

DOCUMENT RESUME

ED 039 779

24

EM 008 134

AUTHOR Boardman, Gerald R.
TITLE A Computer-Based Feedback Model for Simulation Exercises Involving School Administrators. Final Report.
INSTITUTION Wisconsin Univ., Madison. Dept. of Educational Administration.
SPONS AGENCY Office of Education (DHEW), Washington, D.C. Bureau of Research.
BUREAU NO BR-E-167
PUB DATE 1 Oct 69
GRANT OEG-5-59167-0014(010)
NOTE 292p.

EDRS PRICE MF-\$1.25 HC-\$14.70
DESCRIPTORS *Computer Oriented Programs, *Educational Administration, *Feedback, *Simulation

ABSTRACT

A study was devised to develop a computer-based model for maximizing both the feedback of an administrative simulation exercise and the analysis of the results. The development of the model used in the analysis and feedback of in-basket simulation materials consisted of three phases: instrumentation (identification of items, courses of action, and feedback problems), computer interaction (development of computer-based analysis and feedback procedures), and experimentation and refinement. Most of the data was collected as a by-product of the participants' (who were an administrative staff development group, graduate students in educational administration group, and administration fellows in urban education group) interaction with the computer-based feedback model. The system was found to reliably, efficiently, and objectively collect, store, code, and selectively disseminate data concerning the participants' behavior. (Author/SP)

E
R
I
C
F
U
L
L
T
E
X
T
A
V
A
I
L
A
B
L
E

EDO 39779

FINAL REPORT
Project No. 8-E-167
Grant No. OEG-5-9-59167-0014 (010)

A COMPUTER-BASED FEEDBACK MODEL FOR SIMULATION EXERCISES
INVOLVING SCHOOL ADMINISTRATORS

Gerald R. Boardman
Department of Educational Administration
UNIVERSITY OF WISCONSIN
Madison, Wisconsin 53706

Professor Donald N. McIsaac, Jr.
Faculty Sponsor

October 1, 1969

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

EM 008134

ED0 39779

CERTIFICATION

ORIGINAL SIGNED BY
ROBERT W. ERICKSON

Contract Officer

Date

Donald McLoave

Faculty Sponsor

Oct. 13, 1969

Date

FINAL REPORT
Project No. 8-E-167
Grant No. OEG-5-9-59167-0014 (010)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.

A COMPUTER-BASED FEEDBACK MODEL FOR SIMULATION EXERCISES
INVOLVING SCHOOL ADMINISTRATORS

Gerald R. Boardman

UNIVERSITY OF WISCONSIN
Madison, Wisconsin 53705

Professor Donald N. McIsaac, Jr.
Faculty Sponsor

October 1, 1969

The research reported herein was performed pursuant to a grant with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

ACKNOWLEDGMENTS

The author wishes to express particular appreciation and gratitude to Dr. Donald N. McIsaac, faculty sponsor for this project, for the guidance and encouragement given during the completion of this investigation. The author also wishes to express sincere appreciation to Dr. James M. Lipham and Dr. Richard A. Rossmiller for their helpful suggestions and constructive criticisms in critiquing the manuscript.

The author would like to further acknowledge the University of Wisconsin Computing Center who have made available the computing facilities to complete this study. The author is also grateful to the U.S. Office of Education for the financial support which was provided by U.S.O.E. Grant No. OEG-5-9-59167-0014 (010) for the execution of this study.

Thanks are due to fellow graduate students, and in particular William H. Woods, for the special assistance they provided in this research project. I also wish to thank my wife, Ardelle, for her sacrifices and understanding during the completion of this work.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	i
LIST OF TABLES	iv
LIST OF FIGURES	vii
ABSTRACT	1
CHAPTER	
I. INTRODUCTION	3
Statement of Problem	
Review of Literature	
Rationale for Study	
Statement of Objectives	
Definitions and Delimitations	
Summary	
II. DESIGN AND METHODOLOGY	20
Development of the Model	
The Study Sample	
General Operating Procedures	
Sample Feedback Interchange	
Instrumentation	
Statistical Procedures	
Summary	
III. THE PARTICIPANTS IN THE STUDY	38
Background and Experience Characteristics	
Personal Characteristics of a Select Group of Participants	
IV. PRESENTATION AND ANALYSIS OF IN-BASKET DATA	49
Category Performance and Reliability	
Identification of Administrative Performance Dimensions	
Composite Component Performance and Reliability	
Correlation with other Variables	

CHAPTER	Page
V. ANCILLARY ANALYSIS	90
Second-Order Components	
Q-Mode Analysis	
Revised In-Basket Score Sheet Correlations	
Reaction to Computer-Based Feedback Model	
VI. SUMMARY, CONCLUSIONS, AND IMPLICATIONS	104
Summary	
Conclusions	
Limitations	
Implications	
BIBLIOGRAPHY	112
APPENDIXES	117
A. Response Items	118
B. Interaction Manual	132
C. Scoring Manual	203
D. Computer Model Scoring Summary	228
E. Computer Program for B-5500	238
F. Madison In-Basket Evaluation Sheet and Corresponding Computer Program	249
G. Instrumentation	267
H. Revised Version of Madison In-Basket Performance . .	274
I. Q-Mode Reordered Oblique Projection Matrix	278

LIST OF TABLES

Table	Page
1. Present Position of the 117 Participants	39
2. Sex of the 117 Participants	40
3. Age of the 117 Participants	40
4. Number of Years of Teaching Experience of the 117 Participants	41
5. Number of Years of Supervisory and/or Administrative Experience of the 59 Actual Administrators	41
6. Number of Years Participants Have Served in Their Present Position	42
7. Educational Background of the 117 Participants	43
8. Previous Participation in an Administrative Simulation Exercise	45
9. Performance of 41 Participants on Tests of Academic Aptitude	46
10. Performance of 41 Participants on a Value-Oriented Test	46
11. Performance of 15 Participants on a Test of Critical Thinking	47
12. Performance of 41 Participants on 15 Basic Personality Factors	48
13. Means and Standard Deviations of the 37 Scoring Categories	50
14. Interpretation Reliability Estimates for the 37 Scoring Categories	54
15. Internal Consistency Reliability Estimates for the 37 Scoring Categories	58

Table	Page
16. Intercorrelations among the 37 Scoring Categories for the Participant Interpretations	61
17. Intercorrelations among the 37 Scoring Categories for the Investigator Interpretations	63
18. Eigenvalues and Percents of Communality for the Intercorrelation Matrices	65
19. Scoring Category Communalities	66
20. Reordered Oblique Projection Matrix for Participant Component Analysis	68
21. Reordered Oblique Projection Matrix for Investigator Component Matrix	69
22. Scoring Categories for the Preparation for Decision Component for the Participant and Investigator Interpretations	71
23. Scoring Categories for the Organizes Work Component for the Participant and Investigator Interpretations	72
24. Scoring Categories for the Exchanging Information and Directing Component for the Participant and Investigator Interpretations	73
25. Scoring Categories for the Maintaining Organizational Relationships Component for the Participant and Investigator Interpretations	74
26. Scoring Categories for the Responding to Outsiders and Discussing before Acting Component for the Participant and Investigator Interpretations	75
27. Scoring Categories for the Analyzing the Situation Component for the Participant and Investigator Interpretations	76
28. Scoring Categories for the Complying with Suggestions Component for the Participant and Investigator Interpretations	77

