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A Study of the Concept of Image and of
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ABSTRACT

A STUDY OF THE CONCEPT OF IMAGE AND OF ITS APPLICATION TO ORGANIZATIONAL ANALYSIS

by Ferris Francis Anthony

The purpose of this study is to define the concept of image and to translate that concept into elements that can be used for organizational analysis. The specific purpose of this study is to test an image-measuring device in an organizational setting. The object is to obtain concrete, quantifiable data about a specific organization at a specific time.

An image is defined as an alterable state of subjective knowledge which governs behavior. It is only what is believed by the possessor to be true. It is the result of all the past experiences of the possessor. It is the everyday situation of self and surroundings taken to be reality.

The use of image theory suggests the use of an organizational theory based on individual perceptions of the organization. The attempt here is to analyze the organization on an internal rather than an external basis.

The information obtained from such an analysis is valuable for three reasons: (1) it gives us clues to the organization's internal structure and operations; (2) if we understand the individual's image of the organization, we may, within limits, predict his behavior toward the organization; (3) the more facets of an image we are aware of, the better we are able to modify the image in a direction that is likely to be constructive. Administrators, for example, can use the data collected from such an instrument as an indication of how the total membership of the organization perceives the organization. They can also get an indication of how various sub-groups within and without the organization perceive the organization in terms of goals, objectives, problems, and other variables. This information may cause the administrator to modify his goals, to set about changing the goal images held by the sub-groups, or to set other goals.

The specific purpose of this study is to measure the image of a specific organization--the College of Education, Michigan State University. The instrument used for this study was adapted from an instrument developed by Robert Anderson of Michigan State University. Briefly, this instrument consists of two parts: (1) an Open-Ended Questionnaire which is administered to a sample of the organization's members, and (2) a Rating Scale Device which is developed from the OEQ and which is administered to the sub-groups chosen for study.

The following statistical models are used for analysis of the data collected from the Rating Scale Device: (1) means; (2) analysis of variance for unequal sub-groups (3) F test; (4) t-test.

The following analysis was made of the College of Education:

1. No significant image differences were found between five major internal sub-groups. However, significant differences were found on 16 items, some of which may affect goal achievement.
2. No significant image differences were found between 17 departmental sub-groups within the organization. However, significant differences were found on some items, viz., goal statements.
3. No significant image differences were found between the four teaching ranks within the organization.
4. No significant image differences were found between tenured and non-tenured academic personnel.
5. Significant image differences were found between members of the College and school administrators in the County. These differences were found in three areas: general

goal statements, specific programs, and specific problems. It was predicted that these differences would affect organizational goal achievement.

A STUDY OF THE CONCEPT OF IMAGE AND OF ITS
APPLICATION TO ORGANIZATIONAL ANALYSIS

By

Ferris Francis Anthony

A THESIS

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1968

DEDICATED TO

My Parents--

George and Monera Anthony

Their sacrifices made all
this possible

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CHAPTER 1

INTRODUCTION

Need

Self-identification--finding out who and what we are --is one of the perennial questions of mankind. Within the last century, organizational analysts applied similar questions to organizations. Organizations, in this sense, are viewed as an individual personality. People form opinions of organizations in much the same way as they form opinions about individual personalities.

The industrial and corporate enterprises of the United States have long recognized the existence of a corporate personality; the corporate personality is commonly called the corporate image.

The modern corporate executive cannot afford to scoff at images because people are continually acting toward his company on the basis of imagery--not on the basis of facts and figures.¹

The current popularity of the corporate image concept is believed to be related to the effort of the modern corporation to identify itself. This effort to discover self-images has developed into a multi-million dollar business. Public relations, marketing, advertising, and

related areas are filled with the language of the image. The emphasis is on continual evaluation and projection of the corporate image. As Riley points out,

A corporate image is of little value without continuing and systematic information which tells the corporate manager something of the extent to which the image is received and accepted by the various publics to which it is addressed.²

The major potential in the image concept, whether for corporations or any other organization, lies in the clues it can give to the organization's internal structure and operations.³ The information gathered from organizational image research may provide a focus for specific public relations efforts; it may lead to a reconsideration of organizational objectives and policies; it may provide administrators with systematic information of the organization's operations.

Yet the concept of an organizational image, for all the money spent on its development and for all its potential for organizational analysis, has not been adequately defined, nor has any attempt been made to link behavioral science theories with image research. The result, according to Riley, is a superficial interpretation of the corporate image.⁴ The need is for more theoretical guidelines.

Problem

However, the image researcher is beset with many problems. When he turns to behavioral science for theoretical direction he discovers organization theories

which do not lend themselves to image research. Further, the trend in organizational literature has been to assume that research findings are transferable, that is, results from study of one organizational setting are applicable to any organization. However, there is little evidence available to determine the extent to which generalization is possible, either to other organizations performing the same functions or to other types of organizations.⁵ Within the behavioral sciences there is a problem of forging a closer link between theoretical and empirical analysis of organizations. Classical organizational theory views organizations on the basis of a priori principles which, it turns out, cannot explain specific organizational operations.

The image researcher is also faced with another problem. His knowledge of the image indicates that images have component parts. Therefore, his major task is to develop methods of inquiry which will permit a detailing of these component parts.

Purpose of This Study

The general purpose of this study is to define the concept of image and to translate that concept into elements that can be used for organizational analysis. The specific purpose of this study is to test an image measuring device in an organizational setting. The object is to obtain

concrete, quantifiable data about a specific organization at a specific time.

Hypotheses to Be Tested

The organization selected for study is the College of Education, Michigan State University, East Lansing, Michigan. The hypotheses to be tested are:

1. The image of the College of Education held by five internal sub-groups will not vary significantly between groups.
2. Images of the College of Education held by departmental sub-groups will not vary significantly between departments.
3. The image of the College of Education held by members of the four teaching ranks will not vary significantly between ranks.
4. The image of the College of Education held by tenured and non-tenured academic personnel will not vary significantly.
5. The image of the College of Education held by members of the College will not vary significantly from the image of the College held by school personnel in Ingham County (Michigan).

Theory to Be Used

Here is a summary of the theory used in this study.⁶
A more detailed explanation of this theory is included in Chapter 2.

An organization, besides the reality of its physical structure, is only something in the minds of men; it is an image. An image is an alterable state of knowledge which governs behavior (subjective knowledge). An image is what is believed by the possessor to be true. It is

the result of all the past experiences of the possessor. It is the everyday situations of self and surroundings taken to be reality. It has no necessary connection with the possessor's judgment of good or bad, accurate or inaccurate, adequate or inadequate; that is, it is not necessarily connected to epistemological problems. It is reality to its possessor, and, as such, it governs his behavior. In any instance, the possessor's behavior is purposeful, relevant, and pertinent to the situation as he understands it.

The use of image theory suggests the use of an organizational theory based on individual perceptions of the organization. The attempt here is to analyze the organization on an internal rather than an external basis. The analyst attempts to view the situation from the point of view of the specific organization in order to describe the operations of that one organization. Each individual within the organization perceives the organization with certain behavior expectations, that is, his behavior depends upon his perception of the organization.

The individual perceives the organization on three levels. First, he views himself in a certain role within the organization. Second, he perceives the organization as a sub-part or division of a larger organization. Third, he perceives the organization in a certain relationship to the larger society of which it is a part.

The organizational analyst must also consider at least three other levels of organizational perception. First, he must consider his own view. Second, he must consider the organization member's view. Third, he must consider the non-member's view.

The properties included in all these many perceptions tend to vary depending upon the position from which the view was taken. Was the organization viewed from the total society view, from the organization self-view, or from the internal position incumbent view? These questions will be dealt with in the course of this study.

Overview

The rest of this study is concerned with the theories and questions raised in this chapter. Here is a chapter breakdown:

In Chapter 2 the concept of image and the theory of organizations will be developed and explained by reference to pertinent literature. In Chapter 3 a methodology for organizational analysis is explained with specific reference to the organization being studied here. In Chapter 4 the hypotheses to be tested are again presented along with the data collected from the study of the College of Education. Chapter 5 includes a summary of the study with conclusions, implications, and recommendations for further study.

In the next chapter, then, concepts and theories are explained along with pertinent literature.

Citations--Chapter 1

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2. John W. Riley, Jr. with Marguerite F. Levy (eds.),
"The Nature of the Problem," The Corporation and
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3. Ibid., p. 187.
4. Ibid., p. 183.
5. Christopher Sower, "Ideas for Proposed Research,"
Mimeographed Paper, May 16, 1961, p. 3.
6. The theory used in this study is presented in Chapter
2; this section is a summary of that theory.

CHAPTER 2

LITERATURE REVIEW

This chapter is divided into two sections. In Section I, the theory of the image is presented and explained. This includes some definitions of the concept of image, some considerations on the nature of the image, a look at the image on various organizational levels, and a consideration of the images within the university sub-culture. It should be noted from the outset that most of the theoretical considerations presented in Section I were taken from the works of Kenneth Boulding (see appropriate footnotes). The social scientists, as we shall see, have neglected the area of image research. The other references in Section I were largely drawn from corporate image research or from public relations and advertising research.

In Section II, certain organizational theories are presented and explained. Section II includes special reference to the work of Christopher Sower. Sower's work is used to develop the methodology of this study and to connect the image theory with organizational analysis.

Part I.--Introduction

In the sixth century A. D., Cosmas of Alexandria, an explorer, traveler, geographer, and later a monk, wrote a treatise on the universe. The purpose of the treatise was to prove from common-sense arguments the literal accuracy of Scripture regarding the nature of the universe. In his work, Topographia Christiana, Cosmas said the universe is best illustrated in Scripture by the Tabernacle of Moses. The universe, he said, is a rectangular plane, covered by the firmament, above which is heaven. In the center of the plane is the uninhabited earth, surrounded by ocean, and beyond this the Paradise of Adam. The sun, much smaller than the earth, revolves around a conical mountain to the north and is thereby obscured at night.

Cosmas's picture of the universe served mankind for nearly 900 years. When Christopher Columbus sailed around to the "Indies," man had to revise this mental picture of the world. Man had to picture the world as a sphere, and he had to base his behavior on this new picture.

This process of creating mental pictures and revising them is not limited to geography; it is found in all human activity. For example, Walter Lippmann in his book Public Opinion, writes about an island which in 1914 was inhabited by a few Englishmen, Frenchmen, and Germans.¹ The island was cut off from civilization, so

the inhabitants had no idea of what was going on in Europe. Six weeks after the outbreak of World War I they learned their countries were at war. Yet for six weeks they had acted as if they were friends, when, in fact, they were enemies. Therefore, they had to revise their mental picture of the world.

This island, of course, was not much different from the rest of the world. There was a moment before the War when the picture of Europe on which men were conducting their business as usual did not correspond to the Europe which was about to make a jumble of their lives. Goods were manufactured that would not be shipped; goods were bought that would not be imported. People planned their lives, set off on careers, and drew up hopes and expectations all in the belief that the world as they knew it was the world as it was. "Men were writing books describing that world. They trusted the picture in their heads."²

At other times in history, here in America for example, men pictured as evil and hanged some old women. In the 1920's men thought they could grow rich by always selling and never buying. This mental picture of the economic process led to economic depression. In science, to use another example, the nuclear physicist had to revise his mental picture of the universe and make the transition from Newtonian physics to atomic physics. The nuclear physicists created models of the atom; they used

the models, the mental pictures, to describe physical phenomena. Yet the model was never complete, and with each bit of new knowledge the model was revised. Throughout history men have governed, fought, traded, reformed, discovered, and invented in the world as they imagined it to be; their efforts succeeded or failed in the world as it was.

The process being described here--the change from a flat to a round picture of the world, the mental pictures held by the island inhabitants in 1914, the American witchhunts, the models of the physicist--is the process of image formation--the mental pictures in the minds of men which govern their behavior.

Definitions

The Greeks defined the image as a "phantom," or a "likeness."³ The image, according to the Romans, was an imitation, copy, likeness, picture, conception, thought, or idea.⁴ More abstractly, the Romans defined an image as a "mental representation of something not by direct perception, but by memory or imagination; a mental picture or impression; an idea, conception."⁵

A more recent description of the image concept by Kenneth Boulding is,

The image is built up as a result of all past experiences of the possessor of the image. Part of the image, I suppose, consists of little else than an undifferentiated blur and movement. From the moment of birth, if not before, there is a constant stream

of messages entering the organism from the senses. At first, these may merely be undifferentiated lights and noises. As the child grows, however, they gradually become distinguished into people and objects. He begins to perceive himself as an object in the midst of a world of objects. The conscious image has begun.⁶

The image concept has also been defined by the business world. The corporate image, says Lee Bristol, is nothing essentially new. "It is, in its essentials, merely the picture which your organization has created in the minds of your various publics."⁷ Charles Winick says the corporate image is belated recognition by the marketing field what courts recognized over a century ago when they declared the corporation to be a legal person.⁸ Pierre Martineau reinforces Winick's statement. He says, "In law, the corporation is an entity, which can sue or be sued, just like an individual person. . . ."⁹

Another explanation of the image is offered by Professor Edward Robinson in his book Communication and Public Relations. Professor Robinson uses a definition developed by the Opinion Research Corporation.

The concept of the Corporate Image may be defined as a kind of 'summing up' of how people perceive and react to companies--to their products, personnel, policies, and prospects.¹⁰

The sum of these definitions, and others,¹¹ is that an image is an alterable state of knowledge--subjective knowledge--which governs behavior. The emphasis in this definition is on the words "subjective knowledge."

It should be made clear from the outset that the image as conceived here has little connection with the great philosophical arguments of epistemology. The concern here is not whether images are true or how we know whether they are true. The image here is essentially an abstraction, so the problems of truth and validity cannot be solved completely by the abstraction of the image. The concern is with the image concept and its relation to human behavior. The closest we might come to epistemology is to borrow a definition from Jacques Maritain. "Images are the internal likenesses of things . . . words directly signify ideas, at the same time evoking images."¹²

The Nature of the Image

The image, then, is an alterable state of subjective knowledge which governs behavior. The fundamental proposition here is that knowledge is what somebody or something knows. "Without a knower, knowledge is an absurdity."¹³ Subjective knowledge is what is believed to be true by the knower. It is this knowledge--this image--that largely governs behavior.

For example, the daily activities of a particular individual are based upon what he believes to be true.¹⁴ He goes to his office on Monday morning in the belief that the office is where he left it on Friday evening. He goes home in the evening to his family, has dinner with them, reads a book or watches television, and goes to bed. In

other words, he lives in a world of reasonably stable relationships based on his knowledge of that world. The individual in this example may predict his own behavior with a fair degree of accuracy because of the knowledge--the mental picture--he has of his life. He knows where his home is, that his wife and children will be waiting for him when he returns from the office, that he has a certain amount of reading or television watching he wants to do, and that he needs sleep if he is to function properly as a human being. Of course many things may happen to change his mental pictures. New events may occur which alter his knowledge structure, but each new event will result in a revised image and a change of behavior. The first proposition of this study, then, is that behavior depends on the image.

Let us take a closer look at our example. We said that a new event may change our image of the world. The new event that reaches an individual is called a message. We must distinguish between the image and the messages that reach it. Messages consist of information, that is, structured experiences. The meaning of a message is the change which it produces in the image.

Messages may be classified into signs and symbols. A sign is a message which alters the image of the immediate universe around the organism. In Pavlov's experiment with the salivating dog, the sound of a bell was used as a sign



for food. The dog, however, would not salivate if Pavlov told him a story about food. This can only be done to human beings. The symbol carrying capabilities of human messages are what affect the human image. A symbol may not affect the image of the immediate universe around a person. The effect of a symbol is that it produces a proliferation and elaboration of the image into a symbolic universe.¹⁵ For example, if one person speaks in a room, another person may hear his words. The noise of the words confirms the second person's image of someone's presence in the room. It would make no difference if the first person were talking sense or nonsense. His words produce a sign which confirms an image. However, if the first person were talking in a language foreign to the second person, then the second person experiences a symbolic change in his image; the change is not in the immediate universe around him but in the whole content of his imagination. This symbolic image and the communications which establish it and which change it are a peculiar quality of human society.

It is plain, therefore, that communication in society is of prime importance in establishing and changing images. Written and literary communication are of prime importance in this connection. The stock of images in a society is changed through this communication process.

Three things can happen when a message hits an image. First, the image may remain unaffected. The majority of the messages that reach the image are of this type. As the man in our example reads his book at home he may hear noise from a passing car or he may hear the children playing in another part of the house, but he ignores these noises, these messages. His image is not affected.

Second, an image may be changed by the addition of new messages in a regular and well-defined way. Our man might be looking at a world map. Maybe he had some mental picture of the island of Cyprus as being off the coast of Greece. Looking at the map he sees that Cyprus is off the coast of Turkey. His picture of the world has not changed completely. The vague picture he had of Cyprus is now somewhat clearer.

Third, a change in the image might be revolutionary. Our man might hear a minister tell him of his evil and wicked ways, and he might convert to a particular religion. He reorganizes his image of himself and of the world. This reorganization happens in all our lives, but probably in much less spectacular ways than conversion. Our images of the world are somewhat resistant to change. When we receive new messages which conflict with our image of the world, our first impulse is to reject the messages. As we receive more and more messages we may come to revise our image completely.

The image may be affected in still another way. The image has a certain dimension or quality of certainty or uncertainty, probability or improbability, clarity or vagueness. Our image of the world is not uniformly certain, uniformly probable, uniformly clear.¹⁶ Messages may, therefore, clarify or make something certain which was previously regarded as uncertain.

On the other hand, messages may have a contrary effect. They may introduce doubt into the image. The man in our example may not find his wife and children at home when he returns from work. He may think he has returned from work too soon, and, possibly, his wife is meeting the children at school. He may think something happened to one of the children, and his wife took him to the doctor. Whatever he thinks, an element of doubt has crept into his stable image of the world. He does not know what to believe.

In sum, then, we conclude that the image is subjective knowledge about the world. It is, as Boulding says, organic knowledge, and the growth of knowledge is the growth of an organic structure.¹⁷ By organic structure we mean that the image follows principles of growth and development similar to those with which we are familiar in complex organisms and organizations. In organisms and organizations there are internal and external factors affecting growth. The accumulation of knowledge is simply

not the difference between messages taken in and messages given out. We are not like reservoirs. Rather, there is an internal organizing principle much the same as the gene is a principle or entity organizing the growth of bodily structure. The gene serves as a model for bodily growth. Similar models exist for the growth of images. Knowledge grows because of internal models as well as outward messages. A teacher, for example, does not penetrate the student's defenses with loud or violent messages. Rather, the teacher must cooperate with the student's own inward "teacher" and allow the student's image to grow in conformity with that of his outward teacher. Public knowledge, in this sense, depends on certain basic similarities among men.

Dimensions of the Image

It is possible to abstract the concept of image and to speak of it in a relatively few important dimensions. Boulding speaks of ten dimensions. These include: spatial, temporal, relational, personal, value, affectional or emotional, conscious, unconscious, and subconscious, certainty or uncertainty, clarity or vagueness, reality or unreality, public-private.¹⁸ Boorstin lists five dimensions of the image: synthetic, believable, passive, vivid and concrete, and simplified.¹⁹

The spatial image, according to Boulding, is man's view of himself in space, on earth, in a continent. This

spatial image has only been changed in the last few hundred years. We have already seen that man once thought of the earth as a flat surface.

The temporal image common to Western civilization is one-dimensional, that is, time is a stream flowing at a constant rate. Its main point is the present. This point divides the past from the future.

The relational image governs man's stable relations. Put in hypothetical form, this might be described as: if A, then B. This relational image varies from one culture to another and even between subcultures within the same culture.

The value image is important in its effects but obscure in its origins. Messages do not freely enter the image; the value system stands at the gate of the image. "We see the world the way we see it because it pays us and has paid us to see it that way."²⁰ Images consist not only of "facts" but also of "values." There is a certain difference between the image of a physical object in space and time and the valuation which is put on these objects or on the events which concern them. A professor may know that Michigan State University is located in East Lansing, Michigan, but this does not tell us what value he puts on the University. This does not tell us whether or not he thinks Michigan State University is "good" or "bad."

The value image is closely related to the image of fact, but there is some difference between them. The value image is concerned with rating various parts of our world according to some scale of better or worse. All of us, according to Boulding, possess these scales.²¹

Most people possess not only one scale of valuation but many scales and for different purposes. Value scales exist in a hierarchy, and this hierarchy determines the effect of messages on the image. Our value image of clothing fashions is usually on a lower end of the scale than our value image of our religion. Boulding says,

One of the most important propositions [of image theory] is that the value scales of any individual or organization are perhaps the most important single element determining the effect of the messages it receives on its image of the world.²²

A message that is perceived as neither good nor bad will have little or no effect on the image. If the message is bad or hostile to the image, there will be a resistance to accepting it.

Further, we are learning that even sense data come through a value system. We do not perceive raw data. Facts come through a highly learned process of interpretation and acceptance. This means that there are no such things as facts for any individual. There are only messages filtered through a changeable value system.

This does not mean that all knowledge is subjective. Part of our image of the world is the belief that this

image is shared by other people like ourselves who are also part of our image of the world. In daily relations with others we behave as if we possess roughly the same image of the world as everyone else. When people are at a party together they behave as if there were other people in the room. This commonly shared knowledge is what we define as public knowledge as opposed to private knowledge.

The point here is that groups of people share similar images of the world. At least their images are roughly identical. If this is the case, if these people have been exposed to much the same set of messages in building their images of the world, then their value systems must be approximately the same.

Further, the human organism is not only capable of having an image of the world, but of talking about it. Human discourse makes the human image public. The "public image" is the shared images of many individuals. A public image is a product of a universe of discourse, that is, a process of sharing messages and experiences. People conversing do not perceive the situation exactly alike, but, nevertheless, they do get highly similar images.

The affectional image is closely related to the value image. The view we hold of the universe is colored with affects and emotions. We like one thing; we dislike another. These emotions and affections, however, do not exist in a vacuum; we place certain values on our emotions.

For example, we put a high value on love in marriage, but we put a low value on love of vice. Emotions by themselves are not good or bad. Hate is generally considered bad, but it may be good and necessary for the soldier on the battlefield. "Man," according to Boulding, "Is ambivalent between his affections and his values."²³

The certainty-uncertainty image means that we are sure of some things and not sure of other things. Every aspect of the image, including the value and affectional images, is tinged with some degree of certainty or uncertainty. This is especially true of the relational image.

Closely related to the certainty-uncertainty dimension is the reality-unreality dimension. We are sure that we live in a certain house, that we own certain properties, and that we have certain friends. The "things" in our life are real; they are not products of our imagination, and we are sure they will not disappear from the scene. This is not to take up the philosophical question of whether there is a real world outside of our perception. Reality and unreality here are simply properties of the image.

The consciousness, unconsciousness, and subconsciousness dimensions of the image are related to each other. There is something in the image that is analogous to a scanning mechanism. We are not conscious of all parts of the image at once with the same degree of intensity. By

scanning, we are able to obtain a clear mental picture of the whole universe around us. Likewise, a small part of our image is exposed to our internal view at any one time. We also have the property of recall, that is, we can call into conscious view parts of the image which lie in the unconscious. We have a capacity for giving ourselves examinations.

The subconscious dimension might be traced to Sigmund Freud's work. The subconscious mind is a vast storehouse of forgotten memories and experiences; it is, moreover, a genuine image affecting our conduct and behavior in ways that we as yet do not understand. Recognition of the subconscious image enables us to integrate the rational with the irrational. In this sense all behavior is governed by the image and its value system. Rational behavior is that part of the image which is accessible to consciousness. Irrational behavior is that part of the image which lies in the subconscious.

Boorstin lists five other dimensions of the image which differ from Boulding's dimensions. Boorstin's emphasis is on the image as a pseudo-event, that is, an event which is planned and planted for the purpose of being reported or reproduced. The image has little relation to the reality of the situation; it is intended to be a self-fulfilling prophecy. The image, in this sense, is a fabrication. It exhibits five dimensions.

An image is synthetic. It is planned and created to serve a purpose or to make a certain kind of impression. The trademark is one of the older and more obvious illustrations of this synthetic dimension. The use of the image as a symbol, trademark, or brand name has become important in the twentieth century. More abstract images are also in vogue. The abstract image is the synthesized or fabricated personality profile of an individual, corporation, product, or service. The abstract image, according to Boorstin, is tyrannical.²⁴ It is shaped in three dimensions of synthetic material; it is fabricated and reinforced by new techniques in the graphic revolution. The emphasis is upon illusion. There is a distinction between what we see and what is really there; the reality of the situation is covered by the image.

The image is also believable. It serves no purpose unless people believe it. An individual must make the image stand for the person or institution imaged.

An image is passive. Since the image is synthetically fabricated, then the producer of the image is supposed to fit the fabrication. The person who receives the image is supposed to fit into it showhow. These are passive relations; both subject and object want to fit into the projected picture of the image. Both subject and object will assume that a portrait which is so persuasive and so popular is made from life.²⁵ In the

beginning the image is a likeness of the organization. Then the organization becomes a likeness of the image. An image, therefore, is a kind of ideal which becomes real only when it has become public. A corporation which decides to rebuild its image has decided less on a change of heart than on a change of face. Because of its passive nature the image has little to do with the activities of the corporation itself. Image building is the building of reputations not of characters.²⁶

An image is also vivid and concrete. It serves its purpose best by appealing to the senses. Advertising is filled with appeals to the senses; "Use Dial Soap and feel refreshed." The point here is that the image is limited; it must be more graspable than any specific list of objectives. An individual or an organization must vividly portray their good qualities.

An image is simple. The image must be simpler than the object it represents in order to exclude undesired and undesirable aspects. So the most effective image is one that is simple and distinctive enough to be remembered.

An image is ambiguous. It lies somewhere between the imagination and the senses, between expectation and reality. In another sense it is ambiguous, for it must not offend.

