It was determined that
these teachers' value and belief patterns do in fact differ from
the subject administrators'. Item statements ranked high by the
teacher respondents were items falling primarily within the affective
domain. Item statements ranked high by the subject administrators
were those falling primarily within the cognitive domain.

2. Do these teachers' value and belief patterns about the
areas of concern differ from those of elementary principals? It was
determined from the observations that the teachers' and this group
of principals' values and beliefs about the areas of concern are

quite similar and, overall, very little difference exists between these groups.

3. Do those administrators who are engaged in rational management model usage phrase their efforts in gesellschaft terms? It was determined that these administrators do in fact phrase their efforts in gesellschaft terms, as described in the literature. Eight out of ten items receiving a Z-score ranking of 1.0 or above by the group were items described in gesellschaft terms.

4. Are these teachers attempting to create classroom organizations with the characteristics of a gemeinschaft? It was determined that the teachers in the study are attempting to create classroom organizations with characteristics of a gemeinschaft, as described in the literature. Five out of eight items receiving a Z-score ranking of 1.0 or above were items described in gemeinschaft terms.

5. Are the elementary principals' views about the areas of concern different from those of administrators engaged in rational model usage? It was determined that these principals' views about the areas of concern do differ from the subject administrators'. Item rankings by the principals were closely related to those of the teachers in the study.

This study described some of the relevant characteristics relative to the three areas of concern between the teachers and subject administrators involved in the study. Although many distinctive characteristics were identified between these two groups,

there were also areas of common agreement. This points out that
the two sociological concepts are not necessarily distinct in all
respects.

ACKNOWLEDGMENTS

It is with great pride and joy that I dedicate this dissertation to my parents, who have provided me with everlasting motivation which has allowed me to arrive at this point in my life.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Purpose

The researcher's purpose in this study was to examine points of differences about teaching, learning, and classroom organization between some elementary classroom teachers and some school administrators who are engaged in attempts to influence teaching, learning, and classroom organization by the implementation of rational management models (systems). In addition, this researcher examined points of differences about teaching, learning, and classroom organization between the same group of elementary teachers and some elementary principals who are not engaged in attempts to influence teaching, learning, and classroom organization by the implementation of rational management models. A subpart of this study examined points of differences about the three areas of concern between the two administrator groups.

Introduction

Morrish (1976) states that institutions like the school must reflect, almost inevitably, the sort of society in which they exist. Society has a tendency to produce and maintain the institutions which serve it best, and when a particular institution is perceived as not rendering the required service, attempts are made

to modify its role or replace it with something else. It is apparent that schools will not be substituted but there are presently attempts to modify their role.[1]

Schools over the years have been faced with constant changes. One of the reasons for many changes taking place is due to the fact that there is no universal agreement by those responsible for organizing and conducting school procedures, on the actual role of the school in society. Attempts continue to be made to establish the types of schools (primarily public schools) that will meet the needs of the present and future society.

Public schools cannot avoid the impact of this society's sophistication. As society becomes more modern, with increased usage of highly sophisticated programs and techniques, there is a perceived need to adjust schools accordingly. The impact of these adjustments is not always positive.

Lortie (1975) states that public schools are among major social, economic, and political institutions and that they, like other large institutions, are headed for the "trauma" Max Weber calls "rationalization."[2] Rationalization in this sense is used to describe a situation where primary efforts are made toward estab- lishing logical and reasonable explanations for any and all activi- ties and procedures taking place in an institution.

Public schools are not exempt from the impact of rationali- zation methods that are utilized in other large institutions in society. Efforts are constantly being made to better organize work units and modes of operation in other large institutions on down to

learning units in schools and their mode of operating. Since public schools are open to public scrutiny (more so than other large institutions like government and private industry), more rigorous efforts are being made to better plan and account for what is taking place in schools that directly affects the outcome. These efforts are being made by some professional educators who have been assigned the task of planning and organizing major aspects of school programs. These efforts are all aimed at making functions in the school a more rational process. The efforts these educators are making toward making the functions of the school a more rational process will be described within the sociological context of what has been termed a gesellschaft, which will be elaborated on within the conceptual framework appearing in Chapter II.

In these educators' attempts to better coordinate, control, predict, and generally make more sense out of educational process and procedures, the trend shows that many of these educators have adopted and mandated implementation of various "rational management models" which have been modified for classroom use. These rational management models were originally developed for use in other large institutions, mainly government and private industry. These institutions have experienced, to some degree, success with rational management models. The success has been with these models helping to assist organizations reach their desired goal(s).

Rational management models are characterized by their clear distinction between means and end. There is an interdependence of parts. These models have an emphasis in abstraction. Hard technology

fits into this description. Rational management models are designed to more systematically assist organizations reach their goal(s). With rational management models, organizational leaders can more accurately assess and plan for organizational activities.

The characteristics described above are basically synonymous with the more commonly used term system. Churchman (1968) says that the word system has been defined in many ways, but most definers will agree that a system is a set of parts coordinated to accomplish a set of goals.[3] (A more detailed discussion on system appears in the review of literature in the following chapter.)

Rational management models (systems) are presently being introduced in the school organization more and more by some educators who are responsible for planning and organizing school functions. To what extent, if any, classroom teachers who are or would be directly responsible for the actual task(s) assigned by the model, accept the concept underlying such model usage is not known. Many models, when implemented, alter the way classroom teachers teach. In addition, these models rearrange the way students learn as well as the way classrooms are organized.

This study examined points of differences about teaching, learning, and classroom organization between some elementary classroom teachers and some school administrators who are engaged in attempts to influence teaching, learning, and classroom organization by the implementation of rational management models (systems). In addition, this study examined points of difference about teaching, learning, and classroom organization between the same group of

teachers and some elementary principals who are not engaged in attempts to influence teaching, learning, and classroom organization by the implementation of rational management models (systems). A subpart of this study examined points of differences about the three areas of concern between the two administrator groups.

Exploratory Questions

The following exploratory questions guided this study:

1. Do teachers' value and belief patterns about teaching, learning, and classroom organization differ from those of administrators who are actively engaged in attempts to influence teaching, learning, and classroom organization by the implementation of rational management models (systems)?

2. Do teachers' value and belief patterns about teaching, learning, and classroom organization differ from those of administrators who are not engaged in attempts to influence teaching, learning, and classroom organization by the implementation of rational management models (systems)?

3. Do those administrators who are engaged in rational management model usage phrase their efforts in gesellschaft terms?

4. Are teachers attempting to create classroom organizations with the characteristics of a gemeinschaft?

5. Are elementary principals' views about teaching, learning, and classroom organization different from those of administrators who are engaged in rational management model (systems) usage?

Significance of the Study

Because the business of classrooms is learning, it appears that what and how one learns is directly related to the structure in which one learns. Outside educators and classroom teachers each

have their own idea of what constitutes the most appropriate learning and classroom structure. With the adoption and implementation of various systems models in classrooms, administrators engaged in rational management model usage attempt to establish a learning and operating structure that sometimes conflicts with that of classroom teachers. When there are basic disagreements between teachers and outside educators regarding what each perceives to be the most appropriate learning and classroom structure, conflict sets in and the teaching and ultimately the learning process is hindered.

It appears that the number of those outside the classroom who are intent on affecting events inside the classroom is growing, and as the number increases, the pressures to develop abstract systems for classroom use will also increase. Continued attempts to implement these will increase, and perhaps teacher frustration and conflict with these will increase. For these reasons and more, the area was worthy of study.

Definition of Terms

Outside Educator--A nonclassroom person who has the power to mandate the usage or influence the use of various systems approaches on classrooms. These people function from outside the immediate boundaries of the classroom but do impact on teaching, learning, and classroom organization.

Rational Management Model (Systems)--One of many types of management-oriented techniques devised to systematically coordinate

activities in an organization; it has clearly defined means and ends.

Gemeinschaft--Refers to a community, close-knit group, collective good rather than individual attainment; relations based on personal affectivity, resistance to change, and an identification of means with ends.

Gesellschaft--The emphasis here is on the individual achievement, efficiency, complexity, and individual happiness rather than collective good.

Value--Intrinsic significance one places on a method or procedure that has become desirable to the individual.

Belief--Conviction in the manner of carrying out certain acts or functions.

Limits of the Study

1. This study deals only with the phases of the school program, K-6, in some public schools in Michigan. The first group of subjects is limited to those outside educators who are engaging in attempts to impose a rational management model on classrooms; the second, a group of elementary classroom teachers; and last, a group of building-level administrators all in the State of Michigan.

2. No attempt is made to evaluate the effectiveness of teachers, outside educators, or their programs in terms of structure or outcome. No attempt is made to postulate ideal instructional situations or settings.

Chapter II contains a review of the literature giving a general background on systems. It is important to include this since systems usage is on the increase in organizations, including schools.

Footnotes--Chapter I

[1]Ivor Morrish, Aspects of Educational Change (New York: John Wiley and Sons, 1976), p. 155.

[2]Dan C. Lortie, Schoolteacher: A Sociological Study (Chicago: University of Chicago Press, 1975), p. viii.

[3]C. West Churchman, The Systems Approach (New York: Delarante Press, 1968), p. 29.

CHAPTER II

A REVIEW OF THE LITERATURE

Introduction to Systems

Hall and Fagen (1956) define a system as a set of objects together with relationships between the objects and between their attributes.[1] Another way is to say that a system is an entity composed of (1) a number of parts, (2) the relationship of these parts, and (3) the attributes of both the parts and the relationships. One could also perceive a system as "some form in structure or operation or function of united and integrated parts."[2]

In reality, just about anything can constitute a system. It could be something as large and complex as the solar system or as small as a single cell in the human body. Systems themselves are composed of parts which are themselves systems. An example would be the human body, which is a system composed of various subsystems (nervous, cardiovascular, etc.). In turn, these subsystems are composed of cells, each of which is itself a system. Thus, systems typically exhibit a structure in which there are parts (subsystems) embedded within other parts (subsystems) within the overall system. The embedding of one system within another can go on through many stages, almost endlessly.[3,4]

10

This study is concerned only with the use of systems as it relates to management systems and management-oriented systems procedures that are conceived and developed by man in his effort to better coordinate, control, and generally better predict organizational activities and outcomes.

Forms Systems Thinking Has Taken

Movement toward systems thinking began about 45 years ago and has its greatest period of development in the past 25 years or so. There are basically 11 major approaches systems thinking has taken over the years that have led to the present modes of systems thinking. These approaches are presented in this section.

General Systems Theory (GST)

Developed by Ludwig von Bertalanffy, GST has its roots in the organismic conception of biology. GST also draws heavily upon mathematics, physiology, and economics. Its main area of study, "its domain," is the phenomena of growth and evolution. Its main assumption is that the process of growth and its intermediate and final stages (evolution) follow the same pattern, whether the growth is of a single organism, of a group of organisms, or of society itself. GST can employ either of two approaches. The first approach is to look over the empirical universe and pick out certain phenomena which are found in many different disciplines, and seek to build up general theoretical models relevant to these phenomena. The second approach is to arrange the empirical fields in a hierarchy of

complexity of organization of these basic "individual" or unit of behavior, and to try to develop a level of abstraction appropriate to each.[5]

Cybernetics

Cybernetics is defined by Norbert Wiener as the science of control and communication in the animal and the machine. Cybernetics deals with all forms of behavior so far as they are regular, or determinate, or reproducible. It holds that people and society themsleves can be best understood through the communication and control activities of the system. It establishes a network for assessing feedback and its effect on system state, the monitoring of system activity, and the adaptation of the system in light of information (knowledge).[6]

Operations Research

Operations Research is the use of the scientific method to provide criteria for decisions concerning man-machine systems involving repeatable operations. As part of the general systems movement, it was first to move directly into applied practice. It involves the concept of optimization. That is, considering all possible modes of operation of a man-machine system, it strives for that mode which is considered the "best" or optimum one for achieving the established task.[7,8]

Holism

This approach was originally centered in continental Europe. Holism has many similarities to the General Systems movement because of its interdisciplinary emphasis and generic focus. Its distinct characteristic that makes it different from General Systems Theory is its tendency to incorporate, to a greater extent, the concerns of philosophy, theology, and the humanities (along with the social, behavioral, and physical sciences). Most recently this movement has been applied particularly to concerns normally falling into the traditional realms of philosophy and religion.[9,10]

Systems Design

The Systems Design approach has grown from General Systems Theory and the Operations Research movement. Like Holism, Systems Design is interdisciplinary and based in the "generalizability" of system findings. But unlike Operations Research, Systems Design is less concerned with the creative development and structuring of new, different, and unique systems. This approach can be applied to man, machine, or man-machine systems, simple or complex. This process can be developed through high-level mathematical procedures or logical-subjective techniques.[11]

Information Theory

This approach is an outgrowth of Cybernetics and the first purely quantitative branch of the systems movement. This process was originally developed to respond to problems in communications

engineering, but more recently has been applied to telephone communication and radar as well as to various information systems in machines and organizations. The premise behind Information Theory is that more right guesses can be made when its information is defined quantitatively.[12]

Systems Analysis

This approach is basically an analytical technique that is a modified systems process for business and industrial problem solving. Systems Analysis involves the breaking down of a particular system into its logical components or subsystems. Subsequently, the inputs, processor, outputs, and feedback of each system will be defined in terms of the information required to make decisions regarding the proper function of these system elements.[13]

Systems Engineering

Systems Engineering grew out of Operations Research. With Operations Research being concerned primarily with existing systems, Systems Engineering focuses more on the planning and design of new systems (as well as on the improved performance of existing operations). Systems Engineering seeks to create better systems--man, man-machine, or mechanical. It tends to be a discipline in the traditional sense and thereby has tended to create its own specialists, procedures, and specified body of knowledge.

Input/Output Analysis

Input/Output Analysis is a sophisticated branch of Systems Analysis. Its major premise is that a system (organization) can be studied in terms of the results of its actions or activity. The major focus here is on (1) outcomes or output, (2) the evaluation of output in terms of system goals, and (3) subsequent feedback to the system as to how its operations and processes can be modified to better achieve system goals.

Mathematical Programming

Mathematical Programming is one of the widely known processes used in management decision making. It applies quantitative techniques. It uses mathematical formulas, such as linear equations, to solve complex organizational problems.

Computer Science

Computer Science is concerned with the use of computers to assist in making organizational decisions. It has great value in such areas as scheduling and accounting. Computer Science is a growing area of interest to organizational leaders, with endless possibilities.[14,15]

Summary

These 11 major forms systems thinking has taken over the last 40 years provide the conceptual foundation from which present systems procedures are now built. Although they overlap in many respects, a certain degree of distinctiveness also exists.

Types of Systems

In organizational leaders' continuous efforts to make more
rational the activities within the organization and to exercise better
control over the overall process toward reaching organizational goals,
many of these leaders are "thinking systems." The end results vary,
but the idea behind each is the same. As a result of systems think-
ing, a multitude of systems approaches have been developed for organi-
zational use, both in the private and public spheres. Following
are some of the more popular systems procedures presently used.

PPBS

The Planning-Programming-Budgeting System is the short- and
long-range systematic budgeting scheme originally developed by the
Rand Corporation and made popular by the federal government.[16] An
important aspect of PPBS is its rational planning process that takes
into account the scarcity of resources and seeks to optimize them.
It also establishes a process whereby there is a systematic alloca-
tion of limited resources. Apparent in this approach are long-range
projections of goals for the organizational units or activities in
terms of precise objectives with systematic cost-benefit analysis
of alternative strategies and a resulting multi-stage financial plan
(multiple year budgeting) in order to meet organizational goals
through optimum use of resources.[17,18] PPBS focuses on long-range
goals and objectives and the most economical steps to meet them. The
program activities that will be involved are clearly spelled out.

The decision-making process is perceived to be more rational through the use of PPBS because goals are spelled out in relationship to cost.

PERT

Program Evaluation and Review Technique (or Critical Path Method, as it is sometimes referred to) had its formal beginning in the Department of Defense, where the technique was employed to help speed up the development of the United States Navy Missiles Project. PERT has been used to help schedule and control all the activities of getting a system designed and installed.[19]

PERT is a process for analyzing, planning, and scheduling large, complex projects. The process requires that a project be broken down into its various parts or activities, determining which of these are more critical than others, and then scheduling the project in terms of its parts or subactivities in order to meet a target time at minimum cost.[20]

PERT basically allows organizational leaders to gather necessary information in order to best, from their perception, utilize human and material resources in the organization. The process also points out possible obstacles that may be encountered as well as time estimates on the total project and all of its subactivities. All of this is plotted on a network diagram. Like other systems techniques, the PERT network application is a means of reviewing the logical steps and their interrelationships in achieving a desired outcome. The major steps involved in PERT are as follows:

1. Identify the desired outcome.

2. List the events necessary for completing the final event.

3. Diagram the events into a network.

4. Estimate the times for each event.

5. Determine the critical path.

6. Estimate probability (which is a mathematical procedure that employs a fixed formula).[21,22]

MBO

Peter F. Drucker was one of the first to express the notion of Management by Objectives, which was reported in 1954 when he was concerned with overall management at General Motors. Drucker felt that General Motors' success as a work organization was not solely dependent on the quality and design of their products, production processes, systematic cost control, and strong dealer organizations, but pivoted on the fact that the managers at General Motors had implemented the concept of working by objectives. Their individual work behavior was monitored by the clearly spelled out objectives they had established along with their superior in the joint effort to meet organizational and self goals.[23] Managers being involved in the decision-making process was a means for better realizing corporate goals. Under MBO, emphasis is focused upon the goals to be reached rather than the various activities being performed by the managers or upon the traits one may or may not exhibit in the performance of these activities.[24]

This whole concept grew from Drucker's belief that no individual in a large-scale organization could direct all the activities of one's subordinates. The idea was that if the manager could control the end-product or results of their work by a system built around understood goals, the individual could more effectively manage the large number of people the person is responsible for.[25]

Here, managerial performance could be measured against pre-established goals. As one can observe, Drucker's concept took into consideration only those who served in a managerial capacity in the organization.