Table	Page
29. Composition of Composite Component Performance Dimensions	78
30. Interpretation Reliability Estimates for the Composite Component Scores	82
31. Internal Consistency Reliability Estimates for the Composite Component Scores	84
32. Correlation of Participant Composite Component Scores with Background and Test Score Variables	86
33. Correlation of Investigator Composite Component Scores with Background and Test Score Variables	87
34. Investigator Composite Component Intercorrelations	91
35. Reordered Oblique Projection Matrix for Investigator Second-Order Component Analysis	92
36. Characteristics of Participants Categorized in Group 1 by Q-Mode Analysis	94
37. Characteristics of Participants Categorized in Group 2 by Q-Mode Analysis	96
38. Characteristics of Participants Categorized in Group 3 by Q-Mode Analysis	97
39. Characteristics of Participants Categorized in Group 4 by Q-Mode Analysis	98
40. Characteristics of Participants Categorized in Group 5 by Q-Mode Analysis	99
41. Correlation between a Revised In-Basket Score Sheet Rating and the Components Identified in this study	102
42. Summary Results of Participant Reaction Form	103

LIST OF FIGURES

Figure	Page
1. Man-Machine System for the Analysis and Feedback of Performance Data	8
2. Schematic Representation of Second-Order Components	93
3. Q-Mode Analysis Groups	100

A COMPUTER-BASED FEEDBACK MODEL FOR SIMULATION EXERCISES INVOLVING SCHOOL ADMINISTRATORS

Abstract

The purpose of this investigation was to develop a computer-based model for maximizing both the feedback of an administrative simulation exercise and the analysis of the results. The two primary objectives of the study were (1) to develop a reliable model which would provide a consistent and objective feedback to simulation exercises for school administrators, and (2) to expedite the collection and analysis of data resulting from a situational in-basket procedure.

The theoretical framework was derived from both the decision-making process and the systems approach. The computer-based model resolved each participant decision into its basic elements. Through the expression of element interrelationships in mathematical terms, (component analysis), patterns of administrative styles were identified.

The development of the model used in the analysis and feedback of the in-basket simulation materials consisted of three phases:

- (1) Instrumentation
 - a. identification of items
 - b. identification of courses of action
 - c. identification of feedback problems
- (2) Computer Interaction
 - a. development of computer-based analysis
 - b. development of computer-based feedback procedures
- (3) Experimentation and Refinement
 - a. administration of instrument
 - b. analysis of results

The study sample included the following groups of participants: (1) an Administrative Staff Development Group, (2) a Graduate students in Educational Administration Group, and (3) an Administration Fellows in Urban Education Group.

Most of the data was collected as a by-product of the participant's interaction with the computer-based feedback model. In addition, as a reliability check on the participant's interpretation of his responses and to provide a uniform interpretation upon which category reliabilities could be based, the investigator evaluated all of the sets of responses obtained in the final sample of the computer-based feedback model. The basic statistical techniques utilized in the analysis of the data were Principal Component Analysis, Pearson Product moment correlations, and KR-20 reliability coefficients.

In summary, the investigator developed a prototype of a model which attempts to move beyond the one-shot, in-basket item format to the more complex and sequenced feedback. The system efficiently and objectively collects, stores, codes, and selectively disseminates data concerning the participant's behavior.

The reliability of the model both in terms of the scoring categories and the composite components (administrative performance dimensions) was quite satisfactory. The few low reliabilities which emerged could be accounted for by either infrequent scoring or lack of problem clarity. A more reliable scoring model was found when the participant's interpretation was based on the composite components.

The administrative performance dimensions identified in the study were quite similar to those identified by Hemphill, Griffiths, and Frederiksen in the Whitman Elementary School project. Two second-order components were also identified. They were a Preparation for Decision component and a Responsiveness and Compliance component. On the basis of these dimensions along with the first-order dimensions it was then possible on an exploratory basis to identify several groups of participants with distinct types of administrative performance patterns and to establish relationships between these general administrative performance dimensions and some of the background and personal variables.

CHAPTER I

INTRODUCTION¹

The development of the educational system has been influenced by many significant technological innovations, but one of the most promising of the present day media is the computer.² The impact of the computer is being felt in such varied areas of the educational system as instruction, administration, pupil personnel, and research and development. Some specific applications have been (1) computer-based instruction, (2) instructional management information systems, (3) school planning systems, (4) program budgeting systems, (5) school information and retrieval systems, and (6) computer simulation.³

This study was concerned with the latter application. The significance of computer simulation for education rests upon the assumption that simulation will lead to a better understanding of the educational system and that from this improved understanding will come better educational-practice. An unprogrammed computer knows nothing and can do nothing. If one is to develop a system which enables the computer to analyze interrelations among an array of symbols, one has to specify that system--both the definitions of the symbols and the interrelations among them. A present emergent concept resulting from this systematized type of analysis has been that of system analysis.⁴ Whether simulation leads to applicable results or becomes a powerful way of generating useless information depends upon the skill and competence with which it is used. If this is understood fully, computer simulation will testify to one's understanding by analyzing the interrelations correctly. If this is not understood, the errors in the simulation will testify to that, too. This kind of research will force one to refine and develop

¹The research reported herein was performed pursuant to Grant No. OEG-5-9-59167-0014 (010) and Project No. 8-E-167 of the Office of Education, U.S. Department of Health, Education, and Welfare.

²"Computer -- An automatic electronic machine for performing simple and complex calculations." Webster's Third New International Dictionary, (G. & C. Merriam Co., Encyclopedia Britannica, Inc., Unabridged, 1966), p. 468.

³"Simulation -- The dynamic implementation of a model representing a physical or mathematical system and its phenomena by computers or other equipment initiating the behavior of the system in order to enable study of the system." W. B. Fritz, "Selected Definitions," Communications of the ACM, (January, 1963), pp. 152-158.

⁴"System analysis -- The selection of elements, relationships, and procedures to achieve a specific purpose." Van Court Hare, Jr., System Analysis: A Diagnostic Approach. (New York: Harcourt, Brace and World, 1967), p. ix.

an understanding of what one teaches, how one teaches it, how an organizational structure actually works, and whether resources are being used efficiently to accomplish the desired objectives. Simulation imposes a discipline upon the researcher far beyond that previously known in applied educational research.

In the present study, the investigator was concerned with the application of computer simulation to organizational behavior. This type of simulation can be differentiated into four classes:

- (1) Descriptive simulation studies of existing organizations.⁵ The purposes of this class of models are to formulate theories which explain why existing organizations have behaved in particular ways, to test these theories by comparing the observed past behavior with the simulated behavior generated by the model, and to predict how these organizations will behave in the future.
- (2) Illustrative simulation studies of quasi-realistic organizations.⁶ The purposes of this class of simulation models are to explore the implications of reasonable assumptions about organizational behavior, in order to determine what the world would be like if these assumptions were true.
- (3) Normative simulation studies for designing organizations.⁷ The purposes that models of this type serve are to allow one to determine which of several possible forms of organizations are in fact best suited to the particular goals one wants these organizations to fulfill.
- (4) Man-machine simulations, which are intended to train people to function more effectively in organizational settings.