Boorstin, then, sees the image in negative terms. He says the image is a creation of advertising and public

relations, and, to him, this is a negative force in society. This definition is what Riley has called "superficial."²⁷ For our purposes here we will use Boulding's dimensions while being aware of Boorstin's dimensions, for Boorstin's work is valuable in explaining how images are projected.

The Image and Organization²⁸

When we speak of organization we are speaking of structure, of anything that is not chaos, or, in other words, anything that is improbable. More specifically, when we speak of an organization we are speaking of a structure of roles tied together with lines of communication. At the moment, this definition will serve to look at the image on seven levels of organization.²⁹

The first level of organization is called the level of static structures. In this level we put such things as jig-saw puzzles, statues, pictures, trees, houses, and roads. In short, this level is made up of things.

The second level is the clockwork level, that is, the level of predetermined dynamic structure. The structure repeats its movements because of some simple law governing the connection of its parts. The clock is a good example of this organizational level.

At the third level of organization--the thermostat level--the concept of image begins in a rudimentary form. The thermostat has an image of the outside world in the shape of information regarding temperature. It also has

a value system, that is, it has a preset temperature which governs its behavior. The incoming information from the environment is measured by its scale of values. The image of the environment and the preset scale are brought together and proper adjustments are made in temperature.

The cell makes up the fourth level of organization. The cell is an open-system; it maintains its structure in the midst of a "through-put" of chemical material.³⁰ It is not merely a homeostatic control system; it is a self-maintaining system capable of metabolism and digestion. This taking in and excretion of substances is the means of maintaining the structure. This behavior cannot be understood unless we assume that the cell has "knowledge" of its environment and that this knowledge is interpreted.

On the fifth level of organizational structure the cells group into societies. This is the botanical level. A plant is a society of cells with an elaborate structure and extensive division of labor. The plant has a variety of cells which receive something from the others and give something to the others in a way that supports the continued existence of all of them.

The behavior of plants, like that of one-celled animals, can only be explained on the assumption that they build the messages which they receive from their environment into an image of a simple kind.³¹

The plant exhibits a regular behavior. It "knows" when to put out its leaves, when to flower, when to fruit, and when to die.

Animals make up the sixth level of organization. Animals not only have cell societies with assigned functions, they also have something like awareness and mobility, differentiation of sleep and waking, and even basic self-images. Specialized sensory apparatus enable the animal to take in enormous amounts of information. Along with the increase in information intake, there is also an increase in the complexity of the image and a greatly increased capacity for learning. Self-consciousness, value systems, and even emotions are exhibited at this level.

✓ The seventh level of organization, and most important for our purposes here, is the level of human beings. No significant change occurs on the human level with regard to increase in intake of information. In some cases human senses are not much better than those of lower animals; in some cases they are worse. "It is the capacity for organizing information into large and complex images which is the chief glory of our species."³² The human enjoys a much more extended image of space and time. The human is located in a temporal process; he has an image of the past which extends far beyond the limits of his experience, and he has an image of the future. He is also aware of cause and effect, of the relations of one thing to another. There is also an increased awareness of self-consciousness and of self-awareness. The human knows, and he knows that he knows.³³ This is the

reflective character of the human image; it is what leads to philosophy. [All these human characteristics--sense of time and space and sense of relationships--enable man to have rational behavior, that is, the human response is not to an immediate stimulus but to an image of the future filtered through an elaborate value system.] The human image not only contains what is, but also what might be. "In rational behavior man contemplates the world of potentialities, evaluates them according to his value system, and chooses the 'best.'"³⁴

Man's image is also characterized by a phenomenal capacity for internal growth and development quite independent of messages received from the environment. When this capacity runs amuck, as in the case of the schizophrenic, the person builds up a whole imaginary universe out of the multiplication of his own images without regard to any contradictory messages from the outside world.

Man's image is also characterized by the ability to have an image of himself as well as an image of many others. This capacity enables man to enter into complex personal relationships, to build organizations, and to write novels. This capacity for abstract communication and language and the ability to enter in imagination in the lives of others enables man to build organizations of a size and complexity far beyond those of the lower animals.³⁵ Organization, which we loosely defined as a structure of roles tied

together with lines of communication, are not men, but, in a sense, parts of men acting in a certain role. Because of this, each man is able to participate in many organizations in different roles and in different parts of his time and activity. The organization maintains its role structure even though individuals occupying various roles are constantly changing positions.

Organizations themselves exhibit characteristics similar to organisms. Organizations have a division of labor, specialized roles, and a hierarchial structure of communication and authority. Also, as in biological structures, the organization has some "central agent," some executive or responsible agent whose decisions are of prime importance in determining the behavior of the organization. The behavior of the organization can be interpreted as a result of the image of the executive, directed by his value system.³⁶ The executive, in this sense, is analogous to the control mechanism of the thermostat. He receives messages from the members of the organization, and his job is to transform those messages into instructions or orders which go out into the organization. The executive, however, is not merely a machine which takes in messages and sends out instructions. The messages which come in to the executive are filtered through his image. The outgoing messages are, therefore, a result of his image and not of the incoming messages. The incoming messages

only modify the outgoing messages if they succeed in modifying the executive's image.

Another part of man's image is, as we have seen, a public image. Man has a public image of the organization in which he plays a role or which comprises his environment. This public image is, in many respects, a self-conscious image, and, consequently, the organization itself may be said to have self-consciousness. However, it is important to note that the image is always the property of the individual, not of the organization.

It is clear from all that has been said that as we proceed from lower to higher levels of organization, the concept of image becomes an increasingly important part of any theoretical model, and the image itself becomes increasingly complex. At the first two levels of organization there is little, if any, concept of image. At the level of simple control mechanisms the image takes on a basic form. It is clearly exhibited at the next level--the cellular level of organization. As we ascend the biological ladder it grows in importance until we reach man where it is of overwhelming importance in the interpretation of human behavior and of the dynamics of society.

The Image in Society

Images, it has been pointed out, are the property of the individual person. By way of metaphor and analogy we can speak of organizations or of society as having an

image.³⁷ Nevertheless, images of some individuals, and parts of the image of most individuals can properly be regarded as an image of the society itself even though the image is in the minds of the individual.³⁸

Therefore, to discuss the image and its relation to society, it is necessary to think of an inventory of individual images. We may, on a basic level, think of this as a simple list of the images: the image of person a, b, c, d . . . z. This inventory of images is maintained and changed by the processes of society. For example, the things which change individual images are also involved in changing societal images. The most basic thing which society uses for changing images is the learning process. The learning process is what has been referred to as the messages which impinge on the individual image.

Society, then, is generally composed of individuals and also of organizations. Individuals are grouped into family organizations, unions, universities, churches, businesses, and so on. The existence of these organizations depends upon the presence of a "public image" among those who participate in its roles. Of course every individual in an organization does not need to have an identical image of the organization.

The image of a great organization which is possessed by the president of the company is very different from the image of the same corporation possessed by the janitor. . . . images of the roles must be consistent with the over-all image of the organization itself.³⁹

The organization itself begins as an image in the mind of some individual. A Justin Morrill, for example, conceived the image of a land-grant university. Morrill's ability to implant this image or at least an approximation in the minds of others depended upon his powers to communicate.

As an organization grows and becomes more complex a division of labor begins and people assume different roles. The growth of the organization is at some point characterized by a breakdown in face-to-face communication.⁴⁰

As the organization grows the image held by the central agent--the executive--becomes greatly superior in complexity and in content to that of any of the other members of the organization. However, the image of the organization is also held by the individuals composing the organization. Moreover, the individual's image of his role in the organization is not passive. The role may impose itself on the individual but the individual also reorganizes the role itself through the operations of his own images. This constant interaction between the role and the personality is one of the dominant characteristics of society and of organizations.⁴¹

The organization does not, as was pointed out, have an image of its own. But the organization does possess something analogous to the phenomenon of self-consciousness.

This self-consciousness is the property of the public image of the organization which is shared by those who participate in it or are related to it.⁴²

Organizations, like organisms, have both a phenotype and a genotype.⁴³ The phenotype of a university is the form of the campus, the buildings, the academic calendar, the curriculum. Students and professors come and go but the university goes on. But in the case of organizations, the image resides in the genotype not in the phenotype. Because of their hierarchical nature, there are some individuals in the organization whose images are of peculiar importance in the organization.

The phenotype of a university moves more toward the image of the president than it does toward the image of the humble instructor. Nevertheless, in the dynamics of an organization all images are important and none can be neglected. We must always operate with the concept of an inventory of images and we can never replace this inventory by a single image, not even of the most important person in the organization.⁴⁴

Leo B. Moore puts this same idea another way.

As each in his own way contributes his bit to the mosaic that makes for the image so also it is true that each may contribute to that fund of knowledge which provides assurance that we are steering by the right star and in the right direction.⁴⁵

The lower levels in the organizational structure, Moore insists, must not merely receive communications about what the image will be; they must participate to the limit of their capability in the formation and adjustment of the image.⁴⁶

The University Subculture and the Image

A subculture may be defined as a group of people sharing a public image.⁴⁷ This public image need not be a conscious image and the group need not be conscious that they are sharing it. If, however, there are basic similarities in the images of the different individuals in the group, the behavior of the group will, in general, reinforce the similarities. This is because the symbolic messages which are issued from individuals in the group reflect in some degree the image which they possess. When these messages are received by other individuals in the group they confirm the image which is held by the recipient.

The university subculture is but one of many subcultures in our society. In medieval times the university subculture was dominated by philosophy and theology. This domination by theology held true in the American colleges in the early part of their development. Today the university is dominated by science. The university enjoys a complex public image, and its main characteristic is specialization.

Because of this high degree of specialization, however, each specialist within the university sees the image from his own vantage point. The image of his own specialty is seen in great detail; related specialization is seen somewhat more vaguely; distant fields are sometimes hardly perceived. Within the university, then, there is no single

public image uniting the intellectual subculture. "Rather there is a series of departmental and specialized images which form some kind of an overlapping continuum."⁴⁸

The continuous division of the intellectual subuniverse into sub-subuniverses or departments of discourse has become a serious problem. This problem is, to some extent, the result of the increasing size of the transcribed image of the intellectual universe which makes it impossible for any single individual to become familiar with it all.⁴⁹ The departmental organization also means that an individual may satisfy his need for gregariousness within the confines of his own department of specialization. Lines of communication fall almost wholly within departments and very rarely extend from one department to another. The more this happens the harder it becomes to break through the departmental barriers; each department develops an image of its own and a language of its own. Within the departmental walls the image grows, changes, develops, and decays almost with a life of its own. Each academic discipline often develops with little regard to what is happening in other disciplines or even in the outside world. The members of the departmental subculture turn inward and devote themselves to the elaborate solution of problems which they themselves create.

The university is also made up of many sub-cultures besides the departmental sub-cultures. For example, there

is a student sub-culture, a non-academic personnel sub-culture, and so forth. The purpose of this study is to focus on the college sub-culture within the university and to consider only the sub-cultures of the departments and administrative groupings within the college.

Part II.--Organizational Theory and the Image

An organization, as we have seen in image theory, is the sum total of the individual images held by the members of the organization. This collective image of the organization is reflected to the people outside the organization. Theoretically, there is a similarity between the internal and external organizational images.

This view of organizations--as the sum total of individual images--suggests the use of some sort of organizational perceptual theory. Christopher Sower is the prime exponent of looking at organizations in terms of an individual's perceptions.⁵⁰ Sower does not use image theory for developing his organizational theory, but he uses a synthesis of several organizational models which lend themselves to image research. With some modifications Sower's model for organizational analysis can be used for linking image theory with organizational analysis.

To understand Sower's model for organizational analysis it is necessary to briefly sketch some key

theoretical positions in organizational literature.

Sower's work represents a synthesis of some of these positions.

Before sketching these positions, however, it would be helpful to give certain organizational definitions. Organizational theorists use technical terms, and an understanding of the literature must begin with an understanding of these terms.

To begin, then, an organization is called an artifact.⁵¹ An organization is a social group, but unlike a natural society, it has been assembled for a purpose. It is a bureaucratically arranged social group with at least one specifiable goal.⁵² This means the members of the organization have different functions which relate to a goal of the organization. The organizational goal is a state of affairs which the organization brings into being. Indeed, the organization exists for these goals. These goals, in image theory, are future states, future pictures of the organization, which may or may not be brought about. Once a goal is achieved, it becomes a part of the organization or of its environment, so it is no longer an image guiding organizational activities; it is no longer a goal.

A system is defined as a conventionally selected set of variables which are supposed to interact.⁵³ These variables are defined in such a way that, given the state of the system at a specified time, its state at any other

given time can be predicted. This set of variables may be a part of a larger set of variables, that is, the system to be studied may be a part of a larger system.

The elements of a system are the entities of the system that reflect its substantive content.⁵⁴ They are the descriptive terms of the system.

Variables of the system are the conditions of these elements within an organization at given times.⁵⁵ The value of the variables at any given time defines the state of the system at that time. They carry the implications of change or variation regardless of the precision with which this change can be measured.

Parameters of the system are the condition of elements outside the organization which act and interact upon it as environmental variables.⁵⁶ The parameters are the external organization variables which affect the organization. Organizational change comes through a change in either the variables or the parameters of the system or both.

An organizational model is best described by C. Wright Mills.⁵⁷ Mills points out that most of the ideas of the classical social theorists are not of the sort that can be readily shaped for precise testing. Rather, they are interpretative ideas oriented to various ways of looking at social realities. The theorists attempt to state general historic trends of the main drift of societies. They

attempt to make sense of what is happening in order to gauge or predict the probability of future events. They structure these "great ideas," which represent the vitality of the men in the classical social tradition, into working shapes which are called models. These models are described as follows:

In these working models are contained statements of (1) the elements to which attention must be paid if we are to understand some particular feature of society as a whole, and (2) the range of possible relations among these elements. The elements are not left merely to interact in some vague way. Rightly or wrongly, they are constructed in close specific inter-connection with one another, and causal weights are assigned to each. These imputed connections, and weights, of course, are specific theories.⁵⁸

Organizational Theory: The Natural System Model versus the Rational Model

Historical studies by Gouldner⁵⁹ identify two distinct approaches taken by classical organizational analysts. The first is called the rational model. This model is best exemplified in the work of Saint-Simon, Gulick and Urwick, and Weber.⁶⁰ In this model, the organization is conceived as a deliberately established structure--an instrument, that is, the formally blueprinted patterns which are generally subject to deliberate inspection and rational manipulation.

The second model classified by Gouldner is called the natural systems model. This is best exemplified by the work of Comte, Michels, Selznick, and Parsons.⁶¹ Here, the

organization is conceived as a "natural whole" or a system. The organization goal is one of several important needs to which the organization is oriented. Its component structures are seen as emergent institutions which are understood only in relation to the diverse needs of the total system.⁶² As such, the organization strives to survive and to maintain its equilibrium. This striving toward balance may go on even after the organization's explicitly held goals have been attained. Equilibrium becomes more important than rationality. The focus of organizational analysis, using this model, is not on deviations from rationality but on disruptions of organizational equilibrium, particularly on mechanisms by which equilibrium is maintained.

Gouldner says that it is a major task of organizational analysts today to reconcile the "rational" and "natural system" models.⁶³ He calls for a single synthesized model which will aid in analyzing: (1) the distinctive characteristics of modern organizations as rational bureaucracies, (2) the characteristics which bureaucratic organizations share with other kinds of social systems, and (3) the relationship of those characteristics to one another.

Effectiveness versus Survival Models

Etzioni, in his discussion of organizational effectiveness, identifies two other classical organizational models-- the "survival" model and the "effectiveness" model.⁶⁴

The survival model specifies a set of requirements which, if fulfilled, allow a system to exist. All conditions specified are necessary prerequisites for the functioning of the system; remove one of them and the system will disintegrate. The analytical test for this model demands only a yes or no answer to the question, "Is this specific relationship functional?"

The "effectiveness model," in contrast, defines a pattern of interrelations among the elements of the system which make it most effective in the service of a given goal. Georgopoulos and Tannenbaum define organizational effectiveness as the extent to which an organization as a social system, given certain resources and means, fulfills its objectives without incapacitating its means and resources and without placing undue strain upon its members.⁶⁵ This model indicates that although several functional alternatives satisfy a requirement (or a need) some are more effective in doing so than others. There is a first, second, and nth. choice. Only rarely are two patterns full alternatives in that they have the same effectiveness value.

Perceptual Theory

Perceptual theory is considered to be a phenomenological approach to the study of human behavior.⁶⁶ It is concerned with the observation of behavior known through

the senses, that is, as sensed or reported by the one who is behaving. The observer attempts to view the situation from the point of view of a particular individual (the personal image) in order to predict what that individual will do in a given situation (the spatial, temporal, and relational images). This, then, is an internal rather than an external approach to the study of human behavior.

Perceptual theory holds that reality for an individual is what that individual perceives reality to be, and that he acts in a manner that is consistent with that perception. Perceptual theory holds that awareness (the consciousness image) is a cause of behavior, that perception is affected by the individual's physiology, values, beliefs, and needs (value and affectional images), that perception is dependent upon opportunity, that an individual's perceptual field is unique to him, and, finally, that an individual's behavior is purposeful, relevant, and pertinent to the situation as he understands it.⁶⁷ The entire perceptual field, the behavior's universe, includes the past, present, and future as he has experienced or inferred them.

Perceptual theory also holds that an individual's behavior is predictable on the basis of postulated relationships between the perceptual field and the past behavior of an individual. Likewise, future perceptual fields and behavior may be projected.⁶⁸ The perceptual theory also

holds that change in a perceptual field does not occur through a process of differentiation, that is, of recognizing the emergence of new segments of the field in detail and the lapsing out of other segments of the field into undifferentiated ground. Therefore, it is possible not only to predict behavior, but also to change behavior by bringing new perceptual fields into focus at the individual's awareness level.

In sum, perceptual theory holds that an individual will behave in a manner consistent with his perceptions.⁶⁹ The correctness of an individual's perception of reality is subject only to proof, that is, comparing it against the "social reality," or the public image, which, as we have indicated, is the overlapping of perceptual fields of different people. The perception most people seem to hold in common becomes the basis for this type of "proof."

Sower's Model

Christopher Sower addresses himself to the problem of synthesizing the rational, natural system, and effectiveness models. He also takes concepts from perceptual theory.⁷⁰ This synthesis is also compatible with Etzioni's suggestion that the system model is most appropriate for studying organizations.⁷¹

Sower's major assumptions are:⁷²

1. The key to understanding and explaining the operations of an organization and their

consequences is the organizational link between its subgroups.

2. The extent to which an organization achieves its goals is a consequence of certain internal variables. These variables are subject to change upon decisions of persons who occupy specific positions in the organization. A corollary of this assumption is that these variables, when identified, are capable of being described and explained, and the relationship between them predicted.
3. The actions of the incumbent of a position within an organization will agree with his own expectations of behavior proper to that position and what he conceives the expectations of relevant others to be, whether they are shared by a majority or not, and whether or not his conceptions are accurate.

The relationship between the organizational variables are explained by Sower's "Model for Explaining and Predicting the Relationship Between Internal Organizational Variables and the Extent of Goal Achievement for a Development Organization." Briefly, this model accounts for the following internal relationships:

1. The extent to which the organization's members have a clearly defined conception of its purpose and goals.

2. The extent to which the organization imposes upon its members patterns of expected behavior that are congruent with their own behavior expectations.
3. The extent to which the organization's members are interested in achieving its goals.

These relationships are the intervening variables of the model. Consensus among members of the organization on each variable selected directly determines the extent to which the organization is likely to achieve its goals. Postulates constructed from these three intervening variables may be expressed as follows:⁷³

Postulate I

The degree to which an organization will achieve its goals is directly related to the extent to which its members have a clear conception of the organization's purposes or goals.

Postulate II

The degree to which an organization will achieve its goals is directly related to the extent to which the organizational role is perceived as clearly defined by "relevant others."

Postulate III

The degree to which an organization will achieve its goals is directly related to the extent to which the organization imposes upon its members patterns of expected behavior that are congruent with their own behavior expectations.

Postulate IV

The degree to which an organization will achieve its goals is directly related to the extent to which its members are interested in achieving the goals of that organization.

Summary

An image, according to what we have said here, is an alterable state of subjective knowledge. An image is what the possessor believes is true. It is the everyday situations of self and surroundings taken to be reality. It is reality to the possessor, and, as such, it governs his behavior.

The image exists on various organizational levels, beginning with the static level of organization, puzzles and inanimate objects, for example; it reaches an apex in the complex images possessed by the human being. The human image is composed of ten dimensions:

- The Spatial Image;
- The Temporal Image;
- The Relational Image;
- The Personal Image;
- The Value Image;
- The Affectional or Emotional Image;
- The Conscious, Unconscious, or Sub-conscious Images;
- The Certainty-Uncertainty Image and the Reality-Unreality Image; and
- The Public Image.

Organizations, in terms of the image theory, are products of man's image. Organizations exhibit the ten human image dimensions. To say that an organization has an image, however, is to speak metaphorically or by way of analogy. The organization, besides the reality of its structure, is actually made up of the images of individuals.

If an organization is the sum total of the individual images of its members, then image theory may be used for

organizational analysis. This means that organizations may be analyzed from an internal rather than an external viewpoint.

The work of Christopher Sower is best suited for implementing the image concept for organizational analysis. Sower emphasizes a perceptual approach to organizational theory. His organizational model takes into account the perceptions of the position incumbents, that is, the members of the organization. Sower's model is also based on four predictive assumptions which make it possible to draw certain conclusions or measure organizational effectiveness in terms of image consensus.

In the next chapter, a methodology is presented for operationalizing the theories presented here.

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CHAPTER 3

METHODOLOGY

Introduction

The methodology used in this study is presented and discussed in this chapter. The following topics are developed: (1) Underlying Theory for the Methodology; (2) Selection of Study Population; (3) Instrumentation; (4) Statistical Hypothesis; (5) Experimental Design; and (6) Statistical Models Used for Analysis.

Underlying Theory for the Methodology

The methodology used in this study is a modification and adaptation of a method developed by Robert Anderson.¹ Anderson's methodology is based on Sower's theoretical model, viz., "Model for Explaining and Predicting the Relationships Between Internal Organizational Variables and the Extent of Goal Achievement for a Development Organization."² Sower's model explains the relationship between the independent and dependent organizational variables. This model is basically a consensus model in which the internal organizational relationships to be considered are consensus factors:

1. The extent to which the role of the organization is perceived as clearly defined by its position incumbents.
2. The extent to which the organization defines perceived congruent behavior expectations for its position incumbents.
3. The extent to which the position incumbents are interested in achieving the goals of the organization.

Consensus among members of the organization under analysis directly determined the extent to which the goals of the organization will be achieved.

Selection of Study Population

The population used in this study was defined in two ways:

1. All members of the College of Education, Michigan State University, East Lansing, Michigan, and
2. All school superintendents, high school and elementary principals in Ingham County, Michigan.³

For purposes of this study the populations were treated in the following manner. A member of the College of Education was defined as anyone who held a position of either instructor, assistant professor, associate professor, or professor. The sample was broken down into

the following sub-samples: (1) deans (including Dean, Associate dean, and assistant deans), (2) department chairmen, (3) institute directors, (4) full-time faculty members, and (5) part-time faculty members. In addition to these five basic sub-groups, the College was also divided into departmental categories; this resulted in seventeen (17) sub-group classifications. The total College population was further divided by rank--instructor, assistant professor, associate professor, and professor. Finally, the total group was divided into those having tenure and those who were non-tenured.

Because of this breakdown into various sub-groups, it was found necessary to sample the entire population. The total population was defined, therefore, as 209. Of this total population of 209, only 201 members of the College could be used for the study. Eight members of the faculty were either on leaves-of-absence, foreign service, or their contract had terminated with the College. This left an N of 201.

The sample of school personnel selected from Ingham County was divided according to membership in a school district. These school districts included:

--East Lansing,	--Mason,
--Lansing,	--Stockbridge,
--Okemos,	--Webberville,
--Waverly,	--Williamston.
--Dansville,	
--Haslett,	
--Holt,	
--Leslie,	

A total of 102 persons were selected for study from the County school population.⁴

Instrumentation

The instrument used for this study is a modification and adaptation of an instrument developed by Anderson.⁵ The instrument is an attempt to meet the theoretical considerations set forth by Sower (see Chapter 2). Basically, the instrument considers the following variables.

1. Dependent Variables.--The goals of the organization represent the dependent variables of the methodology.

2. Independent Variables.--The role of the organization as perceived by incumbents of the organization. The role of the organization as perceived by relevant others who are not members of the organization. The perceived expectations impinged upon position incumbents in the organization by self and relevant others. The interest position incumbents express in achievement of the organization's goals.

3. Control Variables.--The control variables include the following factors related to the position incumbents: (a) position in organization hierarchy, (b) position in special interest organizations, and (c) relevant other relationships.

Instrument Development and Administration

The elements which make up the independent variables in the study organization are determined by administration of a question and answer device constructed along the lines developed by Anderson.⁶ This device is called an Open-ended Questionnaire (OEQ). The OEQ consisted of the following questions:

1. What do you believe to be the purpose and goals of the College of Education, Michigan State University?
2. In your opinion what do school administrators now think are the goals and purposes of the College of Education, Michigan State University?
3. In your opinion what are the most important specific programs (teaching, research, service, etc.) engaged in by the College of Education, Michigan State University?
4. In your opinion what specific programs (teaching, research, service, etc.) should be acted upon by the College of Education, Michigan State University?

All members of the organization and all members of the Ingham County school district population received a copy of the OEQ along with a letter of introduction and explanation (see Appendix A).

Basically, the respondent was asked to write out his opinions and reactions to the four questions. No

limits were placed on the response. Respondents were told to write as much or as little as they wanted.