By 1957, Douglas McGregor had become one of Drucker's strongest supporters, but he went one step further and expanded the concept to include nonmanagerial employees. In this respect, employees would be informed of the specific goals they are expected to achieve. The employees would then make decisions on the most appropriate work and time arrangements and other considerations toward reaching organization goals. The idea behind this procedure is that employees will feel that they are more a part of the total organization and are perceived by management to possess relevant input toward reaching desired results. Intrinsic rather than extrinsic motivation will supposedly exist because employees will be self-motivated since managers are not watching over employees step by step. McGregor does point out that management must continue to reserve the right of management to determine how work will be organized.[26]

MBO procedures like the one proposed by McGregor are not always successful. Not many are used by large organizations because they are difficult to maintain over long periods of time. Those programs that are successful usually have an inception period which ranges from three to five years.

Odiorne (1965) perceives MBO not only as a management system but also as a method of performance review. Odiorne endorsed a procedure whereby managers are reviewed annually in terms of the pre-set goals and their performance in relation to these set goals. This is quite similar to Drucker's original version. Managers, knowing what is expected of them, are free to set up work activities in their particular department to best achieve their goals, which are directly related to the organization goals. Because managers know what is expected of them, it is perceived that less manager apprehension will exist. Odiorne states that there should be less doubt and fewer risks involved for organizational members. Through such a procedure, the organization's hierarchy can reduce levels of uncertainty and hopefully make better organizational predictions.[27]

In the descriptions up to this point, the attempts were to involve more people in the organization's decision-making process toward the realization of the organizational goals, while at the same time reducing the level of organizational uncertainty and increasing employee morale.

Management Information Systems (MIS)

Slightly different in concept, a Management Information System is a formal system in the organization which provides management with the necessary reports to be utilized in the decision-making process.[28] The task of many organizations over the years has been to establish regulation. Information is considered to be the essential factor required for organization regulation. Government and business organizations have led the way with attempts to more effectively establish Management Information Systems for the purpose of generating change as well as understanding all relevant aspects of the organization.

For all Management Information Systems, the major goal is to provide information for managers to assist in making organizational decisions. Many of these systems serve in a support capacity to managers, while others make some of the repetitive decisions usually made at the lower levels of the organization.

Management Information Systems are primarily developed for providing information for planning and control purposes. Like other management systems, MIS's are tailored to the particular organization.[29]

MIS's are geared to help reduce the degree of organizational uncertainty when decisions are to be made by organizational managers.

Characteristics

In an effort to reduce noise (uncertainty) so that a system can achieve balance among its parts, a system must have a feedback

(information) mechanism. When there is a fixed reference for this balance, such as body temperature, it is called equilibrium. When there is a balanced relationship independent of a fixed reference, the system is said to be in a steady state.[30]

All systems seek to maintain a state of steadiness. Cannon (1939) was an early theorist on the tendency of systems to seek steady states. He wrote that every "complex organism must have more or less effective self-righting adjustments in order to prevent a check on its functions, or a rapid disintegration of its parts, when subjected to stress."[31] The check on functions and the rapid disintegration of parts is what has been termed entropy.[32] Entropy is the equivalent of death, where negative entropy would be a healthy state. Theoretically, systems can avoid entropy by the evaluation of feedback (information) which can be regarded as the difference between actual performance and expected performance. When the feedback loop exists within the system, it is called a closed loop. When the feedback loop extends beyond the boundary of the system into the environment, the loop is said to be open. Sensor elements monitor feedback loops, and report perceived changes to decision-making elements which make the necessary adjustments in the system to achieve a steady state and avoid entropy.[33]

Summary

Originally developed as an engineering concept for use in industry and then government, systems analysis is now being used in the social sciences. One such approach, the Planning-Programming-

Budgeting System (PPBS) serves primarily to facilitate organizational resources. Program Evaluation and Review Technique (PERT) is a procedure for gathering information toward more efficient appropriation of human and material resources as well as a procedure for pointing out possible obstructions in achieving desired goals and to estimate project and subproject time requirements.

Another systems approach described was Management by Objectives (MBO). Presented were several versions. The first was a program geared specifically for organizational managers. Goals were spelled out to managers and it became their responsibility to coordinate their work to reach agreed-upon objectives. The second proposed version of MBO saw nonmanagerial employees involved in organizing their work with assistance from their superiors. Another adaptation is the Management Information System (MIS). This system is set up to provide the organization's hierarchy with relevant information on activities taking place in the organization. From such information, perceived relevant decisions are made.

The presentation of systems thinking, in general systems particularly, and their characteristics, provides one with a clearer perspective of the total systems movement and its present state. What appears common to all systems approaches as management perceives it is their ability to better control organizational activities (including people within the organization) toward more effectively reaching the organizational goal(s). It is viewed as a more rational way of operating. It is a part of an overall attempt to reduce the degree of uncertainty in the organization. Systems take

into account human behavior and seek to structure this behavior so
as to complement and not hinder efforts toward the realization of
the organization's goal(s). To what extent these movements' efforts
conflict with the efforts of the individual members of the organiza-
tion is not known.

System approaches are being introduced into the school organi-
zation and many are not experiencing success. Presented next are
situations where systems approaches were implemented in schools and
eventually rejected by teachers for various reasons.

Some Attempts to Impose Systems on
Classroom Teachers

Montello (1975) in his discussion on systems usage in public
education, states that because public education is currently experi-
encing a dramatic test of continual existence, educators are fran-
tic in their efforts to find new ways to restructure education.[34]
Educators outside of the classroom whose productivity to some
degree appears to be determined by the amount of structure they
establish on the classroom, have imposed and are continuing to
impose various systems models on schools and their classrooms.

Wolcott (1977) points out that outside educators' (whom he
refers to as technocrats) efforts to effect change in the classroom
and in the total school by implementing some type of systems approach
have not always experienced success at the classroom level. He
states that although these technocrats may insist that the quality or
effectiveness of teaching can be improved (and some teachers agreed,
while others disagreed), the teaching processes remain relatively

unchanged. Structural changes like team teaching seem to fare best,
perhaps because they do not interfere with the teaching process.
However, when attempts to tamper with teaching or teachers become
too heavy-handed (through attempts to coordinate teachers' efforts
by imposing some form of a systems approach), teachers almost
reflexively close ranks and begin drawing upon their broad repertoire
of resisting behavior.

Wolcott cites a specific example where one such systems
model, School Planning Evaluation and Communication System (SPECS),
a spin-off of Planning-Programming-Budgeting System (PPBS), was
imposed on teachers in the South Lane School District in the State
of Oregon, and the resulting conflict it had with teachers there.
SPECS was devised basically to increase the accountability of public
school employees and programs. SPECS was geared to influence the
instructional interaction between administrators and teachers, the
communication between central office and school building, and the
relationships between a school district and its community.[35] SPECS
presumes that program effectiveness and efficiency will increase
substantially as the processes for planning and evaluating those
programs become more data-based, output-oriented, and self-corrective.
SPECS is made up of five basic components, which include:

1. A Systems Analysis of the School District--This would be
a descriptive system analysis of the school district.
Hierarchical relationships among on-going programs and
activities are found here.

2. Program Budgeting and Cost Accounting—This phase deals primarily with desired and actual program impacts in relation to finances.

3. Program Planning, Evaluation Replanning, and Articulation—This is considered the heart of the SPECS model. It is geared to encourage staff members to use summary data about district programs toward self-improvement.

4. The Monitoring Subsystem—Broad organization goals are established here and expectations that have been generated by those providing feedback to the total system.

5. The Management Subsystem—Here "gaps" that exist between actual and preferred states of the school district are identified.[36]

The decision to adopt and implement such an elaborate, all-purpose system was made by the superintendent of schools in South Lane. The superintendent had made his own assessment of the need to better coordinate his schools (i.e., better control), to improve the quality of curriculum planning, and to anticipate the growing interest in educational accountability. Imposition of SPECS without teacher input negatively affected SPECS' possible chances of survival. It can be inferred that this outside educator sought to gain more control of the activities in the classroom and how the teacher operated. This educator attempted to place more structure on classroom teachers and their classrooms. SPECS appeared to coincide with the values and beliefs this person holds about teaching, learning, and classroom organization.

Through an interviewing process, Wolcott found that a large number of teachers in this district had virtually the same negative feelings about the use of SPECS in their classrooms. Because SPECS required teachers to organize their classroom activities according to pre-set, structured procedures spelled out by SPECS, teachers strongly rejected SPECS usage. SPECS basically conflicted with how teachers felt their classroom program should be structured, as well as how they perceived themselves operating in the classroom. South Lane teachers questioned the wisdom of following the same procedure for every type of instructional program which SPECS dictated. Antagonism to the way the materials had been imposed within the district was at least as strong as the antagonism to the materials themselves. Teachers felt that in their zeal to "effect a technological change, the developers and superintendent alike had failed to attend to some corresponding dimensions of human change."[37] Cooperation, he states, had simply been mandated. Because of these reasons and more, SPECS failed in the South Lane school district. Wolcott is firmly convinced that "with minor variations, the development, implementation, and de-implementation of some type of systems model like SPECS has been and will be re-enacted time and time again in the nation's schools."[38] The results, he feels, will be the same: conflict and rejection by classroom teachers.

Knezevich (1969) states new ideas upset established procedures; this in turn unsettles the people (teachers in this case) who have already designed what they perceived to be conducive operating procedures, adjusted accordingly, and learned to live with

them as standard operations. He feels that many of the problems in schools can be traced to rapid acceptance of the products of "new technological" methods by some and not others.[39]

In 1976, Perrone conducted an investigation of Michigan's Kalamazoo Public Schools' Accountability System, from the perspective of the teachers affected by it. Up to the point when the investigation began (April, 1976), there had been much conflict over the school system's accountability program.[40] Charges and counter-charges had been exchanged regularly between the Kalamazoo Education Association (KEA) and the Office of the Superintendent of Schools. Perrone and other investigators who made up the investigating committee conducted the investigation in an effort to establish a more positive dialogue about accountability between the Kalamazoo Public Schools teachers and those who were actively engaged in the implementation of the system.

The Kalamazoo Accountability System was perceived as a comprehensive system of employee evaluation and accountability—one designed to "reward excellence and stifle mediocrity."[41] An overview and the developmental sequence of this system follow:

- In an effort to increase efficiency of school operations, the Kalamazoo board established a department of Research and Development that was developed in the fall of 1972.

- Pre-tests were administered to students in grades one through nine in September and May, using nationally standardized achievement tests.

- Kalamazoo teachers received test scores of individual
  students, composite scores for their class groups, and an
  analysis of test items most frequently missed.

- The teachers were required to administer their own tests
  to their students.

- In addition to teachers being involved, each school year
  all administrators were required to develop performance
  objectives; percentages of accomplishment were determined
  at the end of each year by several relevant groups (e.g.,
  school board).

- Performance profiles were developed for all teachers. The
  profile was accumulated to measure and improve teacher per-
  formance. Included in the profile were views of the teacher
  from students, principals, other teachers, parents, and a
  teacher self-evaluation. (This information was shared with
  the teacher.)

- All this information was collected, interpreted, and
  reported by the Research and Development staff members.
  The information was purported to assist school personnel
  toward self-improvement.[42] This constituted the basis of
  the system.

Although some teachers perceived this approach as beneficial,
the great majority Perrone states felt that the effects were negative.
Teachers stressed that instead of using ratings for professional
growth, performance objectives for improved instruction, and testing
for assessing student progress over time, the Kalamazoo Accountability

System was primarily used to assess teacher accountability for student performance. This, teachers felt, was unrealistic because so many other extrinsic conditions affect student learning. Besides feeling threatened, pressured, and feeling administrators in the district displayed little concern for their feelings, teachers were also disturbed over the little input they were allowed to contribute into this system. For these reasons and more, the Kalamazoo teachers, like those in Oregon's South Lane district, did not support the accountability system that was imposed on them.

Perrone concluded his report by saying that the overall responses from teachers were negative--among the most negative that he ever viewed in an evaluation.

Bleecher (1975) measured Michigan's K-8 teachers' understanding of, and attitudes toward, a state department of education's demand for accountability and assessment of learning outcomes using Barnard's theory of authority as a framework for analysis.[43] The six parts that constitute the accountability system are:

1. identification of common goals,

2. development of performance objectives,

3. assessment of educational needs,

4. analysis of delivery systems,

5. evaluation of testing systems or progress, and

6. recommendations for improvement.

Of these, number three became a primary concern for Michigan teachers. Michigan's State Superintendent of Public Instruction, John Porter, defines assessment of educational needs as a process

of obtaining, for decision-making purposes, information concerning educational activities.

The program was originally initiated by the Governor and the Legislature in an effort to account for what two billion dollars of state monies was buying in terms of outcomes. By 1968, the plans had been developed for statewide assessment by high-level staff persons. Act 38 of 1970 instituted the State Department of Education's six-part system toward achieving educational accountability. To find out teachers' understandings about the overall system, Bleecher mailed a questionnaire to 500 teachers in the state. He found the following: K-8 teachers felt the communications of accountability and assessment were inconsistent with the purposes of the school organization as they understand it; that the communications of accountability and assessment were not compatible with teachers' personal interests; and teachers felt that they could not comply, physically and mentally, with the accountability and assessment program.

With these findings, Bleecher concludes that this sample of the teachers involved in the investigation theoretically will withdraw cooperation from the accountability and assessment program. It is Bleecher's feeling that the purpose of such a rational system is to reduce equivocality and increase predictability, which he feels is the nature of rational systems. The reduction of equivocality and increase of predictability enlarges the possibility of control of activities by those who allocate resources.[44,45]

Summary

In each case presented, it was concluded that teachers generally were not able to comply with the systems imposed on them by educators who function from outside the classroom. Various reasons prompted decisions to adopt and implement a systems approach in each of these districts.

Bain (1970) points out that teachers feel threatened by various state and local assessments, or accountability programs, and seem to be resisting many of these models. They detect the control element clearly. They feel they have "too little control or no control" over the facts which might render such programs feasible or fair.[46]

With the School Planning Evaluation and Communication System (SPECS), it was the feeling of the superintendent that a more systematic procedure was needed to increase the interaction and accountability level of the public school employees and programs in the district as well as his awareness level (through planned communication) of classroom activities. The superintendent saw SPECS as a possible answer to his attempts.

The implementors of the Kalamazoo Accountability System sought to establish a more structured procedure of employee evaluation and accountability. It was explained to teachers in the beginning of this program that one of the primary attempts was to reward teachers who were perceived to be excellent and not reward those perceived to be mediocre. Teachers eventually felt that it was used to assess overall teacher accountability for student

performance in their classrooms. Judging excellence and mediocrity on student achievement or nonachievement caused many teachers to react negatively to this system.

Michigan's Educational Accountability Program was developed to better account for educational spending and outcomes. Teachers were not able to comply because they felt the communications of accountability and assessment were inconsistent with the purposes of the school as they understood them. They also felt that the communication of accountability and assessment was not compatible with their personal interest.

In each application it appeared that these outside educators saw a need to install a system approach that would assist them in their effort to do such things as:

1. require teachers to structure their programs more in line with their values and beliefs,

2. require teachers to do more planning and rely more on test results,

3. require teachers to be more open with their teaching methods,

4. provide for a more direct channel of obtaining information on classroom activities and teacher functions, and

5. hold teachers more accountable.

For such educators, systems models appeared to incorporate those prescribed functions they seek to have performed in classrooms. Such efforts stem from the values and beliefs these educators have about teaching, learning, and classroom organization which possibly

differ from those of teachers who are responsible for carrying out the assigned task(s).

Presented thus far has been a brief description of system development. As stated earlier, such models allow those assigned with the responsibility of planning and organizing school functions a procedure whereby they are able to more accurately account for what takes place in schools and their classrooms. Application of systems models in classrooms forces teachers and their classrooms to readjust to a more structured mode of operating. Whether this more structured procedure increases learning is not known and was not determined by this study. This study examined differences between groups of educators on issues that may in fact affect learning and teachers' overall efforts in classrooms. Teachers do not always accept the same set of values and beliefs about teaching, learning, and classroom organization as those administrators who propose system usage.

This study examined points of differences about teaching, learning, and classroom organization between some elementary classroom teachers and some school administrators who engaged in rational management model (systems) usage. In addition, the study examined points of differences between the same group of elementary teachers and some elementary principals not engaged in model usage. A subpart of this study examined differences between the two administrator groups. The purpose behind including elementary principals is to determine how this group's values and beliefs about teaching, learning, and classroom organization match or differ from teachers and rational model users. It is this group who is in a key position

to make a strong impact on the success or failure of activities and functions taking place inside classrooms.

In an effort to better understand why teachers' values and beliefs may in fact differ from those of the subject administrators, it is perceived necessary at this point to provide some background information on some teachers' attempts in classrooms. Understanding what some reported successful classroom teachers do in their classrooms should provide some helpful insight on why differences may exist between teachers and the subject administrators over the three areas of concern (i.e., teaching, learning, and classroom organization).

Background on Some Teachers' Attempts in Classrooms

A number of studies on teachers' behavior and classroom environment have provided some insight to the behavior and environmental conditions teachers attempt to establish in their classrooms that make for what they perceive to be the most conducive learning and teaching situation.

Jackson (1968), through a series of classroom observations and interviews done in such areas as Palo Alto, California, and Chicago, Illinois, provides a description of important variables of life in the classroom related to teaching and learning. In interviews with teachers, Jackson found that the teachers sought to develop a sense of closeness in their classes. This closeness was exemplified by the lack of interest these teachers had in educational modifications. Such interest was mild and typically restricted to

ideas about minor matters like room arrangements. "Rarely," if ever, was there talk about the need for educational change.[47]

Janesick (1977), through a participant observation approach, sought to describe and explain one teacher's classroom perspective about teaching and the learning environment in that person's class-room. Over a participatory period of seven months, the researcher obtained an understanding of the teacher's world and how this person constructed his teaching in the classroom. This researcher found that the teacher worked at developing a sense of groupness and thereby achieved his classroom goals. Two factors contributed to this: (1) the teacher consciously worked to develop a strong group, a community feeling in the classroom; and (2) by developing this group, community feeling, the classroom was not easily manipulated by outside interferences. It was reported that this teacher and the group (students) exhibited all the characteristics of a small, com-munal family. Respect and cooperation contributed toward the goals of the total class. In many respects this teacher took on a leader-ship role similar to that displayed by the family leader.[48]

Smith and Geoffrey (1968), like Janesick, viewed a single classroom but used more of a direct observation technique. The focus differed in that they studied an urban classroom to see how a middle-class teacher coped with a group of lower-class youngsters. The researchers found that this teacher did attempt to develop a community feeling about the room. Efforts were made toward develop-ing a feeling of groupness. Lack of interest in new approaches like certain new textbooks that were prescribed for the class were

countered by this teacher's interpersonal relations and personalized

interaction.[49] Although this study has many psychological implica-

tions for those primarily interested in urban classrooms, it also

has relevance for the concern at hand, in that it points out that

classroom teachers are attempting to establish conditions in class-

rooms that basically reject outside interference. These researchers

infer that many teachers in schools are not open to certain inno-

vative techniques about learning and classroom operations because

they do not coincide with their perceptions of adequate teaching

and learning environments.