The latter application was the one in which this investigator was interested, particularly as it related to the preparation of educational administrators.

⁵ R. M. Cyert and J. G. March, A Behavioral Theory of the Firm, (Englewood Cliffs, N.J.: Prentice-Hall, 1963), pp. 128-148.

⁶ Ibid., pp. 149-182.

⁷ C. P. Bononi, Simulations of Information and Decision Systems in the Firm, (Englewood Cliffs, N.J.: Prentice-Hall, 1963).

Cohen and Cyert⁸ state:

Computer models⁹ and man-machine simulations offer an unparalleled means by which we can: (a) formulate extremely detailed and highly precise models of organizational behavior; (b) test the empirical validity of these models; (c) experimentally manipulate the models in a way which is usually prohibitive with the real-world organizations; (d) predict the future behavior of existing or redesigned organizations; (e) train people to behave more effectively in an organizational setting.

Despite the capabilities and advantages of computer models and simulation techniques in studying various aspects of organizational behavior, Cohen and Cyert¹⁰ also warn that one should not overlook the fact that behavior of an individual subsystem in isolation may be very different from its behavior as it interacts with other subsystems. McIntyre¹¹ also pointed this out, when he stated:

If behavior in an organization is a function of idiographic and nomothetic forces in dynamic interaction, then prediction of that behavior could never be very accurate at best, because the interaction of those forces could not be known before selection and placement had occurred.

Thus, despite the power and versatility of computer simulation models, there are certain problems and limitations that the computer model builder must keep in mind. If this is done, then computer models can become a powerful tool in dealing with educational problems that have long resisted any form of successful solution or even resolution.

⁸Kalman J. Cohen and Richard M. Cyert, "Simulation of Organizational Behavior," Simulation Models for Education, (Fourth Annual Phi Delta Kappa Symposium on Educational Research, Phi Delta Kappa, Inc., 1965), p. 158.

⁹"Computer Models -- A formal model designed for computer simulation." Ibid., p. 106.

¹⁰Ibid., p. 157.

¹¹Kenneth E. McIntyre, "Six Studies on the Prediction of Administrative Behavior," Educational Administration Quarterly, (University Council for Educational Administration, Winter, 1968), pp. 53-54.

Statement of Problem

The purpose of this research was to develop a computer-based model for maximizing both the feedback of an administrative simulation exercise and the analysis of the results. The two primary objectives of the study were (1) to develop a reliable model which would provide consistent and objective feedback to simulation exercises for school administrators, and (2) to expedite the collection and analysis of data resulting from a situational in-basket procedure.

Review of the Literature

The background information consisting of a review of relevant literature and research is presented in three sections: (1) theoretical basis, (2) relevant research, and (3) a description of the "Madison" simulation materials.

Theoretical Basis

In this study the theoretical framework is provided by both the decision-making process and the systems approach. The use of the decision-making framework has been a valuable approach to the study of administration. Griffiths¹² wrote:

. . .the central function of administration is directing and controlling the decision-making process. It is not only central in the sense that it is more important than other functions, as some writers have indicated, but it is central in that all other functions of administration can best be interpreted in terms of the decision-making process.

Barnard, Simon, and McCamy each stressed the importance of decision-making:

The essential process of adaptation in organizations is decision, whereby the physical, biological, personal, and social factors of the situation are selected for specific combination by volitional action.¹³

¹²Daniel H. Griffiths, Administrative Theory, (New York: Appleton-Century-Crofts, Inc., 1959), p. 121.

¹³Chester Barnard, The Functions of the Executive, (Cambridge, Mass.: Harvard University Press, 1948).

The task of "deciding" pervades the entire administrative organization quite as much as the task of "doing".¹⁴

The making of decisions is at the very center of the process of administration and the discussion of administration will be more systematic if we accept a framework for the analysis of decision-making.¹⁵

The dictionary¹⁶ defines a decision as a settling or terminating, as of a controversy, by giving judgment on the matter; also, a conclusion arrived at after consideration. Based on this definition, Griffiths¹⁷ stated:

A decision is essentially a judicial proceeding; that is, a state of affairs is present, and a judgment is made about it. The judgment is such as to influence action which results from the decision. Action is implicit in a decision, and the judgment is made so that a course of action will be influenced.

Thus, an important guide to both administrative process and administrative action or behavior would be an analysis and understanding of decisions.

The present trend has been toward the use of systems analysis, computer models, and simulation to provide a framework for the analysis and understanding of decisions. These are the concepts upon which this study is based. In this study the individual is placed in a simulated situation and asked to make certain administrative decisions in regard to a series of problems presented to him. A computer-based model is then used to analyze these decisions. Since, in reality, a decision is judgmental and does not necessarily terminate or settle a controversy but may alter, change its direction, or sometimes prolong it; the computer-based model also provides a feedback situation to the individual based on the original decision.

The computer-based model presented in this study is based on the systems approach.¹⁸ The systems which are of concern are complex,

¹⁴Herbert Simon, Administrative Behavior, (2nd ed.; New York: MacMillan, 1957).

¹⁵James McCamy, "An Analysis of the Process of Decision Making," Public Administrative Review, VII, No. 1 (1947), p. 41.

¹⁶Webster's Third New International Dictionary, op. cit., p. 585.

¹⁷Daniel H. Griffiths, "Administration as Decision-Making," Administrative Theory in Education, Andrew W. Halpin, ed., (New York: MacMillan Co., 1967), pp. 122-123.

¹⁸Hare, op. cit.

purposeful, and adaptive.¹⁹ They are complex since they are composed of several interacting components or subsystems performing different functions; purposeful insofar as the total system, viz., the network of subsystems as a whole, is seeking some overall objectives or relationships with its environment; and adaptive insomuch as the systems have the capability of changing their performance depending on how the environment interacts.

Abstractly, a simple system which demonstrates these features is illustrated below.