The following assumptions underlie the use of the OEQ:

1. The internal conception of an organization is related to the way position incumbents of that organization act and identify themselves relative to the identities attributed to them in the past (or to others in that position) by relevant others who hold authoritative position to ascribe roles (or the way in which relevant others act or have acted toward the position incumbent). This self-conception of an organization is assumed to be comprised of the organized past experience of its position incumbents. This self-concept leads to an organizational self-expectation that acts to guide the organization's ongoing social behavior. The self-organizational expectations have predictive utility.
2. The important elements of an organization's self-conception are available at the awareness level through statements by its position incumbents, provided they can and are willing to state them. This comprises a direct approach to an organization's self-conception. Position incumbent respondents are confronted with the problem of

identifying the organization of which they are a part. They must decide for themselves how this identification will be made.⁷

Obviously, an infinite number of descriptive statements could be made by position incumbents in a given organization. The OEQ device used, therefore, accounts for a very small fraction of all possible elements or descriptive statements that respondents might make.

Research done utilizing the similar "Twenty-Statement Problem" indicates that even a small sample of statements about the self is useful because it permits both stable differentiation among persons and reliable predications about their behavior.⁸ It is held, therefore, that an analytic transfer of self-concept from an individual to an organization can be made without a significant loss in the reliability or predictive usefulness of the Twenty-Statement Problem methodology, or, in this case, the OEQ device.

Administration of the Instrument

Anderson suggests that the OEQ device may be administered in group situations, directly to single persons, or by mail.⁹ For this study the OEQ was administered by mail. Respondents were assured that they were free to express their concerns about the organization, that these concerns would be consciously considered in future decision-making,

and that no personal punishment or reward would result from their participation in the project.

Analysis and Classification of Responses

The information gathered from the OEQ would, in itself, provide a sound base for qualitative and quantitative analysis of the organization. However, this study was not concerned with any direct analysis of this information. Rather, the OEQ was used for generating and selecting significant elements or descriptive statements about the organization. The statements were numbered and classified according to their literal content by using subject as one criterion and action verb as a second criterion.¹⁰ This categorization not only satisfied the requirements set down by Anderson, but it also answers the plea of image-researchers that image research must consider both content and value of statements.

A total of 110 OEQ devices were returned from the total population. This total represented a satisfactory amount of returns, since, according to Anderson, no statistical significance is placed on the returns of the OEQ device. The point of emphasis is to have the organizational members generate a number of descriptive statements about the organization.

Each individual's responses were typed on separate cards; one card was used for each descriptive statement.

This resulted in approximately 600 separate response cards.

The cards were first divided into subject categories. This resulted in approximately 150 categories from the initial 600 single responses. A frequency distribution was done on the 150 categories; the subject appearing the most was placed in the first deck, and the subject appearing least was placed in the last deck.

The cards within each category were then classified according to the action of the verb, that is, the cards were classified according to the strength of the verb. The question here was, "How strongly does the respondent feel about the subject?"

This classification and reclassification resulted in a rough draft of a device which contained the elements of the organization. This rough draft contained 147 individual statements. It became necessary at this point to weed out the unnecessary, repetitious, and non-significant statements.

A panel of 12 graduate students was chosen to select significant items. The panel weeded out 66 items, leaving a total of 81 descriptive statements.

These descriptive statements were developed into a rating-scale device. It should be noted that the items selected from the OEQ are edited as little as possible. This is to insure that the responses are kept as close

as possible to the original wording and intent of the respondent. The researcher is, however, free to add descriptive statements which may have particular bearing on the study. For this study, goal statements were taken from an article which described the College of Education and its goals.¹¹ This was done at the request of the Associate Dean, John X. Jamrich.

The Rating Scale Device

The Rating Scale device is based on the notion of consensus or variation of the elements as perceived by position incumbents of the organization under analysis. The Rating Scale device asks each respondent to what extent he agrees with the elements (specific descriptive statements). This satisfies the theory of Boulding and others that the image has a value dimension. The respondent chooses between the following response categories:

1. Strongly Agree
2. Moderately Agree
3. Not Sure
4. Moderately Disagree
5. Strongly Disagree

Administration of the Rating Scale Device

The Rating Scale device was administered to the same population that received the OEQ (201 members of the

College and 102 school personnel). The Rating Scale device was administered by mail (see Appendix B).

Hypotheses to Be Tested

Responses obtained from the Rating Scale device were required to test the hypotheses set forth in Chapter 1. These hypotheses were stated in null form, that is, no differences were expected between the groups under study. The College of Education was assumed to be a stable organization, that is, an organization with clearly defined goals, clearly defined role structures, an adequate communication network, a stable population, and good relations with outside groups and organizations.

The hypotheses, then, are as follows:

1. The image of the College of Education held by five internal sub-groups (deans, department chairmen, full-time faculty, part-time faculty) will not vary significantly between groups.
2. The image of the College of Education held by 17 departmental sub-groups will not vary significantly between departments.
3. The image of the College of Education held by the four teaching ranks (instructor, assistant professor, associate professor, professor) will not vary significantly between ranks.
4. The image of the College of Education held by tenured and non-tenured academic personnel will not vary significantly.
5. The image of the College of Education held by members of the College will not vary significantly from the image of the College held by school administrators in Ingham County (Michigan).

These five hypotheses may be stated symbolically as:

$$1. \quad H_0 = M_1 = M_2 = M_3 = M_4 = M_5$$

$$H_1 \neq M_1 \neq M_2 \neq M_3 \neq M_4 \neq M_5$$

$$2. \quad H_0 = M_1 = \dots M_{17}$$

$$H_1 \neq M_1 \neq \dots M_{17}$$

$$3. \quad H_0 = M_1 = M_2 = M_3 = M_4$$

$$H_1 \neq M_1 \neq M_2 \neq M_3 \neq M_4$$

$$4. \quad H_0 = M_1 = M_2$$

$$H_1 \neq M_1 \neq M_2$$

$$5. \quad H_0 = M_1 = M_2$$

$$H_1 \neq M_1 \neq M_2$$

In these symbolically stated hypotheses, the term H_0 represents the null hypothesis; $=$ means there is no difference; H_1 represents the alternate hypothesis; $\neq$ means there is a difference, and M represents the total mean scores for each group. If, for example, the total mean scores for groups 1, 2, 3, and 4 (hypothesis 1) are not found to be significantly different, then H_0 will be accepted and the alternate H_1 will be rejected.

Analysis of Data

In Anderson's original methodology, consensus was treated as a simple measurement of mean, variance, and chi-square. Such measurement was found inadequate for purposes of this study because they differentiate on a low level of significance. Therefore, besides the initial analysis suggested by Anderson, this study includes two additional statistical models--F test and t-test.

In Anderson's original methodology, the means for each response were used to get a measure of central tendency for the response. Along with the means for each response, this study takes into account the total means for each group. The Standard Deviation was used to call attention to disagreements on each item rather than to indicate direction of response patterns. Chi-square was used to point out significant differences at the 0.05 level of significance. All these basic statistical measures were obtained on the Michigan State University 3600 Computer using the "Act 1.01 Program" developed by Alan M. Lesgold.¹²

In addition to these measurements, an F-test was used to indicate significant difference at the 0.05 level of significance. The F test is the most powerful measurement in parametric statistics. Parametric statistics deal with populations of unequal number. The F test measurement and an analysis of variance was obtained by

using the program "One-Way Analysis of Variance with Unequal Number of Replications Permitted."¹³ It should be noted that this program is designed to test variance and F test significance on heterogeneous populations of two or more groups. The program is designed to compensate for unequal sub-groups within the total population. The F test, then, was used to point out significant differences between groups and significant differences on each item.

At this point all necessary calculations are complete; the hypotheses may be accepted or rejected. It is, however, helpful if one additional test is made. This test, called a postmortem test, is calculated on those items which were judged significantly different by the F test. A t-test was found most appropriate for this study.

To summarize, the mean scores will be used to indicate central tendency, standard deviation will indicate disagreement, chi-square will indicate significance at the 0.05 level of significance. Analysis of variance with unequal sub-groups and F test will be used to indicate significant differences between total mean scores and on each item, and the t-test will indicate significant differences between any two groups on single item responses.

Citations--Chapter 3

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CHAPTER 4

PRESENTATION AND ANALYSIS OF DATA

The purpose of this chapter is to demonstrate the application and usefulness of the methodology presented in Chapter 3. The data presented here represent the results obtained when the methodology was used to analyze a specific organization--The College of Education, Michigan State University, East Lansing, Michigan. This chapter provides descriptive and explanatory data for that analysis, and, where possible, predictive conclusions based on the theory presented in Chapter 2.

Procedure

The methodology was carried out according to the procedure described in Chapter 3. The population sample of the College of Education included all members of the organization, with the exceptions noted in Chapter 3. The data presented here was obtained from the responses of 144 members of the College. This represents 71% of the total population.

The population sample of superintendents, high school, junior high school, and elementary principals included a

total of 102 members. The data presented here was obtained from 61 respondents. This represents 59.8% of the sample population.

Both populations received the Open-Ended Questionnaire and the Rating Scale device in the form of mailed questionnaires. One follow-up letter was sent to members of both groups who did not respond to the Rating Scale device after one-and-a-half weeks of its initial administration.

Responses to items on the Rating Scale device were recorded and verified on IBM Data Processing Cards. Specific items that were not scored by the respondent received a score of 0; thus, the response was not figured into the totals. Analysis of each statement was conducted only on responses circled 1-2-3-4-5.

Group mean scores and variances were calculated for both row and column effects. Row effect consists of the total statement mean score and variance for each respondent, that is, a simple addition of responses for all 81 items. Column effect consists of the group mean scores and variances obtained for each of the 81 items.

Presentation of Data

Study findings are reported by using the following measures of analysis: means (measure of central tendency), variance, F-test significance, and t-test significance (where applicable). The means and variances are related

to the degree of consensus about elements, that is, items selected by the position incumbents of the organization.

The measure of central tendency is the mean score of the respondent's scaled responses to the statements which made up the intervening variables of the study. This score gives an over-all priority rating to each element or item included in the study. The grand mean score obtained from each item, and the mean score of all position incumbents, form the basis for ordering the items from a position of "strongly agree" (or high priority) to a position of "strongly disagree" (or low priority). When interpreting the results, a mean of 1.00 indicates "strongly agree," while a mean of 5.00 indicates "strongly disagree." If a mean score is carried out to second and third places (2.41 for example), the second and third places are rounded off to the nearest tenth. A mean of 2.41 is interpreted as "moderately agree." A mean score of 2.50 is interpreted as "moderately agree" or "not sure."

While the mean scores may be used to give an indication of level and direction of an item, they do not necessarily give a true measure of consensus. For example, the group mean scores of an item may fall within a very narrow range on the rating scale (2.50 and 2.60, for example). Such close distribution may lead to the conclusion that consensus between groups exists on that item, or consensus exists within the response group. It may be the case,

however, that the within group mean scores on a given item range from "strongly agree" to "strongly disagree." This represents a wide variation in intensity of responses on that item. If such a wide range within one or more groups does in fact occur, despite the fact the group means happen to fall within a narrow range, it would be an error to conclude that there is consensus on that item.

A second measure, the measure of variance (or variation in the responses from the grand mean score) must also be taken into account. The variance is necessary to get F test results.

F test results are used to point out consensus or non-consensus on total mean scores or on individual items. The F test significance on total means or on individual items was set at the 0.05 level. This means that to be significantly different an item must have an F test result of 0.05, 0.04, 0.03, 0.02, 0.01, or 0.00.

The t-test, although not necessary to the hypotheses of this study, is used when certain items called for deeper analysis. The t-test is used to locate significant differences between two groups. It should be noted, therefore, that the t-test is not employed for all items or for all groups which were found to be significantly different by the F test.

Study Findings Format

The data presented here is used to accept or reject the null hypotheses presented in Chapter 3. Interpretation of the study results is based on the theory presented in Chapter 2, especially Sower's four predictive postulates. These postulates were stated as:

Postulate I

Within an organization the degree to which organizational goals will be achieved is related directly to the extent to which the organization's role is perceived as clearly defined by position incumbents of that organization.

Postulate II

Within an organization the degree to which organizational goals will be achieved is related directly to the extent to which the organizational role is perceived as clearly defined by "relevant others" (School Administrators).

Postulate III

Within an organization, the degree to which organizational goals will be achieved is directly related to the extent to which the organization defines congruent behavior expectations for its position incumbents.

Postulate IV

Within an organization, the degree to which organizational goals will be achieved is directly related to the extent to which the position incumbents, or members, of that organization are interested in achieving the goals of the organization.

These four postulates were reflected in the methodology in the four basic statements which made up the Open-Ended-Questionnaire.

Presentation of Data

The findings of the study are presented under each hypothesis. Each hypothesis is stated along with significant data and a statement of acceptance or rejection. This is followed by presentation and analysis of items which were found significantly different by the F test. The t-test results are then presented and interpreted. A discussion of the results for each hypothesis is presented after all data have been presented for the hypothesis.

A Note on Tables

The major summary tables containing the data for this study are presented at the end of this chapter. In Tables 1, 2, 3, 4, and 5, means scores for each group and for each item are presented with standard deviations, chi-squares, degrees of freedom for each item, and F test significance. Tables 6 through 30 present item comparisons between two groups, that is, mean scores and t-test scores for each item that was judged significantly different by the F test.

Hypothesis Number One.--

The image of the College of Education held by five internal sub-groups (deans, department chairmen, (institute directors, full-time faculty, part-time faculty) will not vary significantly between groups.

$$H_0 = M_1 = M_2 = M_3 = M_4 = M_5$$

$$H_1 \neq M_1 \neq M_2 \neq M_3 \neq M_4 \neq M_5$$

To test this hypothesis, the total mean score for each group was computed, that is, the 81 items on the questionnaire were added up for each group. The total mean score for each group was compared with the scores of the other groups, using the one-way analysis of variance for unequal sub-groups. Significance for the F test was set at the 0.05 level. The result of the F test was an F statistic of 0.09. Therefore, the null hypothesis (H_0) was accepted; the alternate hypothesis (H_1) was rejected.

Therefore, we conclude that no significant image differences exist between the five internal sub-groups. However, an item analysis revealed significant differences on 16 items. These items include:

Section I.--The following statements ARE goals of the College. Please agree, disagree, etc.

Item

10. A program of educational evaluation and assessment.
11. A program for the design, production, and testing of programmed materials and media for use in colleges and schools.
13. A continuing effort to improve the effectiveness and quality of the College's undergraduate and graduate instructional programs.

The following statements SHOULD BE goals of the College

28. To put education on a scientific basis.

Section II.--Please indicate whether or not you think the following programs are important.

46. The Elementary Intern Program is probably the most important of all undergraduate teaching programs.

Item

- 47. The Extern program of the Department of Administration is an important activity.
- 49. We should cooperate with governmental agencies on such programs as Job Corps, Head Start, etc.
- 50. Committee work by individual faculty members on College and departmental programs and policies is important.
- 51. None of the programs of the College of Education are worthwhile.

We SHOULD conduct research in the following areas:

- 53. Subject matter research.
- 56. Philosophy of education research.

Section III.--We SHOULD CARRY OUT the following programs and activities. Also included in this section are problem statements.

- 68. We should expand certain graduate programs, such as Higher Education.
- 71. We must find ways to maintain smaller teaching sections at both undergraduate and graduate levels.
- 72. We should reduce teaching loads on instructors by increasing faculty.
- 2-4. We should cut back the number of our present programs.
- 2-16. The structure of the College prohibits the effective use of many of its positive attributes.

Looking at Table 1 (at the end of this chapter), we can check the mean score, standard deviation, chi-square, and F test for each of these items. Again, the F test is significant at the 0.05 level. The F test scores show that the 16 items listed above were significantly different between the five sub-groups. However, this does not tell us where the significant differences are, that is, between what scores.

A t-test was used to determine differences between any two groups in the five group sample. The t-test revealed differences between groups as shown in Item Comparison Figure 1 on the next page. Figure 1 shows how the differences between the five sub-groups are distributed. The specific mean scores and t-test results for this distribution are presented at the end of the chapter in Tables 6 through 14. Table 6 is presented below as an example of how the tables are interpreted.

TABLE 6.--Item comparison: Groups 1 & 2.

Item	Group 1	Group 2	t-test
12	1.17	3.67	2.999
53	0.63	2.67	2.711
56	0.83	2.33	2.831

t-test significant at 2.015

In Table 6, then, we see a comparison between group 1 (deans) and group 2 (department chairmen) on three items which were found significantly different by the F test. Table 6 shows the mean score for each group on a particular item. The t-test is shown in the last column. T-test significance is determined by checking the t-test score results with a table of t-test significance. The t-test significance is shown at the bottom of each table. The

Items		10	12	13	28	46	47	49	50	51	53	56	68	71	72	2-4	2-16
Groups																	
1-2			X								X	X					
1-3		X	X				X				X	X					X
1-4		X	X		X		X		X		X	X					X
1-5		X	X		X						X	X					
2-3														X		X	
2-4						X							X			X	
2-5						X								X			
3-4						X			X								
4-5													X	X	X		

Legend: Group 1 = Deans
 Group 2 = Department Chairmen
 Group 3 = Institute Directors
 Group 4 = Full-Time Faculty
 Group 5 = Part-Time Faculty

Figure 1.--Item comparisons for five sub-groups.

figure 2.015 means that the t-test score must equal or be greater than 2.015.

Looking at Table 6, we see that the deans strongly agree on all three items, while the department chairmen are not sure or moderately disagree on items 12 and 53, and they moderately agree on item 56. The mean scores of 0.67 and 0.83 for the deans on items 53 and 56 indicate that one or more members of the group did not respond to the item. Again, the group 2 means of 3.67 and 3.67 do not necessarily reflect within group consensus on items 12 and 53. There may be a wide range of agreement or non-agreement on these items.

If we summarize the data on both Item Comparison Figure 1 and on Tables 6 through 14, we see that the most significant differences exist on items 10, 12, 28, 53, and 56.

On item 10 (A program of educational evaluation and analysis), differences were found between group 1 and groups 3, 4, and 5. These differences are shown in the following mean distribution.

Item 10:

Group	1	5	4	3
Mean	1.00	1.89	2.15	2.67

Group 1 (deans) strongly agree that a program of educational evaluation is a goal of the College. Group 5 (part-time faculty) moderately agrees. Group 4 (full-time faculty)

moderately agrees. Group 3 (institute directors) moderately agrees or is not sure.

On item 12 (A program for the design, production, and testing of programmed materials and media for use in colleges and schools), differences were found between group 1 and groups 2, 3, 4, and 5. These differences are shown in the following mean distribution.

Item 12:

Group	1	5	4	3	2
Mean	1.17	2.37	2.59	3.57	3.67

Again, Group 1 (deans) strongly agrees with the item. Group 5 (part-time faculty) moderately agrees. Group 4 (full-time faculty) moderately agrees or is not sure. Group 3 (institute directors) and group 2 (department chairmen) is not sure or moderately disagrees. These mean scores show a range of image consensus and non-consensus.

On item 28 (One goal of the College should be to put education on a scientific basis), differences were found between group 1 and groups 4 and 5. The mean distribution for this item is show below.

Item 28:

Group	1	4	5
Mean	1.33	2.28	2.32

Group 1 (deans) strongly agrees that one of the goals of the College should be to put education on a scientific basis. Group 4 (full-time faculty) and group 5 (part-time faculty) only moderately agrees.

On items 53 and 56 (We should conduct subject matter research and philosophy of education research), differences were found between group 1 and groups 2, 3, 4, and 5. The mean distribution for these items is shown below.

Item 53:

Group	1	4	3	5	2
Mean	0.67	1.84	1.86	1.95	3.67

Item 56:

Group	1	5	3	4	2
Mean	0.83	1.74	1.86	1.07	2.33

Group 1 (deans) strongly agrees on both items, but the other groups only moderately agreed. On item 53, group 2 (department chairmen) was not sure or moderately disagreed.

Discussion of Hypothesis Number One

The grand mean scores, analysis of variance, and F test results for the five internal sub-groups of the College of Education indicate that no significant differences in image exist between the groups. This conclusion is supported by the expectation presented in Chapter 3, that is, the College of Education was expected to be a stable organization, and, as such, no image differences were expected within the organization. However, such a conclusion is misleading, because the item analysis revealed between-group differences on 16 items.

The most serious differences existed on items 10 and 12 which are actual goal statements of the College. These statements are recognized by the deans as goals toward which the College is being directed. Yet the deans differed from all other groups in recognition of these statements. In some cases the statements were not recognized as goals of the College; in some cases there was only moderate recognition.

If we apply Sower's predictive postulates to the findings on these two items, we conclude that the College will not achieve these two goals because the goals are not recognized by the members of the College. Applying image theory to the findings, we conclude that there is no image consensus on these items between the deans and the other sub-groups. If the deans want to achieve these goals, then they must change the images of the other groups.

There was also a lack of image consensus on item 28. The deans strongly agree that one of the goals of the College should be to put education on a scientific basis. The full-time and part-time faculty do not agree with the deans. The deans view education as a science, and they feel that the College should be based on scientific principles, but they will not achieve this goal, because the faculty members view education in other ways. Their moderate agreement on this item shows that they are not strongly opposed to placing the College on a scientific basis, but they also want to place it on other bases.

There is also lack of image consensus on items 53 and 58. Again, the deans strongly favor both subject matter and philosophical research, but the other groups either moderately agreed or were not sure that these types of research should be conducted. If subject matter and philosophical research are viewed as organizational goals by the deans, then they must change the images of the other groups. If these images are not changed, then we can predict that subject matter and philosophical research will not be achieved as organizational goals.

We can generally conclude that the largest differences in image exist between the deans, the institute directors, and the full-time faculty. This conclusion is borne out by the fact that the deans differed with the institute directors on six items, and they differed with the full-time faculty on seven items. However, the number of differences is not significant, but the areas of difference are significant. The institute directors and the full-time faculty do not agree with the deans on the goal statements of the College or on the research functions of the College.

The differences between the other groups (2-3, 2-4, 2-5, 3-4, 4-5) are so small they do not need explanation. We may, however, study these differences if we want to get a better understanding of the relationships between these groups.

Hypothesis Number Two.--

The image of the College of Education held by 17 departmental sub-groups will not vary significantly between departments.

$$H_0 = M_1 = . . . M_{17}$$

$$H_1 \neq M_1 \neq . . . M_{17}$$

The total mean score for each group, the one-way analysis of variance, and the F test indicate that no significant differences exist between the total mean scores of the 17 departmental sub-groups. The F test was calculated at the 0.26 level of significance. Therefore, we accept the null hypothesis (H_0) and reject the alternate hypothesis (H_1).

However, an individual item analysis revealed significant differences on 19 items. These items include:

Section I.--The following statements are goals of the College.

Item

9. A program of subject matter analysis.
The following statements should be goals of the College:
18. To conduct research--pure, experimental, and action--in all aspects of education.
19. To develop and implement research in teaching.
23. To have faculty members produce scholarly writing.
29. To "weed out" or screen those going into the profession and separate the wheat from the chaff.
34. To provide extension courses.

Item

35. To train teachers and administrators to fit specific school systems.

Section II.--Please indicate whether or not you think the following programs are important.

44. Research is important but we place too much emphasis on it so instruction and service suffer.
45. The most important undergraduate programs are the opportunities for school visitations and participation in actual classroom situations.
46. The Elementary Intern Program is probably the most important of all undergraduate teacher programs.
47. The Extern program of the Department of Administration is an important activity.
58. We should conduct federally supported research.
59. The Institute for International Study is an important activity.

Section III.--Which of the following programs and activities should be carried out by the College.

68. We should expand certain graduate programs, such as Higher Education.
71. We must find ways to maintain smaller teaching sections at both undergraduate and graduate levels.
72. We should reduce teaching loads on instructors by increasing faculty.
- 2-13. We should cut down the number of methods courses and offer more subject matter courses.
- 2-14. We should give prospective teachers more experience in practical matters, such as how to handle discipline, how to interact with people, how to get along with co-workers, etc.
- 2-18. The College should be based on a Behavioral Science foundation.

A t-test was calculated on these items for six of the 17 departmental sub-groups. These six sub-groups represented the largest groups within the departmental classification and are considered the main sub-divisions of the College. The other 11 sub-groups had five or less members (one or two members in some cases). Therefore, in order to reveal significant differences on the t-test, and in order to protect the anonymity of the respondents in the smaller sub-groups, the t-test was only calculated on the larger groups (11 or more members).

The six groups chosen for analysis include:

Group

- 2 - School for Teacher Education
- 6 - Department of Administration and Higher Education
- 7 - Department of Counseling Personnel Services,
and Educational Psychology
- 8 - Elementary and Special Education
- 9 - Health, Physical Education, and Recreation
- 10 - Secondary Education and Curriculum

Results of the t-test for these groups are presented in Tables 15 through 28 at the end of this chapter.

On the next page, in Item Comparison Figure 2, we can see the distribution of differences between the six groups. What follows is an interpretation of these differences as shown in Figure 2 and Tables 15 through 28. Only those items which show the most significant differences are presented here. It should also be noted that

Items																			
Groups	9	18	19	23	29	34	35	44	45	46	47	58	59	68	71	72	2-13	2-14	2-18
2-6		X		X				X	X		X	X	X	X	X				X
2-7		X		X		X		X		X		X	X	X			X	X	X
2-8		X		X		X				X						X			X
2-9			X					X		X						X	X		
2-10				X					X			X							
6-7					X		X	X	X	X	X			X					
6-8						X		X	X		X			X	X	X	X		
6-9		X	X	X					X		X		X	X			X	X	X
6-10	X	X			X		X	X	X	X	X			X					
7-8										X					X	X	X		
7-9		X	X	X			X	X			X			X		X			
7-10	X				X			X						X			X		
8-9	X	X				X	X	X	X			X	X		X	X	X		
8-10					X					X			X		X	X			

Legend: Group 2 = School for Teacher Education
Group 6 = Administration and Higher Education
Group 7 = Counseling, Personnel Services, and Educational Psychology
Group 8 = Elementary and Special Education
Group 9 = Health, Physical Education and Recreation
Group 10 = Secondary Education and Curriculum

Figure 2.--Item comparisons for 6 of 17 departmental sub-groups.

the mean scores of both deans and department chairmen are compared with the six sub-groups selected for study.