Summary

Each investigation presented was conducted in classrooms

of reputed "successful" teachers. In each case teachers concen-

trated a major part of their effort toward creating a community with

students. Teachers in the study stressed group participation and a

feeling for the classroom as a collective in which each student

could obtain recognition and satisfaction from contributing to the

whole unit. It was not suggested that academic achievement was of

minor importance to those teachers, but in order to be successful,

those teachers felt that they had to create, in Lortie's terms,

"cordial, disciplined and work-eliciting relationships" between

themselves and the students and among the students themselves.[50]

Collectively, these teachers have decided on this type of

behavior and classroom environment which they perceive to be the

most conducive for themselves as teachers and the learning that goes on in their classrooms.

How and to what extent various management systems conflict with teachers' values and beliefs about teaching, learning, and classroom organization are not known. What is known is that such systems do affect the way teachers conduct their teaching and operate their classrooms. The efforts these teachers are making in their classrooms will be described within the sociological context of what has been termed a gemeinschaft which, as will be described, is opposed to a gesellschaft. Both concepts are discussed within the conceptual framework appearing in the following section.

Conceptual Framework

Hillary (1968) defines communal organizations as a quality, generally referring to people having something in common.[51] Sociologists such as Maine, Becker, Weber, Durkheim, Parsons, and Toennies, in particular, have outlined the characteristics of these societies which Toennies terms "gemeinschaft" opposed to noncommunal societies which he terms "gesellschaft."[52] Toennies sees gemeinschaft and gesellschaft as two different modes of mentality and behavior, and as two different types of societies. Gemeinschaft includes the characteristics of collective good rather than individual attainment, isolation from the resistance to influences from outside and outsiders, relations based on personal affectivity, resistance to change, an identification of means with ends as opposed to a means-ends dichotomy, and an emphasis on individual behavior that is not

only collective oriented, but present oriented. It can be inferred that many of the characteristics itemized in the sociologists' writings are those sought after by classroom teachers.

Gesellschaft types of societies are just the opposite. They are characterized by emphasis on the individual and the orientation of the individual toward discrete ends. It follows that the orientation is toward efficiency and alteration of means in order to maximize returns, and on individual achievement, particularly individual "happiness" rather than collective good. Other characteristics include relationships that are temporary and secondary, openness and accessibility from without, affective neutrality, universalism, and the desire for change. With its emphasis on abstract principles and a sharp distinction between means and ends, a gesellschaft is perceived to be much more rational than a gemeinschaft with its emphasis on collective behavior and a confusion of means and ends.

Systems models implemented in classrooms by educators who function from outside the immediate boundaries of the classroom are basically identical with those described by sociologists in their elaboration on gesellschaft. In both situations, the emphasis is on individual achievement as opposed to collective well-being, on universalism as opposed to particularism, on secondary as opposed to primary relations, cognitive rationality rather than affective empathy, and on a sharp distinction between means and ends.

These concepts by the sociologists lead to material described in the management literature. In reviewing this literature,

one can easily see that the rational management models espoused by the management oriented are identical with those explained in gesellschaft terms by sociologists. In both instances, the emphasis is on individual achievement as opposed to collective well-being, on universalism as opposed to particularism, on secondary as opposed to primary relations, cognitive rationality rather than affective empathy, and on a sharp distinction between ends and means. Accountability assessment models, variations on program budgeting, program evaluation review techniques, management by objectives, and competency-based performance, even in education, are all from a gesellschaft-type perspective and they are diametrically opposed to a gemeinschaft-type perspective.

Summary

It appears that those administrators who are engaged in attempts to make classrooms more rational have adopted (by the use of systems models) methods and procedures that are not necessarily in agreement with classroom teachers.

The sociological concept, gesellschaft, which has been applied to the administrator group engaged in rational model usage, does have endemic characteristics which are contradictory to the gemeinschaft, which is applied to the teacher group. As described earlier, institutions usually end up reflecting the type of society in which they exist. Modern society reflects the concept of gesellschaft. The classroom teachers described are making efforts to establish and maintain a gemeinschaft-type environment in the

classroom. These two sociological concepts served as a basis for categorizing the attempts to the two primary groups of concern. Using these descriptors, the study examined the differences between some elementary teachers and the subject administrators. Additionally, a group of elementary principals was examined with this group of teachers and administrators.

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CHAPTER III

METHODS AND PROCEDURES

Chapter III presents a description of the procedures that were utilized in this study. This description is presented in the following divisions: methodology employed, selection of participants, concept identification, concept reduction, selection of Q-sort items, pilot test, administration of Q-sort, and treatment of the data.

Methodology Employed

This study utilized Q-methodology and techniques to identify and analyze the belief patterns of three groups of school personnel. The first group consists of a particular group of administrators in Michigan who are actively engaged in attempts to influence some elementary classrooms' operating procedures by the implementation of rational management models (systems). The second group is composed of some elementary classroom teachers in the state. The third consists of a group of elementary principals not engaged in rational management model usage. All groups were analyzed with reference to their values and beliefs about teaching, learning, and classroom organization.

The Q-methodology was developed by Stephenson (1953) and involves the rank-ordering of objects (statements in this case

written on cards) by persons with statistical treatment of the data to establish clusters of people with similar belief patterns.[1]

In addition to the Q-sort, other information concerning personal characteristics of the participants was obtained by having the participants complete a short questionnaire before completing the Q-sort instrument (see Appendix A).

Selection of Participants

Administrators

In Q-methodology the selection of the participants is not usually done randomly but rather they are chosen to represent identifiable divisions of the population with which the study is concerned. For the primary group of administrators this study is concerned with rational model proponents; the Q-methodology appears to be one of the most appropriate procedures. It would not have been possible to randomly select a group of administrators around the state who are actively engaged in attempts to influence classroom procedures by the implementation of some rational management model for classroom use because the number is limited.

For this reason the first task was to identify a population of administrators who are presently engaged in some attempt to impose a rational management model on classrooms. In doing so, it became necessary to carefully select administrators who have publicly identified themselves with such an effort. Over the course of many phone calls and many references from other educators, 12 administrators in Michigan who fit the description for this research were

identified. It is important to point out here that there was not a large number of these administrators to choose from and for this reason only 12 were involved.

Among the 12 were 3 superintendents, 2 principals, an associate superintendent of the Michigan Department of Education, and 6 people in central offices who have positions in planning and evaluating. Each had publicly identified him/herself with an attempt to impose a rational model on classrooms.

Teachers

Since the intent of this study was to identify and analyze belief patterns of some elementary classroom teachers in general and not to seek reactions of particular teachers who are directly affected by the actions of such administrators described above, the selection process for teachers proceeded in the following nonrandom manner. Six districts in Michigan were contacted and permission was granted from the district offices to approach individual schools within these districts in an effort to obtain the necessary number of teacher respondents. Individual schools were approached and the necessary number (47) of teacher respondents was acquired for the purposes of this study.

Elementary Principals

Again, a nonrandom selection process took place for the elementary principals involved. Sixteen of the 23 principals were selected from the Middle Cities School District, which is a nonprofit

organization of 16 urban school districts in Michigan. The remaining seven were from surrounding districts. All were contacted and asked to participate in the study.

Concept Identification

Scheduled interviews were set up with each of the 12 identified educators who espoused the use of rational management models (systems). (Interview questions appear in Appendix B.) The purpose of the scheduled interviews was to learn about their efforts and the assumptions they have made about teaching, learning, and classroom organization. Each interview was taped and ranged from one-half hour to two hours in length.

The next task was to study the content of the protocols to gather some initial ideas about the values and beliefs these people hold. The attempt next was to isolate the beliefs they held in common and extract those beliefs and values toward the development of concepts that would contribute to a more precise instrument.

Listed below are 23 belief statements of rational model proponents extracted from the interview tapes, each of which was voiced by 5 or more of the 12 subjects.

1. Learning is acquiring discrete skills.
2. Students are quite different from one another and should be approached individually.
3. Teaching can be characterized as a "delivery system" geared toward individual students.

4. Teachers have to identify where a child is on a particular skill level and then they may bring appropriate resources to help him move to a higher level.

5. Teaching then is a monitoring function, with the teacher monitoring individual learning activities.

6. Classrooms should be more "rational" places. ("Rational" in this case means that distinctions between means and ends should be more clearly delineated.)

7. It is important to articulate classroom procedures and processes to parents.

8. Teaching-learning decisions can be made outside the classroom.

9. There is room for individualized approaches among teachers but this individualization has gone too far.

10. Learning outcomes are important; those outcomes should be clear.

11. A system will improve teaching but not tell teachers how to teach.

12. Classrooms need to be more open and accessible.

13. Teachers should have a choice but their choice should be within a "modeled" context.

14. External evaluation is necessary and should be increased.

15. Measurable achievement is the goal.

16. Administrators should review instructional processes.

17. Abstract models of instruction are important.

18. Competency levels should be phrased abstractly and objective plans should be developed to attain those levels.

19. Classrooms should treat children equitably.

20. A highly mobile student population justifies the press for coordination.

21. There needs to be a more precise division of labor in education.

22. Communication among teachers should be increased.

23. There is a need for coordination across classrooms.

In reviewing this list of statements, one can see that the subject administrators, who are all engaged in some clear attempt to apply a version of a rational management model to classrooms, tend to hold a simplistic but fairly well integrated conceptual picture of teaching, learning, and classroom organization. They tend to view classroom learning as the acquisition of a set of discrete and measurable skills by a heterogeneous number of equal and individual learners. Hence discreteness and objectivism of learning and the universalism of the clientele are components of their value/belief pattern. They see teaching as the bringing of appropriate resources to those learners as individuals. Hence individualization is a part of their value/belief pattern. Since they all see a clear difference between teaching, the means, learning, and the end, they espouse a rationalistic approach to instruction with the applied means clearly distinct from the measurable ends.

Ideally, this process should lend itself to being formulated as a series of clearly defined rational procedures which, since they are stated abstractly, can be applied universally and evaluated from without. Beliefs in abstract models of instruction and external evaluation are elements of the set. It follows that since the processes can be abstracted, modeled, and given to a set of discrete but equal learners, then both teaching and learning can be organized from without. Therefore, an administrative hierarchy has an important part in the learning processes. Subsequently, this administrative hierarchy through its authoritativeness not only evaluates but can assist in the standardization of classroom procedures. And it follows that if learning can best be attained by the application of abstractly defined and administered processes, then classroom procedures should be open, accessible, and manipulable by those outside the classroom. Hence accessibility is part of that set of values and beliefs.

In sum, the key elements in the perceptual set held by those administrators outside the classroom who are engaged in such attempts seem to revolve around these elements: objectivism of learning, universalism of students, individualization of instruction, rationalization of classroom processes, abstract modeling of instructional plans, and the importance of an administrative hierarchy which will assist in standardization and external evaluation and a greater accessibility of classrooms to changes imposed from without. To this one more is added, and that is a sense of urgency. All of

the subjects voiced feelings that classrooms "had to change." The extent of change or degree of perceived urgency varied with each respondent, of course.

Listed above are those concepts that were identified from the interviews with the select group of administrators. For the purpose of this study, each will be further reduced.

Concept Reduction

The first reduction was to take the concepts of "abstract models of instruction" and "individualization" and reduce them to one concept, which is called "a belief in the abstract rationality of classroom processes." This concept includes the belief that classroom processes should clearly delineate the cause-effect or means-end relations between the instructional activities undertaken or planned by the teacher and the outcomes expected of students. This delineation should be phrased in clear terms and be adhered to independently of the varied personalities among those who are charged with implementing it. This is what is meant by abstract.

The second reduction process was to take the concepts "universalism of clientele," "discreteness of learning," and "individualization of instruction" and reduce them into one concept, which is termed "a belief in the incremental and individualized instruction." What this means is that the subjects see learning as the acquisition of groups of discrete skills and bits of information. Each individual child is at some places on the continua of acquiring these sets of skills and learning these bits of

information. Subsequently, the task of the teacher is to accurately ascertain the place of each child on those continua and bring to bear whatever resources will assist the child in moving along toward greater mastery. That the concept includes the idea of "universalism" means that each child is to be treated equally, unlike a normative society wherein different individuals create different roles and expectations for themselves and hence get treated, and indeed treat themselves, differentially.

The third reduction was to take the concepts of "administrative hierarchy" and "authoritativeness" and combine them into the concept of "the importance of administrative hierarchy in learning." These two concepts are practically synonymous and their relation has been explained above.

The fourth reduction was to take the concepts "external evaluation," "standardization," and "accessibility" and reduce them to the concept of "coordination and evaluation from without." The idea here is that since the processes can be abstracted and objectivized, then the administrative hierarchy will be able, through independent measuring devices, to accurately assess the efforts of the teachers and the learning of the students. And since the processes are abstracted and rationalized, they will similarly be open to suggestions for improvement, and through the authoritative hierarchy, implementation of those suggestions.

The fifth concept, which was perceived not needing any further reduction, is a "sense of urgency" and the value placed on change.

The above-identified concepts generated from the interviews with the 12 administrators encompass this group's values and beliefs about teaching, learning, and classroom organization.

Since the study is designed to test the value and belief patterns of teachers, administrators who are engaged in attempts to influence classroom procedures through the imposition of some rational management models (systems), as well as administrators who are not engaged in such attempts (elementary principals), it was necessary to review each concept from the teachers' perspective. The question that had to be addressed prior to setting up individual items under each concept or category was whether teachers' beliefs about teaching, learning, and classroom organization could be encompassed, either affirmatively or negatively, under these concepts. While the intent is to see if the two parties differ on the issues of concern, it was perceived necessary to leave room for some possible concepts which might indicate other areas of similarity or differences.

In order to search further for concepts, several related searches were undertaken. First the works cited earlier by Janesick,[2] Martin,[3] Smith,[4] and Lortie[5] were reviewed. These works contained first-hand descriptive material about some successful teachers' professional lives. In addition, a series of ten exploratory interviews with some teachers were held. These teachers were asked to express their values and beliefs about the areas of concern. These took place to see if the concepts previously established or their converse could encompass teachers' values and beliefs. It was also perceived necessary to search for concepts not previously considered.

After studying the teacher protocols and the related litera-
ture, it was felt that the five concepts, as they are presently
formulated, may be over-representative of the administrative side
of the issue (rational model users). Since the intent is to develop
an instrument to which both administrators and teachers may respond,
it was perceived necessary to have additional categories of items in
the instrument that would allow the teacher respondents sufficient
room to voice a wide range of beliefs about teaching, learning, and
classroom organization. Two additional categories were generated,
which will allow the subject teachers in the study a greater oppor-
tunity to respond positively.

The first of these concepts is "affectivity," and by that
two things are meant. First the descriptive data indicate that
much of a teacher's effort seems to be designed to gain the personal
respect of the students.

Lortie cites subjects from the five towns study as saying
a "good teacher" was one who could "(1) produce affection and respect
from students, (2) got work out of the students and (3) was effective
in winning student compliance and discipline." The passage from
Janesick was also cited, indicating that the teachers spent a great
deal of time trying to build positive affective feelings among the
students, toward developing them into a normative society.

The second meaning of that concept, from the interviews with
teachers, is that affectivity is itself a major instructional goal.
Listed below are statements supporting this concept, which were made
by several of the teacher interviewees.

1. I get a chance to treat people as I wish I had been treated when I was that age.

2. Insensitivity toward students is a very big concern.

3. Treating students fairly is very important.

4. The first goal of the student is to feel good about him/herself and the second is to achieve some kind of self-discipline.

5. We should be doing an awful lot of humanistic education.

6. Affective education is what should be going on in elementary schools.

What is pointed out here is that this goal of affectivity is an important lesson and affectivity as a means to classroom instruction appears to be a very important element in the way teachers conduct their classrooms.

The second concept added is "behaviorism." This means that it seems teachers do not express their instructional goals in abstract or rational terms, but rather in terms of what behavior the students exhibit in the classroom. Of course, this is closely related to the concept of affectivity, but it is felt that this area deserves a separate identity because of the intensity with which it showed up in the data. According to Lortie, it is the way the students behave with respect to the teachers and with respect to one another that counts.

After concept reduction and additions, a total of seven concepts was developed. Five of the seven were generated from

examining administrator interviews and two were generated from looking at descriptions of teachers (in addition to the teacher interviews). Within each of the seven it is felt that there is room to search for and possibly demonstrate differences between the subjects.

Selection of Q-Sort Items

In order to operationalize each concept, a set of items was developed. The attempt in developing a group of items was to test for differences between the parties within each of the seven categories that are being used as a framework toward the exploration of belief patterns between the groups of concern.

Again reviewing the studies by Janesick, Martin, Smith, and Lortie, a general list of items was developed. The list was revised by several professors in the College of Education. In total, 60 items were generated.

These items were considered by local teachers, administrators, fellow students, and several professors. These people were to select relevant items on the basis of their representativeness of the particular concepts and overall intent of the study. The number of items was eventually reduced to a final set of 47 to be utilized for the Q-sort instrument. (See Appendix C.)

This number was reduced to 47 in order to:

1. increase its proportionality,

2. remove possible redundancies,

3. remove items which could be misinterpreted, and

4. reduce the number of items to a more manageable size.