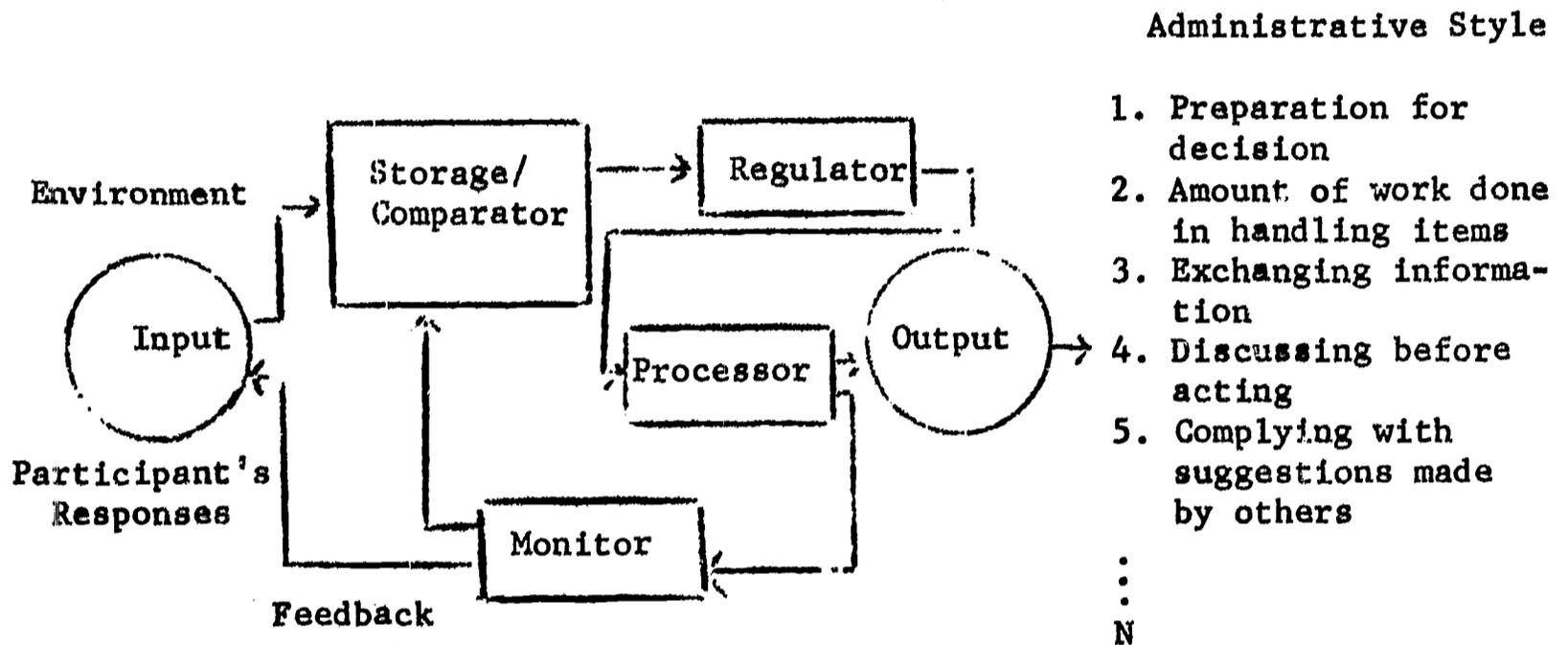


FIGURE 1

MAN-MACHINE SYSTEM FOR THE
ANALYSIS AND FEEDBACK OF PERFORMANCE DATA

The Storage receives two informational inputs. One is from the Monitor concerning "just past" output of the system. The other input is from the environment. The information is stored at this point in the system. The Comparator matches both inputs--information about actual and information about desired system outputs--and computes the differences, if any. The results of this comparison are then transmitted to the Regulator which modifies its directions to the Processor according to the nature, direction and level of the comparison. These modifications in Processor operations will, in turn, affect the system's output. Again,

¹⁹U.S. Department of Health, Education, and Welfare, "The Design and Development of Prototype Instructional Materials for Preparing Educational Administrators," Project No. 5-0998, (January, 1968), p. 89.

this will be noted by the Monitor and reported back to the Comparator and to the environment. The cycle continues until the analysis and feedback has been completed. Hence, this combination of subsystems communicating with each other (complex), seeking a target (purposeful), and modifying their output (adaptive) illustrates the original definition.

In summary, the computer-based model resolves each of the decisions (input) made by the participant into its basic elements and then as the result of an expression of the interrelationships of the elements in mathematical terms, the computer is able to analyze the interrelationships and identify the various administrative styles (output) exhibited by the participant in his decision-making. It is hoped that such analysis of decisions will provide a better understanding of the nature of decision-making in both administrative process and administrative behavior and, as a result, provide leads for future research and new knowledge.

Relevant Research

The basic research underlying this study was the Whitman Elementary School project conducted by Hemphill, Griffiths, and Frederiksen.²⁰ The Whitman School project was directed toward the development of criteria of performance in school administration. The major objective was to determine how one might describe differences in the performance of elementary school principals. This was done by simulation, which permits the collection of normative and comparative data on behavior and performance in identical situations. The school simulated was called the Whitman School and 232 elementary principals took part in the project. The means employed to simulate the administrative tasks was the in-basket. Eight administrative styles were identified through a tedious content analysis of the in-basket items and the relationships between the patterns of administrative performance and personal variables were examined. It was anticipated that the analysis of the data would stimulate the development of concepts and models useful in both research and training.

The present study was designed to build upon the administrative factors and results derived from the Whitman School project and to provide simultaneously a more efficient and reliable method for analyzing in-basket simulation materials and of providing feedback to the participant. This study was also concerned with the elementary principalship; however, it employed the "Madison" simulation materials, a recent revision of the original Whitman School materials.

Models reflecting attempts to develop materials of a feedback nature for the "Madison" materials which utilize the in-basket technique are as follows:

²⁰ John K. Hemphill, Daniel E. Griffiths, and Norman Frederiksen, Administrative Performance and Personality, (Bureau of Publications, New York: Teachers College, Columbia University, 1962).

- (1) A Computer Assisted Instruction Feedback Procedure for an Administrative In-basket Problem²¹
- (2) A Game Theory Derived Rationale for Constructing Feedback to In-basket Items Used in the Madison School Simulation²²
- (3) A Game Model Analysis of Conflicts of Interest Situations in Administration²³
- (4) Leadership Game-Secondary Principalship²⁴
- (5) Madison School Simulation RES Decision Problems²⁵

Model one consists of a programmed response technique for a single item from the Elementary Principal's In-basket wherein the participant is presented with a variety of responses and selectively chooses responses until the correct one is found. The participant is then analyzed on the basis of how efficient he was in choosing the correct response. Models two and three are based on game theory and sequenced feedback procedures. They consist of identifying conflict situations and relating them to possible consequences and payoffs. Model four is also a gaming situation, but here the player is presented with a complete sequence of programmed responses as in model one. Also, the instructor must be available to provide orally the information required by the player. Model five consists of presenting several different ways of analyzing specific items by means of semi-structured decision problems.

There are several problems and limitations involved in the above feedback models:

- (1) The participant may not be given a chance to reflect his own thoughts because of the requirement that he choose a response from a completely structured set of

²¹Wailand Bessent, "A Computer Assisted Instruction Feedback Procedure for an Administrative In-basket Problem," University of Texas, February, 1967. (Report made available by University Council for Educational Administration).

²²Robert H. Ohm, "A Game Theory Derived Rationale for Constructing Feedback to In-basket Items Used in the Madison School System Simulation," University of Oklahoma, May, 1967. (Report made available by UCEA).

²³Robert H. Ohm, "A Game Model Analysis of Conflicts of Interest Situations in Administration," University of Oklahoma, 1967. (Unpublished report).

²⁴Robert H. Ohm, "Leadership Game-Secondary Principalship," University of Oklahoma, 1967. (Report made available by UCEA).