On item 23 (One of the goals of the College should be to have faculty members produce scholarly writing), groups 6, 7, and 10 strongly to moderately agree, but groups 2 and 9 moderately agree or are not sure. Here is a distribution of means on this item (including the mean scores of deans [D] and department chairmen [D. C.]).

Item 23

Group	D	7	6	D.C.	10	9	2
Mean	1.50	1.61	1.62	1.67	1.91	2.47	2.55

The deans strongly agree that scholarly writing should be one of the goals of the College, but the department chairmen fall between groups 6 and 10; they strongly to moderately agree. We have, according to this distribution, lack of image consensus between the five sub-groups and the deans and department chairmen.

On item 34 (One of the goals of the College should be to provide extension courses), there are differences between five sub-groups, the deans, and the department chairmen. Here is a distribution of means for this item.

Item 34

Group	2	6	D	10	8	7	D.C.
Mean	1.73	1.81	1.83	1.83	2.20	2.74	3.00

Groups 2, 6, the deans, and 10 strongly to moderately agree. Group 8 moderately agrees. Group 7 and the department chairmen are not sure. This shows a wide range of

images between the groups, hence, there is no image consensus.

On item 35 (One of the goals of the College should be to train teachers and administrators to fit specific school systems), there are differences between five sub-groups, the deans, and the department chairmen. Here is a distribution of means for this item.

Item 35

Group	D	7	10	9	6	8	D.C.
Mean	2.33	2.74	2.78	3.00	3.05	3.90	4.00

The deans moderately agree with the item. Groups 7, 10, 9, and 6 are not sure. Group 8 and the department chairmen moderately disagree. It is interesting to note that group 8 is the Department of Elementary and Special Education; they have the same image of this item as the department chairmen. Only one department (7--Counseling, Personnel Services, and Educational Psychology) is close to the deans, and even there we do not have complete consensus.

On item 44 (Research is important but we place too much emphasis on it so instruction and service suffer), there were differences between all six sub-groups and the deans and department chairmen. Here is a mean distribution for this item.

Item 44

Group	9	2	D.C.	7	6	8	D	10
Mean	2.27	2.47	3.01	3.10	3.50	3.67	3.83	4.40

Groups 9 and 2 moderately agree with this statement. The department chairmen and group 7 are not sure. Groups 6, 8, and the deans are not sure or moderately disagree. Group 10 disagrees. This distribution indicates that there is no clear picture of the College's research function. Some groups moderately agree that there is too much emphasis on research; some groups, the deans and group 10 especially, think research is not being over-emphasized.

On item 45 (The most important undergraduate programs are the opportunities for school visitations and participation in actual classroom situations), non-consensus was found between the six sub-groups, the deans, and the department chairmen. Here is a mean distribution for this item.

Item 45

Group	2	7	10	D	D.C.	9	6	8
Mean	2.60	2.96	3.00	3.17	3.33	3.36	4.00	4.33

The interesting thing to note here is that group 2 (School for Teacher Education) is on opposite ends of the distribution from group 8 (Elementary and Special Education). Possibly group 8 does not think that some of the in-service programs are worthwhile.

On item 46 (The Elementary Intern Program is probably the most important of all undergraduate teacher programs), there was non-consensus between the six-groups, the deans,

and department chairmen. Here is a distribution of means for this item.

Item 46

Group	D.C.	8	D	9	7	2	10	6
Mean	1.33	1.67	1.83	2.18	2.62	2.87	3.00	3.50

The department chairmen strongly agree with this item. Group 8 and the deans strongly to moderately agree. Group 9 moderately agrees. Groups 7 and 2 moderately agree or are not sure. Group 10 is not sure. Group 6 is not sure or moderately disagrees.

On item 47 (The Extern program of the Department of Administration is an important activity), non-consensus was found between five groups, the deans, and the department chairmen. Here is a mean distribution for this item.

Item 47

Group	D	D.C.	8	10	9	6	7
Mean	1.00	1.00	1.33	1.80	2.00	2.50	2.53

There is strong agreement on this item between the deans, department chairmen, and group 8. Groups 10 and 9 moderately agree; groups 6 and 7 moderately agree or are not sure. The interesting thing to note here is that group 6 (Department of Administration and Higher Education) only moderately agreed or was not sure. Yet the item directly refers to a program sponsored by the Department. One possible explanation for this is that group 6 is made up of three sub-groups--Administration, Higher Education, and Adult Education. The Administration group may strongly

agree with this item, but the other two groups may not agree.

On item 58 (We should conduct federally supported research), there was non-consensus between six groups, the deans, and the department chairmen. Here is a mean distribution for this item.

Item 58

Group	6	7	8	2	10	D	9	D.C.
Means	1.50	2.14	2.33	2.40	2.60	2.83	3.09	3.33

Group 6 strongly to moderately agreed with this item. Groups 7, 8, and 2 moderately agreed. Group 10, and the deans moderately agreed or were not sure. Group 9 and the department chairmen were not sure.

On item 68 (We should expand certain graduate programs, such as Higher Education), non-consensus was found between six groups, the deans, and the department chairmen. Here is a distribution of means for this item.

Item 68

Group	D.C.	6	7	D	8	9	10	2
Means	1.37	1.67	2.13	2.17	2.65	2.67	2.74	3.18

The department chairmen strongly agree with this item. Group 6 (Administration and Higher Education) strongly to moderately agrees. Yet the item makes direct reference to this group. Again, this might be explained by the fact that the Department is made up of three sub-groups. Group 7 and the deans moderately agree. Groups 8, 9, and 10 moderately agree or are not sure. Group 2 is not sure.

On item 71 (We must find ways to maintain smaller teaching sections at both undergraduate and graduate levels), non-consensus was found between six groups, the deans, and the department chairmen. Here is a distribution of means for this item.

Item 71

Group	D.C.	8	9	2	D	10	7	6
Means	1.00	1.30	1.73	1.82	1.83	1.96	2.43	2.67

The department chairmen and group 8 strongly agree with this item. We might hypothesize that since group 8 (Elementary and Special Education) is the largest department in the College, they feel a stronger need to cut down the size of classes; hence, they strongly agree with the item. Groups 9, 2, the deans, and 10 strongly to moderately agree with the item. Group 7 moderately agrees; group 6 moderately agrees or is not sure.

On item 72 (we should reduce teaching loads on instructors by increasing faculty), non-consensus was found between the six groups, the deans, and the department chairmen. Here is a mean distribution for this item.

Item 72

Group	D.C.	8	D	9	2	10	6	7
Means	1.00	1.30	1.83	1.93	2.09	2.13	2.43	2.65

Again, as in item 71, the department chairmen and group 8 strongly agree with this item. The deans and groups 9, 2, 10, and 6 moderately agree. Group 7 moderately agrees or is not sure.

On item 2-13 (we should cut down the number of methods courses and offer more subject matter courses), non-consensus was found between the six groups, the deans, and the department chairmen. Here is a mean distribution for this item.

Item 2-13

Group	9	7	6	10	D	2	8	D.C.
Means	2.67	3.26	3.62	4.00	4.00	4.09	4.20	4.67

Group 9 moderately agrees or is not sure on this item. Group 7 is not sure; group 6 is not sure or moderately disagrees; group 10, the deans, group 2 and group 8 moderately disagree. The department chairmen moderately to strongly disagree. The department chairmen seem to picture the curriculum from a practical viewpoint. This conclusion is borne out by the fact that the department chairmen indicated disagreement with putting the College on a scientific basis.

On item 2-18 (The College should be based on a behavioral science foundation), non-consensus was found between the five groups, the deans, and the department chairmen. Here is a mean distribution for this item.

Item 2-18

Group	D	6	7	8	9	2	D.C.
Means	1.67	2.48	2.57	2.60	3.20	3.36	3.67

The deans strongly agree with this item, but the department chairmen are not sure or moderately disagree. Group

6 moderately agrees. Groups 7 and 8 moderately agree or are not sure; groups 9 and 2 are not sure.

Discussion of Hypothesis Number Two

Taking all 16 items into account, we find that significant image differences exist between the six departmental sub-groups selected for study. These differences can be explained by the image theory of organizations. As the organization expands, and as the division of labor and specialization increase, there is a breakdown of the image between the various sub-groups within the organization. We have generally concluded, however, that no serious image breakdown has occurred within the departmental sub-groups of the College.

The differences between the six departmental sub-groups and the deans and departmental chairmen may, however, have serious consequences. On item 2-18, for example, there is non-consensus about putting the College on a behavioral science foundation. In fact, the department chairmen are at opposite ends of the continuum from the deans. The six sub-groups are "torn" between the two poles. Applying Sower's postulates and the image theory to this item, we conclude that the deans will not achieve this goal unless, of course, they change the images of the other groups.

Probably more important than the differences found on these 16 items is an analysis of statements 9, 10, 11, 12, 13, 14, and 15. These statements are actual goal

statements of the College; they are goals toward which the deans are striving.¹ These statements are:

Section I.--The following statements ARE goals of the College. Please agree, disagree, etc.

Item

9. A program of subject matter analysis.
10. A program of educational evaluation and assessment.
11. A program of cooperative service arrangements with local schools and other agencies.
12. A program for the design, production, and testing of programmed materials and media for use in colleges and schools.
13. A continuing effort to improve the effectiveness and quality of the College's undergraduate and graduate instructional programs.
14. A broad-scale program of basic research in human learning and development.
15. A program for translating basic research in human learning and development into proposed models for instructional and management systems.

The following chart shows the mean distribution for the deans, department chairmen, and the six departmental sub-groups.

Group	D	D.C.	2	6	7	8	9	10
Item								
9.	1.50	2.67	2.36	2.43	2.35	2.90	2.53	3.17
10.	1.00	1.67	1.73	1.95	2.04	2.00	2.00	2.00
11.	1.33	2.00	1.45	1.52	2.22	2.00	1.80	1.65
12.	1.17	3.67	2.33	1.00	2.38	2.65	3.00	2.33
13.	1.33	1.00	1.45	1.29	1.52	1.25	1.47	1.57
14.	1.17	2.67	2.09	1.57	2.04	2.05	1.80	2.09
15.	1.17	2.67	1.91	1.91	2.00	1.90	1.93	1.87

We can see from the chart that the deans strongly agree with all the goal statements of the College (note exception in item 9 [1.50] strong to moderate agreement). The department chairmen strongly agree with only one item --13; they moderately agree or are not sure on all the other items. The six sub-groups show varying degrees of consensus or non-consensus on the items. Despite the fact that the mean scores reported for each of these items are generally positive, that is, the mean scores do not fall below 3.00 on the rating scale, the data presented in the chart make it clear that there will be a low level of goal achievement on all the items. Applying Sower's postulates and the image theory, we conclude that if there is a lack of image consensus on the organizational goals, then the members of the organization either do not recognize the goals, or, if they do recognize them, they are not interested in achieving them. We can also conclude that there is a breakdown in the internal socialization process, that is, the values, beliefs, and attitudes of the deans are not being transmitted to the departmental sub-groups. We can also conclude that the College is recruiting personnel who may have the "proper skills" for a position within the organization, but who lack the "proper attitude."²

Hypothesis Number Three.--

The image of the College of Education held by the four teaching ranks (instructor, assistant professor, associate professor, professor) will not vary significantly between ranks.

$$H_o = M_1 = M_2 = M_3 = M_4$$

$$H_1 \neq M_1 \neq M_2 \neq M_3 \neq M_4$$

To test the null hypothesis, the total mean scores were computed for each of the four groups. A one-way analysis of variance and an F test were also computed. The F statistic was computed at the 0.50 level of significance. Therefore, we accept the null hypothesis, and we reject the alternate hypothesis.

However, an individual item analysis revealed significant differences on eleven items. These items include:

One of the goals of the College should be:

Item

- 21. To cooperate with behavioral scientists in research.
- 23. To have faculty members produce scholarly writing.
- 26. To promote the general security and economic security of the profession.
- 28. To put education on a scientific basis.
- 30. To develop, evaluate, and disseminate innovation in education.
- 47. The Extern program of the Department of Administration is an important activity.

Item

- 56. We should conduct research in philosophy of education.
- 68. We should expand certain graduate programs, such as Higher Education.
- 2-10. Persons in teacher education or administration should be forced to spend one year out of five in elementary and secondary school classrooms and administration.
- 2-17. Most graduates of the College are not interested in the profession but only in how much money they are going to make.

The differences between the four groups were distributed as shown in Figure 3 on the next page. Looking at Figure 3, we see that the greatest number of differences were found between group 1 (instructors), and group 2 (assistant professors), and group 4 (professors).

Differences were found between group 1 and group 4 on items: 23, 28, 47, 56, 68, and 2-10 (see Table 29 at the end of the chapter).

The instructors moderately agreed on items 23, 47, and 65. The professors strongly to moderately agreed on the same items. Item 23 is about the necessity of producing scholarly writing. We might hypothesize that a person who is beginning his academic career would not like to emphasize scholarly writing; an instructor is likely to emphasize teaching rather than research. On the other hand, the professor, who has already met promotional requirements, is no longer threatened by the requirement of scholarly writing. In short, the instructor may also be security conscious,

Items		21	23	26	28	30	47	50	56	68	2-10	2-17
Groups												
1-2											X	
1-3				X							X	
1-4			X		X		X		X	X		
2-3												X
2-4			X	X	X		X	X	X			
3-4				X								X

Legend: Group 1 = Instructors
Group 2 = Assistant Professors
Group 3 = Associate Professors
Group 4 = Professor

Figure 3.--Item comparisons for four teaching ranks.

and, according to image theory, he may be threatened by a message which says he must do something in order to reach a higher rank. The instructors also moderately agreed or were not sure of item 68 (we should expand certain graduate programs, such as Higher Education). The instructor's rank has some graduate students; they may think that the graduate school is already filled to capacity, or at least near capacity. The professors, on the other hand, strongly agreed with item 68. They may picture the graduate program as a source of rich teaching and research experiences.

The assistant professors also differed from the professors on six items: 23, 26, 28, 47, 50, and 56 (see Table 30). The assistant professors were generally in moderate agreement on all six items, while the professors strongly to moderately agreed on the same items. Again, the professors strongly agreed that scholarly writing should be one of the goals of the College, while the assistant professors moderately agreed. The professors also strongly agreed that committee work (item 50) by individual faculty members on College and departmental programs and policies is important. The assistant professors moderately agreed. The assistant professors may not want to spend time on committee work, since this may take away time for other activities, such as teaching. In short, they may not see the value of committee work.

Discussion of Hypothesis Three

We can generally conclude that teaching rank (instructor, assistant professor, associate professor, and professor) has no significant impact on the individual's image of the College. The differences that were found between the groups seem to be differences in aspiration and job security. We also know that the instructors and assistant professors are usually a transient group, that is, they feel more flexibility in moving from one job to another. Therefore, there would not be any strong image consensus within these two groups. The professors, on the other hand, would feel a stronger commitment to the organization and would identify with its goals and objectives.

Hypothesis Number Four.--

The image of the College of Education held by tenured and non-tenured academic personnel will not vary significantly between the two groups.

$$H_0 = M_1 = M_2$$

$$H_1 \neq M_1 \neq M_2$$

To test the null hypothesis, total mean scores were computed for the two groups. A one-way analysis of variance and an F test were also computed. The F statistic was calculated at the 0.61 level of significance.

Therefore, we accept the null Hypothesis (H_0) that there

is no significant image difference between the two groups, and we reject the alternate hypothesis (H_1) that there are significant image differences between the groups.

An individual item analysis revealed significant differences between the two groups on five items. These items are:

The following statements should be goals of the College:

Item

- 23. To have faculty members produce scholarly writing.
- 28. To put education on a scientific basis.
- 50. Committee work by individual faculty members on College and departmental programs and policies is important.
- 66. We should expand the program in comparative and international education.
- 2-4. We should cut back the number of our present programs.

On item 23 (One of the goals of the College should be to have faculty members produce scholarly writing), the tenured group (1) strongly agreed, while the non-tenured group (2) moderately agreed. This supports the conclusion reached on the same item for instructors, assistant professors, and professors. The tenured group also strongly agreed with item 50 (Committee work by individual faculty members on College and departmental programs and policies is important), while the non-tenured group moderately agreed.

Discussion of Hypothesis Four

We can generally conclude that there is no significant image differences between the tenured and non-tenured academic personnel. The differences that do occur may be due to longevity and/or security consciousness.

Hypothesis Number Five.--

The image of the College of Education held by the members of the College will not vary significantly from the image of the College held by school administrators in Ingham County, Michigan.

$$H_o = M_1 = M_2$$

$$H_1 \neq M_1 \neq M_2$$

To test the null hypothesis, total mean scores were computed for the two groups. A one-way analysis of variance with unequal sub-groups and an F test were also computed. The F statistic was calculated at the 0.00 level of significance. Therefore, we reject the null hypothesis, and we accept the alternate hypothesis; significant image differences do exist between the groups.

An item analysis revealed significant image differences on 30 items. These items include:

Section I.--The following statements ARE goals of the College.

Item

9. A program of subject matter analysis.
10. A program of educational evaluation and assessment.

The following statements should be goals of the College.

- 16. To prepare teachers for inner-city schools.
- 21. To cooperate with behavioral scientists in research.
- 23. To have faculty members produce scholarly writing.
- 24. To serve faculty members of other colleges and universities both within and without the state.
- 27. To work for unity among educators and to eradicate the threat of unionization which promises to divide us.
- 28. To put education on a scientific basis.
- 29. To "weed out" or screen those going into the profession and separate the "wheat from the chaff."
- 31. To give prospective teachers a broad, general background including: administration, higher education, special education, remedial education, music, arts, literature, etc.
- 33. To prepare and distribute educational materials to the schools in the state.
- 34. To provide extension courses.
- 38. To turn out practical-minded teachers who meet the school administrator's definition of what a good teacher should be.

Section II.--Please indicate whether or not you think the following programs are important.

- 40. The most important activity of the College is teaching undergraduates.
- 42. Graduate education is our most important activity.
- 44. Research is important but we place too much emphasis on it so instruction and service suffer.
- 45. The most important undergraduate programs are the opportunities for school visitations and participation in actual classroom situations.
- 51. None of the programs of the College of Education are worthwhile.

Item

- 56. We should conduct philosophy of education research.
- 62. The Mott Institute for Community Improvement is an important activity.

Section III.--The following programs and activities should be carried out by the College. This section also includes some problem statements.

- 65. We should overhaul placement procedures and include a follow-up interview with school administrators and first jobbers.
- 70. We should not have any new programs and should concentrate on improving the programs we have.
- 72. We should reduce teaching loads on instructors by increasing faculty.
- 73. We should cut down the number of students admitted to both undergraduate and graduate programs.
- 2-9. We need a well-organized, continuous in-service training program for faculty members in the College.
- 2-10. Persons in teacher education or administration should be forced to spend one year out of five in elementary and secondary school classrooms and administration.
- 2-11. The College should explore the possibility of establishing a small, experimental college of education.
- 2-12. Research courses should be assigned to the School for Advanced Studies and taken away from departmental affiliations.
- 2-14. We should give prospective teachers more experience in practical matters, such as how to handle discipline, how to interact with people, how to get along with co-workers, etc.
- 2-17. Most graduates of the College are not interested in the profession but only in how much money they are going to make.

A comparison of mean scores for these two groups is presented on the next page.

Mean Score Comparison: College of Education and School Administrators.

Item	College Mean	School Administrator Mean
9	2.75	2.13
10	2.08	1.66
16	1.59	1.84
21	1.60	1.90
23	1.91	3.32
24	2.18	2.61
27	3.19	2.54
28	2.25	2.66
29	2.12	1.75
31	2.27	1.66
33	2.70	1.84
34	2.04	1.51
38	3.28	2.77
40	2.90	2.46
42	3.16	3.72
44	3.06	2.49
45	2.94	2.36
51	4.80	4.52
56	1.89	2.21
62	2.22	1.93
65	2.17	1.54
70	3.38	3.83
72	2.17	2.69
73	2.97	3.49
2-9	1.97	1.69
2-10	3.56	2.21
2-11	2.73	2.36
2-12	3.72	2.70
2-14	2.38	1.54
2-17	3.98	3.64

F test significant 0.05

If we look at the 30 items which were found significantly different by the F test, we find that the items can be grouped into three areas:

1. Items which deal with general organizational goals: 9, 10, 21, 23, 28, 31, 33, 40, 42, 44, 56, 72, 73, 2-11, 2-12, and 2-14.
2. Items which deal with specific programs: 16, 24, 29, 34, 45, 51, 62, 65, and
3. Items which deal with specific problems: 27, 2-9, 2-10, 2-17.

In the first group (items which deal with general organizational goals), we see that the school administrators strongly to moderately agree with items 10, 21, 31, 33, and 2-14, while the College group moderately agrees with the same items. Again, despite the fact that the grand mean scores for each of these items are generally positive, that is, the mean scores do not fall below 3.00 on the rating scale, a prediction of a low level of image consensus must be maintained, because the variance scores found in Table 5 indicate non-consensus.

On items 9, 40, 44, and 2-11 in the same group, the school administrators moderately agreed, while the College group moderately agreed or was not sure. On item 28 and 72, the school administrators moderately agreed or were not sure, while the College group moderately agreed.

In the second group (items which deal with specific programs), the school administrators strongly to moderately agreed with items 16, 29, 34, 62, and 65, while the College group moderately agreed with the same items. The

school administrators moderately agreed with item 45, but the College group was not sure. The school administrators were not sure or moderately disagreed with item 70, but the College group was not sure.

In the third group (items which deal with specific problems), the school administrators moderately agreed with item 2-10 and moderately agreed or were not sure with item 27. The College group, on the other hand, moderately disagreed with item 2-10 and was not sure with item 27. The school administrators strongly to moderately agreed with item 2-9, but the College group moderately agreed. The school administrators were not sure or moderately disagreed with item 2-17, but the College group moderately disagreed.

Discussion of Hypothesis Number Five

Those items in group 1 (items which deal with general organizational goals) which were strongly or moderately favored by the school administrators, refer, in most cases, to operational goals (practical goals). The school administrators picture the College of Education as a "service" organization, that is, the College exists to meet the practical needs of the school system. The school administrators moderately agreed with other items in this group which referred to general goals, such as, "A program of subject matter analysis," or "The most important activity of the College is teaching undergraduates." The school

administrators were not sure on broad goal statements, such as, "To put education on a scientific basis."

We see here, then, an ordering of the value image. School administrators picture the College: first as an organization which should meet their practical needs, than as an organization which should strive for some general goals, and then as an organization which should be concerned with the broad goals of the profession.

The same pattern holds true for items in the second group (items which deal with specific programs). The administrators strongly to moderately agree that the College should prepare teachers for inner-city schools, that it should provide extension courses, that the Mott Institute is an important activity, and so forth. They moderately agreed that school visitation by prospective teachers is important. They moderately disagreed that the College should not have any new programs. Again, they view the College as an organization which should meet the needs of their school systems.

Again, in the third group (items which deal with specific problems), the school administrators emphasize the practical items. They moderately agreed that persons in teacher education or administration should spend one year out of five in a school classroom or in school administration. They moderately agreed that one of the goals of the College should be to work for unity among educators and eradicate the threat of unionization.

The College group. on the other hand, only moderately agreed with the operational goals in group 1. In a few cases, however, they strongly to moderately agreed with specific, practical goals, such as, "To train teachers for inner-city schools." In general, they emphasize theoretical goals, that is, goals which do not deal with here-and-now practical situations. For example, they emphasized such things as cooperation with behavioral scientists, production of scholarly writing, conducting philosophical research, and so forth. The College group did not, on the other hand, agree they should spend one out of every five years in a school classroom or in school administration. And they only moderately agreed that they need a continuing, in-service training program.

Therefore, we conclude that there is significant image differences between the College group and the school administrators. Specifically, we conclude:

1. That the College of Education is not projecting its image to the school administrators.
2. That the school administrators view the College of Education as a practical, "service" organization; the function of the College is to meet the specific needs of the school systems.
3. That the College of Education views itself as a theoretically-oriented organization.
4. That the College of Education may not be listening to what the school administrators are

saying; the College of Education may not be "reading" the needs of the times. In short, the College of Education is not relating to the schools.

Citations--Chapter 4

1. See "How Do We Learn?" The Michigan State University Alumni Magazine (East Lansing, December, 1964), n.p.; Also see John E. Ivey, Jr., "Program Directions for the College of Education," a speech presented at Michigan State University, December 4, 1962.
2. W. Richard Scott, "Theory of Organizations," in Robert E. L. Faris (ed.), Handbook of Modern Sociology (Chicago: Rand McNally & Company, 1964), p. 518.

TABLE 1.--Main summary table for five internal sub-groups of the College of Education,
Michigan State University.