People considering the items were to judge each item using the following criteria:

1. Is the message of each item understandable?

2. Are any areas unrepresented by the item sample?

3. Are any areas overemphasized?[6]

Overall, those considering the items felt they represented the established concepts.

Pilot Test

Before administering the items to the actual population, a pilot test was run. Because of the limited number of administrators who are engaged in rational management model usage in this state, none of these subjects appeared in the pilot; only teachers were used in the pilot test. Sixteen teachers were pilot tested to see if the items were representative of the concepts. These teachers were allowed to add their input. It was found that these teachers' belief patterns about teaching, learning, and classroom organization did cluster together, which indicated a similar value and belief pattern.

Administration of the Q-Sort

The 47 items were mimeographed onto 5x7 index cards suitable for sorting and were randomized for presentation to the participants. The participant was asked to sort the cards (items) into nine piles on a continuum ranging from very strongly agree to very strongly disagree, with varying degrees in between. The participant was required first to look through the entire deck of 47 cards and

select 11 he/she most agreed with and to place them on the left--
11 more they most disagreed with were to be placed on the right, and
the remaining 25 cards were to be placed in the middle.

The next step required the participant to take the first
stack of 11 cards on the left (those most agreed with) and further
subdivide this pile by placing two cards in the very strongly agree
envelope, three cards in the strongly agree envelope, and the remain-
ing six cards in the moderately agree envelope. Participants were
instructed to follow the same procedure for the stack of 11 cards
on the right, and finally, to conduct a similar procedure for the
stack of 25 cards in the middle until all the cards were placed in
the envelopes that best represented the respondent's feelings about
the statements. The participant was informed that following the
original sort, it was allowable to go back and exchange a particular
card, but the final distribution of cards had to be in the following
form:

Pile No.	9	8	7	6	5	4	3	2	1
No. of Items	2	3	6	8	9	8	6	3	2

The Q-sort steps were incorporated into an instruction sheet
(see Appendix D) which was explained to the participants. Instruc-
tions and the Q-sort deck were left with the participants for several
days to allow them to complete the process at their convenience.

Treatment of the Data

A Q-analysis computer program developed by N. Van Tubergen
of the Mass Communications Research Bureau of the School of

Journalism of the University of Iowa was used in the study. Data were processed in the following manner:

1. A Pearson product-moment correlation matrix was constructed by correlating every person's sort of items with those of every other person. (Two separate correlation matrices were produced from two separate runs.)

2. This matrix was evaluated for principal component factors and those were submitted to varimax rotation. The obtained factors then represented groups of persons who presented similar patterns of belief.

3. The program then weighted each item response of the person by the loading of the factor with which he/she was most closely associated, summed these weighted responses across each item separately, and produced an item array of weighted responses for each factor. These item arrays were then converted to Z-scores.

4. The item arrays were then ordered from most accepted to least accepted on the basis of their Z-scores to provide a hierarchy of item acceptance for each factor.

5. The acceptance of each item by each factor (grouping) was then compared to provide a basis for differentiating the factors from one another. A difference of 1.0 in Z-scores for an item factor was considered significant.[7]

From the steps described above, this researcher was able to examine the different patterns of belief about teaching, learning, and classroom organization between the elementary classroom teachers,

the administrators engaged in rational management model (systems) usage, and the elementary principals.

Validity

Since the researcher was testing the theory that teachers' belief patterns about teaching, learning, and classroom organization differ from those engaged in rational management model usage, as well as from administrators not engaged in rational model usage, the following definition of validity was applied: "If the theory is valid, and if the Q-sort adequately expresses the theory, two rather big ifs, the statistical analysis of the sorts should show the theory's validity."[8]

Reliability

Kerlinger quoted Stephenson as saying: "For statistical stability and reliability, 40 or 50 items in some rare cases are sufficient."[9] Forty-seven items for this study were determined to represent the identified concepts.

Footnotes--Chapter III

[1]William Stephenson, A Study of Behavior (Chicago: University of Chicago Press, 1953).

[2]Valerie J. Janesick, "An Ethnographic Study of a Teacher's Classroom Perspective" (Ph.D. dissertation, Michigan State University, 1977).

[3]William H. Martin, "A Participant Observation Study of an Outdoor Education Experimental Curriculum Experiment Operating on a Public Secondary School" (Ph.D. dissertation, Michigan State University, 1977).

[4]Louis Smith and William Geoffrey, The Complexities of an Urban Classroom (Chicago: Holt, Rinehart and Winston, Inc., 1968).

[5]Dan C. Lortie, Schoolteacher: A Sociological Study (Chicago: University of Chicago Press, 1975), p. 120.

[6]Harvey B. Tiller, "Quality Belief Patterns in Secondary Education" (Ph.D. dissertation, University of Iowa, 1969).

[7]Ibid., pp. 35-36.

[8]Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1964), p. 588.

[9]Ibid., p. 582.

CHAPTER IV

ANALYSIS OF THE DATA

Introduction

This researcher examined points of differences about teaching,

learning, and classroom organization between some elementary class-

room teachers and some school administrators who are engaged in

attempts to influence teaching, learning, and classroom teaching by

the implementation of rational management models (systems). In

addition, this researcher examined points of differences about

teaching, learning, and classroom organization between the same

group of elementary teachers and some elementary principals who are

not engaged in attempts to influence teaching, learning, and class-

room organization by the implementation of rational management models.

A subpart of this study examined points of differences about the

three areas of concern between the two administrator groups. The

following questions were investigated:

1. Do teachers' value and belief patterns about teaching,
    learning, and classroom organization differ from those
    of administrators who are actively engaged in attempts
    to influence teaching, learning, and classroom organi-
    zation by the implementation of rational management
    models (systems)?

2. Do teachers' value and belief patterns about teaching,
    learning, and classroom organization differ from those
    of administrators who are not engaged in attempts to
    influence teaching, learning, and classroom organization
    by the implementation of rational management models
    (systems)?

3. Do those administrators who are engaged in rational management model usage phrase their efforts in gesellschaft terms?

4. Are teachers attempting to create classroom organizations with characteristics of a gemeinschaft?

5. Are elementary principals' views about teaching, learning, and classroom organization different from those of administrators who are engaged in rational management model usage (systems)?

A total of seven concepts was generated from a series of structured interviews with administrators engaged in rational management model usage, and some classroom teacher interviews. Each concept was represented by a set of operational items. A total of 47 items was developed. These items were generated primarily from a review of classroom studies by Janesick,[1] Martin,[2] Smith,[3] and Lortie[4] as well as from a review of the original administrator and teacher interviews. A Q-sort of these items was done by 83 teachers and administrators from various districts in Michigan.

Each of the 82 participants was to sort the 47 items into 9 piles according to their relative importance regarding issues related to teaching, learning, and classroom organization.

Respondents were allowed to place only a specific number of items into each pile so that their final distribution of the items appeared in the following form:

Pile No.	9	8	7	6	5	4	3	2	1
No. of Items	2	3	6	8	9	8	6	3	2

This resulted in the respondents placing two items they very strongly agree with into pile number nine, three they strongly agree with into

pile number eight, six they moderately agree with into pile number seven, eight they slightly agree with into pile number six, nine they neither agree nor disagree with into pile number five, eight they slightly disagree with into pile number four, six they moderately disagree with into pile number three, three they strongly disagree with into pile number two, and two they very strongly disagree with into pile number one. The items in pile nine were each assigned a value of nine, those in pile eight received a value of eight, those in pile seven received a value of seven, and so on. These values were used for statistical purposes.

Because Q-analysis does not allow the number of respondents to exceed the number of items, two computer runs were made to accommodate the total number of 82 respondents. The respondents broke down into the following distribution:

. 47 elementary classroom teachers

. 12 administrators engaged in rational management model usage

. 23 elementary principals

Administrators engaged in rational management model usage and elementary principals made up the first run, whereas the second run consisted of teachers.

Matrices of intercorrelations were formed by correlating every person's sorting with every other person's sorting--in this case, administrators with administrators. Teachers were not correlated with the model users because of their similar correlation with the principals group. (See Appendix E.) The matrix was

submitted to analysis with items as observations and persons as variables. A principal axis solution was obtained and submitted to a varimax rotation, which produced three orthogonal factors for administrators and three for teachers.

For teachers, data on three factors appeared with one factor (factor one) surfacing as meaningful. Humphrey's test (a test that measures the significance of each factor) verifies this by indicating that factors two and three are not meaningful. Additionally, the arrived eigenvalue for the first factor for teachers is 19.7 compared to an eigenvalue of 2.5 for factor two and only 1.8 for factor three. Data on three factors appeared for administrators also, with the first two factors surfacing as meaningful. It is important to point out here that on the run for administrators, not one administrator engaged in rational management model usage fell under factor one. Factor one consisted entirely of elementary principals. Nine out of the 12 administrators engaged in rational management model usage fell under factor two, which had an N of 14.

Although Humphrey indicates that all three administrator factors are meaningful, the arrived eigenvalue for factor one is 11.3 and 3.1 for factor two, with factor three receiving an eigenvalue of only 1.6. With this information, a total of three factors collectively (from both runs) was observed for the purposes of this research: factors one and two for administrators and factor one for teachers.

Factor Clarification

Since two distinct runs were made and each produced meaningful "factor ones" (i.e., one factor one composed of teachers and the other composed of elementary principals), the two will be distinguished. The factor "one" composed of all teachers will remain as factor one, whereas the factor "one" composed of all elementary principals will now be classified as factor three to alleviate possible confusion.

Participant Composition

Eight-two school personnel from various districts in Michigan participated in the study. Data on six factors were provided, with three being observed as meaningful. Table 1 presents the make-up of the three identified meaningful groups or types.

Table 1.--Participant composition.

Type	No.	Teachers	Model Users	Elementary Principals
1	23	23	0	0
2	9	0	9	0
3	16	0	0	16
Total	48	23	9	16

Selected Personal Characteristics of Participants:
Teachers and All Administrators

Age and Area

Presented in Table 2 are the age distributions of teacher and administrator respondents from the meaningful factors observed, relative to the area employed. Of the age group 20-26, there were 3 teacher respondents or 100% of the total number of respondents in this age group. There were no administrator respondents between the ages of 20-26. Of the age group 27-33, there were 14 teacher respondents or 88%, while there were 2 administrator respondents or 13% of the total number of respondents in this age group. There were 3 teacher respondents or 23% between the ages of 34-40, while there were 10 administrators or 77% of the total. Between the ages of 41-47, teachers comprised a total of 2 respondents or 15%, while there were 11 administrators or 85% of the total number. Of the age group 48 and older, teachers made up a total of 1 or 14%, while administrators made up 6 or 86% of the total number of respondents.

The phi-prime coefficient for the data in Table 2 is .70 and indicates a strong association between the age of the respondent and the area employed. A basic conclusion to be reached here is that administrator respondents in the study are older than the teacher respondents. The majority of the teacher respondents were between the ages 27-33, while the majority of the administrator respondents were between the ages of 41-47.

Table 2.--Relation between age and area, expressed as frequencies (teachers and all administrators).

| Age | Area | | Total |
	Teachers	Administrators	
20-26	3 (100.0)[a]	0 (0.0)	3
27-33	14 (87.5)	2 (12.5)	16
34-40	3 (23.1)	10 (76.9)	13
41-47	2 (15.4)	11 (84.6)	13
48 and over	1 (14.3)	6 (85.7)	7
Total	23	29	52

[a]Numbers in parentheses represent row percentages.

Sex and Area

Presented in Table 3 is the variable sex relative to the variable area. There were 5 male teachers or 20% of the total number of responses observed compared to 20 male administrators or 80% of the total number. For females, there were 18 teachers or 67% of the total number observed compared to 9 administrators or 34% of the total number of female respondents.

Table 3.--Relation between sex and area, expressed as frequencies (teachers and all administrators).

| Sex | Area | | Total |
	Teachers	Administrators	
Male	5 (20.0)	20 (80.0)	25
Female	18 (66.7)	9 (33.3)	27
Total	23	29	52

The phi-prime coefficient for the data in Table 3 is .47 and indicates a slight association between the sex of the respondent and the area in which the person is employed. The conclusion reached here is that the largest concentration of teacher respondents is female, while the majority of administrator respondents are male.

Experience and Area

Presented in Table 4 is the variable experience (years teaching or years as an administrator) relative to the variable area. Seven teachers or 88% of the teacher respondents had 4 or less years of experience, while only 1 or 13% of the administrators fell in this category. Of the years between 5-8, there were 6 or 60% of the total number of teacher respondents compared to 4 or 40% administrator respondents. Seven teachers had between 7 and 12 years of experience (50% of the total number), while 7 administrators or 50% had had between 9-12 years of experience. One teacher had between 13-16 years of experience or 25% compared to 3 administrators or 75% of the total number of respondents in this experience category. One teacher had between 17-20 years of experience or 20%, while there were 4 administrators or 80% falling in this category. One teacher or 25% of the teacher respondents had 20 or more years of experience, while 3 or 75% of the administrators had 20 or more years experience.

The phi-prime coefficient for the data in Table 4 is .44, and indicates a slight association between experience and area. The conclusion to be reached is that the majority of the teacher respondents had either 1-4 years of experience or 9-12 years, compared to

administrators having 9-12. The administrators overall have more experience than the teachers.

Table 4.--Relation between experience and area, expressed as frequencies (teachers and all administrators).

| Experience (Years) | Area | | Total |
	Teachers	Administrators	
1- 4	7 (87.5)	1 (12.5)	8
5- 8	6 (60.0)	4 (40.0)	10
9-12	7 (50.0)	7 (50.0)	14
13-16	1 (25.0)	3 (75.0)	4
17-20	1 (20.0)	4 (80.0)	5
20 or more	1 (25.0)	3 (75.0)	4
Total	23	22	45

Selected Personal Characteristics of Participants: Administrators and Administrators

Administrators in factor two (i.e., administrators who are engaged in rational management model usage) and administrators in factor three (i.e., elementary principals) were compared on the following variables:

Age and Area

Presented in Table 5 are the age distributions of the two groups of administrators relative to the particular area in which they are employed (i.e., administrators engaged in rational management model usage and elementary principals). None of the administrators engaged in rational management model usage was between the ages of

20-26. One elementary principal fell into this age group, which constituted 100% of the total number of administrator respondents in this age group. One rational model administrator or 50% was between the ages of 27-33, compared to 1 elementary principal or 50% of the total number of respondents falling in this age group. Five rational management model administrators or 50% were between the ages of 34-40, compared to 5 or 50% of the elementary principals. There were 2 rational management model users or 18% between the ages of 41-47, while 9 or 82% of the elementary principals were between the ages of 41-47. One rational management model administrator or 17% was 48 or older, while 5 or 83% of the elementary principals were 48 or older.

Table 5.--Relation between age and area, expressed as frequencies (administrators and administrators).

Age	Area		Total
	Model Users[a]	Elem. Principals	
20-26	0 (0.0)	1 (100.0)	1
27-33	1 (50.0)	1 (50.0)	2
34-40	5 (50.0)	5 (50.0)	10
41-47	2 (18.2)	9 (81.8)	11
48 and over	1 (16.7)	5 (83.3)	6
Total	9	21	30

[a]Administrators engaged in rational management model (systems) usage.

The phi-prime coefficient for the data in Table 5 is .36, and indicates a slight association between age and area. In

conclusion, the largest concentration of model users is between the ages of 34-40, while the largest concentration of elementary principals is between the ages of 41-47.

Sex and Area

Presented in Table 6 is the variable sex relative to the variable area. There were 6 male rational management model users or 30% compared to 14 male elementary principals constituting 70% of the total number of respondents for all male administrators. There were 3 female rational management model users or 30% compared to 7 female elementary principals or 70%.

Table 6.--Relation between sex and area, expressed as frequencies (administrators and administrators).

Sex	Area		Total
	Model Users	Elem. Principals	
Male	6 (30.0)	14 (70.0)	20
Female	3 (30.0)	7 (70.0)	10
Total	9	21	30

The phi-prime coefficient for the data in Table 6 is .00, which indicates no association between the variables sex and area employed. In conclusion, the majority of rational management model administrators are male, while majority of elementary principals are also male.

Experience and Area

Presented in Table 7 is the variable experience relative to the variable area. There were no rational management model users with 1-4 years of experience, while there were 5 elementary principals or 100% of the total number of respondents within that experience range. One rational management model user or 17% had 5-8 years of experience, while 5 elementary principals or 83% had 5-8 years of experience. There was 1 rational model user or 25% with 9-12 years of experience, while there were 3 or 75% of the elementary principals with 9-12 years of experience. No rational model users had 13-16 years of experience, while 4 or 100% of the elementary principals fell within this experience range. There were 2 rational management model users with 17-20 years of experience or 67%, while there was 1 elementary principal or 33% with 17-20 years of experience. A total of 8 observations was missing, which prevented analyzing the variable experience with the variable area for the groups with 20 or more years of experience.

The phi-prime coefficient for the data of Table 7 is .56, which indicates a moderate association between the variable experience and area employed. General conclusions were not reached because of the eight missing observations.

Table 7.--Relation between experience and area, expressed as
frequencies (administrators and administrators).

Experience (Years)	Area		Total
	Model Users	Elem. Principals	
1- 4	0 (0.0)	5 (100.0)	5
5- 8	1 (16.7)	5 (83.3)	6
9-12	1 (25.0)	3 (75.0)	4
13-16	0 (0.0)	4 (100.0)	4
17-20	2 (66.7)	1 (33.3)	3
Total	4	18	22

Item Typal Belief Patterns

Item patterns for each of the three factors were estimated
by weighting the person most highly associated with a given factor
to the degree with which he/she was related to that factor. The
higher a person's loading on the factor, the greater was the weight.
These weights were applied to each item response and the weighted
item scores were then summed across all persons on the factor. This
produced an array of weighted item scores for each of the factors
or types. The arrays of weighted item scores were then converted
to Z-scores where the highest Z-score is attached to the item deemed
most important by the particular group of respondents regarding
their beliefs about teaching, learning, and classroom organization.[5]

Descriptive Titles

A descriptive title was applied to each of the three factors
to provide the reader with a necessary frame of reference. For

factor one (teachers) and factor two (administrators engaged in rational management models' usage) the original sociological concepts gemeinschaft and gesellschaft are applied; gemeinschaft-oriented to represent the teachers and gesellschaft-oriented for the subject administrators. Factor three (elementary principals) will be referred to as teacher-oriented because of their response pattern described in the following sections.