²⁵Robert E. Sweitzer, "Madison Schools Simulation RES Decision Problems," Pennsylvania State University, March, 1967. (Report made available by UCEA).

responses. Thus, it is possible that the participant will respond in a manner which is not typical of his true behavior.

- (2) The notion of a single correct response is questionable.
- (3) Replication and generalizability is difficult.
- (4) Identification of administrative styles and attributes is quite limited and difficult to score.
- (5) The administration of some of the models is cumbersome and requires special training.
- (6) The models deal with a specific item or group of items, and the analyses for the most part are subjective and time consuming.

Through the use of computer-based analysis and feedback procedures, the model presented by the investigator in this study attempts to remedy some of the above mentioned problems and limitations and yet build upon the results and ideas contained in their models and studies.

Some recent developments in using the computer in connection with simulation exercises have included attempts at direct computer simulation. A study conducted by the Systems Development Corporation for the U.S. Office of Education was designed to explore uses of systems analysis and computer simulation in studying innovation in public secondary schools.²⁶ One of the primary objectives of the project was the use of computer simulation for the organizational planning required to implement instructional innovation. The major findings reported include the identification of two uses of systems in education: (1) the specification of procedures for conducting analyses of instructional systems, and (2) the implications of systems analysis for school organization. Although the Systems Development Corporation study did not deal with either the simulation or identification of administrative performance specifically, it does show that computers can be applied to education and simulation techniques.

The most recent attempts at direct computer simulation include two prototype computer-based simulations of administrative problems by Paul Cullinan and Robert Ruderman.²⁷ The first computer simulation problem was intended to trace the information search patterns of

²⁶System Development Corporation, "New Solutions to Implementing Instructional Media through Analysis and Simulation of School Organization," Technical Memorandum 14931201100, 1966. (U.S. Office of Education Grant No. 7-14-9120-217).

²⁷U.S. Department of Health, Education, and Welfare, op. cit., pp. 86-148.

administrators as they conceive a problem and formulate a recommendation regarding a school building addition. The other problem was concerned with the selection of an elementary school principal. In both of these problem situations, the participant sits at a teletypewriter, which serves as a remote terminal for the computer storing the program. The two prototype models are significant in that they both illustrate the potential of the computer-based system as a medium through which content might be organized and communicated--the concept to which this study was based.

Other research related to the use of the in-basket simulation technique has been in the area of predicting administrative behavior. Studies done along these lines have been reported by Brown,²⁸ Cross,²⁹ and Gibbs.³⁰ The principal findings of the Brown and Cross studies were (1) no relationship existed between pre-service in-basket responses and teachers' perceptions of administrative behavior, (2) a slight relationship existed between the factor structure of the in-basket responses and perceived behavior on the job, (3) global impressions of on-the-job performance were considerably more predictable than were specific categories of behavior, (4) few significant differences were found between the subjects' predictive in-basket performances and their later concurrent in-basket performances, and (5) the three significant predictive relationships which were found were for categories of an interpersonal nature. The main limitations of both of these studies were that the number of participants was small (only 14) and the participants were limited to one geographic area. Gibbs, using a sample of 35 elementary principals, found a significant relationship between the in-basket responses and perceived on-the-job nomothetic behavior exhibited by the principals. Gibbs' findings seem to indicate that from decisions made in a simulated situation general behavior characteristics may be more predictable than specific behaviors, which is what Cross also had found. Thus, simulated situations for educational administrators may have more of a utility in terms of training administrators to behave effectively in an organizational setting, and as a framework in which school administrators may obtain decision-making practice, rather than as a predictor of specific on-the-job administrative behaviors.

²⁸ Robert S. Brown, "Predictability of Administrative Behavior from In-Basket Simulation Responses," (Unpublished doctoral dissertation, Austin: The University of Texas, 1967).

²⁹ Wilton Ray Cross, "Relationships Between In-Basket Performance and the On-The-Job Behavior of Elementary School Principals," (Unpublished doctoral dissertation, Austin: The University of Texas, 1967).

³⁰ Gordon C. Gibbs, "Use of Computer Simulation to Examine the Validity of Getzel's and Guba's Model in Terms of its Ability to Predict Administrative Behavior," (Unpublished doctoral dissertation, Ames: Iowa State University, 1968).

Background Description of the "Madison" In-Basket Materials³¹

The purposes of the "Madison" school district in-basket test materials are to provide (1) general descriptions of administrative performance in the school, and (3) criteria indicative of effective administrative performance in the school. These descriptions and criteria are sought through the use of specially constructed "In-Basket" problems, which aim to simulate everyday tasks confronted by the school administrator. The materials are intended for use in pre-service programs and in traditional course formats. Two types of materials have been developed. The first consists of background items which orient the participants to the "Madison School District". The materials consist of a filmstrip entitled, "Madison School and Community" and a packet of written materials providing an introduction to the attendance area, school building, staff, program and pupils. The second type of material centers around stimulus items to promote the active involvement of participants. A variety of items are provided which may be used totally or selectively. The content for these items has been prepared to (1) represent the reality of the position as it exists in the "Madison School District", and (2) represents current practices relevant to educational administration.

The major portion of the tasks are represented by two sets of in-basket items. The first set of in-basket items is organized to represent situations typical for the first week of school and the second set of items relate to situations occurring three months later. Each in-basket is a collection of items representative of the variety of communications which appear on the elementary principal's desk. The in-baskets are designed for use in a free response or semi-structured situation in which the participant is asked to react to each item in the basket as he thinks he would under real conditions. The in-basket items consist of letters, memos, exhibits, and telephone messages. They are representative of the following task areas: curriculum development, staffing for instruction, materials development and utilization, in-service education, evaluation of instruction, community relations, and staff relations. The number of items in each task area is chosen in accordance with the administrative position.

The immediate situation of the in-basket is briefly described. General instructions for making responses to the problems in the in-basket are given. The participant taking the in-basket is instructed to act as he would if he really found himself assuming the described position under the indicated circumstances. He is to dispose of the in-basket contents as he would dispose of them on the job, with the additional requirement that he must record all of his actions, plans, and decisions in writing. That is, where a matter might be handled by a telephone call he must write out what he intends to discuss, what information he will ask for or give, and the like. Letters and memoranda

³¹University Council for Educational Administration, Madison School System Simulation, (Ohio: Columbus, 29 West Woodruff Avenue, 1967).

are to be written. Also, plans for future action are to be outlined, as are topics to be discussed at meetings or with individuals.

Information also is included to provide a basis for future reaction and discussion. In addition, a resource materials packet prepared by UCEA³² is available for general use. These supplementary materials are intended to provide a variety of approaches from which individual professors may embark upon the use of the "Madison" simulation materials.

Rationale for Study

Whitehead³³ states in his discussion of the learned world:

First-hand knowledge is the ultimate basis of intellectual life. To a large extent book-learning conveys second-hand information, and as such can never rise to the importance of immediate practice.

It has been known for some time that situations affect behavior in significant ways. This knowledge has led many authorities away from the "traitist" and toward the "situationist" point of view. This approach assumes that performance, i.e., that which one actually does, is the important element. A survey of available simulated materials indicates that these materials have been used in a variety of ways in different situations. One important method employed to simulate tasks of administration has been the in-basket.³⁴ This technique uses items which have actually appeared in the in-baskets of working administrators.