E No.	Total					1			2			3			4			Σ	X ²	DF	F
	M	SD	M	SD	Total	M	SD	M	SD	M	SD	M	SD	M	SD						
9	2.75	1.22	1.50	0.84	2.67	0.58	2.43	0.98	2.88	1.25	2.53	1.12	16	21.954	0.11						
10	2.08	0.99	1.00	0.00	1.67	0.58	2.57	1.13	2.15	0.98	1.89	0.99	16	20.379	0.05						
11	1.80	0.84	1.33	0.52	2.00	1.00	1.86	0.38	1.50	0.87	1.89	0.88	16	17.381	0.80						
12	2.57	1.15	1.17	0.41	3.67	1.15	3.57	1.40	2.59	1.10	2.37	1.01	16	38.702	0.00						
13	1.52	0.89	1.33	0.82	1.00	0.00	2.00	1.00	1.44	0.81	1.95	1.88	12	19.724	0.05						
14	2.00	1.13	1.17	0.41	2.67	0.58	2.57	1.13	2.03	1.19	1.79	0.85	16	34.613	0.20						
15	1.93	0.95	1.17	0.41	2.67	0.58	2.14	1.46	1.90	1.00	2.16	1.07	16	22.644	0.16						
16	1.60	0.64	1.17	0.41	1.00	0.00	1.57	0.53	1.64	0.60	1.63	0.90	12	15.052	0.19						
17	1.59	0.82	1.33	0.52	1.67	1.15	1.57	0.79	1.61	0.83	1.58	0.60	16	9.303	0.90						
18	1.44	0.73	1.50	0.55	1.33	0.58	1.86	1.07	1.43	0.73	1.37	0.68	12	10.160	0.77						
19	1.43	0.70	1.17	0.41	1.33	0.58	1.71	1.11	1.43	0.67	1.47	0.77	12	11.727	0.66						
20	4.46	0.97	4.17	0.98	4.33	0.58	4.86	0.38	4.44	0.96	4.26	1.19	20	21.820	0.70						
21	1.59	0.63	1.17	0.41	2.33	0.58	1.29	0.49	1.62	0.61	1.53	0.77	12	18.716	0.08						
22	2.34	1.00	2.17	0.98	3.00	1.00	2.43	1.13	2.32	1.00	2.37	1.01	16	9.415	0.79						
23	1.91	0.93	1.50	0.55	1.67	0.58	1.29	0.49	2.02	1.00	1.68	0.58	16	10.505	0.17						
24	2.17	0.91	1.83	0.98	3.00	1.00	1.71	0.76	2.09	0.90	2.26	0.93	16	12.978	0.35						
25	1.99	0.84	1.83	0.75	3.33	1.15	2.00	1.00	1.94	0.78	2.05	0.97	12	23.218	0.14						
26	2.38	1.08	2.33	0.82	2.33	0.58	2.57	1.27	2.37	1.10	2.42	1.12	16	9.253	0.91						
27	3.20	1.50	3.67	1.21	3.67	0.58	3.57	1.67	3.18	1.50	3.00	1.67	20	8.999	0.88						
28	2.23	1.07	1.33	0.52	2.67	1.15	1.86	0.69	2.28	1.11	2.32	0.95	16	13.320	0.05						
29	2.15	1.00	1.50	0.55	2.00	0.00	2.71	1.11	2.17	1.02	2.11	0.94	16	16.094	0.18						
30	1.48	0.61	1.00	0.00	1.33	0.58	1.57	0.53	1.53	0.60	1.37	0.76	12	12.282	0.25						
31	2.27	1.14	1.67	0.82	1.67	0.58	1.71	0.95	2.39	1.17	2.11	1.05	16	11.006	0.33						
32	2.45	1.01	2.50	1.05	2.33	0.58	2.00	1.00	2.51	0.96	2.32	1.34	20	14.086	0.84						
33	2.69	1.16	2.50	1.38	4.00	1.00	2.14	0.90	2.68	1.14	2.47	1.22	16	13.786	0.25						
34	2.06	0.97	1.83	0.75	3.00	1.73	2.14	1.07	2.04	0.95	2.11	1.05	16	20.378	0.35						
35	3.48	1.13	2.33	1.21	4.00	1.73	3.29	1.11	3.52	1.09	3.58	1.17	16	26.385	0.17						
36	1.98	0.86	1.50	0.84	3.00	1.00	1.86	0.69	1.96	0.84	2.11	0.94	16	19.311	0.19						
37	3.15	1.19	2.67	1.21	3.67	1.53	2.43	0.53	3.20	1.21	3.16	1.17	16	11.770	0.16						
38	3.29	1.29	3.33	1.86	4.33	0.58	2.71	1.60	3.37	1.29	2.89	0.94	20	32.649	0.35						
39	4.60	0.84	4.83	0.41	5.00	0.00	4.00	1.53	4.64	0.81	4.47	0.77	20	16.868	0.13						
40	2.93	1.36	3.00	1.90	2.67	0.58	3.57	1.13	2.82	1.34	3.32	1.25	16	18.390	0.17						
41	2.47	1.38	2.67	1.86	1.33	0.58	3.14	1.35	2.53	1.37	2.00	1.25	16	13.608	0.21						
42	3.17	1.21	3.67	1.37	1.67	0.58	3.14	1.21	3.14	1.20	3.42	1.17	20	20.368	0.07						
43	3.77	1.21	3.67	1.37	4.67	0.58	3.71	1.11	3.70	1.22	3.42	1.18	20	9.832	0.08						
44	3.18	1.37	3.83	0.98	3.01	1.73	3.57	1.67	3.03	1.39	3.11	1.24	16	16.820	0.35						
45	2.96	1.13	3.17	1.83	3.33	0.58	2.57	1.62	3.00	1.10	2.74	0.87	20	32.793	0.63						
46	2.62	1.15	1.83	1.72	1.33	0.58	2.00	0.82	2.78	1.13	2.42	0.96	20	39.141	0.00						
47	2.03	0.81	1.00	0.00	1.00	0.00	2.43	0.79	2.09	0.79	2.05	0.78	12	24.369	0.00						
48	1.92	0.83	1.33	0.52	1.67	1.15	2.14	1.07	1.93	0.82	2.00	0.88	12	23.060	0.30						
49	2.19	0.83	2.00	0.89	3.33	1.15	2.29	0.95	2.19	0.83	2.00	0.67	16	19.963	0.05						
50	1.90	0.75	1.33	0.52	1.33	0.58	1.43	0.53	2.01	0.74	1.74	0.18	16	19.342	0.02						

51	4.83	0.64	5.00	0.00	5.00	0.00	5.00	0.00	4.84	0.58	4.58	1.07	16	9.784	0.00
52	1.75	1.04	1.17	1.47	1.86	1.73	1.86	1.46	1.74	0.99	1.74	0.81	20	50.118	0.26
53	1.85	0.97	0.67	0.52	1.86	1.53	1.86	1.07	1.84	0.93	1.95	0.78	30	51.103	0.00
54	2.29	1.77	1.67	1.86	2.14	2.52	2.14	1.68	2.31	1.09	2.42	1.02	20	41.632	0.72
55	1.40	0.89	0.83	0.41	1.43	0.58	1.43	0.79	1.44	0.71	1.37	0.50	20	17.713	0.47
56	1.90	0.88	0.83	0.75	1.86	0.58	1.86	0.69	1.97	0.90	1.74	0.61	20	37.518	0.05
57	1.48	0.81	1.17	0.75	1.29	0.58	1.29	0.49	1.47	0.83	1.58	0.69	20	29.735	0.43
58	2.14	1.09	2.83	1.37	1.86	2.08	1.86	1.57	2.12	0.99	1.95	0.97	20	39.725	0.15
59	1.94	0.93	1.67	1.37	1.71	2.00	1.71	1.11	1.96	0.86	1.84	0.90	20	63.984	0.36
60	2.12	0.95	1.50	0.55	2.29	0.58	2.29	1.38	2.06	0.90	2.53	1.12	20	22.538	0.17
61	1.99	0.93	1.50	0.24	1.43	0.00	1.43	1.48	2.06	0.87	2.00	1.11	16	31.658	0.40
62	2.24	1.00	1.67	1.03	2.14	1.15	2.14	0.90	2.21	0.96	2.47	1.17	20	31.863	0.15
63	1.93	1.03	1.67	1.37	1.57	2.08	1.57	0.79	1.97	1.00	1.68	0.82	20	35.288	0.13
64	1.96	0.98	1.50	1.38	1.71	1.53	1.71	0.95	2.02	0.98	1.79	0.85	20	25.442	0.62
65	2.17	1.02	2.50	1.05	2.71	0.58	2.71	1.25	2.16	1.05	2.05	0.78	20	13.175	0.61
66	2.62	0.97	2.83	1.83	2.71	1.53	2.71	1.11	2.63	0.88	2.37	1.01	16	35.693	0.22
67	2.72	1.15	3.33	1.51	2.57	0.58	2.57	0.98	2.56	1.14	2.42	1.07	16	14.871	0.32
68	2.43	1.01	2.17	1.17	2.86	1.33	2.86	1.68	2.56	0.92	1.84	0.96	16	37.902	0.01
69	2.71	0.99	3.17	0.98	2.86	1.53	2.86	1.21	2.68	1.00	2.63	0.16	20	15.122	0.34
70	3.44	1.34	3.83	1.60	3.43	1.53	3.43	1.51	3.40	1.33	3.47	1.31	20	9.090	0.46
71	2.09	1.09	1.83	0.98	2.57	0.00	2.57	0.79	1.98	1.06	2.79	1.18	16	29.535	0.01
72	2.17	1.03	1.83	1.33	2.43	0.00	2.43	0.79	2.08	1.02	2.84	0.90	16	24.993	0.02
73	2.95	1.25	3.33	1.03	3.00	1.73	3.00	1.00	2.94	1.27	3.05	1.22	16	11.718	0.73
2-4	3.56	1.06	3.50	1.05	3.71	1.15	3.71	0.49	3.63	1.03	3.42	1.17	20	42.355	0.03
2-5	3.84	1.29	4.00	1.10	3.86	0.58	3.86	1.68	3.81	1.36	3.95	0.85	20	21.535	0.99
2-6	2.33	1.20	3.17	1.83	2.00	1.00	2.00	1.11	2.27	1.19	2.32	1.11	16	17.202	0.41
2-7	2.71	1.04	2.50	1.38	2.86	1.15	2.86	1.46	2.71	1.04	2.58	0.77	16	18.224	0.73
2-8	1.80	0.88	1.50	0.55	1.86	0.58	1.86	0.69	1.82	0.95	1.74	0.65	20	5.023	0.96
2-9	1.99	0.90	1.67	0.52	2.57	0.00	2.57	1.13	1.98	0.92	1.89	0.88	16	17.353	0.49
2-10	3.55	1.21	3.67	1.75	4.00	0.58	4.00	0.82	3.50	1.25	3.47	0.96	16	12.890	0.42
2-11	2.72	1.28	2.67	1.47	3.71	2.08	3.71	0.95	2.62	0.23	2.95	1.31	16	25.390	0.38
2-12	3.71	1.19	3.17	1.47	3.71	1.73	4.00	1.15	3.73	1.21	3.58	0.90	16	16.581	0.71
2-13	3.58	1.20	4.00	0.89	3.43	0.58	3.43	0.53	3.59	1.29	3.26	0.87	20	19.820	0.44
2-14	2.38	1.16	2.00	1.14	2.00	2.08	2.00	1.29	2.36	1.14	2.74	1.05	20	36.423	0.62
2-15	3.01	1.12	3.50	1.05	3.14	2.31	3.14	1.68	2.90	1.08	3.32	0.95	16	31.043	0.15
2-16	2.85	1.08	3.83	0.98	4.00	1.00	2.57	0.98	2.72	1.05	3.16	1.07	16	24.729	0.02
2-17	3.97	0.95	4.17	0.75	3.71	0.00	3.71	1.11	3.96	0.97	3.89	0.88	16	9.102	0.42
2-18	2.74	1.09	1.67	0.82	2.57	1.53	2.57	1.27	2.81	1.08	2.63	0.90	16	19.024	0.11
2-19	2.68	1.27	3.00	1.55	1.86	1.73	1.86	1.07	2.68	1.27	2.84	1.21	16	19.409	0.58

Legend: M = Mean; SD = Standard Deviation; DF = Degrees of Freedom; χ^2 = Chi-square; F test = $\alpha 0.05$.

Group 1 = Deans; Group 2 = Department Chairmen; Group 3 = Institute Directors; Group 4 = Full-time Faculty; Group 5 = Part-time Faculty.

TABLE 2.--Main summary table for 17 departmental sub-groups of the College of Education, Michigan State University.

No.	Total		1		2		3		4		5		6		7		8		9	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
9	2.75	1.22	3.67	0.58	2.36	1.43	3.20	1.10	1.00	0.00	2.00	1.41	2.43	1.12	2.35	0.98	2.90	1.41	2.53	0.92
10	2.08	0.99	2.33	1.53	1.73	0.79	1.60	0.89	1.00	0.00	1.50	0.71	1.95	0.86	2.04	1.02	2.00	1.08	2.47	0.92
11	1.80	0.84	2.00	0.00	1.45	0.52	2.00	0.71	1.00	0.00	1.00	0.00	1.52	0.60	2.22	1.35	2.00	0.97	1.80	0.56
12	2.57	1.15	2.00	1.41	2.33	1.53	2.45	1.21	1.60	0.89	1.00	0.00	1.00	0.00	2.38	1.12	2.65	1.11	3.00	1.34
13	1.52	0.89	2.00	1.73	1.45	0.93	2.00	1.00	1.00	0.00	1.50	0.71	1.29	0.56	1.52	0.95	1.25	0.72	1.47	0.83
14	2.00	1.13	2.00	1.00	2.09	1.38	2.40	1.14	1.00	0.00	1.50	0.71	1.57	0.68	2.04	1.11	2.05	1.39	1.80	0.94
15	1.93	0.95	2.00	1.00	1.91	0.83	2.40	1.14	1.00	0.00	1.50	0.71	1.90	0.94	2.00	1.00	1.12	1.93	1.40	0.76
16	1.60	0.64	1.00	0.00	1.36	0.50	1.60	0.89	1.00	0.00	1.00	0.00	1.48	0.51	1.65	0.57	1.75	0.64	1.60	0.51
17	1.59	0.82	1.67	0.58	1.45	0.52	1.40	0.89	1.00	0.00	1.00	0.00	1.52	0.68	2.32	1.24	1.55	0.83	1.40	0.63
18	1.44	0.73	1.00	0.00	1.82	0.75	1.20	0.45	1.00	0.00	1.00	0.00	1.19	0.40	1.30	0.63	1.35	0.49	2.07	1.10
19	1.43	0.70	1.67	0.58	1.45	0.69	1.40	0.89	1.00	0.00	1.00	0.00	1.38	0.50	1.39	0.72	1.25	0.44	2.07	1.03
20	4.46	0.97	4.00	1.00	3.73	1.10	4.40	0.89	2.00	0.00	3.50	2.12	4.62	0.92	4.65	0.78	4.30	1.30	4.47	0.83
21	1.59	0.63	1.67	0.58	1.82	0.60	1.20	0.45	1.00	0.00	1.50	0.71	1.62	0.67	1.39	0.50	1.60	0.50	1.87	0.92
22	2.34	1.00	3.00	1.00	2.91	1.45	1.60	0.89	2.00	0.00	2.00	0.00	2.05	0.80	2.09	0.85	2.60	1.19	2.33	1.05
23	1.91	0.93	1.67	0.58	2.55	0.93	1.20	0.45	4.00	0.00	3.00	1.41	1.62	0.59	1.61	0.84	1.95	1.00	2.47	1.30
24	2.17	0.91	2.67	1.53	2.36	0.81	1.80	0.84	2.00	0.00	1.00	0.00	1.95	0.74	2.00	0.90	2.50	1.10	2.40	0.83
25	1.99	0.84	2.67	1.15	2.09	1.04	1.60	0.89	1.00	0.00	2.00	1.41	1.71	0.96	1.83	0.58	2.00	0.73	2.47	0.83
26	2.38	1.08	2.67	1.15	2.45	1.21	2.60	1.51	5.00	0.00	2.00	1.41	3.00	1.64	3.87	1.14	3.25	1.28	2.13	0.83
27	3.20	1.50	4.00	1.00	2.36	1.63	2.60	2.51	5.00	0.00	2.00	1.41	3.00	1.64	3.87	1.14	3.25	1.28	2.13	0.83
28	2.23	1.07	2.67	0.58	2.82	0.98	1.60	0.89	3.00	0.00	1.50	0.71	2.19	0.93	2.04	0.77	2.10	1.12	2.40	1.35
29	2.15	1.00	2.00	1.00	2.18	1.17	1.80	0.84	5.00	0.00	1.50	0.71	1.90	0.89	2.09	0.95	1.95	0.51	1.73	0.70
30	1.48	0.61	1.33	0.58	1.45	0.52	1.00	0.00	1.00	0.00	1.00	0.00	1.29	0.46	1.52	0.79	1.45	0.51	1.73	0.59
31	2.27	1.14	2.00	1.73	2.55	1.51	2.20	1.10	2.00	0.00	1.50	0.71	2.00	0.77	2.48	1.24	2.45	1.19	1.80	0.86
32	2.45	1.01	2.67	0.58	3.09	1.30	2.40	1.34	2.00	0.00	1.50	0.71	2.14	0.79	2.30	0.93	2.40	1.14	2.67	0.90
33	2.69	1.16	3.67	1.53	3.18	1.08	2.60	1.52	1.00	0.00	1.50	0.71	2.57	1.21	2.78	1.09	2.85	1.39	2.73	1.03
34	2.06	0.97	2.67	1.15	1.73	0.47	1.80	1.10	1.00	0.00	1.00	0.00	1.81	0.68	2.74	1.42	2.20	1.01	2.00	0.85
35	3.48	1.13	3.33	1.15	3.64	1.12	3.40	1.52	1.00	0.00	2.50	0.71	3.05	1.20	3.83	0.98	3.90	1.21	3.00	0.93
36	1.98	0.86	1.67	0.58	2.45	1.04	2.40	0.55	1.00	0.00	1.00	0.00	1.95	0.92	1.78	0.80	1.80	0.52	2.13	0.83
37	3.15	1.19	4.00	1.73	3.36	0.92	2.80	1.34	2.00	0.00	1.50	0.71	3.29	1.10	2.87	0.87	3.40	1.39	3.00	0.93
38	3.29	1.29	3.33	1.53	3.27	1.27	3.60	1.14	5.00	0.00	3.00	1.41	2.67	1.59	3.57	1.04	3.10	1.45	2.93	1.10
39	4.60	0.84	4.67	0.58	4.45	1.21	4.60	0.89	4.00	0.00	5.00	0.00	4.52	1.17	4.35	1.11	4.90	0.31	4.60	0.63
40	2.93	1.36	2.67	2.08	1.82	1.17	2.60	0.89	2.00	0.00	3.00	1.41	3.43	1.43	3.35	1.15	2.60	1.31	2.40	1.35
41	2.47	1.38	3.33	2.08	2.82	1.40	2.00	1.22	1.00	0.00	1.00	0.00	7.43	1.36	2.83	1.27	2.35	1.35	3.67	1.54
42	3.17	1.21	2.33	2.52	3.82	0.57	3.40	0.89	5.00	0.00	3.00	1.41	3.19	1.40	2.30	0.88	3.05	1.15	3.53	1.06
43	3.77	1.21	4.00	1.00	4.45	0.82	3.70	1.64	5.00	0.00	3.50	0.71	3.86	1.28	3.35	1.30	3.60	1.14	3.80	1.15
44	3.61	1.27	3.45	1.36	2.47	1.46	2.70	1.43	2.00	0.00	5.00	0.00	3.00	0.71	3.10	1.37	3.67	1.53	2.27	0.90
45	3.04	0.82	3.50	1.15	2.60	0.74	3.09	1.08	1.00	0.00	4.00	0.00	4.00	0.00	2.96	1.13	4.33	0.58	3.36	1.21
46	3.13	0.97	2.45	1.28	2.87	0.35	3.30	1.18	2.00	0.00	3.00	0.00	3.50	0.71	2.62	1.15	1.67	0.58	2.18	1.33
47	1.87	0.76	2.75	0.64	2.60	0.74	2.30	0.70	2.00	0.00	2.00	0.00	2.50	0.71	1.86	0.81	1.33	0.58	2.60	0.63
48	2.04	0.98	2.00	0.97	2.00	0.76	2.26	0.86	2.00	0.00	3.00	0.00	1.50	0.71	1.92	0.83	1.33	0.58	1.64	0.50
49	1.96	0.71	2.55	1.00	2.67	0.90	2.26	0.81	2.00	0.00	2.00	0.00	2.00	0.00	2.19	0.83	1.33	0.58	2.09	0.70
50	2.09	0.67	1.90	0.79	2.27	0.70	2.09	0.85	2.00	0.00	1.00	0.00	2.00	1.41	1.90	0.75	1.67	0.58	1.64	0.81

51	4.83	0.49	4.95	0.22	4.47	1.25	4.74	0.62	5.00	0.00	5.00	0.00	5.00	4.83	0.64	5.00	0.00	5.00	0.00
52	1.35	0.88	1.60	0.93	2.00	1.31	2.17	0.89	1.00	0.00	2.00	0.00	2.50	2.12	1.04	1.67	0.58	2.09	1.38
53	1.70	0.88	1.85	0.93	1.93	1.16	2.26	0.89	1.00	0.00	2.00	0.00	2.50	2.12	1.75	1.67	0.58	1.45	0.93
54	1.96	1.02	2.35	1.31	2.33	1.18	2.83	1.07	3.00	0.00	2.00	0.00	2.50	2.12	2.29	2.00	1.00	1.82	1.08
55	1.22	0.42	1.25	0.55	2.00	1.31	1.65	0.57	1.00	0.00	2.00	0.00	1.50	0.71	1.46	1.67	0.58	1.36	0.50
56	1.65	0.78	2.10	1.07	2.27	1.16	1.83	0.58	3.00	0.00	2.00	0.00	1.50	0.71	1.90	1.67	0.58	1.82	0.98
57	1.57	0.90	1.40	1.10	1.80	1.26	1.61	0.58	1.00	0.00	2.00	0.00	1.00	0.00	1.48	1.67	0.58	1.45	0.69
58	1.96	1.36	1.75	0.79	2.40	1.24	2.39	0.84	3.00	0.00	4.00	0.00	1.50	0.71	2.14	2.33	0.58	3.09	1.04
59	1.94	0.93	2.00	0.00	2.45	1.21	1.00	0.00	1.00	0.00	1.00	0.00	1.71	1.01	1.83	2.10	0.79	2.57	0.59
60	2.12	0.95	2.00	0.00	2.45	1.21	1.80	1.10	1.00	0.00	1.00	0.00	2.29	1.10	1.96	2.35	0.99	2.27	0.59
61	1.99	0.93	2.00	0.00	2.36	1.03	2.20	1.10	1.00	0.00	1.50	0.71	1.81	0.81	1.91	2.35	0.88	2.00	0.85
62	2.24	1.00	2.00	0.00	2.36	0.92	2.40	1.34	1.00	0.00	2.00	1.41	2.33	1.02	2.09	2.50	1.00	2.20	0.68
63	1.93	1.03	2.00	0.00	2.18	1.08	1.40	0.89	1.00	0.00	1.00	0.00	2.38	1.16	1.83	2.35	1.18	1.73	0.80
64	1.96	0.98	1.67	0.58	2.27	1.10	1.40	0.89	1.00	0.00	1.00	0.00	2.43	1.21	1.87	2.10	0.79	1.93	0.88
65	2.17	1.02	2.67	0.58	2.18	1.25	3.00	0.00	3.00	0.00	1.50	0.71	1.67	0.80	2.13	2.25	1.21	2.13	0.99
66	2.62	0.97	3.33	1.53	3.09	1.14	2.20	0.84	3.00	0.00	1.50	0.71	2.05	0.97	2.57	3.00	0.79	2.80	0.86
67	2.72	1.15	3.33	1.15	2.64	1.12	3.00	1.22	3.00	0.00	1.50	0.71	2.33	1.11	3.09	2.95	1.23	2.73	0.88
68	2.43	1.01	1.67	0.58	3.18	0.98	2.00	1.00	4.00	0.00	2.00	1.41	1.67	0.86	2.13	2.65	0.93	2.67	1.05
69	2.71	0.99	3.00	0.00	3.36	0.67	2.60	0.89	4.00	0.00	3.00	0.00	2.38	0.74	2.87	2.60	1.31	2.93	1.10
70	3.41	1.34	3.00	1.00	2.55	1.37	3.60	0.89	5.00	0.00	4.00	1.41	3.95	1.20	3.17	3.15	1.53	3.20	1.21
71	2.09	1.09	3.00	0.00	1.82	1.25	2.60	0.55	4.00	0.00	1.50	0.71	2.67	1.32	2.43	1.12	0.57	1.73	0.80
72	2.17	1.03	3.33	0.58	2.09	1.30	2.60	0.55	3.00	0.00	1.50	0.71	2.43	1.03	2.65	1.30	0.57	1.93	1.10
73	2.95	1.25	3.00	0.00	3.18	1.47	3.00	0.71	3.00	0.00	2.50	0.71	3.00	1.18	2.65	2.10	1.29	3.07	1.10
2-4	3.56	1.06	2.67	0.58	3.45	1.37	3.60	0.55	4.00	0.00	4.50	0.71	3.62	1.16	3.35	3.07	1.14	3.73	1.03
2-5	3.84	1.29	3.67	1.15	3.55	1.63	3.80	0.84	4.00	0.00	4.50	0.71	3.95	1.24	3.65	4.05	1.23	4.13	1.06
2-6	2.33	1.20	3.33	0.58	2.18	1.33	3.00	1.55	3.00	0.00	2.00	1.41	2.57	0.93	2.52	2.27	1.50	1.80	1.08
2-7	2.71	1.04	2.67	0.58	3.36	1.57	2.40	0.55	4.00	0.00	2.50	0.71	2.57	0.93	2.57	2.55	1.15	3.00	0.85
2-8	1.80	0.88	2.00	0.00	1.91	1.38	1.80	0.84	3.00	0.00	1.50	0.71	1.43	0.60	2.00	0.90	1.07	1.80	0.86
2-9	1.99	0.90	2.00	0.00	1.82	1.33	2.00	0.71	2.00	0.00	1.50	0.71	1.86	0.79	2.04	0.71	1.20	2.20	0.86
2-10	3.55	1.21	4.00	1.00	2.55	1.44	4.00	1.00	4.00	0.00	3.50	0.71	3.62	1.24	3.87	1.10	1.39	3.20	1.08
2-11	2.72	1.28	3.67	1.15	3.73	1.42	2.20	0.84	2.00	0.00	2.50	0.71	2.29	1.45	2.61	1.31	1.36	3.00	0.93
2-12	3.71	1.19	2.33	1.15	3.27	1.62	3.40	1.14	4.00	0.00	2.50	0.71	3.71	1.31	3.91	1.16	1.20	3.73	0.88
2-13	3.58	1.20	3.00	0.00	4.09	1.38	3.40	0.55	5.00	0.00	4.00	1.41	3.62	0.97	3.26	1.05	1.45	1.80	0.77
2-14	2.38	1.16	3.00	0.00	3.00	1.18	3.20	0.84	4.00	0.00	1.00	0.00	2.48	0.98	2.30	2.30	1.45	1.80	0.77
2-15	3.01	1.12	3.00	0.00	3.55	1.13	2.80	0.84	5.00	0.00	3.50	0.71	3.29	1.06	2.87	1.18	1.28	2.60	0.99
2-16	2.85	1.08	3.00	1.00	2.73	1.10	2.80	0.84	3.00	0.00	3.00	1.41	3.24	1.14	2.83	1.27	0.91	2.73	0.80
2-17	3.97	0.95	4.00	1.00	3.73	1.10	4.00	0.71	5.00	0.00	5.00	0.00	4.00	0.89	4.04	0.93	1.00	4.00	0.93
2-18	2.74	1.09	3.33	0.58	3.36	1.12	2.00	1.41	4.00	0.00	2.00	1.41	2.48	1.08	2.57	1.16	1.10	3.20	0.77
2-19	2.68	1.27	2.00	1.00	2.45	1.37	2.60	1.14	2.00	0.00	4.50	0.71	2.38	1.28	2.65	1.34	1.10	3.27	0.96

Legend: $\bar{M}$ = Mean; SD = Standard Deviation; DF = Degrees of Freedom; χ^2 = Chi-square; F test = $\alpha 0.05$.