Type One (Gemeinschaft-Oriented Teachers) Belief Pattern

An array of item statements ordered according to the way the gemeinschaft-oriented teachers responded to items regarding teaching, learning, and classroom organization is presented in Table 8. Listed on the left-hand side are the item numbers for reference purposes; next are the items with the particular concept listed in parentheses, and appearing on the right are the Z-score values. For the purposes of this study, items ranking one or more standard deviation above or below the mean were considered to be significant. Items above or below this point represent those most strongly agreed or disagreed with by the particular group of respondents. A standard deviation of 1.0 was chosen arbitrarily as a cut-off point for determining those items with which respondents most strongly agreed or disagreed. Items falling between a Z-score value of 1.0 and -1.0 are also listed to provide the reader with additional information on the overall response pattern.

Those items type one most strongly agree with have a Z-score value of 1.0 or above. This type believe that matters like

Table 8.--Item descriptions and descending array of Z-scores for teachers (significant items above 1.0).

Item	Item Description	Z-Score
40	The most important thing teachers can do is to treat students with personal respect (affectivity).	1.984
45	Positive relations between teachers and students are more important than achievement on standardized tests (affectivity).	1.663
41	Building positive student social attitudes is an important goal for teachers (affectivity, behavior).	1.496
2	Good teaching is an art and will remain an art (abstract rationality).	1.384
27	It is as important for a child to achieve individually as it is for that child to conform to classroom norms (incremental, individual).	1.245
43	Teachers who concern themselves with humanistic approaches to instruction are more effective than those who concern themselves with measurable outcomes (affectivity).	1.200
28	The most successful classrooms are those wherein each child is working at his or her individual level (incremental, individual).	1.165
46	The important thing in classrooms is how students behave in class with respect to others (behavior).	1.144
25	Development of the class into a mini-community is an important prerequisite to effective teaching (incremental, individual).	.927
7	It is important that teachers have clearly stated goals for all classroom activities (abstract rationality).	.816
4	A system wherein goals and objectives are clearly stated and the relations between them clearly defined is essential to good teaching (abstract rationality)	.810

Table 8.--Continued.

Item	Item Description	Z-Score
44	By developing students' respect and liking for one another, teachers have then accomplished the major classroom goal (affectivity).	.799
47	The most important element in assessing teacher effectiveness is to observe the way students behave in the classroom (behavior).	.752
31	Individualized learning programs do raise student achievement levels (incremental, individual).	.655
17	What takes place in the classrooms should be primarily the responsibility of the teachers (admin., learning process).	.648
6	Teachers need to clearly explain the intended outcomes of their instructional activities (abstract rationality).	.586
42	There is too much emphasis placed on the cognitive aspect of learning and not enough on the affective (affectivity).	.508
11	Teachers need to be more responsive to improved teaching techniques (urgency change).	.440
12	Teachers need not fear educational change (urgency change).	.389
24	A teacher's job is to be the orchestrator of individualized learning activities (incremental, individual).	.308
5	Instructional models are necessary to good teaching (abstract rationality).	.200
29	Learning can be structured on a step-by-step basis (incremental, individual)	.106
34	Teachers are to have autonomy over instructional activities (coordination, without).	-.147

personal respect for students, positive class relations among students, and establishing student respect for other students are of utmost impor-tance. These teachers do not believe teaching is or can be a science, but rather they see it as an art. Two items falling under the concept of incremental and individualized instruction ranked high (i.e., having a Z-score of 1.0 or more) in the teachers' response pattern. It is worth pointing out here that items under this concept were generally ranked high by all three groups, as will be observed in the later tables. It is therefore decided that although this concept and its representative items are important, it is not perceived as one that clearly distinguishes the belief patterns of the different groups of concern. For replication purposes, the items under this concept should appear differently in order to more accurately assess differ-ent belief patterns. In general, items believed most important by teachers in the study were those pertaining to positive-humanistic working relationships in the classroom.

The items which type one most strongly disagree with have a Z-score value of -1.0 or below and are presented in Table 9. These items primarily refer to these teachers' rejection of outside inter-ference by administrators. These teachers are strongly against any evaluation using student achievement test scores as a way to measure teacher effectiveness. Programs are not to be selected from those chosen by administrators but rather selected by themselves. These teachers feel that not all learning activities taking place in the classroom can be measured. Some things teachers do in the classroom simply cannot be tested.

Table 9.--Item descriptions and descending array of Z-scores for teachers (significant items below -1.0).

Item	Item Description	Z-Score
16	Administrative evaluation is good for teaching (admin., learning process).	-.148
14	In twenty-five years, classroom teaching will be vastly different from the way it is now (urgency change).	-.193
3	Teaching is an art but we can make it a science (abstract rationality).	-.207
15	Changes in teacher instructional techniques are long overdue (urgency change).	-.209
32	Educational planners insure instructional continuity within an entire district (coordination, without).	-.214
36	Individual teacher activities need to be coordinated more than they are (coordination, without).	-.264
9	Successful instructional systems can be implemented regardless of the teacher's individual style (urgency change).	-.266
10	Teachers keep up with the latest instructional techniques (urgency change).	-.272
22	A teacher's job is to be the manager of group activities (incremental, individual).	-.282
30	Individualized learning programs contribute to cooperation among students (incremental, individual).	-.395
13	Most of the proposed changes in instructional systems are quire valuable (urgency change).	-.434
8	Much more is known about successful teaching now than was known twenty-five years ago (urgency change).	-.529
26	Teaching is primarily a job of bringing resources to learners as a group rather than to each individual (incremental, individual).	-.568
37	District-wide coordination of learning activities is important to teacher success (coordination, without).	-.739

Table 9.--Continued.

Item	Item Description	Z-Score
35	There is presently too much diversity among teachers' instructional styles (coordination, without).	-.752
23	The teacher's major task is to develop those particular skills that standardized tests show the students to be deficient in (incremental, individual).	-.776
18	Administrative supervision can best be described as an important contribution to student learning (admin., learning process).	-1.061
20	Choices teachers have regarding particular programs are to be made from those selected by central office planners and coordinators (admin., learning process).	-1.333
19	Administrators are to have a strong voice in the methods and materials used in the classrooms (admin., learning process).	-1.439
38	Those educators outside the classroom are in a better position to learn about innovations in teaching than are teachers (coordination, without).	-1.441
21	Changes in teaching techniques are to be determined by administrators (admin., learning process).	-1.497
1	Teachers' major efforts are to be directed toward teaching those things that can be tested (abstract rationality).	-1.527
33	Administrators who are not in direct contact with classrooms can still maintain a good feel for what goes on in classrooms (coordination, without).	-2.031
39	Student achievement test scores are the best way to measure teacher effectiveness (coordination, without).	-2.500

Type Two (Gesellschaft-Oriented Administrators) Belief Pattern

Presented in Table 10 is an array of item statements ordered according to the way the gesellschaft-oriented administrators (type two) who are engaged in rational management model usage responded to items regarding teaching, learning, and classroom organization. Those items which type two most strongly agree with have a Z-score of 1.0 or above. Type two, which is composed primarily of administrators who are engaged in rational management model usage, strongly believe that teachers need to clearly explain the intended outcomes of their instructional activities. This type believe that classroom goals and objectives need to be clearly stated and the relations between them clearly defined. For these administrators, these matters are essential to what they perceive as good teaching. Where teachers (type one) believe administrative evaluation is not necessary to good teaching, type two believe administrative evaluation is good for teaching. Individualization is believed to be a major goal for teachers to work toward in their classrooms. Programs that have discernible ends are also believed important.

Those items type two most strongly disagree with have a Z-score of -1.0 or below and appear in Table 11. Unexpectedly, this group is strongly against using student achievement test scores as the best way to measure teacher effectiveness. But this group is strongly against too much teacher autonomy over instructional activities. This group states that they cannot possibly maintain a good feel for what goes on in classrooms. The group of responses appearing

Table 10.--Item descriptions and descending array of Z-scores for gesellschaft-oriented administrators (significant items above 1.0).

Item	Item Description	Z-Score
6	Teachers need to clearly explain the intended outcomes of their instructional activities (abstract rationality).	2.228
4	A system wherein goals and objectives are clearly stated and the relations between them clearly defined is essential to good teaching (abstract rationality).	2.052
16	Administrative evaluation is good for teaching (admin., learning process).	1.514
41	Building positive student social attitudes is an important goal for teachers (affectivity, behavior).	1.425
28	The most successful classrooms are those wherein each child is working at his or her individual level (incremental, individual).	1.337
7	It is important that teachers have clearly stated goals for all classroom activities (abstract rationality).	1.289
27	It is as important for a child to achieve individually as it is for that child to conform to classroom norms (incremental, individual).	1.261
24	A teacher's job is to be the orchestrator of individualized learning activities (incremental, individual).	1.193
18	Administrative supervision can best be described as an important contribution to student learning (admin., learning process).	1.147
40	The most important thing teachers can do is to treat students with personal respect (affectivity).	1.081
19	administrators are to have a strong voice in the methods and materials used in the classrooms (admin., learning process).	.982
5	Instructional models are necessary to good teaching (abstract rationality).	.763

Table 10.--Continued.

Item	Item Description	Z-Score
12	Teachers need not fear educational change (urgency change).	.699
11	Teachers need to be more responsive to improved teaching techniques (urgency change).	.600
29	Learning can be structured on a step-by-step basis (incremental, individual).	.524
46	The important thing in classrooms is how students behave in class with respect to others (behavior).	.487
31	Individualized learning programs do raise student achievement levels (incremental, individual).	.456
15	Changes in teacher instructional techniques are long overdue (urgency change).	.116
47	The most important element in assessing teacher effectiveness is to observe the way students behave in the classroom (behavior).	.107
37	District-wide coordination of learning activities is important to teacher success (coordination, without).	.065
17	What takes place in the classrooms should be primarily the responsibility of the teachers (admin., learning process).	.001
32	Educational planners insure instructional continuity within an entire district (coordination, without).	-.045
42	There is too much emphasis placed on the cognitive aspect of learning and not enough on the affective (affectivity).	

Table 11.--Item descriptions and descending array of Z-scores for gesellschaft-oriented administrators (significant items below -1.0).

Item	Item Description	Z-Score
36	Individual teacher activities need to be coordinated more than they are (coordination, without).	-.076
13	Most of the proposed changes in instructional systems are quite valuable (urgency change).	-.085
23	The teacher's major task is to develop those particular skills that stan-dardized tests show the students to be deficient in (incremental, individual).	-.221
38	Those educators outside the classroom are in a better position to learn about innovations in teaching than are teachers (coordination, without).	-.333
8	Much more is known about successful teaching now than was known twenty-five years ago (urgency change).	-.353
14	In twenty-five years, classroom teaching will be vastly different from the way it is now (urgency change).	-.379
25	Development of the class into a mini-community is an important prerequisite to effective teaching (incremental, individual).	-.386
30	Individualized learning programs contribute to cooperation among students (incremental, individual).	-.395
3	Teaching is an art but we can make it a science (abstract rationality).	-.471
45	Positive relations between teachers and students are more important than achievement on standardized tests (affectivity).	-.639
9	Successful instructional systems can be implemented regardless of the teacher's individual style (urgency change).	-.667
22	A teacher's job is to be the manager of group activities (incremental, individual).	-.777
43	Teachers who concern themselves with humanistic approaches to instruction are more effective than those who concern themselves with measurable outcomes (affectivity).	-.833

Table 11.--Continued.

Item	Item Description	Z-Score
35	There is presently too much diversity among teachers' instructional styles (coordination, without).	-.943
44	By developing students' respect and liking for one another, teachers have then accomplished the major classroom goal (affectivity).	-.955
2	Good teaching is an art and will remain an art (abstract rationality).	-1.010
10	Teachers keep up with the latest instructional techniques (urgency change).	-1.074
1	Teachers' major efforts are to be directed toward teaching those things that can be tested (abstract rationality).	-1.126
20	Choices teachers have regarding particular programs are to be made from those selected by central office planners and coordinators (admin., learning process).	-1.181
21	Changes in teaching techniques are to be determined by administrators (admin., learning process).	-1.349
26	Teaching is primarily a job of bringing resources to learners as a group rather than to each individual (incremental, individual).	-1.370
33	Administrators who are not in direct contact with classrooms can still maintain a good feel for what goes on in classrooms (coordination, without).	-1.410
34	Teachers are to have autonomy over instructional activities (coordination, without).	-1.547
39	Student achievement test scores are the best way to measure teacher effectiveness (coordination, without).	-.1883

at the bottom of Table 11 differed from the response anticipated at the outset of this investigation.

Type Three (Teacher-Oriented Administrators) Belief Pattern

An array of item statements according to the way the teacher-oriented administrators (type three) responded to matters regarding teaching, learning, and classroom organization is presented in Table 12. The items which type three most strongly agree with have a Z-score of 1.0 or above. Type three generally believe that teachers who concern themselves with humanistic approaches to instruction are more effective than those who concern themselves with measurable outcomes. Positive relations between teachers and students are believed to be more important than achievement on standardized tests. Type three believes that successful classrooms are those wherein each child is working at his/her own level. Building positive social attitudes is believed most important and teaching to this type is an art and will remain an art.

The items which type three most strongly disagree with are those with a Z-score of -1.0 or below; they appear in Table 13. Type three generally believe that student achievement test scores are not the best way to measure teacher effectiveness. This type believes that teachers and not administrators are to determine what changes, if any, are to take place in classrooms. Administrators like themselves are not necessarily in a better position than teachers to learn about innovations in teaching. It is also believed by

Table 12.--Item descriptions and descending array of Z-scores for teacher-oriented administrators (significant items above 1.0).

Item	Item Description	Z-Score
43	Teachers who concern themselves with humanistic approaches to instruction are more effective than those who concern themselves with measurable outcomes (affectivity).	2.077
45	Positive relations between teachers and students are more important than achievement on standardized tests (affectivity).	1.841
40	The most important thing teachers can do is to treat students with personal respect (affectivity).	1.831
28	The most successful classrooms are those wherein each child is working at his or her individual level (incremental, individual).	1.767
41	Building positive student social attitudes is an important goal for teachers (affectivity, behavior).	1.407
2	Good teaching is an art and will remain an art (abstract rationality).	1.238
27	It is as important for a child to achieve individually as it is for that child to conform to classroom norms (incremental, individual).	1.196
42	There is too much emphasis placed on the cognitive aspect of learning and not enough on the affective (affectivity).	.942
4	A system wherein goals and objectives are clearly stated and the relations between them clearly defined is essential to good teaching (abstract rationality).	.849
24	A teacher's job is to be the orchestrator of individualized learning activities (incremental, individual).	.781
6	Teachers need to clearly explain the intended outcomes of their instructional activities (abstract rationality).	.765
11	Teachers need to be more responsive to improved teaching techniques (urgency change).	.683

Table 12.--Continued.

Item	Item Description	Z-Score
7	It is important that teachers have clearly stated goals for all classroom activities (abstract rationality).	.673
31	Individualized learning programs do raise student achievement levels (incremental, individual).	.652
44	By developing students' respect and liking for one another teachers have then accomplished the major classroom goal (affectivity).	.609
30	Individualized learning programs contribute to cooperation among students (incremental, individual).	.535
46	The important thing in classrooms is how students behave in class with respect to others (behavior).	.456
12	Teachers need not fear educational change (urgency change).	.201
36	Individual teacher activities need to be coordinated more than they are (coordination, without).	.193
9	Successful instructional systems can be implemented regardless of the teacher's individual style (urgency change).	.162
29	Learning can be structured on a step-by-step basis (incremental, individual).	.028
25	Development of the class into a mini-community is an important prerequisite to effective teaching (incremental, individual).	.026
15	Changes in teacher instructional techniques are long overdue (urgency change).	-.014

Table 13.--Item descriptions and descending array of Z-scores for teacher-oriented administrators (significant items below -1.0).

Item	Item Description	Z-Score
5	Instructional models are necessary to good teaching (abstract rationality)	-.045
16	Administrative evaluation is good for teaching (admin., learning process).	-.080
47	The most important element in assessing teacher effectiveness is to observe the way students behave in the classroom (behavior).	-.124
14	In twenty-five years, classroom teaching will be vastly different from the way it is now (urgency change).	-.146
17	What takes place in the classrooms should be primarily the responsibility of the teachers (admin., learning process).	-.172
18	Administrative supervision can best be described as an important contribution to student learning (admin., learning process).	-.220
33	Administrators who are not in direct contact with classrooms can still maintain a good feel for what goes on in classrooms (coordination, without).	-.340
8	Much more is known about successful teaching now than was known twenty-five years ago (urgency change).	-.428
32	Educational planners insure instructional continuity within an entire district (coordination, without).	-.450
10	Teachers keep up with the latest instructional techniques (urgency change).	-.505
22	A teacher's job is to be the manager of group activities (incremental, individual).	-.590
19	Administrators are to have a strong voice in the methods and materials used in the classrooms (admin., learning process).	-.592
3	Teaching is an art but we can make it a science (abstract rationality).	-.593
35	There is presently too much diversity among teachers' instructional styles (coordination, without).	-.738

Table 13.--Continued.

Item	Item Description	Z-Score
13	Most of the proposed changes in instructional systems are quite valuable (urgency change).	-.866
37	District-wide coordination of learning activities is important to teacher success (coordination, without).	-.962
34	Teachers are to have autonomy over instructional activities (coordination, without).	-1.126
26	Teaching is primarily a job of bringing resources to learners as a group rather than to each individual (incremental, individual).	-1.165
23	The teacher's major task is to develop those particular skills that standardized tests show the students to be deficient in (incremental, individual).	-1.242
20	Choices teachers have regarding particular programs are to be made from those selected by central office planners and coordinators (admin., learning process).	-1.299
1	Teachers' major efforts are to be directed toward teaching those things that can be tested (abstract rationality).	-1.460
38	Those educators outside the classroom are in a better position to learn about innovations in teaching than are teachers (coordination, without).	-1.658
21	Changes in teaching techniques are to be determined by administrators (admin., learning process).	-1.848
39	Student achievement test scores are the best way to measure teacher effectiveness (coordination, without).	-2.051

this type that teachers do not have to direct their major efforts to toward those matters that can be tested. In many respects, type three response pattern is similar to that of type one; but, like type two, they believe teachers are not to have autonomy over instructional activities.