Some of the advantages and capabilities of simulated situations are as follows:³⁵

- (1) Evident face validity of the situation stimulates interests and motivation in learning and encourages the subject to behave as he might in reality. Fears, satisfaction, anxieties, anger, fatigue, doubt, and frustration are poignantly experienced. Learning by doing is manifest.

³²University Council for Educational Administration, Madison Public Schools Resource Materials Packet, (Ohio: Columbus, 29 West Woodruff Avenue, 1967).

³³Alfred N. Whitehead, The Aims of Education and Other Essays, (New York: MacMillan Company, 1929), p. 61.

³⁴Norman D. Frederiksen, D. R. Saunders, and Barbara Wand, "The In-Basket Test," Psychological Monographs, Vol. 71, No. 9 (Whole No. 438), 1957.

³⁵D. Richard Wynn, "Simulation: A Terrible Reality in the Preparation of School Administrators," Phi Delta Kappan, Vol. XLVI, (December, 1964), pp. 170-173.

- (2) The written record of performances results in the accumulation of normative data and permits clinical examination and comparison of "on-the-job" behavior in identical situations. Subjects are enabled to examine a variety of solutions and to weigh the effectiveness of each.
- (3) Permits the learner to profit from mistakes that might be disastrous on the job. Permits experimentation which is frequently not possible on the firing line.
- (4) The instructor can provide the subject with concepts, research evidence, models, or other information which he can not always send in during the actual game. Theory and practice may be more relevant and visibly joined in simulation than in more conventional teaching methods.
- (5) Provides an opportunity to see the whole picture, to view each problem in broad context. The relevance of distant, obscure, or subtle variables in the ecology are perceived more readily than in the more generalized situations common in conventional instruction.
- (6) Permits a degree of introspection rarely provided on the real job. Subjects can look at themselves more self-consciously, more deliberately, more leisurely, and more objectively than is possible when the chips are down. Defensiveness and rationalization of behavior are less intense and less frequent. Subjects can deepen their perception of the effects of their behavior on others, and can understand and accept themselves more realistically.
- (7) A medium of instruction which the subject may find useful in his own school situation--use in in-service programs back home.
- (8) Presents an extremely useful research medium, permitting the collection of normative and comparative data on behavior and performance in identical situations. Analysis of the data stimulates the development of concepts and models useful both in research and teaching.

Post-participation discussion of the probable consequences of actions taken in response to simulated situations has provided new insights for the practicing administrator in dealing with the real situation. However, the technique used most by educational administrators, the simulated in-basket technique, has been restricted by the availability of appropriate feedback materials. A review of available feedback materials to in-basket simulation exercises reveals some of their limitations and problems. Five such limitations are:

- (1) Lack of a system to efficiently and objectively collect, store, code, operate, and selectively disseminate data concerning the participant's behavior.

- (2) Lack of a system that moves beyond the one-shot, in-basket item format to the more complex and sequenced feedback.
- (3) Lack of a system for making precise comparisons between and among responses of participants.
- (4) Lack of a system which provides immediate attainment of reinforcing relationships between concepts and simulated administrative situations.
- (5) Lack of a system for modifying future problem situations through accumulated feedback.

Thus, the primary concern of this study was the development of appropriate procedures and methods for maximizing both the feedback to the simulation exercise participants and the analysis of the results. The above limitations suggested the following question: "What media are available today through which appropriate sequenced feedback might be presented and within which content might be organized, communicated, and analyzed efficiently and objectively?" By drawing upon present emergent concepts related to such areas as system analysis, information analysis, and computer technology, one of the most promising media available to achieve these purposes is the computer. Thus, the development of feedback materials was based on a model involving a computer-based program.

To narrow the focus of the study and to build upon the results and ideas contained in previous models and studies, the "Madison School District" in-basket simulation materials provided the basic model structure. In summary, the main purpose of this study was the development of a reliable computer-based feedback model of the "Madison School District" elementary principal in-basket simulation exercises using a teletype terminal as a remote access unit.

Utility of the Model

As further rationale for the study, presented below are some of the utilities of the computer-based analysis and feedback model.

- (1) Directly builds upon the administrative performance factors and results arrived at in the Whitman School Study and upon some of the ideas contained in the other feedback models.
- (2) Provides an immediate, objective, and consistent analysis of the participant's responses.
- (3) Provides for the preparation, training, and selection of school administrators.
- (4) Relieves the professor and trained scorer of the tedious task of making a subjective content analysis of each participant's responses.

- (5) No transfer of data is necessary; all of the data is already coded and stored in the computer directly.
- (6) Acquaints the participant with some of the uses of the computer.
- (7) Provides further insight into the analysis of administrative performance through decision-making.
- (8) Acquaints the participant with system analysis and computer simulation.
- (9) Provides for replicability in future research.
- (10) Yields definite implications for future research in the simulation of administrative performance and in the sequential feedback of such exercises.

Statement of Objectives

The objectives of the study developed from the need for a consistent, immediate, and objective feedback to participants in simulation exercises and from the problems which have been encountered in the study of administrative preparation and training, and administrative qualification and selection. The study had two primary objectives and three secondary objectives. In addition, certain ancillary relationships were investigated.

Primary Objectives

- (1) To develop a reliable computer-based model which would provide a consistent and objective feedback to simulation exercises for school administrators.

In this study an effort was made to establish a model that would minimize the variability involved in the analysis of the participant's responses and provide an unbiased profile of his behavioral performance. Such a model would improve feedback for future simulation techniques and provide opportunities for replication. Furthermore, it was anticipated that comparability between and among responses of participants would be enhanced.

- (2) To expedite the collection and analysis of data resulting from a situational in-basket procedure.

The computer-based feedback model would relieve an evaluator from performing a manual content analysis of

a participant's responses. The data would be both coded and stored within the machine during the feedback process, thus eliminating any previous data handling. It would also permit a thorough analysis of the participant's responses to be presented immediately upon completion of the feedback process.

Secondary Objectives

- (1) To determine dimensions of performance in the school administrator and, thus, develop a better understanding of the nature of the job of the school administrator.

An effort was made to describe and understand the administrative behavior of the school administrator and in particular the elementary school principal. To do this, the behavioral dimensions of the administrator were identified through the analysis of basic performance characteristics exhibited by the administrator in his decisions.

- (2) To provide information helpful in the solution of the problem of selecting school administrators.

Success in determining the dimensions of the performance of school administrators, and the development of knowledge within this dimension as related to other performance characteristics, may suggest more discriminating procedures for the selection of school administrators.

- (3) To provide instrumentation for the preparation and training of school administrators.

The instrumentation in this study includes a model for interaction and feedback of in-basket simulation exercises. The media for the instrumentation was provided through a teletype terminal, which offers the participant experience in both decision-making techniques and computer applications.