1 = School for Advanced Studies; 2 = School for Teacher Education; 3 = Office of International Programs;
 4 = Office of Off-Campus Affairs; 5 = Special Projects; 6 = Administration and Higher Education; 7 = Counseling, Personnel
 Services and Educational Psychology; 8 = Elementary and Special Education; 9 = Health, Physical Education and Recreation.

53	10		11		12		13		14		15		16		17		F
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	
9	3.17	1.15	5.00	0.00	2.00	0.00	5.00	0.00	3.00	0.82	2.75	1.71	4.00	0.82	2.00	0.00	84.541
10	2.00	0.95	3.00	0.00	2.00	0.00	1.50	0.71	3.25	0.96	2.25	1.26	3.25	1.26	2.00	0.00	63.035
11	1.65	0.65	2.00	0.00	2.00	0.00	1.50	0.71	2.00	0.00	1.75	0.96	1.50	0.58	2.00	0.00	47.610
12	2.33	0.62	2.70	1.06	1.00	0.00	4.00	0.00	2.00	1.41	3.00	0.82	2.75	0.96	3.50	1.29	85.753
13	1.57	0.95	1.00	0.00	2.00	0.00	1.50	0.71	2.00	0.00	1.75	1.50	2.50	1.73	2.00	0.00	73.658
14	2.09	1.08	1.00	0.00	3.00	0.00	1.50	0.71	3.25	1.26	2.00	1.41	3.00	1.83	3.00	0.00	56.221
15	1.87	0.76	1.00	0.00	2.00	0.00	1.50	0.71	1.50	0.58	2.50	1.91	2.25	1.89	3.00	0.00	55.410
16	1.91	0.90	2.00	0.00	2.00	0.00	1.50	0.71	1.50	0.58	1.00	0.00	1.75	0.50	2.00	0.00	41.233
17	1.43	0.59	2.00	0.00	2.00	0.00	1.00	0.00	1.50	0.58	1.75	0.96	1.00	0.00	3.00	0.00	55.800
18	1.52	0.79	1.00	0.00	4.00	0.00	1.00	0.00	1.25	0.50	1.25	0.50	1.50	0.58	1.00	0.00	72.304
19	1.43	0.59	1.00	0.00	4.00	0.00	1.00	0.00	1.50	0.58	1.00	0.00	1.00	0.00	1.00	0.00	87.865
20	4.52	0.90	5.00	0.00	5.00	0.00	5.00	0.00	4.50	0.58	5.00	0.00	5.00	0.00	5.00	0.00	72.437
21	1.83	0.65	2.00	0.00	2.00	0.00	1.00	0.00	1.25	0.50	1.50	0.58	1.00	0.00	1.00	0.00	41.209
22	2.52	0.79	3.00	0.00	4.00	0.00	2.50	0.71	2.50	1.00	2.25	1.50	1.75	0.50	2.00	0.00	67.368
23	1.91	0.73	3.00	0.00	1.00	0.00	2.00	0.00	1.75	0.50	2.50	1.29	1.75	0.50	1.00	0.00	91.429
24	2.35	0.83	2.00	0.00	2.00	0.00	2.00	1.41	2.25	0.96	2.50	1.29	1.50	0.58	2.00	0.00	59.142
25	2.04	0.72	2.00	0.00	4.00	0.00	4.00	1.41	3.25	0.58	2.25	1.50	1.75	0.50	2.00	0.00	58.766
26	2.22	0.95	1.00	0.00	4.00	0.00	4.00	1.41	2.75	1.89	2.00	0.82	2.50	0.58	2.00	0.00	72.471
27	3.52	1.31	2.00	0.00	5.00	0.00	4.00	1.41	2.75	1.89	3.50	1.91	3.50	1.73	5.00	0.00	96.596
28	2.61	1.16	3.00	0.00	2.00	0.00	4.00	1.41	1.50	1.00	1.25	0.50	1.75	0.96	2.00	0.00	88.853
29	2.57	1.16	2.00	0.00	2.00	0.00	3.50	2.12	2.50	1.00	1.75	0.50	3.25	0.96	4.00	0.00	119.744
30	1.65	0.71	2.00	0.00	2.00	0.00	2.00	1.41	1.75	0.50	1.25	0.50	1.25	0.50	2.00	0.00	52.638
31	2.61	1.20	2.00	0.00	1.00	0.00	1.00	0.00	2.50	1.00	2.00	1.41	3.25	0.96	2.00	0.00	67.757
32	2.91	1.08	2.00	0.00	2.00	0.00	2.50	0.70	1.75	0.50	2.75	0.96	2.00	0.00	2.00	0.00	77.314
33	3.43	0.95	2.00	0.00	4.00	0.00	3.50	2.12	3.00	0.82	1.75	0.50	2.75	1.50	4.00	0.00	62.100
34	1.83	0.58	1.00	0.00	4.00	0.00	2.50	0.71	2.25	0.50	1.75	0.50	2.00	1.41	2.00	0.00	91.988
35	3.78	0.95	2.00	0.00	5.00	0.00	3.50	0.71	2.50	1.00	3.50	0.58	4.00	0.82	4.00	0.00	105.378
36	2.26	1.10	2.00	0.00	2.00	0.00	3.00	1.41	1.75	0.96	1.50	0.58	1.50	0.58	2.00	0.00	51.236
37	3.57	1.16	2.00	0.00	3.00	0.00	4.00	1.00	2.50	1.29	2.50	0.58	3.00	1.83	2.00	0.00	63.946
38	3.52	1.08	2.00	0.00	5.00	0.00	5.00	0.00	3.75	1.50	3.50	1.29	3.50	1.29	2.00	0.00	75.064
39	4.57	0.66	5.00	0.00	5.00	0.00	5.00	0.00	4.50	1.00	4.75	0.50	5.00	0.00	4.00	0.00	45.338
40	2.96	1.33	2.00	0.00	4.00	0.00	3.00	1.41	4.00	0.00	3.25	2.06	2.50	1.00	4.00	0.00	84.461
41	2.35	1.47	2.00	0.00	4.00	0.00	1.00	0.00	3.75	0.96	2.25	1.26	1.50	1.00	2.00	0.00	66.297
42	3.17	1.23	3.00	0.00	3.00	0.00	4.00	0.00	4.00	0.00	3.00	1.83	4.00	1.00	4.00	0.00	106.104
43	3.70	1.40	4.00	0.00	4.00	0.00	5.00	0.00	3.25	1.26	3.50	1.29	5.00	0.00	4.00	0.00	63.865
44	4.40	0.55	1.00	0.00	3.00	0.00	3.05	1.20	4.00	0.82	2.25	1.26	2.75	2.06	5.00	0.00	82.006
45	3.00	0.71	3.00	0.00	2.50	2.12	2.33	1.02	2.00	1.41	2.00	1.41	2.25	1.26	4.00	0.00	115.900
46	3.00	1.22	2.00	0.00	2.00	0.00	2.14	1.01	1.50	0.58	1.00	0.00	2.00	0.82	3.00	0.00	111.791
47	1.80	0.84	1.00	0.00	1.50	0.71	1.24	0.54	2.75	0.50	1.75	0.96	2.75	0.50	3.00	0.00	142.428
48	1.40	0.89	1.00	0.00	1.00	0.00	1.81	0.68	2.00	0.82	1.75	0.96	1.50	0.58	3.00	0.00	51.877
49	2.00	0.71	2.00	0.00	1.50	0.71	2.05	0.86	2.50	1.00	1.75	0.96	2.00	0.00	2.00	0.00	53.656
50	1.60	0.89	1.00	0.00	1.00	0.00	1.71	0.72	2.00	0.82	1.75	0.50	2.00	0.82	2.00	0.00	54.766

51	4.60	0.89	5.00	0.00	5.00	0.00	4.81	0.87	5.00	0.00	5.00	0.00	5.00	0.00	5.00	0.00	5.00	0.00	5.00	0.00	5.00	0.00	5.00	0.00	68	31.580	0.65
52	1.40	0.89	1.00	0.00	3.50	0.71	1.62	0.97	1.25	0.50	2.50	1.73	1.25	0.50	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	85	107.554	0.09
53	1.80	0.84	1.00	0.00	1.50	0.71	1.95	0.97	1.25	0.50	2.00	0.82	2.25	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85	93.825	0.40
54	2.80	1.48	1.00	0.00	2.00	0.00	2.33	1.15	1.50	1.00	3.00	1.41	2.50	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85	101.411	0.22
55	1.00	0.00	1.00	0.00	1.00	0.00	1.33	0.48	1.00	0.00	1.50	1.00	1.25	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85	99.490	0.08
56	2.40	1.34	1.00	0.00	2.00	1.41	1.81	0.68	1.25	0.51	2.50	1.29	1.75	0.50	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	85	87.664	0.58
57	1.80	0.84	1.00	0.00	1.00	0.00	1.38	0.68	1.00	0.00	1.25	0.50	1.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	85	75.120	0.88
58	2.60	1.52	1.00	0.00	2.00	0.00	2.10	0.83	1.25	0.50	2.25	1.26	1.50	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85	115.898	0.01
59	2.04	0.82	0.00	0.00	2.00	0.00	1.50	0.71	2.00	1.15	2.50	1.29	1.50	0.58	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	85	142.390	0.01
60	1.91	0.79	1.00	0.00	3.00	0.00	1.50	0.71	2.50	1.29	2.50	1.29	1.75	0.96	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	85	75.652	0.15
61	2.04	0.82	3.00	0.00	2.00	0.00	1.50	0.71	2.00	1.41	2.50	1.29	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85	96.699	0.15
62	2.26	0.92	2.00	0.00	3.00	0.00	1.50	0.71	2.00	0.82	2.50	1.29	2.00	1.41	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	85	84.770	0.91
63	1.87	0.87	1.00	0.00	2.00	0.00	1.50	0.71	1.25	0.50	1.75	0.96	1.50	1.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	85	86.635	0.37
64	2.04	0.98	2.00	0.00	2.00	0.00	1.50	0.71	1.00	0.00	1.50	1.00	1.50	0.58	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	85	94.158	0.24
65	2.35	1.03	1.00	0.00	3.00	0.00	2.00	0.00	2.50	0.58	1.75	0.96	2.00	0.82	5.00	0.00	5.00	0.00	5.00	0.00	5.00	0.00	5.00	0.00	85	121.068	0.16
66	2.52	0.95	3.00	0.00	2.00	0.00	3.00	0.00	3.00	0.82	3.00	1.41	3.00	0.82	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	68	69.273	0.20
67	2.52	1.04	3.00	0.00	3.00	0.00	2.00	1.41	3.00	0.00	3.00	1.83	1.50	0.58	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	68	69.426	0.43
68	2.74	0.75	3.00	0.00	1.00	0.00	2.50	0.71	2.75	0.50	3.75	0.96	1.75	0.50	5.00	0.00	5.00	0.00	5.00	0.00	5.00	0.00	5.00	0.00	68	124.374	0.00
69	2.52	0.85	3.00	0.00	2.00	0.00	3.00	0.00	2.75	0.50	3.25	1.89	2.00	0.82	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	85	77.631	0.55
70	3.52	1.34	3.00	0.00	3.00	0.00	2.50	0.71	3.25	1.26	4.00	2.00	4.00	1.41	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	85	75.773	0.60
71	1.96	1.11	3.00	0.00	1.00	0.00	1.50	0.71	3.00	0.00	1.75	0.96	2.25	0.96	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	68	102.656	0.00
72	2.13	0.97	3.00	0.00	3.00	0.00	1.00	0.00	3.25	0.50	1.50	0.58	2.00	0.82	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	68	76.681	0.00
73	3.57	1.27	3.00	0.00	1.00	0.00	2.50	0.71	3.00	0.82	3.00	0.82	3.75	0.96	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	68	71.754	0.09
2-4	3.52	1.04	3.00	0.00	3.00	0.00	3.00	0.00	3.50	0.58	4.25	0.96	4.25	0.96	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	85	69.696	0.88
2-5	3.87	1.18	5.00	0.00	1.00	0.00	4.00	1.41	3.25	1.50	3.50	1.91	4.50	1.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	85	90.448	0.72
2-6	2.26	0.92	2.00	0.00	1.00	0.00	1.50	0.71	2.50	0.58	2.50	1.83	2.50	1.41	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	68	59.821	0.86
2-7	2.83	1.07	2.00	0.00	4.00	0.00	2.00	1.41	2.50	0.58	3.00	1.50	2.50	1.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	68	74.536	0.77
2-8	1.96	0.82	2.00	0.00	2.00	0.00	2.00	1.41	1.50	0.58	1.25	0.50	1.75	0.50	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	85	64.603	0.83
2-9	1.96	0.82	2.00	0.00	2.00	0.00	1.50	0.71	1.50	0.58	2.00	1.41	1.75	0.96	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	68	70.336	0.84
2-10	3.61	1.12	3.00	0.00	3.00	0.00	3.00	0.00	3.75	1.26	3.25	1.50	4.25	1.41	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	68	77.684	0.38
2-11	2.52	0.95	3.00	0.00	4.00	0.00	1.50	0.71	2.75	1.26	3.00	2.31	3.00	1.50	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	68	79.562	0.33
2-12	3.91	1.04	3.00	0.00	5.00	0.00	3.00	0.00	3.50	1.29	4.50	1.00	3.75	1.50	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	68	72.473	0.67
2-13	4.00	1.04	4.00	0.00	3.00	0.00	0.50	0.71	2.50	1.00	4.25	0.96	4.00	1.41	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	85	162.377	0.00
2-14	2.65	1.11	1.00	0.00	3.00	0.00	3.00	1.41	1.50	0.58	3.00	1.50	1.75	0.50	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	85	188.538	0.01
2-15	2.78	1.00	3.00	0.00	1.00	0.00	2.50	0.71	2.50	1.00	3.00	1.63	3.00	1.41	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	68	73.668	0.31
2-16	2.52	1.04	3.00	0.00	2.00	0.00	1.50	0.71	2.25	0.96	3.75	0.96	2.00	1.15	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	68	62.678	0.42
2-17	3.78	1.04	4.00	0.00	3.00	0.00	3.50	0.71	3.25	1.26	4.50	1.00	4.25	0.96	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	68	45.235	0.81
2-18	2.96	0.71	2.00	0.00	2.00	0.00	4.50	0.71	2.00	0.82	3.25	1.50	2.75	0.96	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	68	98.762	0.03
2-19	2.70	1.29	1.00	0.00	1.00	0.00	2.00	1.41	2.25	1.26	3.00	1.63	2.00	1.41	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	68	60.889	0.41

Legend: $\bar{M}$ = Means; SD = Standard Deviation; DF = Degrees of Freedom; χ^2 = Chi-square; F test = α 0.05

10 = Secondary Education and Curriculum; 11 = Student Teaching; 12 = Human Learning Institute; 13 = Humanities Teaching Institute; 14 = Learning Systems Institute; 15 = Mott Institute for Community Improvement; 16 = Science-Mathematics Teaching Center; 17 = Social Science Teaching Institute.

TABLE 3.--Main summary table of the four teaching ranks of the College of Education, Michigan State University.

Teaching Rank	Total		1		2		3		4		DF	χ^2	P
	M	SD	M	SD	M	SD	M	SD	M	SD			
9	2.75	1.22	2.73	1.03	2.66	1.10	2.87	1.38	2.71	1.30	16	14.498	0.86
10	2.08	0.99	2.45	0.86	2.09	1.00	2.00	0.86	1.98	1.10	16	20.633	0.39
11	1.80	0.84	1.82	0.80	1.81	0.86	1.87	1.06	1.71	0.73	16	14.176	0.75
12	2.57	1.15	2.64	1.05	2.63	0.94	2.52	1.26	2.57	1.25	16	18.404	0.94
13	1.52	0.89	1.68	1.04	1.50	0.88	1.45	0.77	1.46	0.91	12	18.407	0.49
14	2.00	1.13	2.18	1.05	2.38	1.31	1.81	1.19	1.80	0.98	16	22.417	0.11
15	1.93	0.95	2.14	0.77	2.03	1.03	1.84	0.97	1.82	0.97	16	16.941	0.59
16	1.60	0.64	1.55	0.51	1.59	0.71	1.74	0.51	1.54	0.69	12	20.940	0.48
17	1.56	0.82	1.50	0.67	1.63	0.71	1.90	1.16	1.45	0.69	16	16.321	0.13
18	1.44	0.73	1.59	0.73	1.59	0.87	1.26	0.44	1.38	0.73	12	17.921	0.18
19	1.43	0.70	1.50	0.80	1.56	0.76	1.39	0.62	1.34	0.64	12	11.933	0.58
20	4.46	0.97	4.60	0.80	4.31	1.06	4.52	1.18	4.55	0.81	20	25.279	0.21
21	1.59	0.63	1.86	0.71	1.56	0.56	1.55	0.57	1.46	0.57	12	43.153	0.01
22	2.34	1.06	2.09	0.52	2.38	0.87	2.58	1.12	2.27	0.96	16	23.572	0.41
23	1.91	0.73	2.45	1.10	2.16	0.99	1.84	0.93	1.61	0.68	16	19.687	0.00
24	2.17	0.91	2.23	0.87	2.28	0.96	2.32	0.98	1.98	0.82	16	13.599	0.28
25	1.99	0.84	2.09	0.87	2.16	0.88	1.87	0.72	1.89	0.82	12	16.722	0.38
26	2.38	1.08	2.14	0.94	2.63	1.13	2.81	1.17	2.14	0.98	16	16.530	0.01
27	3.20	1.50	3.00	1.48	3.53	1.44	3.19	1.33	3.14	1.60	20	30.728	0.51
28	2.23	1.07	2.68	1.25	2.56	1.08	2.10	1.11	1.95	0.86	16	21.813	0.04
29	2.15	1.00	2.05	0.90	2.31	1.06	2.39	1.12	1.96	0.87	16	16.818	0.16
30	1.48	0.61	1.55	0.51	1.59	0.56	1.52	0.77	1.34	0.48	12	47.941	0.04
31	2.77	1.14	2.23	1.23	2.25	0.98	2.23	1.12	2.36	1.23	16	7.920	0.86
32	2.45	1.01	2.32	1.04	2.56	1.05	2.32	0.98	2.50	0.95	20	29.904	0.73
33	2.69	1.16	2.41	1.10	2.69	1.23	2.90	1.04	2.70	1.22	16	12.755	0.63
34	2.06	0.91	1.96	0.89	2.25	1.19	2.32	1.08	1.91	0.77	16	17.208	0.11
35	3.48	1.11	3.36	1.05	3.41	1.16	3.90	0.98	3.32	1.18	16	13.781	0.25
36	1.98	0.86	2.00	0.93	1.97	0.78	2.03	0.75	1.93	0.95	16	13.875	0.92
37	3.15	1.10	3.09	1.23	2.97	1.28	3.19	1.17	3.25	1.16	16	8.397	0.92
38	3.29	1.29	3.18	1.22	3.28	1.20	3.34	1.48	3.29	1.25	20	11.568	0.93
39	4.60	0.84	4.82	0.39	4.69	1.95	4.29	1.22	4.70	0.60	20	24.613	0.24
40	2.93	1.36	2.50	0.34	2.88	1.39	2.84	1.34	3.20	1.35	16	15.631	0.39
41	2.47	1.38	2.55	1.44	2.69	1.46	2.29	1.16	2.46	1.46	16	14.821	0.93
42	3.17	1.21	3.64	0.95	3.34	1.26	3.13	0.99	2.89	1.34	20	21.302	0.13
43	3.77	1.21	4.18	0.96	3.84	1.14	3.71	1.07	3.59	1.39	20	16.055	0.45
44	3.10	1.37	3.18	1.26	2.63	1.36	3.73	1.23	3.25	1.40	16	16.247	0.37
45	2.96	1.13	2.45	1.01	2.91	1.06	3.45	1.11	2.96	1.17	20	22.187	0.13
46	2.62	1.15	2.37	1.18	2.60	1.21	2.87	0.99	2.61	1.20	20	15.807	0.53
47	2.03	0.81	2.32	0.72	2.16	0.81	2.13	0.81	1.79	0.80	12	15.759	0.03
48	1.92	0.83	1.86	0.89	2.00	0.84	1.90	0.83	1.89	0.82	12	7.376	0.94
49	2.19	0.83	2.09	1.02	2.28	0.85	2.13	0.85	2.20	0.75	16	18.172	0.89
50	1.90	0.75	1.98	0.95	2.13	0.79	1.94	0.73	1.71	0.62	16	17.228	0.04
51	4.83	0.64	4.73	0.70	4.84	0.72	4.87	0.50	4.86	0.62	16	32.978	0.60
52	1.75	1.04	2.01	1.09	1.88	0.91	1.65	1.02	1.63	1.10	20	19.021	0.47
53	1.85	0.97	1.91	0.97	1.97	1.00	1.97	1.02	1.68	0.96	20	12.250	0.54
54	2.29	1.17	2.27	1.03	2.44	1.11	2.35	1.17	2.18	1.29	20	16.110	0.82
55	1.40	0.68	1.64	1.00	1.56	0.76	1.35	0.55	1.23	0.50	20	19.219	0.07
56	1.90	0.89	2.14	1.04	2.03	0.74	2.00	1.03	1.63	0.75	20	30.052	0.02
57	1.48	0.81	1.59	1.10	1.56	0.76	1.61	1.02	1.30	0.54	20	14.504	0.21
58	2.14	1.09	2.27	1.24	2.25	0.98	1.84	0.97	2.18	1.16	20	14.504	0.53
59	1.94	0.93	2.00	1.02	2.16	0.88	1.94	0.77	1.80	1.00	20	15.087	0.45
60	2.12	0.95	2.18	1.05	2.19	0.86	2.13	0.88	2.05	1.02	20	11.489	0.93
61	1.99	0.93	2.05	0.95	2.13	0.91	2.10	0.83	1.80	0.98	16	18.802	0.15
62	2.24	1.00	2.00	0.93	2.31	1.00	2.42	0.89	2.18	1.10	20	18.574	0.63
63	1.93	1.03	1.50	0.60	2.06	1.11	1.87	0.81	2.05	1.18	20	21.628	0.30
64	1.96	0.98	1.45	0.74	2.13	0.68	2.06	0.93	2.00	1.06	20	24.396	0.15
65	2.17	1.02	2.18	1.14	2.28	0.89	2.13	1.09	2.11	1.04	20	28.209	0.69
66	2.62	0.97	3.00	0.87	2.75	0.92	2.55	0.93	2.43	1.04	16	20.617	0.22
67	2.72	1.15	2.68	1.29	2.38	0.94	2.71	1.22	2.93	1.17	16	22.641	0.42
68	2.43	1.01	2.86	0.99	2.03	0.88	2.52	0.93	2.14	1.09	16	24.161	0.05
69	2.71	0.99	2.91	1.06	2.91	1.03	2.65	0.91	2.55	0.99	20	22.571	0.43
70	3.41	1.34	3.36	1.47	3.56	1.27	3.16	1.39	3.48	1.33	20	18.090	0.81
71	2.09	1.09	1.55	0.74	2.09	1.09	2.03	1.05	2.32	1.19	16	14.245	0.17
72	2.12	1.03	2.09	1.11	1.94	1.01	2.10	1.01	2.34	1.03	16	20.795	0.38
73	2.95	1.25	2.82	1.40	3.00	1.16	2.81	1.28	3.05	1.26	16	10.876	0.90
2-4	3.56	1.06	2.68	0.99	3.63	1.18	3.65	0.80	3.45	1.16	20	20.565	0.72
2-5	3.84	1.29	3.32	1.39	3.81	1.35	4.03	1.82	3.98	1.23	20	25.799	0.18
2-6	2.33	1.20	2.32	1.25	1.94	0.88	2.39	1.33	2.52	1.26	16	12.962	0.36
2-7	2.71	1.04	2.86	1.04	2.75	1.02	2.45	0.99	2.75	1.10	16	16.840	0.61
2-8	1.80	0.88	1.82	0.96	1.75	0.76	1.77	1.18	1.80	0.72	20	16.513	0.81
2-9	1.99	0.90	1.77	1.07	1.88	0.83	1.97	0.91	2.13	0.88	16	18.104	0.56
2-10	3.55	1.21	2.82	1.37	3.63	1.07	3.60	1.25	3.75	1.15	16	20.612	0.04
2-11	2.72	1.28	2.77	1.38	2.69	1.33	2.52	1.21	2.84	1.29	16	8.291	0.76
2-12	3.71	1.19	3.32	1.04	3.84	1.14	3.81	1.11	3.75	1.31	16	24.979	0.47
2-13	3.58	1.20	3.77	1.27	3.75	1.14	3.03	1.43	3.71	1.02	20	28.982	0.07
2-14	2.38	1.16	2.18	1.14	2.44	1.22	2.55	1.09	2.32	1.21	20	20.857	0.75
2-15	3.01	1.12	2.86	1.21	2.94	1.22	3.00	1.06	3.11	1.11	16	11.206	0.91
2-16	2.85	1.08	2.86	1.08	2.84	1.02	2.65	0.95	2.95	1.20	16	10.844	0.87
2-17	3.97	0.95	3.91	0.97	4.16	0.92	3.52	1.03	4.14	0.84	16	17.635	0.03
2-18	2.74	1.09	2.86	1.08	2.72	0.92	2.65	1.20	2.75	1.15	16	14.947	0.97
2-19	2.68	1.27	2.77	1.27	2.56	1.19	2.77	1.26	2.64	1.37	16	13.717	0.92

Legend: M = Mean; SD = Standard Deviation; DF = Degrees of Freedom; χ^2 = Chi-square; P test = α 0.05.