Descending Array of Difference Between Types

The researcher's intent was to examine points of differences between three groups of educators on matters regarding teaching, learning, and classroom organization. These differences were examined by determining each group's belief pattern on items related to the three areas of concern. Thus far, each group's belief pattern has been presented individually. Presented next are comparisons, first between gesellschaft-oriented administrators and the gemeinschaft-oriented teacher group. The second comparison will be between teacher-oriented administrators and the gemeinschaft teachers. The third comparison will be between the gesellschaft group and the teacher-oriented group. Again, differences falling between standard deviation -1.0 and 1.0 are also included to provide the reader with additional information on the way the groups differed or were similar overall.

Listed first in Table 14 are the items, followed by the groups' identification and the Z-score value. In the last section are the differences between the two groups. A Z-score difference of 1.0 above or below the mean was considered as a significant difference between the groups.

Table 14.--Comparisons between factors two and one (significant differences above a Z-score value of 1.0).[a]

Item Description	Gesell. Admin.	Gemein. Teachers	Diff.
Administrators are to have a strong voice in the methods and materials used in the classroom (admin., learning process).	.982	-1.439	2.421
Administrative supervision can best be described as an important contribution to student learning (admin., learning process).	1.147	-1.061	2.208
Administrative evaluation is good for teaching (admin., learning process).	1.514	-.148	1.662
Teachers need to clearly explain the intended outcomes of their instructional activities (abstract rationality).	2.228	.586	1.642
A system wherein goals and objectives are clearly stated and the relations between them clearly defined is essential to good teaching (abstract rationality)	2.052	.810	1.242
Those educators outside the classroom are in a better position to learn about innovations in teaching than are teachers (coordination, without).	-.333	-1.441	1.108
A teacher's job is to be the orchestrator of individualized learning activities (incremental, individual).	1.193	.308	.885
District-wide coordination of learning activities is important to teacher success (coordination, without).	.107	-.739	.846
Administrators who are not in direct contact with classrooms can still maintain a good feel for what goes on in classrooms (coordination, without).	-1.410	-2.031	.621
Student achievement test scores are the best way to measure teacher effectiveness (coordination, without).	-1.883	-2.500	.617

Table 14.--Continued.

95

Item Description	Gesell. Admin.	Gemein. Teachers	Diff.
Instructional models are necessary to good teaching (abstract rationality)	.763	.200	.563
The teacher's major task is to develop those particular skills that standardized tests show the students to be deficient in (incremental, individual).	- .221	- .766	.555
It is important that teachers have clearly stated goals for all classroom activities (abstract rationality).	1.289	.816	.473
Learning can be structured on a step-by-step basis (incremental, individual).	.524	.106	.418
Teachers' major efforts are to be directed toward teaching those things that can be tested (abstract rationality).	-1.126	-1.527	.401
Changes in teacher instructional techniques are long overdue (urgency change).	.181	- .209	.390
Most of the proposed changes in instructional systems are quite valuable (urgency change).	- .085	- .434	.349
Teachers need not fear educational change (urgency change).	.699	.389	.310
Educational planners insure instructional continuity within an entire district (coordination, without).	.001	- .214	.215
Individual teacher activities need to be coordinated more than they are (coordination, without).	- .076	- .264	.188
Much more is known about successful teaching now than was known twenty-five years ago (urgency change).	- .353	- .529	.176

Table 14.--Continued.

Item Description	Gesell. Admin.	Gemein. Teachers	Diff.
The most successful classrooms are those wherein each child is working at his or her individual level (incremental, individual).	1.337	1.165	.172
Teachers need to be more responsive to improved teaching techniques (urgency change).	.600	.490	.160
Choices teachers have regarding particular programs are to be made from those selected by central office planners and coordinators (admin., learning process).	-1.181	-1.333	.152
Changes in teaching techniques are to be determined by administrators (admin., learning process).	-1.349	-1.497	.148
It is as important for a child to achieve individually as it is for that child to conform to classroom norms (incremental, individual).	1.261	1.245	.016
Individualized learning programs contribute to cooperation among students (incremental, individual).	- .395	- .395	.000
Building positive student social attitudes is an important goal for teachers (affectivity, behavior).	1.425	1.496	- .071
Development of the class into a mini-community is an important prerequisite to effective teaching (incremental, individual).	- .386	.927	-1.313
In twenty-five years classroom teaching will be vastly different from the way it is now (urgency change).	- .379	- .193	- .186
There is presently too much diversity among teachers' instructional styles (coordination, without).	- .943	- .752	- .191

Table 14.--Continued.

Item Description	Gesell. Admin.	Gemein. Teachers	Diff.
Individualized learning programs do raise student achievement levels (incremental, individual).	.456	.655	- .199
Teaching is an art but we can make it a science (abstract rationality).	- .471	- .207	- .264
Successful instructional systems can be implemented regardless of the teacher's individual style (urgency change).	- .667	- .266	- .401
A teacher's job is to be the manager of group activities (incremental, individual).	- .777	- .282	- .495
There is too much emphasis placed on the cognitive aspect of learning and not enough on the affective (affectivity).	- .045	.508	- .553
What takes place in the classrooms should be primarily the responsibility of the teachers (admin., learning process).	.065	.648	- .583
The most important element in assessing teacher effectiveness is to observe the way students behave in the classroom (behavior).	.116	.752	- .636
The most important thing in classrooms is how students behave in class with respect to others (behavior).	.487	1.144	- .657

[a]All numbers indicate Z-score values.

The first set of comparisons presented in Table 14 between the gesellschaft- and gemeinschaft-oriented groups shows that there is a significant difference between the groups on the amount of input these administrators believe they should have and what teachers believe these administrators should have regarding methods and materials used in classrooms. Teachers and these administrators differ widely on the way each perceives administrative supervisory functions where student learning is concerned. Where these administrators believe administrative evaluation is good, teachers do not agree. It can be observed that the top three items with the greatest degree of difference between the two groups are those pertaining to administrators' input in classrooms. The next two items with significant degrees of difference relate to outcomes and clearly stated goals and objectives in the teaching process. The final item with a difference of 1.0 or more again relates to factors relative to these administrators' attempts to affect functions taking place inside the classroom.

Only one item received a difference of -1.0 or below. These administrators do not believe good teaching is an art and will remain an art. However, teachers do believe this, which is reported in Table 15.

Table 16 presents comparisons between teacher-oriented administrators and gemeinschaft-oriented teachers (factors one and three). Only one item fell above a standard deviation of 1.0, with no items falling below. These administrators believe that administrators who function from outside the immediate boundaries of the classroom can

still maintain a good feel for what goes on in classrooms, whereas teachers basically disagree with this belief.

Table 15.--Comparison between factors two and one (significant difference below a Z-score value of -1.0).

Item Description	Gesell. Admin.	Gemein. Teachers	Diff.
Good teaching is an art and will remain an art (abstract rationality).	-1.010	1.384	-2.394

Table 17 presents significant differences between the gesellschaft-oriented administrators and the teacher-oriented administrators. There was a significant difference of 1.0 or more on five items. There were eight items with a standard deviation of -1.0 or below. These two groups of administrators basically differ over items pertaining to humanistic teaching approaches, positive teacher/ student relations and student/student relations. Whereas the teacher-oriented administrators strongly agree with matters described above as important, gesellschaft-oriented administrators rank them low. Gesellschaft-oriented administrators do not believe good teaching is an art, whereas teacher-oriented administrators believe good teaching is an art and will remain an art.

Gesellschaft-oriented administrators more strongly disagree with the item stating administrators who are not in direct contact with classrooms can still maintain a good feel for what goes on in

Table 16.--Comparisons between factors three and one (significant differences above a Z-score value of 1.0).

Item Description	T.-O. Admin.	Gemein. Teachers	Diff.
Administrators who are not in direct contact with classrooms can still maintain a good feel for what goes on in classrooms (coordination, without).	-.340	-2.031	1.691
Individualized learning programs contribute to cooperation among students (incremental, individual).	.535	-.395	.930
Teachers who concern themselves with humanistic approaches to instruction are more effective than those who concern themselves with measurable outcomes (affectivity).	2.077	1.200	.877
The most important element in assessing teacher effectiveness is to observe the way students behave in the classroom (behavior).	-.124	.752	.876
Administrative supervision can best be described as an important contribution to student learning (admin., learning process).	-.220	-1.061	.841
Administrators are to have a strong voice in the methods and materials used in the classrooms (admin., learning process).	-.692	-1.439	.747
The most successful classrooms are those wherein each child is working at his or her individual level (incremental, individual).	1.767	1.165	.602
A teacher's job is to be the orchestrator of individualized learning activities (incremental, individual).	.781	.308	.473
Individual teacher activities need to be coordinated more than they are (coordination, without).	.193	-.264	.457

Table 16.--Continued.

Item Description	T.-O. Admin.	Gemein. Teachers	Diff.
Student achievement test scores are the best way to measure teacher effectiveness (coordination, without).	-2.051	-2.500	.449
There is too much emphasis placed on the cognitive aspect of learning and not enough on the affective (affectivity).	.942	.508	.434
Successful instructional systems can be implemented regardless of the teacher's individual style (urgency change).	.162	-.266	.428
Instructional models are necessary to good teaching (abstract rationality).	-.045	.200	.245
Teachers need to be more responsive to improved teaching techniques (urgency change).	.683	.-40	.243
Changes in teacher instructional techniques are long overdue (urgency change).	-.014	-.209	.195
Teachers need to clearly explain the intended outcomes of their instructional activities (abstract rationality).	.765	.586	.179
Positive relations between teachers and students are more important than achievement on standardized tests (affectivity).	1.841	1.663	.178
Administrative models are necessary to good teaching (abstract rationality).	-.045	-.148	.103
Much more is known about successful teaching now than was known twenty-five years ago (urgency change).	-.428	-.529	.101
Teachers' major efforts are to be directed toward teaching those things that can be tested (abstract rationality).	-1.460	-1.527	.067

Table 16.--Continued.

Item Description	T.-0. Admin.	Gemein. Teachers	Diff.
In twenty-five years, classroom teaching will be vastly different from the way it is now (urgency change).	-.146	-.193	.047
A system wherein goals and objectives are clearly stated and the relations between them clearly defined is essential to good teaching (abstract rationality).	.849	.810	.039
Choices teachers have regarding particular programs are to be made from those selected by central office planners and coordinators (admin., learning process).	-1.299	-1.333	.034
Individualized learning programs do raise student achievement levels (incremental, individual).	.652	.655	-.003
It is as important for a child to achieve individually as it is for that child to conform to classroom norms (incremental, individual).	1.196	1.245	-.049
Learning can be structured on a step-by-step basis (incremental, individual).	.026	.106	-.080
Building positive student social attitudes is an important goal for teachers (affectivity, behavior).	1.407	1.496	-.089
There is presently too much diversity among teachers' instructional styles (urgency change).	-.866	-.752	-.114
It is important that teachers have clearly stated goals for all classroom activities (abstract rationality).	.673	.816	-.143

Table 16.--Continued.

Item Description	T.-0. Admin.	Gemein. Teachers	Diff.
Good teaching is an art and will remain an art (abstract rationality).	1.238	1.384	- .146
The most important things teachers can do is to treat students with personal respect (affectivity).	1.831	1.984	- .153
Teachers need not fear educational change (urgency change).	.201	.389	- .188
By developing students' respect and liking for one another, teachers have then accomplished the major classroom goal (affectivity).	.609	.799	- .190
Those educators outside the classroom are in a better position to learn about innovations in teaching than are teachers (coordination, without).	-1.658	-1.441	- .217
District-wide coordination of learning activities is important to teacher success (coordination, without).	- .962	- .739	- .223
Teachers keep up with the latest instructional techniques (urgency change).	- .505	- .272	- .233
Educational planners insure instructional continuity within an entire district (coordination, without).	- .450	- .214	- .236
A teacher's job is to be the manager of group activities (incremental, individual).	- .590	- .282	- .308
Changes in teaching techniques are to be determined by administrators (admin., learning process).	-1.848	-1.497	- .351

Table 16.—Continued.

Item Description	T.-O. Admin.	Gemein. Teachers	Diff.
Most of the proposed changes in instructional systems are quite valuable (urgency change).	-.866	-.434	-.432
The teacher's major task is to develop those particular skills that standardized tests show the students to be deficient in (incremental, individual).	-1.242	-.776	-.466
Teaching is an art but we can make it a science (abstract rationality).	-.693	-.207	-.486
Teaching is primarily a job of bringing resources to learners as a group rather than to each individual (incremental, individual).	-1.165	-.568	-.597
The important thing in classrooms is how students behave in class with respect to others (behavior).	.456	1.144	-.688
What takes place in the classrooms should be primarily the responsibility of the teachers (admin., learning process).	-.172	.648	-.802
Development of the class into a mini-community is an important prerequisite to effective teaching (incremental, individual).	.026	.927	-.901
Teachers are to have autonomy over instructional activities (coordination, without).	-1.126	-.147	-.979

Table 17.--Comparisons between factors two and three (significant differences above a Z-score value of 1.0).

Item Description	T.-O. Admin.	Gesell. Admin.	Diff.
Teachers who concern themselves with humanistic approaches to instruction are more effective than those who concern themselves with measurable outcomes (affectivity).	2.071	- .833	2.911
Positive relations between teachers and students are more important than achievement on standardized tests (affectivity).	1.341	- .639	2.480
Good teaching is an art and will remain an art (abstract rationality).	1.238	-1.010	2.248
By developing students' respect and liking for one another, teachers have then accomplished the major classroom goal (affectivity).	.609	- .955	1.565
Administrators who are not in direct contact with classrooms can still maintain a good feel for what goes on in classrooms (coordination, without).	- .340	-1.410	1.070
There is too much emphasis placed on the cognitive aspect of learning and not enough on the affective (affectivity).	.942	- .045	.987
Individualized learning programs contribute to cooperation among students (incremental, individual).	.535	- .395	.930
Successful instructional systems can be implemented regardless of the teacher's individual style (urgency change).	.162	- .667	.829
The most important thing teachers can do is to treat students with personal respect (affectivity).	1.831	1.081	.750
Teachers keep up with the latest instructional techniques (urgency change).	- .505	-1.074	.570
The most successful classrooms are those wherein each child is working at his or her individual level (incremental, individual).	1.767	1.337	.430

Table 17.--Continued.

Item Description	T.-0. Admin.	Gesell. Admin.	Diff.
Teachers are to have autonomy over instructional activities (coordination, without).	-1.126	-1.547	.421
Development of the class into a mini-community is an important prerequisite to effective teaching (incremental, individual).	.026	- .386	.412
Individual teacher activities need to be coordinated more than they are (coordination, without).	.193	- .075	.258
In twenty-five years, classroom teaching will be vastly different from the way it is now (urgency change).	- .146	- .379	.233
There is presently too much diversity among teachers' instructional styles (coordination, without).	- .738	- .943	.205
Teaching is primarily a job of bringing resources to learners as a group rather than to each individual (incremental, individual).	-1.165	-1.370	.204
Individualized learning programs do raise student achievement levels (incremental, individual).	.652	.456	.196
A teacher's job is to be the manager of group activities (incremental, individual).	- .590	- .777	.187
Teachers need to be more responsive to improved teaching techniques (urgency change).	.683	.600	.084
Building positive student social attitudes is an important goal for teachers (affectivity, behavior).	1.407	1.425	- .018
The important thing in classrooms is how students behave in class with respect to others (behavior).	.456	.487	- .032

classrooms. Teacher-oriented administrators feel they can maintain a good feel for things taking place in the classroom.

Table 18 presents those differences falling on the negative end of the scale. The greatest difference here is regarding the belief that administrators are to have a strong voice in the methods and materials used in the classrooms. Teacher-oriented administrators do not believe this is necessary. They also feel administrative evaluation is not necessarily good for teaching. Outside of matters regarding administrators' involvement in classroom activities, the groups differed in their beliefs about matters related to clearly stated goals and objectives and district-wide coordination of learning activities. Teacher-oriented administrators do not believe such matters are of utmost importance to teaching, learning, and classroom organization, whereas gesellschaft-oriented administrators do believe these things are important.

Summary

Tables 14-18 indicate that gemeinschaft-oriented teachers' and teacher-oriented administrators' belief patterns about teaching, learning, and classroom organization do in fact differ from that of the gesellschaft-oriented administrators. It is determined from the observations that gemeinschaft-oriented teachers and teacher-oriented administrators have similar belief patterns. Both groups ranked personal and humanistic matters high.

Table 18.--Comparisons between factors two and three (significant differences below a Z-score value of -1.0).

Item Description	T.-0. Admin.	Gesell. Admin.	Diff.
It is as important for a child to achieve individually as it is for that child to conform to classroom norms (incremental, individual).	1.196	1.261	- .065
Much more is known about successful teaching now than was known twenty-five years ago (urgency change).	- .428	- .353	- .075
Choices teachers have regarding particular programs are to be made from those selected by central office planners and coordinators (admin., learning process).	-1.299	-1.181	- .118
Student achievement test scores are the best way to measure teacher effectiveness (coordination, without).	-2.051	-1.883	- .168
Changes in teacher instructional techniques are long overdue (urgency change).	- .014	.181	- .195
Teaching is an art but we can make it a science (abstract rationality).	- .693	- .471	- .222
What takes place in the classrooms should be primarily the responsibility of the teachers (admin., learning process).	- .172	.065	- .238
The most important element in assessing teacher effectiveness is to observe the way students behave in the classroom (behavior).	- .124	.116	- .239

Table 18.--Continued.