Ancillary Data

In addition to the primary and secondary objectives, the relationships of the behavioral dimensions of the administrator to certain ancillary data were examined. The ancillary variables were: sex, age, position, number of years in present position, number of years of teaching experience, number of years in administration or supervision, area of academic concentration, level of professional training, and graduate credits in administration. Because of the nature of the final sample, measures of the following variables were also available for a selected portion of that sample: Miller Analogies Test, Watson-Glaser Critical

Thinking Appraisal, Cooperative English Test, Concept Mastery Test, Edwards Personal Preference Schedule, and Differential Values Inventory.

Definitions and Delimitations

The following definitions and delimitations were used:

- (1) **Computer:** An automatic electronic machine for performing simple and complex calculations.
- (2) **Simulation:** The dynamic implementation of a model representing a physical or mathematical system and its phenomena by computers or other equipment initiating the behavior of the system in order to enable study of the system.
- (3) **System Analysis:** The selection of elements, relationships, and procedures to achieve a specific purpose.
- (4) **Computer Model:** A formal model designed for computer simulation.
- (5) **Decision:** A settling or terminating, as of a controversy, by giving judgment on the matter; also, a conclusion arrived at after consideration.
- (6) **Dimensions of Administrative Performance:** Those behavioral performance factors identified through a component analysis of the basis scoring categories used.*

Summary

This chapter has included an introduction to the problem, statement of the problem, review of the literature, rationale of the study, statement of primary and secondary objectives and ancillary variables, and definitions and delimitations of the variables used in testing the objectives. In Chapter II, the development of the model, population of the study, general operating procedures, sample feedback interchange, instrumentation, and statistical procedures are discussed. Chapter III will include a description of the background, experience, and personal characteristics of the participants. The presentation and analysis of the basic data collected through the administration of the computer-based feedback model and the relationship of this data to the ancillary data will be reported in Chapter IV. Chapter V will contain some ancillary analysis of the data. Chapter VI will contain a summary of the findings and a discussion of conclusions and implications.

CHAPTER II

DESIGN AND METHODOLOGY

In this Chapter the development of the model, selection of the population, general operating procedures, sample feedback interchange, instrumentation and statistical procedures are described.

Development of Model

The development of the model consisted of three phases: (1) identification of items, courses of actions, and feedback problems, (2) development of computer-based analysis and feedback procedure, and (3) experimentation and refinement.

Identification of Items, Courses of Action, and Feedback Problems

The items used in the computer-based feedback model were selected by the investigator and Dr. James Lipham, Professor of Educational Administration at the University of Wisconsin. The main criterion used was that the items lend themselves to sequenced feedback. Six items were so identified. They were items four, five, six, eleven, fifteen, and sixteen.*

The investigator went through over 100 in-baskets completed by students in classes in Administrator Behavior during 1967-68 and identified all of the various courses of action taken for each of the six items to be used in the computer-based feedback model. A set of possible actions was then compiled corresponding to each of the items. These actions were then reworded so as to minimize the overlap which might occur between actions. Next, graduate students in educational administration in an advanced seminar in Administrator Behavior developed a set of feedback problems corresponding to the identified actions. These feedback problems were then pilot tested in a class in Administrator Behavior. The procedure was as follows:

- (1) The participant was asked to complete all of the items in the "Madison" in-basket in the usual free response procedure.
- (2) Looking at the sets of actions compiled for items four, five, six, eleven, fifteen, and sixteen, the investigator identified the action or actions that best described those taken by the participant in handling the item.

*The final version of the model included five items. They were items four, five, six, eleven, and sixteen. See Appendix A.

- (3) The appropriate feedback problem corresponding to the actions taken was then assigned to the participant.
- (4) The participant then responded to the feedback problem assigned, again using the free response technique.
- (5) Based on these responses, sets of feedback actions were then compiled for the various feedback problems.
- (6) Additions and refinements were then made in both the original sets of actions for the items being used and for the feedback problems corresponding to these actions.

Development of Computer-Based Analysis and Feedback Procedure

After examining the responses to the items and the feedback problems, the investigator decided to use the following basic format to analyze the in-basket responses:

- (1) Identify the types of communication used.
- (2) Identify the communication groups and individuals involved.
- (3) Identify the purposes of communication with the groups and individuals involved.
- (4) Identify the courses of action taken.
- (5) Provide an appropriate feedback problem.

Because of the inefficiency involved in printing out large quantities of data such as purposes of communication, sets of actions, and feedback problems through a teletype terminal, the investigator developed an accompanying manual to assist in the presentation of these types of data. Thus, to aid in the analysis and feedback of the in-basket items an interaction manual was provided (See Appendix B). This manual contains (1) the basic instructions needed for the use of the computer-based feedback model, (2) types of communication used, (3) communication groups and individuals involved, (4) purposes of communication, (5) possible courses of action, and (6) appropriate feedback problems. Hence, during the analysis and feedback there is a continual interaction between the participant, the computer, and the manual. The computer guides this interaction process.

The scoring categories used in the analysis and feedback are based on those used in the original Whitman Elementary School project, although certain delineations were made because of the infeasibility of scoring some categories by computer and in order to reduce overlap between others. The computer-based model scores thirty-seven categories as opposed to forty categories in the original Whitman School project. A complete set

of directions describing how each of these categories was scored is presented in Appendix C.

To provide reliability in the scoring of the actions taken in response to the items used in the computer-based model, the investigator and Dr. James Lipham, Dr. Robert Moser, Dr. Marvin Fruth and Dr. Richard Morrow, all Professors of Educational Administration at the University of Wisconsin who were familiar with the "Madison" in-basket materials, each scored all of the actions. If a scoring category was checked as applying to a particular action by three or more of the five scorers, that scoring category was then used. A summary of these results and how each of the other components of the computer-based model were scored is presented in Appendix D.

The computer program that guides the analysis and feedback procedure is stored in a Burroughs 5500. The program is written in WIPL.¹ A teletypewriter terminal is used as a remote access unit through which the participant can interact with the computer. Because the core storage allotted to an individual hooked up with the B-5500 is limited, it was necessary to separate the computer program for the computer-based feedback model into two parts. The complete program is given in Appendix E.

A paper and pencil evaluation format was also devised by the investigator so that all of the data that the computer-based model gathers in its analysis, with the exception of the feedback response data, could also be gathered without the aid of the computer. A Fortran IV program was written so that these data could be analyzed on a Control Data 3600 and the same results obtained as can be obtained via the teletype hookup. This enables someone other than the participant to evaluate the participant's responses without having to use the teletype. This technique was used to perform a reliability check on the participant's interpretation of his responses. The paper and pencil evaluation format, a computer card set up, and the Fortran IV program are all shown in Appendix F.

Experimentation and Refinement

In setting up and refining the model, many informal runs of the computer-based feedback model were made using both graduate students and practicing administrators. In addition, two complete pilot studies were conducted and revisions and refinements made. The first pilot study consisted of a group of fifteen students in an administrator behavior class, and the second consisted of twenty-five students in an administrator behavior class. On the basis of the opinions expressed by the various personnel involved in the pilot studies, conclusions were reached with

¹Wisconsin Interaction Problem-Solving Language. An on-line, conversational program developed by the University of Wisconsin Computing Center, Madison, Wisconsin. The program permits a remote B-5500 console to be used as a desk calculator or as a stored program computer.

regard to needed adjustments and revisions in the model. The pilot studies indicated that approximately one hour and fifteen minutes was required for a participant to complete his analysis and feedback; whereas, approximately fifty minutes to an hour of interaction time seemed about right to maintain maximum interest. The pilot studies also indicated that item fifteen was not contributing a substantial amount of information to the overall analysis. Therefore, to reduce the time and to maximize the information gained, item fifteen was eliminated in the final version of the computer-based feedback model. Thus, the present model includes five in-basket items with feedback.