Group 1 = Instructor; Group 2 = Assistant Professor; Group 3 = Associate Professor; Group 4 = Professor.

TABLE 4.--Main summary table for tenured and non-tenured academic personnel of the College of Education, Michigan State University.

Item	Total		1		2		DF	χ^2	F
	M	SD	M	SD	M	SD			
9	2.75	1.22	2.80	1.37	2.69	1.03	8	10.150	0.69
10	2.08	0.99	2.02	1.02	2.20	0.96	8	5.443	0.51
11	1.80	0.84	1.74	0.76	1.92	0.98	8	6.578	0.38
12	2.57	1.15	2.64	1.25	2.45	0.97	8	7.756	0.70
13	1.52	0.89	1.44	0.83	1.63	0.94	6	5.794	0.36
14	2.00	1.13	1.84	1.05	2.24	1.18	8	14.159	0.70
15	1.93	0.95	1.81	0.92	2.12	0.97	8	9.500	0.16
16	1.60	0.64	1.60	0.63	1.57	0.57	6	23.063	0.12
17	1.59	0.82	1.55	0.83	1.69	0.84	8	5.720	0.57
18	1.44	0.73	1.43	0.77	1.47	0.67	6	5.655	0.88
19	1.43	0.70	1.37	0.66	1.57	0.76	6	5.663	0.22
20	4.46	0.97	4.58	0.79	4.25	1.20	10	12.389	0.11
21	1.59	0.63	1.55	0.58	1.67	0.71	6	5.111	0.60
22	2.34	1.00	2.36	1.01	2.33	1.01	8	6.977	0.83
23	1.91	0.93	1.76	0.83	2.18	1.05	8	8.581	0.03
24	2.17	0.91	2.10	0.89	2.29	0.90	8	6.956	0.52
25	1.99	0.84	1.90	0.78	2.14	0.92	6	4.244	0.19
26	2.38	1.08	2.29	1.07	2.55	1.12	8	4.421	0.37
27	3.20	1.50	3.18	1.52	3.31	1.48	10	9.748	0.30
28	2.23	1.07	2.02	1.00	2.55	1.06	8	24.680	0.01
29	2.15	1.00	2.12	1.05	2.22	0.90	8	4.601	0.82
30	1.48	0.61	1.44	0.60	1.57	0.64	6	2.150	0.50
31	2.27	1.14	2.29	1.14	2.25	1.13	8	4.144	0.89
32	2.45	1.04	2.51	0.92	2.37	1.11	10	30.981	0.72
33	2.69	1.16	2.74	1.20	2.63	1.08	8	6.248	0.67
34	2.06	0.97	2.06	0.93	2.06	1.07	8	5.852	0.87
35	3.48	1.13	3.42	1.12	3.53	1.16	8	8.629	0.40
36	1.98	0.86	1.93	0.86	2.06	0.86	8	4.835	0.76
37	3.15	1.19	3.27	1.15	2.92	1.21	8	8.380	0.27
38	3.29	1.20	3.35	1.25	3.20	1.39	10	10.564	0.83
39	4.60	0.84	4.56	0.87	4.67	0.82	10	6.610	0.74
40	2.93	1.36	3.01	1.40	2.76	1.29	8	8.127	0.56
41	2.47	1.38	2.44	1.37	2.59	1.40	8	5.110	0.28
42	3.17	1.21	3.07	1.25	3.33	1.14	10	8.963	0.44
43	3.77	1.21	3.70	1.27	3.96	1.06	10	12.181	0.14
44	3.10	1.37	3.09	1.42	3.14	1.31	8	4.934	0.81
45	2.96	1.12	3.10	1.14	2.73	1.08	10	15.565	0.26
46	2.62	1.15	2.79	1.15	2.33	1.09	10	11.625	0.09
47	2.03	0.81	1.93	0.79	2.20	0.83	6	8.234	0.11
48	1.92	0.83	1.90	0.80	1.92	0.87	6	5.333	0.62
49	2.19	0.83	2.25	0.84	2.08	0.82	8	5.934	0.58
50	1.90	0.75	1.84	0.72	2.06	0.76	8	50.336	0.02
51	4.83	0.64	4.88	0.54	4.73	0.80	8	3.238	0.68
52	1.75	1.04	1.69	1.09	1.84	0.97	10	17.312	0.62
53	1.85	0.97	1.79	0.99	1.94	0.95	10	7.349	0.60
54	2.29	1.17	2.26	1.25	2.33	1.07	10	10.233	0.90
55	1.40	0.60	1.34	0.62	1.53	0.78	10	7.047	0.14
56	1.90	0.89	1.81	0.88	2.08	0.93	10	4.601	0.23
57	1.48	0.81	1.38	0.72	1.67	0.93	10	26.285	0.09
58	2.14	1.09	2.10	1.08	2.24	1.11	10	10.309	0.53
59	1.94	0.93	1.90	0.92	1.96	0.94	10	12.257	0.11
60	2.12	0.95	2.02	0.93	2.24	0.97	10	9.652	0.10
61	1.99	0.93	1.97	0.91	2.00	0.94	8	10.363	0.41
62	2.24	1.00	2.29	1.01	2.18	0.99	10	4.141	0.82
63	1.93	1.03	2.02	1.06	1.78	0.97	10	10.225	0.42
64	1.96	0.98	2.08	1.04	1.78	0.88	10	10.543	0.14
65	2.17	1.02	2.10	1.07	2.29	0.97	10	11.685	0.43
66	2.62	0.97	2.48	0.99	2.80	0.85	8	16.799	0.04
67	2.72	1.15	2.72	1.20	2.69	1.10	8	8.467	0.64
68	2.43	1.01	2.29	1.02	2.69	0.97	8	10.327	0.08
69	2.71	0.99	2.56	1.00	2.96	0.94	10	11.755	0.07
70	3.41	1.34	3.49	1.32	3.31	1.36	10	7.784	0.32
71	2.09	1.09	2.19	1.09	1.88	1.03	8	14.518	0.26
72	2.17	1.03	2.18	1.01	2.20	1.10	8	5.833	0.37
73	2.95	1.25	3.02	1.22	2.86	1.25	8	8.698	0.54
2-4	3.56	1.06	3.61	1.07	3.61	0.92	10	39.077	0.00
2-5	3.84	1.29	3.99	1.23	3.61	1.39	10	13.855	0.17
2-6	2.33	1.20	2.33	1.29	2.31	1.05	8	8.259	0.87
2-7	2.71	1.04	2.63	1.05	2.82	1.03	8	6.706	0.67
2-8	1.80	0.88	1.82	0.85	1.76	0.95	10	5.243	0.96
2-9	1.99	0.90	2.09	0.91	1.82	0.89	8	5.596	0.26
2-10	3.55	1.21	3.71	1.15	3.31	1.30	8	6.968	0.13
2-11	2.72	1.28	2.74	1.27	2.65	1.28	8	6.167	0.56
2-12	3.71	1.19	3.75	1.25	3.67	1.09	8	9.396	0.53
2-13	3.58	1.20	3.54	1.23	3.65	1.18	10	4.818	0.93
2-14	2.38	1.16	2.36	1.19	2.43	1.12	10	5.239	0.89
2-15	3.01	1.12	3.07	1.10	2.88	1.19	8	8.696	0.58
2-16	2.85	1.08	2.87	1.11	2.84	1.05	8	6.442	0.73
2-17	3.97	0.95	3.98	0.95	4.00	0.94	8	5.540	0.50
2-18	2.74	1.09	2.81	1.17	2.67	0.95	8	11.615	0.34
2-19	2.68	1.27	2.69	1.28	2.71	1.29	8	8.405	0.64

Legend: $\bar{M}_2$ = Mean; SD = Standard Deviation; DF = Degrees of Freedom;
 χ^2 = Chi-square; F test = α 0.05.

Group 1 = Tenured; Group 2 = Non-tenured.

TABLE 5.--Main summary table for College of Education mean score totals and school administrator's mean scores.

Expt	College Totals			School Totals			6			7			8			9			DF	χ^2	F
	$\bar{M}$	SD		$\bar{M}$	SD		$\bar{M}$	SD		$\bar{M}$	SD		$\bar{M}$	SD		$\bar{M}$	SD				
9	2.75	1.22	2.13	1.05	1.78	.97	1.80	.92	2.30	1.07	2.20	1.14	15	5.649	0.00						
10	2.08	0.99	1.69	.92	1.56	.88	1.39	1.06	1.82	.88	1.80	.82	12	11.871	0.00						
11	1.80	0.84	1.34	.95	1.29	.89	1.70	1.06	1.64	.82	2.50	.97	12	16.362	0.92						
12	2.57	1.15	2.34	1.10	2.11	1.05	1.90	1.10	2.39	1.03	2.80	1.32	15	12.295	0.13						
13	1.52	0.89	1.81	1.23	1.44	1.13	1.70	1.06	1.94	1.03	1.80	1.40	15	14.930	0.14						
14	2.00	1.13	1.85	.97	1.44	.88	1.80	1.14	1.97	.98	1.90	1.10	15	8.939	0.24						
15	1.93	0.95	2.02	.98	1.78	.97	2.20	1.14	2.03	.92	2.00	1.15	12	6.635	0.75						
16	1.60	0.64	1.82	1.05	1.78	.97	1.80	1.32	1.70	1.02	2.00	1.05	12	10.537	0.55						
17	1.59	0.82	1.60	.91	1.44	.91	1.50	.97	1.53	.87	1.90	.93	12	10.243	0.91						
18	1.44	0.73	1.50	.74	1.46	.78	1.40	.83	1.43	.83	1.50	.97	9	4.770	0.93						
19	1.43	0.70	1.45	.69	1.33	.60	1.60	.83	1.45	.71	1.50	.97	9	4.770	0.93						
20	4.46	0.97	4.11	1.16	3.80	1.45	3.60	.97	4.13	1.10	4.00	.97	12	20.911	0.00						
21	1.59	0.63	1.94	.77	2.20	1.09	2.10	.97	1.92	.77	1.90	.84	9	9.766	0.00						
22	2.34	1.00	2.52	1.07	2.78	1.39	2.60	.99	3.30	1.05	3.50	1.27	12	13.313	0.36						
23	1.91	0.93	3.32	1.18	3.48	1.01	3.30	.99	3.21	.99	3.20	1.25	12	7.508	0.00						
24	2.17	0.91	2.61	.91	2.78	.83	2.60	.97	2.48	.81	3.10	.84	12	9.795	0.00						
25	1.99	0.84	2.05	.83	2.22	1.00	2.00	.97	2.03	.92	3.30	.84	12	9.350	0.63						
26	2.38	1.08	2.13	.91	2.22	.91	2.40	.97	1.97	.82	3.30	.84	12	16.289	0.13						
27	3.20	1.50	2.55	.94	2.33	1.20	2.70	1.06	2.56	1.10	3.20	1.32	15	12.990	0.00						
28	2.23	1.07	2.65	1.09	2.44	1.33	2.20	.99	2.55	1.10	3.50	.84	12	8.167	0.02						
29	2.15	1.00	1.74	.97	1.57	1.15	1.80	1.03	2.76	.83	1.70	1.25	12	9.930	0.02						
30	1.48	0.61	1.48	.57	1.33	.50	1.60	.83	1.45	.69	1.50	.84	6	3.755	0.80						
31	2.27	1.14	1.69	.90	2.11	1.37	1.70	.97	1.64	.86	1.50	.84	9	11.174	0.00						
32	2.45	1.01	2.61	1.12	3.11	1.37	2.60	1.14	2.68	1.10	2.40	.84	12	6.409	0.33						
33	2.69	1.16	1.80	.93	1.44	.73	1.70	.87	1.67	.83	2.20	.84	15	10.783	0.00						
34	2.06	0.97	1.55	.78	1.44	.73	1.40	.87	1.53	.83	1.70	.84	9	4.775	0.00						
35	3.48	1.13	3.32	1.33	3.22	1.30	2.80	1.50	3.39	1.37	3.70	1.06	12	9.256	0.34						
36	1.98	0.86	3.10	1.04	2.11	1.05	2.00	.87	3.06	1.12	2.30	1.06	12	9.266	0.65						
37	3.15	1.19	3.24	1.22	3.11	1.36	2.90	1.10	3.30	1.24	3.50	1.27	12	7.921	0.33						
38	3.29	1.29	2.74	1.37	2.22	1.30	2.60	.97	2.91	1.42	2.90	1.52	12	12.201	0.61						
39	4.60	0.84	4.61	.82	4.78	.44	4.70	.48	4.64	.90	4.30	1.05	12	12.244	0.83						
40	2.93	1.36	2.40	1.21	2.11	1.62	3.00	1.05	2.39	1.12	2.70	1.25	15	16.703	0.03						
41	2.47	1.38	2.47	1.25	3.56	1.13	2.60	1.17	2.30	1.24	1.90	.99	12	17.774	0.89						
42	3.17	1.21	3.74	1.01	4.22	.83	3.30	1.06	3.82	1.07	3.50	.71	12	17.337	0.00						
43	3.77	1.21	4.02	.98	4.22	.67	3.90	1.20	4.12	.93	3.60	1.17	9	7.180	0.14						
44	3.18	1.37	2.47	1.08	3.00	1.50	2.20	.42	2.52	1.12	2.10	.88	15	23.026	0.00						
45	2.96	1.13	2.34	1.01	2.89	1.36	2.70	.67	2.03	.95	2.50	.85	15	25.739	0.00						
46	2.62	1.15	2.40	.90	1.89	1.00	2.60	.70	2.36	.99	2.40	.70	12	5.773	0.33						
47	2.03	0.81	1.97	.83	1.89	.78	1.80	.92	1.91	.77	2.40	.97	12	14.305	0.76						
48	1.92	0.83	1.79	.81	1.67	1.12	1.50	.53	1.85	.80	2.00	.82	9	11.629	0.40						
49	2.19	0.85	2.15	.90	2.00	1.22	2.30	1.06	2.06	.70	2.40	1.07	9	9.058	0.90						
50	1.90	0.75	1.94	.67	1.89	.60	1.80	.63	1.88	.74	2.30	.48	9	6.354	0.74						

51	4.83	0.64	4.50	1.16	4.56	1.33	4.00	1.49	4.64	.82	4.50	1.58	15	16.329	0.05
52	1.75	0.97	1.76	.76	1.78	.67	1.80	.42	1.67	.65	1.60	.70	9	12.334	0.93
53	1.85	0.97	1.76	.76	1.78	.67	2.00	.82	1.79	.78	1.40	.70	12	10.886	0.55
54	2.29	1.17	2.08	1.01	2.22	1.09	2.20	.79	2.09	1.10	1.80	.92	15	16.918	0.27
55	1.40	0.68	1.40	1.53	2.56	.53	1.50	.53	1.42	1.16	1.70	.32	6	6.110	0.90
56	1.90	0.89	2.26	1.05	2.56	.88	2.30	.95	2.33	1.56	1.40	.82	12	9.049	0.02
57	1.48	0.81	1.45	1.56	1.44	.53	1.60	.52	1.42	.56	1.40	.70	6	5.092	0.84
58	2.14	0.93	2.34	1.02	2.44	1.33	2.10	.74	2.36	.96	2.00	1.26	12	13.535	0.27
59	1.94	0.93	1.92	.89	1.44	1.13	2.30	.82	1.91	.80	2.00	.94	12	14.108	0.93
60	2.12	0.95	1.85	.87	1.33	1.00	1.70	.67	2.03	.85	1.90	.88	12	9.968	0.09
61	1.99	0.93	1.82	.69	1.67	.71	1.70	.82	1.91	.68	1.80	.63	6	3.278	0.18
62	2.24	1.00	1.95	.78	1.78	.83	1.70	.82	2.00	.79	2.20	.63	9	5.831	0.05
63	1.93	1.03	1.66	.72	1.67	.83	1.60	.70	1.67	.74	1.60	.70	6	0.783	0.06
64	1.96	0.98	1.82	.84	1.67	1.00	1.90	.74	1.91	.84	1.60	.84	9	3.587	0.31
65	2.17	1.02	1.56	.88	1.00	0.00	1.60	.70	1.76	.87	1.40	.70	9	9.856	0.00
66	2.62	0.97	2.50	.97	2.22	1.30	2.80	.92	2.42	.79	2.70	.67	15	18.488	0.38
67	2.72	1.15	2.42	.97	2.67	1.12	2.40	.92	2.33	.92	2.50	.97	9	5.694	0.12
68	2.43	1.01	2.65	.96	2.78	1.30	2.60	.97	2.64	.96	2.60	.70	15	16.147	0.10
69	2.71	0.99	2.55	.88	2.44	1.01	2.80	.79	2.52	.94	2.50	.71	12	12.082	0.28
70	3.41	1.34	3.79	1.15	4.22	.97	3.30	1.06	3.76	1.25	4.00	.94	12	13.798	0.02
71	2.09	1.09	2.23	1.21	2.44	1.67	3.20	.92	1.94	1.00	2.00	1.25	15	23.622	0.33
72	2.17	1.03	2.66	1.04	3.11	1.36	2.80	.79	2.45	1.03	2.80	.92	12	11.767	0.00
73	2.95	1.25	3.48	1.08	3.89	1.27	3.50	.71	3.45	1.12	3.20	1.14	12	10.692	0.00
2-4	3.56	1.06	3.47	1.00	3.67	1.87	3.40	.52	3.42	.85	3.50	.53	15	40.242	0.81
2-5	3.84	1.29	4.15	1.24	4.44	1.67	4.00	1.25	4.12	1.24	4.10	.88	15	20.126	0.12
2-6	2.33	1.20	1.97	.97	2.11	1.62	1.90	.88	2.03	.85	1.70	.82	15	16.799	0.07
2-7	2.71	1.04	2.65	1.32	2.56	1.74	2.50	1.08	2.64	1.37	2.90	1.10	15	18.627	0.51
2-8	1.80	0.88	1.60	.95	1.56	1.01	1.80	.92	1.67	1.05	1.20	.42	15	21.115	0.18
2-9	1.99	0.90	1.68	.81	1.44	.88	1.80	.63	1.67	.82	1.80	.92	12	11.979	0.04
2-10	3.55	1.21	2.19	1.23	1.89	1.69	2.30	1.06	2.33	1.27	1.90	.74	15	20.693	0.00
2-11	2.72	1.28	2.37	.96	2.11	1.36	2.80	.79	2.36	.90	2.20	.92	15	23.179	0.05
2-12	3.71	1.19	2.71	1.05	2.00	1.41	2.60	.97	2.94	.90	2.70	1.06	15	14.866	0.00
2-13	3.58	1.20	3.34	1.09	3.00	1.50	3.40	.97	3.36	.96	3.50	1.27	12	9.489	0.20
2-14	2.38	1.16	1.53	.86	1.89	1.54	2.00	1.15	1.33	.48	1.40	.52	15	36.863	0.00
2-15	3.01	1.12	2.79	1.16	2.89	1.90	2.90	.99	2.85	1.03	2.40	.97	15	22.738	0.23
2-16	2.85	1.08	2.63	.98	2.56	1.74	2.90	.32	2.58	.94	2.60	.70	15	28.786	0.27
2-17	3.97	0.95	3.61	1.12	3.56	1.67	3.80	.92	3.45	1.09	4.00	.82	15	14.310	0.03
2-18	2.74	1.09	2.71	1.05	2.33	1.58	2.70	1.34	2.85	.91	2.60	.52	12	25.471	0.80
2-19	2.68	1.27	2.53	1.04	2.56	1.42	2.50	.97	2.48	1.00	2.70	.95	12	14.201	0.51

Legend: $\bar{M}$ = Mean; SD = Standard Deviation; DF = Degrees of Freedom; X^2 = Chi-square; F test = α 0.05.

Group 6 = Superintendents; Group 7 = High School Principals; Group 8 = Elementary Principals; Group 9 = Junior High School Principals.

TABLE 7.--Item comparison: Groups 1 & 3.

Item	Group 1	Group 3	t-test
10	1.00	2.67	2.803
12	1.17	3.57	3.998
47	1.00	2.43	2.019
53	0.67	1.86	2.404
56	0.83	1.86	2.337
2-16	3.83	2.72	2.143

t-test significant at 2.015.

TABLE 8.--Item comparison: Groups 1 & 4.

Item	Group 1	Group 4	t-test
10	1.00	2.15	3.466
12	1.17	2.59	6.442
28	1.33	2.28	3.706
50	1.13	2.01	2.752
53	0.67	1.84	4.689
56	0.83	1.97	3.286
1-16	3.83	2.72	2.466

t-test significant at 2.015.

TABLE 9.--Item comparison: Groups 1 & 5.

Item	Group 1	Group 5	t-test
10	1.00	1.89	2.258
12	1.17	2.37	3.993
28	1.33	2.32	3.066
53	0.67	1.95	4.317
56	0.83	1.74	2.466

t-test significant at 2.015

TABLE 10.--Item Comparison: Groups 2 & 3.

Item	Group 2	Group 3	t-test
71	1.00	2.79	2.054
2-4	1.67	3.71	2.436

t-test significant at 2.015

TABLE 11.--Item Comparison: Groups 2 & 4.

Item	Group 2	Group 4	t-test
46	1.33	2.78	3.413
68	1.33	2.56	2.930
2-4	1.67	3.42	2.392

t-test significant at 2.015

TABLE 12.--Item comparison: Groups 2 & 5.

Item	Group 2	Group 5	t-test
46	1.33	2.42	2.327
71	1.00	2.79	2.397

t-test significant at 2.015.

TABLE 13.--Item comparison: Groups 3 & 4.

Item	Group 3	Group 4	t-test
46	2.00	2.78	2.212
50	1.43	2.01	2.500

t-test significant at 2.015

TABLE 14.--Item comparison: Groups 4 & 5.

Item	Group 4	Group 5	t-test
68	2.56	1.84	2.956
71	1.98	2.79	2.801
72	2.08	2.84	3.246

t-test significant at 2.015.

TABLE 15.--Item comparison: Groups 2 & 6.

Item	Group 2	Group 6	t-test
8	1.82	1.19	2.485
23	2.55	1.62	2.885
44	2.47	3.50	1.994
45	2.60	4.00	2.340
47	2.60	2.50	3.262
58	2.40	1.50	2.621
68	3.18	1.67	4.140
71	1.82	2.67	1.723
2-18	3.36	2.48	2.052

t-test significant at 1.684-1.658.

TABLE 16.--Item comparison: Groups 2 & 7.

Item	Group 2	Group 7	t-test
18	1.82	1.30	1.809
23	2.55	1.61	2.923
34	1.73	2.74	2.860
44	2.47	3.10	3.234
46	2.87	2.62	2.030
58	2.40	2.14	2.813
68	3.18	2.13	2.897
2-13	4.09	3.26	1.653
2-14	3.00	2.30	1.536
2-18	3.36	2.57	1.849

t-test significant between 1684-1658.

TABLE 17.--Item comparison: Groups 2 & 8.

Item	Group 2	Group 8	t-test
8	1.82	1.35	1.790
34	1.73	2.20	1.707
35	3.64	3.90	2.794
47	2.60	1.33	3.568
72	2.09	1.30	1.831
2-18	3.36	2.60	1.747

t-test significant at 1684-1658

TABLE 18.--Item comparison: Groups 2 & 9.

Item	Group 2	Group 9	t-test
19	1.45	2.07	1.765
45	2.60	3.36	1.787
47	2.60	2.00	2.137
72	2.09	1.93	2.637
2-13	4.09	2.67	2.816

t-test significant at 1684-1658.

TABLE 19.--Item comparison: Groups 2 & 10.

Item	Group 2	Group 10	t-test
23	2.55	1.91	1.923
46	2.87	3.00	2.285
58	2.40	2.60	1.869

t-test significant at 1684-1658.

TABLE 20.--Item comparison: Groups 6 & 7.