Item Description	T.-O. Admin.	Gesell. Admin.	Diff.
Teachers' major efforts are to be directed toward teaching those things that can be tested (abstract rationality).	-1.460	-1.126	- .333
A teacher's job is to be the orchestrator of individualized learning activities (incremental, individual).	.781	1.193	- .411
Educational planners insure instructional continuity within an entire district (coordination, without).	- .450	.001	- .451
Learning can be structured on a step-by-step basis (incremental, individual).	.028	.524	- .496
Teachers need not fear educational change (urgency change).	.201	.699	- .498
Changes in teaching techniques are to be determined by administrators (admin., learning process).	-1.848	-1.349	- .499
It is important that teachers have clearly stated goals for all classroom activities (abstract rationality).	.673	1.289	- .616
Most of the proposed changes in instructional systems are quite valuable (urgency change).	- .866	- .085	- .781
Instructional models are necessary to good teaching (abstract rationality).	- .045	.763	- .803
The teacher's major task is to develop those particular skills that standardized tests show the students to be deficient in (incremental, individual).	-1.242	- .221	-1.021

Table 18.--Continued.

Item Description	T.-O. Admin.	Gesell. Admin.	Diff.
District-wide coordination of learning activities is important to teacher success (coordination, without).	-.962	.107	-1.069
A system wherein goals and objectives are clearly stated and the relations between them clearly defined is essential to good teaching (abstract rationality).	.849	2.052	-1.203
Those educators outside the classroom are in a better position to learn about innovations in teaching than are teachers (coordination, without).	-1.658	-.333	-1.326
Administrative supervision can best be described as an important contribution to student learning (admin., learning process).	-.220	1.147	-1.367
Teachers need to clearly explain the intended outcomes of their instructional activities (abstract rationality).	.765	2.228	-1.462
Administrative evaluation is good for teaching (admin., learning process).	-.080	1.514	-1.595
Administrators are to have a strong voice in the methods and materials used in the classrooms (admin., learning process).	-.692	.982	-1.674

Consensus Items

Table 19 presents those consensus items held by teachers on matters regarding teaching, learning, and classroom organization. Listed along with the consensus items are the average Z-scores for each item by the types combined, although only type one was considered meaningful and utilized in the analysis. Consensus items are those generally agreed on by the total number of respondents collectively. The item statements at the top are the ones most strongly agreed on by all the subject teachers. Treating students with personal respect ranked the highest. A total of 31 consensus items was determined.

Table 20 presents 20 consensus items and their average Z-scores for these items. This table indicates those items of common agreement by both groups of administrators. Building positive student social attitudes is the most important goal for teachers. It must be pointed out here that there was a total of 12 administrators involved in rational management model usage and 23 elementary principals in the study. This is to say that those items ranking high as consensus items for all administrators may have appeared differently if there had been an equal number of administrators.

Plots of Rotated Factor Loadings

Presented in Figure 1 is a plot of rotated factor loadings for gemeinschaft-oriented teachers and the gesellschaft-oriented administrators. As can be observed, the two groups do not cluster together but do in fact cluster separately, representing a difference in belief patterns.

Table 19.--Consensus items: teachers.

Item Description	Average Z-Score
The most important thing teachers can do is to treat students with personal respect (affectivity).	1.728
Positive relations between teachers and students are more important that achievement on standardized tests (affectivity).	1.463
Building positive student social attitudes is an important goal for teachers (affectivity, behavior).	1.405
It is as important for a child to achieve individually as it is for that child to conform to classroom norms (incremental, individual).	1.360
Good teaching is an art and will remain an art (abstract rationality).	1.116
What takes place in the classrooms should be primarily the responsibility of the teachers (admin., learning process).	1.056
A system wherein goals and objectives are clearly stated and the relations between them clearly defined is essential to good teaching (abstract rationality).	.979
The important thing in classrooms is how students behave in class with respect to others (behavior).	.632
Individualized learning programs do raise student achievement levels (incremental, individual).	.479
Teachers need not fear educational change (urgency change).	.473
Teachers need to be more responsive to improved teaching techniques (urgency change).	.471

Table 19.--Continued.

Item Description	Average Z-Score
Teachers need to clearly explain the intended outcomes of their instructional activities (abstract rationality).	.364
In twenty-five years, classroom teaching will be vastly different from the way it is now (urgency change).	.287
Instructional models are necessary to good teaching (abstract rationality).	.253
Administrative evaluation is good for teaching (admin., learning process).	.175
There is too much emphasis placed on the cognitive aspect of learning and not enough on the affective (affectivity).	.108
A teacher's job is to be the orchestrator of individualized learning activities (incremental, individual).	.088
Individual teacher activities need to be coordinated more than they are (coordination, without).	- .128
Individualized learning programs contribute to cooperation among students (incremental, individual).	- .149
Teaching is an art but we can make it a science (abstract rationality).	- .292
A teacher's job is to be the manager of group activities (incremental, individual).	- .314
District-wide coordination of learning activities is important to teacher success (coordination, without).	- .454

Table 19.--Continued.

Item Description	Average Z-Score
Educational planners insure instructional continuity within an entire district (coordination, without).	-.641
Administrative supervision can best be described as an important contribution to student learning (admin., learning process).	-.739
The teacher's major task is to develop those particular skills that standardized tests show the students to be deficient in (incremental, individual).	-.742
Teaching is primarily a job of bringing resources to learners as a group rather than to each individual (incremental, individual).	-.798
There is presently too much diversity among teachers' instructional styles (coordination, without).	-.900
Choices teachers have regarding particular programs are to be made from those selected by central office planners and coordinators (admin., learning process).	-1.252
Administrators are to have a strong voice in the methods and materials used in the classrooms (admin., learning process).	-1.589
Changes in teaching techniques are to be determined by administrators (admin., learning process).	-1.814
Student achievement test scores are the best way to measure teacher effectiveness (coordination, without).	-2.125

Table 20.--Consensus items: administrator groups.

Item Description	Average Z-Score
Building positive student social attitudes is an important goal for teachers (affectivity, behavior).	1.613
The most important thing teachers can do is to treat students with personal respect (affectivity).	1.589
It is as important for a child to achieve individually as it is for that child to conform to classroom norms (incremental, individual).	1.365
Teachers need not fear educational change (urgency change).	.562
Instructional models are necessary to good teaching (abstract rationality).	.548
The important thing in classrooms is how students behave in class with respect to others (behavior).	.445
Individual teacher activities need to be coordinated more than they are (coordination, without).	.212
Learning can be structured on a step-by-step basis (incremental, individual).	.067
The most important element in assessing teacher effectiveness is to observe the way students behave in the classroom (behavior).	.045
Development of the class into a mini-community is an important prerequisite to effective teaching (incremental, individual).	.019
What takes place in the classrooms should be primarily the responsibility of the teachers (admin., learning process).	-.016

Table 20.--Continued.

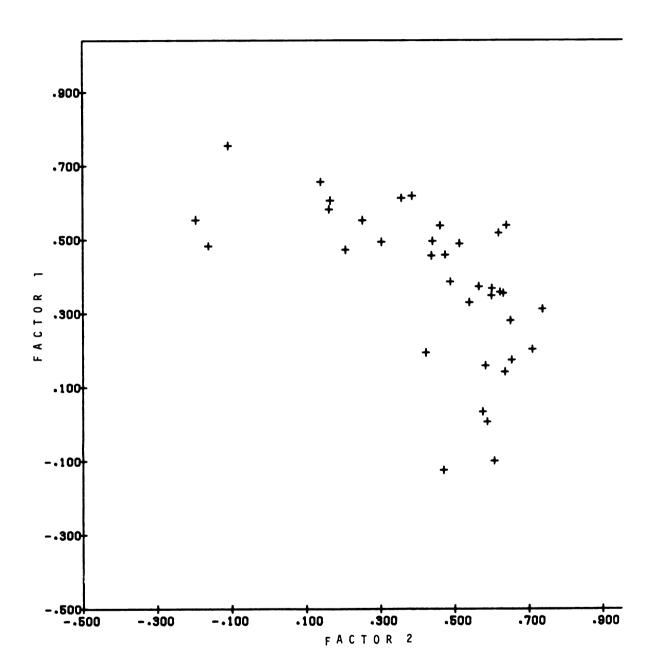| Item Description	Average Z-Score
Educational planners insure instructional continuity within an entire district (coordination, without).	- .050
In twenty-five years, classroom teaching will be vastly different from the way it is now (urgency change).	- .074
Teaching is an art but we can make it a science (abstract rationality).	- .564
Teachers keep up with the latest instructional techniques (urgency change).	- .568
There is presently too much diversity among teachers' instructional styles (coordination, without).	-1.117
Choices teachers have regarding particular programs are to be made from those selected by central office planners and coordinators (admin., learning process).	-1.275
Teachers' major efforts are to be directed toward teaching those things that can be tested (abstract rationality).	-1.332
Changes in teaching techniques are to be determined by administrators (admin., learning process).	-1.759
Student achievement test scores are the best way to measure teacher effectiveness (coordination, without).	-1.921

Figure 1.--Plot of rotated factor loadings: teachers and model users.

Presented in Figure 2 is a plot of rotated factor loadings for teacher-oriented administrators and gesellschaft-oriented administrators. As can be observed, the belief patterns for these groups also differ similarly to that of the teachers.
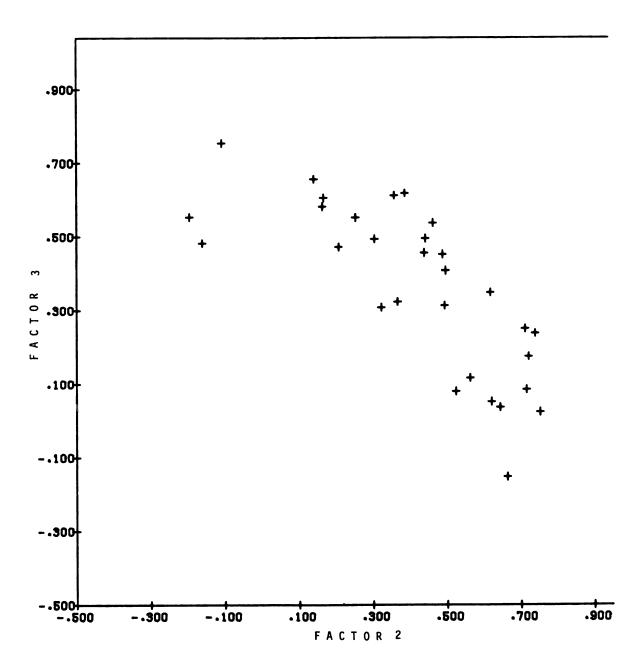
Figure 2.--Plot of rotated factor loadings: administrators
and administrators.

Footnotes--Chapter IV

[1]Valerie J. Janesick, "An Ethnographic Study of a Teacher's Classroom Perspective" (Ph.D. dissertation, Michigan State University, 1977).

[2]William H. Martin, "A Participant Observation Study of an Outdoor Education Experimental Curriculum Experiment Operating on a Public Secondary School" (Ph.D. dissertation, Michigan State University, 1977).

[3]Louis Smith and William Geoffrey, The Complexities of an Urban Classroom (Chicago: Holt, Rinehart and Winston, Inc., 1968).

[4]Dan C. Lortie, Schoolteacher: A Sociological Study (Chicago: University of Chicago Press, 1975).

[5]Harvey B. Tiller, "Quality Belief Patterns in Secondary Education" (Ph.D. dissertation, University of Iowa, 1969), p. 63.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Purpose of the Study

The researcher's purpose in this study was to examine points of differences about teaching, learning, and classroom organization between some elementary teachers and some school administrators who are engaged in attempts to influence teaching, learning, and classroom organization by the implementation of rational management models (systems). In addition, this researcher examined points of differences about teaching, learning, and classroom organization between the same group of elementary teachers and some elementary principals who are not engaged in attempts to influence teaching, learning, and classroom organization by the implementation of rational management models (systems). A subpart of this study examined points of differences about the three areas of concern between the two administrator groups. The specific questions that were studied are the following:

1. Do teachers' value and belief patterns about teaching, learning, and classroom organization differ from those of administrators who are actively engaged in attempts to influence teaching, learning, and classroom organization by the implementation of rational management models (systems)?

2. Do teachers' value and belief patterns about teaching, learning, and classroom organization differ from those of administrators who are not engaged in attempts to

influence teaching, learning, and classroom organization by the implementation of rational management models (systems)?

3. Do those administrators who are engaged in rational management model usage phrase their efforts in gesellschaft terms?

4. Are teachers attempting to create classroom organizations with the characteristics of a gemeinschaft?

5. Are elementary principals' views about teaching, learning, and classroom organization different from those of administrators who are engaged in rational management model usage (systems)?

Procedure

Five relevant concepts were generated from interviews with teachers and the administrators who are actively engaged in the use of rational management models (systems). Two additional concepts for teachers were developed from examination of studies by Janesick, Martin, Smith, and Lortie as well as the interviews obtained.

The next step was to operationalize each concept. This process resulted in the development of 47 representative items. The items were considered by local teachers, administrators, fellow students, and several professors. Collectively, this group determined the items to represent fairly the concepts which would allow this research to examine points of difference between the three groups of concern on matters related to teaching, learning, and classroom organization.

Forty-seven elementary classroom teachers, 12 administrators who are engaged in rational management model usage (systems), and 23 elementary principals who are not engaged in rational management

model usage sorted the 47 items into 9 piles based on their feelings regarding the particular item.

Information concerning selected personal characteristics of the participants was obtained by having respondents complete a short questionnaire.

Each respondent's sort was correlated with the sort of every other respondent on each particular run. The resulting correlation matrix for each of the two runs (i.e., one for teachers and one for the two groups of administrators) was submitted to "principal component analysis" with a subsequent "varimax rotation." Data were analyzed for six factors with three being determined meaningful. Two factors were determined meaningful for the two groups of administrators, which accounted for 41% of the total variance of the original matrix for administrators. One factor was determined meaningful for teachers, which also accounted for 41% of the total variance of the original matrix for teachers.

For each run, selected respondents were associated with a particular factor. Item arrays for each of the factors were established with Z-scores computed for each item placement in each factor. These three item arrays, representing three belief patterns, were then compared both in terms of individual items and the particular group responding, as well as by the concepts under which each item fell, which serve to establish group differences and similarities.

The relationship between belief patterns, as established by this study, and selected characteristics was explored using Cramer's statistic phi-prime. The results appear in detail in Chapter IV.

Summary of Findings

Belief Patterns

Respondents of this study were grouped into a total of six factors with three being determined meaningful. Each factor represented particular views held by three groups of educators about teaching, learning, and classroom organization. As described, each factor basically consisted of one distinct group of educators. This provided for easier determination of a group's position on the areas of concern. It was found that the teachers in this study basically differ from the group of administrators who are actively engaged in attempts to influence teaching, learning, and classroom organization by the implementation of rational management models (systems). These teachers are primarily concerned with matters related to respect for students and the establishing of personal relationships as a foundation for other things that are to take place in the classroom. The subject administrators (model users) are more concerned with outcomes, rationality, and more logical operating procedures in the classroom.

Teachers and those administrators who are not engaged in attempts to influence teaching, learning, and classroom organization by the implementation of rational management models are in relative agreement on the issues related to teaching, learning, and classroom organization. These two groups both differ from the administrators proposing rational management models.

Selected Characteristics

Cramer's statistic phi-prime was used to explore relationships between groups of people. In the first set, the groups consisted of teachers and both groups of administrators. In the second set, the groups consisted of rational management model users and elementary principals who were differentiated by belief patterns. There is an association between age and the current school position of the respondent. The teacher respondents were generally between the ages of 27-33. The average age for administrators, collectively, was between the ages of 41-47. Administrator respondents were older than the teacher respondents.

There is a slight association between the sex of the respondent and the current school position. Mostly females made up the teacher respondents, whereas mostly males made up administrator respondents. There is a slight association between the number of years of experience and current school position. The teacher respondents had an average of 1-4 and 9-12 years of experience, whereas the administrators had 9-12 years.

Distinctions were made between the two groups of administrators and produced the following findings: Most of the administrator respondents engaged in rational management model usage were between the ages of 34-40. The majority of the elementary principals were between the ages of 41-47. In both cases, administrator respondents were mostly male. The personal information on experience had eight missing observations; for this reason, accurate assessments could not be determined.

Conclusions

The conclusions based on the researcher's findings are limited to the school personnel involved in the study. The extent to which these conclusions may be considered applicable to other school personnel groups in other situations is unknown and the reader is cautioned in this regard.

Discussed below are the conclusions of the study with reference to the specific questions to which the study was addressed.

1. Do teachers' value and belief patterns about teaching, learning, and classroom organization differ from those of administrators who are actively engaged in attempts to influence teaching, learning, and classroom organization by the implementation of rational management models (systems)?

From the belief patterns determined, teachers' belief patterns about teaching, learning, and classroom organization do in fact differ from those of administrators who are engaged in rational management model usage. The specific points of differences between the two groups are provided in detail in Chapter IV. For these teachers, data on three factors were provided, with only one factor determined meaningful.

The teachers are distinguished by their desire to first establish positive working relationships with their students, which stems from their beliefs about humanistic approaches in the classroom. It appears to these teachers that such approaches are prerequisites to effective instruction. Students are looked upon with personal respect by the teacher. It is believed important to make efforts toward establishing student respect and liking for one another.

For the administrators engaged in rational management model usage, the concern is primarily with learning procedures and outcomes (with their administrative input into these areas). They do not believe humanistic approaches are of utmost importance, but they do feel it is important. More accessible information regarding what teachers do and intend to do in the classroom was a primary concern for this group of administrators. Such information would allow these administrators to account for as well as more accurately assess activities taking place in classrooms in which they have responsibility. These areas clearly distinguish the different belief patterns between these two groups.

2. Do teachers' value and belief patterns about teaching, learning, and classroom organization differ from those of administrators who are not engaged in attempts to influence teaching, learning, and classroom organization by the implementation of rational management models (systems)?

It was observed that the belief patterns for these two groups are quite similar; only one item of significant difference existed between the groups, which is described in Chapter IV. Overall, very little difference exists between the groups. Teachers, like this group of subject administrators, believe humanistic approaches must come first. Effective learning can come only after establishing positive working relationships between students and teachers. Neither group cited learning techniques, outcomes, and administrative supervision as most important items of concern. The foundation for effective teaching and learning appears to be embedded in the items those principals and teachers ranked highest.