Item	Group 6	Group 7	t-test
34	1.81	2.74	2.620
35	3.05	3.83	2.350
45	4.00	2.96	2.475
46	3.50	2.62	3.199
47	2.50	2.03	2.996
68	1.67	2.13	1.779

t-test significant at 1.684-1.658.

TABLE 21.--Item comparison: Groups 6 & 8.

Item	Group 6	Group 8	t-test
35	3.05	3.90	2.201
45	4.00	4.33	3.368
47	2.50	1.33	5.313
68	1.67	2.65	3.411
71	2.67	1.30	2.243
72	2.43	1.30	4.266
2-13	3.62	4.20	1.827

t-test significant at 1.684-1.658.

TABLE 22.--Item comparison: Groups 6 & 9.

Item	Group 6	Group 9	t-test
18	1.19	2.07	2.863
19	1.38	2.07	2.322
23	1.62	2.47	2.287
46	3.50	2.18	2.986
47	2.50	2.00	5.869
59	1.71	2.53	2.894
68	1.67	2.67	2.939
2-13	3.62	2.67	2.482
2-14	2.48	1.80	2.262
2-18	2.48	3.20	2.269

t-test significant at 1.684-1.658.

TABLE 23.--Item comparison: Groups 6 & 10.

Item	Group 6	Group 10	t-test
9	2.43	3.17	2.111
18	1.19	1.52	1.730
29	1.90	2.57	2.110
35	3.05	3.78	2.171
45	4.00	3.00	2.356
46	3.50	3.00	3.431
47	2.50	1.80	5.521
68	1.67	2.74	4.274

t-test significant at 1.684-1.658.

TABLE 24.--Item comparison: Groups 7 & 8.

Item	Group 7	Group 8	t-test
46	2.62	1.67	1.892
71	2.43	1.30	3.905
72	2.65	1.30	5.464
2-13	3.26	4.20	2.813

t-test significant at 1.684-1.658.

TABLE 25.--Item comparison: Groups 7 & 9.

Item	Group 7	Group 9	t-test
18	1.30	2.07	2.297
19	1.39	2.07	2.075
23	1.61	2.47	2.366
35	3.83	3.00	2.611
44	3.10	2.27	2.262
47	1.86	2.60	2.851
59	1.83	2.53	2.974
72	2.65	1.93	2.055

t-test significant at 1.684-1.658.

TABLE 26.--Item comparison: Groups 7 & 10.

Item	Group 7	Group 10	t-test
9	2.35	3.17	2.467
34	2.74	1.83	2.649
44	3.10	4.40	2.070
68	2.13	2.74	2.483
2-13	3.26	4.00	2.256

t-test significant at 1.684-1.658.

TABLE 27.--Item comparison: Groups 8 & 9.

Item	Group 8	Group 9	t-test
18	1.35	2.07	2.287
19	1.25	2.07	2.796
35	3.90	3.00	2.415
44	3.67	2.27	1.961
45	4.33	3.36	2.729
58	2.33	3.09	1.720
59	2.10	2.53	1.725
71	1.30	1.73	1.715
72	1.30	1.93	1.958
2-13	4.20	2.67	3.909

t-test significant at 1.684-1.658.

TABLE 28.--Item comparison: Groups 8 & 10.

Item	Group 8	Group 10	t-test
29	1.95	2.57	2.266
46	1.67	3.00	2.198
58	2.33	2.60	2.511
71	1.30	1.96	2.441
72	1.30	2.13	3.392

t-test significant at 1.684-1.658.

TABLE 29.--Item comparison: Groups 1 & 4.

Item	Group 1	Group 4	t-test
23	2.45	1.61	3.308
28	2.68	1.95	2.414
47	2.31	1.79	2.935
56	2.14	1.63	2.185
68	2.86	2.14	2.798
2-10	2.82	3.75	2.731

t-test significant at 2.132.

TABLE 30.--Item comparison: Groups 2 & 4.

Item	Group 2	Group 4	t-test
23	2.16	1.61	2.749
26	2.63	2.14	2.147
28	2.56	1.95	2.409
47	2.16	1.79	2.223
50	1.95	1.71	2.769
56	2.14	1.63	2.514

t-test significant at 2.132.

CHAPTER 5

SUMMARY AND CONCLUSIONS

This study is an attempt to do two things: (1) to define the concept of image, and (2) to translate that concept into elements that can be used for organizational analysis. Specifically, this study applies an image measuring device to the analysis of a specific organization--the College of Education, Michigan State University, East Lansing, Michigan.

The image theory used here was largely based on the work of Kenneth Boulding; supplementary theories and concepts were taken from the works of Walter Lippmann, John Riley, Lee H. Bristol, Daniel Boorstin, and others. An image was defined as an alterable state of subjective knowledge which governs behavior. Man, according to this theory, views the world in terms of images; he judges others and is judged himself on the basis of images. Man does not react with reality; he reacts with his subjective knowledge of reality. This subjective knowledge--this image--has ten dimensions. These dimensions include:

- The Spatial Image,
- The Temporal Image,
- The Relational Image,

- The Personal Image,
- The Value Image,
- The Affectional Image,
- The Conscious, Unconscious, or Sub-conscious Image,
- The Certainty-Uncertainty and Reality-Unreality Image, and
- The Public Image.

The image concept is also found on various organizational levels. On the basic level--the level of inanimate objects--the image exists in a rudimentary form. At a higher organizational level--the level of human beings--the image is complex, and it is of overwhelming importance in the interpretation of human behavior. Simply stated, the image is the sum of what we think we know; it makes us act the way we do.

Further, the image concept is not confined to individuals. Families, communities, groups, and organizations of all kinds, and even whole societies may be said to have images. Organizations, for example, may be thought of as simply an image in the minds of men. An organization is the sum total of the images held by its members--administrators, employees, and relevant publics. Each individual within the organization perceives the organization with certain behavior expectations, that is, his behavior toward the organization depends upon his perception of the organization.

This theory of organizational images suggests the possibility of analyzing organizations in terms of the images held by its members. Such an analysis is helpful for several reasons:

- If we understand the individual's image of the organization, we may, within limits, predict his behavior toward the organization.
- An understanding of the organization's image will give us clues to the organization's internal structure and operations.
- The organizational image allows us to look at the detailed characteristics which make up the organization's goals and objectives.
- The more facets of an image we are aware of, the better we are able to modify the image in a direction that is likely to be constructive.

However, the image researcher is faced with many problems. When he turns to behavioral science for theoretical direction, he discovers organizational theories which do not lend themselves to image research. Classical organizational theory views organizations on the basis of a priori principles which, it turns out, cannot explain specific organizational operations. Further, the trend in organizational literature has been to assume that research findings are transferable, that is, results from study of one organization are applicable to any organization. However, there is little evidence available to determine the extent to which generalization is possible, either to other organizations performing the same functions or to other types of organizations. Therefore, the need is to

forge a closer link between theoretical concepts and analysis of specific organizations.

The image researcher also faces another problem. His knowledge of the image indicates that images have component parts or multiple dimensions. Therefore, his major task is to develop methods of inquiry which will permit a detailing of these component parts.

The work of Christopher Sower answers the problems of image research. Sower's theory of organizations is a synthesis of many key theoretical positions found in organizational literature. This synthesis is capable of lending itself to image research. Sower's model for organizational analysis is used to identify, abstract, and explain three limiting factors of internal organization that relate to the extent of goal achievement for a specific organization. These limiting factors are called the intervening variables or elements of the organization. Sower's model for organizational analysis is a consensus model which systematically accounts for various perceptions of the organization under analysis. By itself, however, Sower's model cannot be used for organizational analysis; it is only a theoretical framework.

The work of Robert Anderson makes it possible to apply Sower's theories to individual organizational analysis. Anderson developed an instrument--a tool--for measuring the intervening variables in Sower's model.

This instrument is composed of two parts:

- An Open-Ended Questionnaire: This relatively unstructured device allows the organizational members to identify and select elements of their organization which they perceive as being important to that organization.
- Rating Scale Device: This device is made up of the elements (items) selected by the organizational members. The Rating Scale device forces a scaled measurement of these elements. This allows the image researcher to calculate the results of this measurement on the basis of variation or consensus about those specific elements.

The College of Education Study

To apply the theories presented in this study, an adaptation of Anderson's instrument was tested on the College of Education, Michigan State University, East Lansing, Michigan. The sample population was defined as:

- all members of the College, and
 - school administrators in Ingham County, Michigan.
- Both these populations received mailed copies of the Open-Ended Questionnaire and the Rating Scale device.

For purposes of analysis, the College population was divided into the following sub-groups:

- five major sub-groups (deans, department chairmen, institute directors, full-time faculty, and part-time faculty),
- seventeen departmental sub-groups,
- four teaching rank sub-groups (instructors, assistant professors, associate professors, and professors),
- tenured and non-tenured academic sub-groups.

The school administrator population, composed of superintendents, high school, elementary school, and junior high school principals was treated as a single group.

The hypotheses tested in this study may be generally stated as: The image of the College of Education held by the various internal sub-groups was not expected to vary significantly between the various groups; and, the image of the College of Education held by members of the College was not expected to vary significantly from the image of the College held by the school administrators.

Study Findings

The five general findings of this study are:

1. No significant image differences exist between the five major internal-sub-groups (deans, department chairmen, institute directors, full-time faculty, and part-time faculty). However, significant differences were found on 16 items. The most serious differences were found on goal statements and objectives of the College.
2. No significant image differences were found between the 17 departmental sub-groups within the College. For purposes of this study, six of the 17 departments were chosen for specific analysis. The images held by these departments were also compared with the images held by the deans and department chairmen. The most serious differences

between these groups were found on those items which dealt with the goals and objectives of the College, viz., items 9 through 15.

3. No significant image differences were found between the four teaching ranks within the College (instructor, assistant professor, associate professor, and professor).
4. No significant image differences were found between tenured and non-tenured academic personnel.
5. Significant image differences were found between members of the College and school administrators. These differences were found on 30 items. These items were classified into three areas:
 - Items which dealt with general organizational goals,
 - Items which dealt with specific problems, and
 - Items which dealt with specific programs.

Conclusions

If we apply the image theory and Sower's postulates to the findings of this study, we can conclude the following:

1. Within the College of Education there are some serious differences between the images held by the deans, department chairmen, institute directors, full-time faculty, and part-time

faculty. These differences are generally found on specific goal statements or in program areas. We conclude that the College will not achieve these goals, viz., a program of educational evaluation and assessment, and a program for the design, production, and testing of programmed materials and media for use in colleges and schools. The College will also have difficulty achieving two of its research goals, viz., subject matter and philosophical research.

2. The six departmental sub-groups selected for study had significant differences between departments on 16 items. More important, when the six groups were compared with the deans and department chairmen, significant differences were found on all seven goal statements. These differences lead us to conclude that the departmental sub-groups are not relating or identifying with the total organizational structure, that is, departmental specialization and proliferation within the organization has caused an image breakdown. We also conclude that there is a breakdown in the internal socialization process; the deans are not projecting or communicating their values, beliefs, and attitudes to the departmental sub-groups. Finally, we conclude that the College is recruiting

personnel who may have the "proper skills" for a position within the organization, but who lack the "proper attitude" or commitment to the organizational goals.

3. Image differences between the four teaching ranks and image differences between the tenured and non-tenured academic personnel may be due to individual aspirations, security needs, and longevity with the organization. In this connection, we conclude that full professors have a stronger commitment to the organizational goals and more loyalty to the organization than either instructors or assistant professors.

The professor's image of the College is in line with the image held by the administrators.

4. The significant differences between members of the College and school administrators lead us to conclude:

--That the College of Education is not projecting its image to the school administrators; there is a possible communication breakdown between the two groups.

--That the school administrators picture the College as a practical, service organization; the function of the College is to meet the specific needs of the school systems.

--That the members of the College view the College as a theoretical, broadly based organization.

- That the College may not be listening to what the school administrators are saying; the College may not be "reading" the needs of the times. In short, the College does not seem to be relating to the school districts in any direct, unified manner.

Practical Implications

There are both general and specific implications of the image theory and of the instrument used for measuring an organizational image. Generally:

- Image research is valuable as a clue to the internal structure and operations of an organization.
- If we are able to identify the facets of the image within a particular organization, then we are better able to modify the image in a direction that is likely to be constructive.

Specifically:

- The small college administrator, especially the public relations director, may use image theory and the methodology presented here as a quick, easy, and economical measure of the college's image with various publics.
- Image research may be used as an evaluation technique to measure the results of a specific program, or it may be used for getting feedback on the total public relations program.
- Image research allows the administrator to focus on a specific issue or to measure the impact of a specific program on one, two, three, or more publics.
- Image research is an excellent way of allowing subordinates to participate in the organizational decision-making process.

Suggestions for Further Research

The possibilities that image research holds for analyzing all facets of human endeavor lead us to conclude that:

- more work needs to be done on developing theoretical frameworks for image research, and
- more image studies should be conducted to test the image theory in various organizational settings, with different populations, and even between different cultures.

APPENDICES

APPENDIX A

Cover Letter of Open-Ended Questionnaire
Sent to All Faculty Members

Cover Letter of Open-Ended Questionnaire
Sent to School Administrators

Open-Ended Questionnaire

TO: All Faculty Members in the
College of Education

FROM: Ferris F. Anthony, Ph.D.
Candidate, College of Education

Dear Sirs:

This is a request for your time, but I think it will be time well spent.

Enclosed are four questions. Your responses to these questions should be unsigned. Compilation of results will be turned over to all staff members in the College for use in shaping future program development.

For this reason I am asking you to write down your personal opinions and evaluations of the entire scope of activities engaged in by the College of Education. I would like to leave the door of suggestion wide open. The important thing is that you express your opinion of what the College should be doing.

Please return the completed questionnaire to me in 504 Erickson. You can use the enclosed address label and the envelope in which you received your questionnaire.

Please take a few minutes right now and answer the questions. It will help us to gain a better understanding of the College.

Thank you for your time.

Sincerely,

Ferris F. Anthony

Approved by John E. Ivey, Jr., Dean

Ferris F. Anthony
504 Erickson Hall
East Lansing, Michigan

Dear Sir:

I am conducting a study for the College of Education, Michigan State University, in an attempt to evaluate our program and activities. I am asking that you help in this study so we might be better aware of your needs.

Enclosed are four questions. Responses to these questions will help us at the College of Education to evaluate our present programs and to shape future activities.

We need your help. Please write down your personal opinions and evaluations of the activities engaged in by the College of Education. The door of suggestion is wide open.

Please return the completed questionnaire to me in 504 Erickson Hall, East Lansing, Michigan 48823. A self-addressed envelope is enclosed for this purpose.

Please take a few minutes right now and answer the questions. Your opinions and evaluations are of vital importance.

Thank you for your time.

Sincerely,

Ferris F. Anthony

OPEN-ENDED QUESTIONNAIRE

Please briefly write your personal reactions to the following questions. Do not worry about how important, how many, or in what order you list your thoughts. Just jot down the ideas as they come to mind.

A. What do you believe to be the purposes and goals of the College of Education, Michigan State University?

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

B. In your opinion, what do school administrators now think are the goals and purposes of the College of Education, Michigan State University?

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

C. In your opinion, what are the most important specific programs (teaching, research, service, etc.) engaged in by the College of Education, Michigan State University?

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

D. In your opinion what specific programs (teaching, research, service, etc.) should be acted upon by the College of Education, Michigan State University?

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

APPENDIX B

Cover Letter of Rating Scale Device
Sent to College and School
Populations

Rating Scale Device

MICHIGAN STATE UNIVERSITY

College of Education

504 Erickson Hall

You have probably filled out enough questionnaires this year to last you a lifetime. I would not ask you to fill out this one unless it had some value for you. Please let me explain.

The statements on the attached questionnaire were made by School Administrators and members of the College of Education. The statements are about the goals, activities, and problems of the College. Your response to these statements will help us to know ourselves better and to find better ways to serve you.

Your response will take 10 minutes.

That 10 minutes will help us to identify problems and point out future directions. Even if you have had no contact with the College your response is still valuable.

No attempt will be made to identify you. Data will be presented in group scores.

Please give me 10 minutes of your time. Thank you.

Sincerely,

Ferris Anthony

RATING SCALE DEVICE

MY PRESENT POSITION IN THE COLLEGE OR SCHOOL SYSTEM IS:

- 4 Dean (01) _____ Department Chairman (02) _____
 Institute Director (03) _____ Full-time Faculty (04) _____
 Part-Time Faculty (05) _____ Superintendent (06) _____
 High School Principal (07) _____
 Elementary Principal (08) _____ Other (Indicate) _____

I AM IN ONE OF THE FOLLOWING DEPARTMENTS OR INSTITUTES:

- 5-6 School for Advanced Studies (01) _____
 School for Teacher Education (02) _____
 Office of International Programs (03) _____
 Office of Off-Campus Affairs (04) _____
 Special Projects (05) _____
 Administration and Higher Education (06) _____
 Counseling Personnel Services and Educational
 Psychology (07) _____
 Elementary and Special Education (08) _____
 Health, Physical Education and Recreation (09) _____
 Secondary Education and Curriculum (10) _____
 Student Teaching (11) _____
 Human Learning Institute (12) _____
 Humanities Teaching Institute (13) _____
 Learning Systems Institute (14) _____
 Mott Institute for Community Improvement (15) _____
 Science-Mathematics Teaching Center (16) _____
 Social Science Teaching Institute (17) _____

7 MY RANK IS: Instructor (01) _____
 Assistant Professor (02) _____
 Associate Professor (03) _____
 Professor (04) _____

8 I AM: Tenured (01) _____ Non-tenured (02) _____

The following statements were made by members and observers of the college of Education. The first set of statements is about GOALS and PURPOSES. Please circle the number which best describes your feeling about the statement.

1 = Strongly Agree	3 = Not Sure	5 = Strongly
2 = Moderately Agree	4 = Moderately Disagree	

The following statements ARE goals of the College. Please Agree, disagree, etc.

9. 1 2 3 4 5 A program of subject matter analysis.
10. 1 2 3 4 5 A program of educational evaluation and assessment.
11. 1 2 3 4 5 A program of cooperative service arrangements with local schools and other agencies.
12. 1 2 3 4 5 A program for the design, production and testing of programmed materials and media for use in colleges and schools.
13. 1 2 3 4 5 A continuing effort to improve the effectiveness and quality of the College's undergraduate and graduate instructional programs.
14. 1 2 3 4 5 A broad-scale program of basic research in human learning and development.
15. 1 2 3 4 5 A program for translating basic research in human learning and development into proposed models for instructional and management systems.

The following statements SHOULD BE goals of the College. Please indicate 1 strongly agree to 5 strongly disagree.

16. 1 2 3 4 5 To prepare teachers for inner city schools.
17. 1 2 3 4 5 To provide in-service education for teachers.

18. 1 2 3 4 5 To conduct pure, experimental, and action research in all aspects of education.
19. 1 2 3 4 5 To develop and implement research in teaching.
20. 1 2 3 4 5 To conduct research that only applies to Michigan.
21. 1 2 3 4 5 To cooperate with behavioral scientists in research.
22. 1 2 3 4 5 To serve out-of-state schools through consultation, advice, and study.
23. 1 2 3 4 5 To have faculty members produce scholarly writing.
24. 1 2 3 4 5 To serve faculty members of other colleges and universities both within and without the state.
25. 1 2 3 4 5 To assist developing nations in establishing and maintaining educational systems.
26. 1 2 3 4 5 To promote the general security and economic status of the profession.
27. 1 2 3 4 5 To work for unity among educators and to eradicate the threat of unionization which promises to divide us.
28. 1 2 3 4 5 To put education on a scientific basis.
29. 1 2 3 4 5 To "weed out" or screen those going into the profession and separate the "wheat from the chaff."
30. 1 2 3 4 5 To develop, evaluate, and disseminate innovation in education.
31. 1 2 3 4 5 To give prospective teachers a broad, general background including: administration, higher education, special education, remedial education, music, arts, literature, etc.
32. 1 2 3 4 5 To become involved in and further Federal programs in education.
33. 1 2 3 4 5 To prepare and distribute educational materials to the schools in the state.

- 34. 1 2 3 4 5 To provide extension courses.
- 35. 1 2 3 4 5 To train teachers and administrators to fit specific school systems.
- 36. 1 2 3 4 5 To use local school systems for experimentation.
- 37. 1 2 3 4 5 To help school systems secure financial support from the Federal government.
- 38. 1 2 3 4 5 To turn out practical-minded teachers who meet the School Administrator's definition of what a good teacher should be.
- 39. 1 2 3 4 5 To become an institution for turning out as many students as possible.

SECTION II

This section deals with the IMPORTANCE or VALUE of present programs. Please indicate whether or not you think the program is important by circling:

1 = Strongly Agree	3 = Not Sure	5 = Strongly
2 = Moderately Agree	4 = Moderately Disagree	Disagree

- 40. 1 2 3 4 5 The most important activity of the College is teaching undergraduates.
- 41. 1 2 3 4 5 Teaching, research, and service have equal importance.
- 42. 1 2 3 4 5 Graduate education is our most important activity.
- 43. 1 2 3 4 5 Research is the most important activity of the College and should form the basis for all other activities.
- 44. 1 2 3 4 5 Research is important but we place too much emphasis on it so instruction and service suffer.
- 45. 1 2 3 4 5 The most important undergraduate programs are the opportunities for school visitations and participation in actual classroom situations (such as Student Educational Corps, "September Experience, etc.")

- 46. 1 2 3 4 5 The Elementary Intern Program is probably the most important of all undergraduate teacher programs.
- 47. 1 2 3 4 5 The Extern program of the Department of Administration is an important activity.
- 48. 1 2 3 4 5 The Instructional Materials Center is an important function of the College.
- 49. 1 2 3 4 5 We should cooperate with governmental agencies on such programs as Job Corps, Head Start, etc.
- 50. 1 2 3 4 5 Committee work by individual faculty members on College and departmental programs and policies is important.
- 51. 1 2 3 4 5 None of the programs of the College of Education are worthwhile.

We SHOULD conduct research in the following areas:

- 52. 1 2 3 4 5 Psychological research.
- 53. 1 2 3 4 5 Subject matter research.
- 54. 1 2 3 4 5 Textbook studies.
- 55. 1 2 3 4 5 Learning research.
- 56. 1 2 3 4 5 Philosophy of education research.
- 57. 1 2 3 4 5 Teaching methods, team teaching, upgraded primary, etc.
- 58. 1 2 3 4 5 We should conduct federally supported research.

The activities of the following institutes are important.

- 59. 1 2 3 4 5 The Institute for International Study.
- 60. 1 2 3 4 5 Research and Development Program in Vocational Education.
- 61. 1 2 3 4 5 National Science Foundation Institutes.
- 62. 1 2 3 4 5 Mott Institute for Community Improvement.
- 63. 1 2 3 4 5 Human Learning Research Institute.
- 64. 1 2 3 4 5 Learning Systems Institute.

LAST SECTION

This section deals with programs and activities which SHOULD BE carried out by the College of Education. It also includes some statements on PROBLEMS. Please indicate:

1 = Strongly Agree	3 = Not Sure	5 = Strongly
2 = Moderately Agree	4 = Moderately	Disagree
	Disagree	

- 65. 1 2 3 4 5 We should overhaul placement procedures and include a follow-up interview with school administrators and first jobbers.
- 66. 1 2 3 4 5 We should expand the program in comparative and international education.
- 67. 1 2 3 4 5 There is not enough recognition for faculty members who want to work on service activities with school systems.
- 68. 1 2 3 4 5 We should expand certain graduate programs, such as Higher Education.
- 69. 1 2 3 4 5 We should offer new graduate programs in other areas.
- 70. 1 2 3 4 5 We should not have any new programs and should concentrate on improving the programs we have.
- 71. 1 2 3 4 5 We must find ways to maintain smaller teaching sections at both undergraduate and graduate levels.
- 72. 1 2 3 4 5 We should reduce teaching loads on instructors by increasing faculty.
- 73. 1 2 3 4 5 We should cut down the number of students admitted to both undergraduate and graduate programs.
- 2-4. 1 2 3 4 5 We should cut back the number of our present programs.
- 2-5. 1 2 3 4 5 Student evaluations of professors should be made public by the College.
- 2-6. 1 2 3 4 5 Faculty members who have the most ability in the classroom and who give time and service to their students are not recognized and rewarded enough.

- 2-7. 1 2 3 4 5 We need a Research Newsletter to disseminate research and help us gain national prominence.
- 2-8. 1 2 3 4 5 We should find ways to increase the teaching competence of faculty members in the College so they can practice what they preach.
- 2-9. 1 2 3 4 5 We need a well-organized, continuous in-service training program for faculty members in the College.
- 2-10. 1 2 3 4 5 Persons in teacher education or administration should be forced to spend one year out of five in elementary and secondary school classrooms and administration.
- 2-11. 1 2 3 4 5 The College should explore the possibility of establishing a small, experimental college of education.
- 2-12. 1 2 3 4 5 Research courses should be assigned to the School for Advanced Studies and taken away from departmental affiliations.
- 2-13. 1 2 3 4 5 We should cut down the number of methods courses and offer more subject matter courses.
- 2-14. 1 2 3 4 5 We should give prospective teachers more experience in practical matters, such as how to handle discipline, how to interact with people, how to get along with co-workers, etc.
- 2-15. 1 2 3 4 5 Our students do not learn to think critically.
- 2-16. 1 2 3 4 5 The structure of the College prohibits the effective use of many of its positive attributes.
- 2-17. 1 2 3 4 5 Most graduates of the College are not interested in the profession but only in how much money they are going to make.
- 2-18. 1 2 3 4 5 The College should be based on a Behavioral science foundation.
- 2-19. 1 2 3 4 5 The goals and purposes of the College of Education are not clear.

Thank You

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