3. Do administrators who are engaged in rational management model usage phrase their efforts in gesellschaft terms?

From the observations it is determined that these administrators do in fact phrase their efforts in gesellschaft terms. Eight out of the ten items with a Z-score value of 1.0 or above are items representing concepts that are in line with the description of gesellschaft described in Chapter II. The concepts of abstract rationality, administrative hierarchy in learning, and incremental and individualized instruction are all from the gesellschaft perspective.

This group strongly believe teachers need to explain the intended outcomes of their instructional activities. They also strongly believe that a system wherein goals and objectives are clearly stated and the relations between them clearly defined are essential to good teaching. Rational management models (systems) do in fact establish these two primary concerns of the subject administrators. Efforts to implement rational management models appear to come from a belief established in the gesellschaft mode of thinking.

4. Do teachers attempt to create classroom organizations with characteristics of a gemeinschaft?

From the observations, it is determined that these teachers do in fact phrase their efforts in gemeinschaft terms. Five out of the eight items with a Z-score value of 1.0 or above are items representing concepts that are in line with the description of gemeinschaft described in detail in Chapter II. The concepts of affectivity and behaviorism are both from a gemeinschaft perspective.

This group of teachers strongly believe that the most important thing teachers can do is to treat students with personal respect and that positive relations between teachers and students are more important than achievement on standardized tests. In these teachers' efforts to establish such situations in the classroom, they are basically operating from the gemeinschaft perspective described in Chapter II.

5. Are elementary principals' views about teaching, learning, and classroom organization different from those of administrators who are engaged in rational management model (systems) usage?

From the observations, it is determined that the views of the elementary principals involved in the study do in fact differ from those of administrators engaged in rational management model usage. These principals' belief pattern about the areas of concern is quite similar to that of teachers whose belief patterns about teaching, learning, and classroom organization differ from that of the administrators engaged in rational management model usage. An important finding to point out here is that teachers and building-level administrators' (elementary principals') belief patterns about teaching, learning, and classroom organization differ from those of administrators who are engaged in attempts to implement rational management models (systems) in classrooms.

Recommendations

The findings of this study must be limited to the school personnel who participated in it. Nevertheless, it is recommended that

the results of the investigation be seriously considered by those who are engaged in attempts to affect teaching, learning, and classroom organization by the implementation of rational management models (systems). These results can offer some explanation why some teachers are beginning to reject rational management model usage in their classrooms--models that are usually imposed by administrators who function from outside the immediate boundaries of school buildings.

This study has, in a prioritized manner, provided insight into areas of concern teachers believe to be important in their endeavors to be effective teachers. If situations described in Oregon and Kalamazoo (described in Chapter II) are to be avoided, then it may be worthwhile for the growing number of rational management model users to know and understand some of the important teacher factors involved when attempts are made to make teaching, learning, and classroom organization a more rational process.

Teacher training as well as local school districts' inservice training programs may find it beneficial to analyze the results of this study since rational management model (systems) implementation is on the increase.

Further studies should be conducted using a different and larger group of teachers (possibly secondary teachers) to explore their belief patterns. In addition, secondary principals could be used to see if they differ from or resemble teacher responses. Other groups that could be included could consist of heads of teacher

associations, parents, and politicians involved in educational policy making.

Overall, the teachers in the study seem to hold a more simplistic view of teaching, learning, and classroom organization than do administrators engaged in rational management model usage. That is to say, these teachers basically attempt to establish an environment within their classrooms that lends itself to the establishment and maintenance of a collectivity--a collectivity that is group oriented and built on the premise that such things as positive humanistic approaches must come first in the classroom as a prerequisite for other events to take place. It can be inferred from the findings that these teachers are not open to programs and procedures that may alter the basic structure. The findings indicate that the elementary principals' basic values and beliefs about teaching, learning, and classroom organization are in line with those of the teachers.

Administrators engaged in rational management model usage appear not to hold such a simplistic view of teaching, learning, and classroom organization. Programs and procedures this group attempt to have implemented in classrooms are not always in line with classroom teachers' attempts. Rational models, when implemented, establish clear relations between goals and objectives; concerns are with outcomes. Administrative input into classroom activities and procedures is increasing. Model programs provide these administrators with a more direct line of communication regarding classroom functions.

The differences between the two modes of thinking and operating fall within the way each approaches the business of teaching, learning, and classroom organization--teachers from a more simplistic standpoint and the subject administrators from a more rational standpoint. The similarities are that each seeks to influence effectively the overall processes taking place in classrooms.

It appears appropriate to recommend that if present systems models fail to prove their effectiveness in classrooms over a given period of time, it may be feasible to discontinue the introduction of such models in classrooms. Since this study did not seek to determine the most effective mode of teaching, learning, and classroom organization or make any program evaluations, it would not be appropriate to suggest that the absence or presence of systems models might improve teacher effectiveness and student learning. What has been determined is that basic differences about the areas of concern do exist between the teachers and administrators engaged in model usage.

The reader is reminded that this study's findings are of limited generality.

APPENDICES

APPENDIX A

COVER LETTER AND QUESTIONS CONCERNING

PERSONAL CHARACTERISTICS

APPENDIX A

COVER LETTER AND QUESTIONS CONCERNING
PERSONAL CHARACTERISTICS

Dear _____,

       I greatly appreciate you taking time out of your busy schedule to assist me in my research. Attached is a complete set of directions for you to follow in completing the attached instrument.

       The purpose of the research is to isolate the values and beliefs that teachers and administrators have about teaching, learning, and classroom organization in the elementary school. By having a group of teachers and administrators respond to the same set of statements about teaching, learning, and classroom organization, I will be able to isolate what differences, if any, exist between these groups in the areas of concern.

       The methodology used is known as a Q-Sort. Q-Sorting requires you to place a particular number of items (statements written on cards) into an envelope. These items, as I state in the directions, explore your beliefs about teaching, learning, and classroom organization. There is no wrong or right way of responding.

       The Q-Sort need not take a lot of time to complete. Some respondents complete the entire process in less than twenty-five minutes, where others take longer. It is not necessary to spend a lot of time studying each item, but do give each some thought.

       Results of the study will be made available to you upon request.

       Before reading the directions beginning on the next page, please fill out the information below. I assure you complete anonymity. As you notice, there are no places requiring you to write your name or school.

I am a teacher _____   I am an administrator _____   Age _____   Sex _____

Highest degree attained _____   Years as a teacher _____

Years as an administrator _____   Grade level taught _____

I will return to pick up the completed materials on _____.

Sincerely,

James E. Ray

APPENDIX B

INTERVIEW QUESTIONS

APPENDIX B

INTERVIEW QUESTIONS

*1. Have you engaged in attempts to implement a rational model or "management" system for classroom use?

2. Will you please describe these attempts?

3. How were these attempts received by teachers?

4. How did you approach teachers with this?

5. How will these efforts help students?

6. Will this basically affect the way teachers teach?

7. Will this help teachers teach better?

8. How do you see teachers teaching now and how will your efforts help them teach better?

9. What do you think about learning?

10. What do systems approaches have to do with learning?

11. What do you see as a teaching problem? (i.e., What do teachers need to do better?)

12. What does this (system) have to do with teachers teaching and how they operate in classrooms?

*Study contents were explained prior to interview.

APPENDIX C

ITEM STATEMENTS REPRESENTING VALUE AND BELIEF PATTERNS

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APPENDIX C

ITEM STATEMENTS REPRESENTING VALUE AND BELIEF PATTERNS

1. Teachers' major efforts are to be directed toward teaching those things that can be tested.

2. Good teaching is an art and will remain an art.

3. Teaching is an art but we can make it a science.

4. A system wherein goals and objectives are clearly stated and the relations between them clearly defined is essential to good teaching.

5. Instructional models are necessary to good teaching.

6. Teachers need to clearly explain the intended outcomes of their instructional activities.

7. It is important that teachers have clearly stated goals for all classroom activities.

8. Much more is known about successful teaching now than was known twenty-five years ago.

9. Successful instructional systems can be implemented regardless of the teacher's individual style.

10. Teachers keep up with the latest instructional techniques.

11. Teachers need to be more responsive to improved teaching techniques.

12. Teachers need not fear educational change.

13. Most of the proposed changes in instructional systems are quite valuable.

14. In twenty-five years, classroom teaching will be vastly different from the way it is now.

15. Changes in teacher instructional techniques are long overdue.

16. Administrative evaluation is good for teaching.

17. What takes place in the classrooms should be primarily the responsibility of the teachers.

18. Administrative supervision can best be described as an important contribution to student learning.

19. Administrators are to have a strong voice in the methods and materials used in the classrooms.

20. Choices teachers have regarding particular programs are to be made from within those selected by central office planners and coordinators.

21. Changes in teaching techniques are to be determined by administrators.

22. A teacher's job is to be the manager of group activities.

23. The teacher's major task is to develop those particular skills that standardized tests show the students to be deficient in.

24. A teacher's job is to be the orchestrator of individualized learning activities.

25. Development of the class into a mini-community is an important prerequisite to effective teaching.

26. Teaching is primarily a job of bringing resources to learners as a group rather than to each individual.

27. It is as important for a child to achieve individually as it is for that child to conform to classroom norms.

28. The most successful classrooms are those wherein each child is working at his or her individual level.

29. Learning can be structured on a step-by-step basis.

30. Individualized learning programs contribute to cooperation among students.

31. Individualized learning programs do raise student achievement levels.

32. Educational planners insure instructional continuity within an entire district.

33. Administrators who are not in direct contact with classrooms can still maintain a good feel for what goes on in classrooms.

34. Teachers are to have autonomy over instructional activities.

35. There is presently too much diversity among teachers' instructional styles.

36. Individual teacher activities need to be coordinated more than they are.

37. District-wide coordination of learning activities is important to teacher success.

38. Those educators outside the classroom are in a better position to learn about innovations in teaching than are teachers.

39. Student achievement test scores are the best way to measure teacher effectiveness.

40. The most important thing teachers can do is to treat students with personal respect.

41. Building positive student social attitudes is an important goal for teachers.

42. There is too much emphasis placed on the cognitive aspect of learning and not enough on the affective.

43. Teachers who concern themselves with humanistic approaches to instruction are more effective than those who concern themselves with measurable outcomes.

44. By developing students' respect and liking for one another, teachers have then accomplished the major classroom goal.

45. Positive relations between teachers and students are more important than achievement on standardized tests.

46. The important thing in classrooms is how students behave in class with respect to others.

47. The most important element in assessing teacher effectiveness is to observe the way students behave in the classroom.

APPENDIX D

DIRECTIONS FOR COMPLETING THE Q-SORT

APPENDIX D

DIRECTIONS FOR COMPLETING THE Q-SORT

Make sure your materials include the following items:

    a. Nine (9) envelopes with a colored card attached to each;

    b. A stack of forty-seven (47) cards with written statements on each; (please disregard the number in the right-hand corner of each card--they are for coding purposes only);

    c. Rubber bands; and

    d. One (1) large manila envelope.

You will need a table or desk to work on. The stack of forty-seven (47) cards with statements (items) written on them represent assumptions about learning, teaching, and classroom practices. I would like to know to what extent you agree or disagree with each statement. (See next page for Sorting Procedure.)

Sorting Procedure

1. Take the nine (9) envelopes with the colored cards on them and beginning from left to right, align them in the following arrangement:

Very Strongly Agree	Strongly Agree	Moderately Agree	Slightly Agree	Neither Agree nor Disagree	Slightly Disagree	Moderately Disagree	Strongly Disagree	Very Strongly Disagree
#...2	#...3	#...6	#...8	#...9	#...8	#...6	#...3	#...2

2. Look through the stack of forty-seven cards and select eleven (11) you feel you most agree with and place them on your left--and eleven (11) items you feel you most disagree with and place them on your right--and place the remaining twenty-five (25) cards in the middle. Be sure you have counted correctly. (Nothing is placed inside the envelopes at this point.)

3. Taking the first stack on the left (those you most agree with), further sub-divide this pile placing the two (2) out of the eleven you most strongly agree with in the envelope marked very strongly agree; place three (3) you strongly agree with out of the remaining nine in the envelope marked strongly agree; and the remaining six (6) cards in the envelope marked moderately agree. NOTE: The numbers on the colored cards remind you how many cards can be placed in each envelope.

   a. Next take the stack of eleven (11) items on your right (those you most disagree with) and sub-divide this pile, placing two (2) out of the eleven you most disagree with in the envelope marked very strongly disagree; place three (3) you strongly disagree with out of the remaining nine in the envelope; and the remaining six (6) cards in the envelope marked moderately dis-agree.

b. Lastly, take the middle stack of twenty-five items (25) and place eight (8) items out of the twenty-five you slightly agree with in the envelope marked slightly agree; place nine (9) out of the remaining seventeen (17) you neither agree nor disagree with in the envelope and the remaining eight (8) in the slightly disagree envelope.

Note: While sorting items please feel free to go back and change the position of a particular card, but be sure to end up with the correct number of cards in each envelope.

4. Place a rubber band around each envelope and place each into the large one. SEAL THE ENVELOPE AND PLEASE DO NOT REOPEN.

YOU HAVE JUST COMPLETED THE Q-SORT.

Thank you.

APPENDIX E

INTERCORRELATION MATRIX

APPENDIX E

Table E1.—Intercorrelation matrix of administrators by group (ordered within each group by factor loading).

Respondents	24	19	23	25	26	20	28	14	30	21	17	27	32	22	16	1	4	2	8	33	13	31	9	6	3	15	12	11	5	10
ELEMENTARY PRINCIPALS																														
24	100	58	41	59	61	52	54	47	41	44	29	41	21	36	25	30	-03	22	15	10	-13	29	32	27	-08	29	30	39	37	32
19	58	100	36	62	48	54	51	36	43	34	40	43	26	50	27	32	08	13	00	38	-03	11	24	27	-02	31	30	27	46	35
23	41	36	100	34	51	49	50	29	41	43	38	41	20	35	20	46	15	01	20	21	04	27	30	20	01	17	22	26	31	37
25	59	62	34	100	34	51	65	54	49	64	38	55	24	43	37	41	10	27	26	31	-04	24	46	42	04	40	34	48	49	43
26	61	48	51	34	100	44	34	23	53	27	40	43	16	31	31	21	-13	07	04	08	-13	36	04	04	-09	12	28	19	35	22
20	52	54	49	51	44	100	63	49	57	45	45	44	41	47	25	30	29	23	23	21	01	14	45	47	07	31	31	43	52	52
28	54	51	50	65	34	63	100	45	49	69	35	45	51	35	25	32	32	14	27	27	11	21	40	58	08	41	45	47	41	57
14	47	36	29	54	23	49	45	100	38	40	20	46	20	36	28	10	00	28	12	25	-01	-04	27	21	17	29	03	29	41	19
30	41	43	41	49	53	57	49	38	100	38	40	59	20	37	41	16	08	08	24	23	08	17	34	28	-06	35	31	37	43	36
21	44	46	43	64	27	45	69	40	38	100	35	31	16	37	28	49	24	31	25	21	20	14	48	50	13	25	34	47	47	38
17	29	40	38	38	40	45	35	20	40	35	100	36	26	37	37	38	20	15	24	28	15	37	40	30	14	23	27	36	39	29
27	41	43	41	55	43	44	45	46	59	31	36	100	24	51	49	14	-01	03	35	34	-05	30	30	34	14	43	27	31	43	35
32	21	26	20	24	16	41	51	20	20	16	26	24	100	26	09	12	09	22	35	29	-03	38	09	31	16	41	37	13	24	43
22	36	47	35	43	31	47	35	37	37	37	37	51	26	100	32	43	19	38	26	48	20	34	39	44	23	42	46	42	66	36
16	25	27	20	37	31	25	25	10	41	28	37	49	09	32	100	18	17	34	51	43	09	25	26	37	07	31	20	37	33	33
1	30	32	46	41	21	30	32	16	49	38	38	14	26	43	18	100	26	31	18	23	34	34	49	37	-04	22	24	31	35	34
RATIONAL MODEL USERS																														
4	-03	08	15	10	-13	29	32	00	08	24	20	-01	09	19	17	26	100	31	40	47	39	31	46	31	53	31	31	32	31	23
2	22	13	01	27	07	23	14	28	08	31	15	03	22	38	34	31	31	100	27	41	23	25	35	45	25	36	31	40	43	33
8	15	00	20	26	04	23	27	12	24	25	24	35	35	26	51	18	40	27	100	41	23	25	49	41	27	25	29	38	40	45
33	10	38	21	31	08	21	27	25	23	21	28	34	29	48	43	23	47	41	41	100	41	40	34	36	47	41	49	32	53	38
13	-13	-03	04	-04	-13	01	11	-01	08	20	15	-05	-03	20	09	34	39	23	23	41	100	12	23	20	27	20	20	29	27	01
31	29	11	27	24	36	14	21	-04	17	14	37	30	38	34	25	34	31	25	25	40	12	100	30	29	18	41	68	23	39	34
9	32	24	30	46	04	45	40	27	34	48	40	30	09	39	26	49	46	35	49	34	23	30	100	58	25	30	41	54	54	45
6	27	27	20	42	04	47	58	21	28	50	30	34	31	44	37	37	31	45	41	36	20	29	58	100	30	37	48	37	47	48
3	-08	-02	01	04	-09	07	08	17	-06	13	14	14	16	23	07	-04	53	25	27	47	27	18	25	30	100	25	34	08	30	24
15	29	31	17	40	12	31	41	29	35	25	23	43	41	42	31	22	31	36	25	41	20	41	30	37	25	100	38	53	48	41
12	30	30	22	34	28	31	45	03	31	34	27	27	37	46	20	24	31	31	29	49	20	68	41	48	34	38	100	36	60	55
11	39	27	26	48	19	43	47	29	37	47	36	31	13	42	37	31	32	40	38	32	29	23	54	37	08	53	36	100	52	45
5	37	46	31	49	35	52	41	41	43	47	39	43	24	66	33	35	31	43	40	53	27	39	54	47	30	48	60	52	100	37
10	32	35	37	43	22	52	57	19	36	38	29	35	43	36	33	34	23	33	45	38	01	34	45	48	24	41	55	45	37	100

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