The Study Sample

The final sample for this study consisted of a total of one hundred seventeen participants. The specific breakdown of the sample was as follows:

Administrative Staff Development Group	41
Graduate Students in Educational Administration	51
Administration Fellows in Urban Education	25

The Administrative Staff Development Group consisted of a group of practicing elementary principals and a group of potential elementary principals from the Green Bay, Wisconsin, Public School District. The Administrative Staff Development Group was chosen because (1) the group consisted of both practicing and potential elementary principals, (2) as part of the Administrative Staff Development Program the "Madison School District" simulation materials were being administered, and (3) the data from a battery of tests measuring such items as academic aptitude, value orientation, critical thinking, and basic personality factors given in connection with the program would be available to the investigator. The group identified as Graduate Students in Educational Administration consisted of graduate students enrolled in an on-campus Administrator Behavior class taught in the Department of Educational Administration and of graduate students enrolled in an Administrator Behavior class taught off-campus at Whitewater, Wisconsin. The graduate student group was chosen because (1) the "Madison School District" simulation materials were a required part of the Administrator Behavior classes and (2) the classes consisted of both potential and practicing school administrators. The Urban Fellows Group consisted of a group of potential inner-city school administrators enrolled on campus at the University of Wisconsin as part of an Urban School Administration Program. This group was chosen because (1) the "Madison School District" simulation materials were a required part of the Urban School Administration program and (2) the Urban Fellows Group were all potential elementary school administrators.

General Operating Procedures

Described below are the general operating procedures involved in the data collection.

- (1) The participant was first presented with a set of background materials designed to orient him to the "Madison School District". The materials consisted of a filmstrip entitled, "Madison School and Community", and a packet of written materials providing an introduction to the attendance area, school building staff, programs, and pupils. The filmstrip was shown in a group setting to each of the populations making up the final sample. It required approximately one hour. The packet of written materials was given to the participant to take home and study during the week preceding the in-basket exercise.
- (2) The participant assumed the role of an elementary principal and was presented with an in-basket simulation exercise. The exercise consisted of twenty response items of which five were used in the computer-based feedback model. The participant taking the in-basket was instructed to act as he would if he really found himself assuming the described position under the indicated circumstances. The participant was asked to analyze all of the items presented in the in-basket using a free response technique. He was to dispose of the in-basket contents as he would dispose of them on the job, with the additional requirement that he must put all of his actions, plans, decisions, etc. in writing. A two hour time period was allotted to the participant for his reaction to the stimulus items. The participant was also allowed to use the background packet of written materials as a reference source during his participation in the simulated situation. The time lapse between the presentation of the filmstrip and background materials and the in-basket exercise was one week for each of the groups involved in the study.
- (3) The participant sat down at a teletypewriter, which served as a remote terminal for the computer storing the program for the feedback and analysis. To assist in the presentation of certain types of data during the analysis and feedback of the in-basket items an interaction manual was provided (See Appendix B). In addition, to assist the participant with any question that he had either in regard to the teletype or in the use of the interaction manual either the investigator, or Mr. William Woods, a graduate student in Educational Administration at the University of Wisconsin, or Dr. Robert Moser, Professor of Educational Administration at the University of Wisconsin, was available for consultation.

- (4) The participant took his original free responses and interacted with the computer. The computer asked the participant a set of decision-making questions in regard to the responses. The participant responded and the computer asked another question. This process continued until the participant's response to the first item was analyzed. Next, the computer presented the participant with a feedback problem based on the course or courses of action that the participant took in handling the in-basket item. The participant then responded to this problem. This procedure continued until the five items being used in the computer-based feedback model were analyzed. The time required for the computer-respondent interaction process was from approximately fifty minutes to one hour for each participant.
- (5) At the end, the computer presented the participant with a complete and immediate analysis of his responses.

Sample Feedback Interchange

Selected portions of an interchange are given below for illustrative purposes only.

Teletype Interchange:

THIS IS A COMPUTER-BASED MODEL FOR ANALYZING YOUR RESPONSES TO THE MADISON IN-BASKET SIMULATION EXERCISES. YOUR COOPERATION IS APPRECIATED.

ENTER THE ITEM NUMBER OF THE RESPONSE THAT YOU WISH TO ANALYZE.

NUMBER=?

:6

ESTIMATE THE TOTAL NUMBER OF WORDS THAT YOU USED

WORDS=?

:25

TYPES OF COMMUNICATION--TURN TO PAGE TWO (PART A).

CHOICE(1)=?

:2

Reprint from page 2 of the Interaction Manual:

Page 2

Part A IDENTIFY THE TYPE(S) OF COMMUNICATION THAT YOU USED

1. Letter
2. Memo (include any memos or notes to secretary)
3. Telephone Call
4. Face to Face (include any conference or meeting or the intention of such)
5. Note or memo to self

Teletype Interchange:

COMMUNICATION GROUPS INVOLVED--PAGE TWO (PART B)

CHOICE(1)=?

:1

CHOICE(2)=?

:2

CHOICE(3)=?

:0

Reprint from Page 2 of the Interaction Manual:

Page 2

Part B IDENTIFY THE COMMUNICATION GROUP(S) INVOLVED

(Also include any individuals that you explicitly indicated in your response that you plan or intend to communicate with)

1. Subordinate(s) (any staff or non-professional personnel)
2. Superior(s) (superintendent, his office or secretary, assistant superintendent, or Board of Education)
3. Outsider(s) (parents, city officials, PTA, former principal-Parker, etc.)
4. Peer(s) (fellow principals in the "Madison School District")
5. None of the above

Based on the communication group(s) that the participant involved in handling the original response, the computer directs the participant to the appropriate individual(s) to identify the purpose of the communication with that individual.

Teletype Interchange:

SUBORDINATE INDIVIDUALS INVOLVED--PAGE THREE (PART A).

CHOICE(1)=?

:7

CHOICE(2)=?

:0

NOW LOOK AT PART B (SAME PAGE).

CHOICE(1)=?

:0

Reprint from page 3 of the Interaction Manual:

Page 3

PART A IDENTIFY THE SUBORDINATE(S) INVOLVED INDIVIDUALLY

Individual	Position
1. None	
2. Adams, Eugene	Head Custodian
3. Barnes, Jane (Mrs.)	Third (Gr. Chrm.)
4. Cox, Rosie (Mrs.)	Cook-Manager
5. Martin, Judith (Mrs.)	Food Service Helper
6. Shepherd, Linda (Mrs.)	School Secretary
7. Strawn, Linda	Second
8. Timberlake, Phyllis (Mrs.)	Fourth (Gr. Chrm.)
9. Other	

PART B IDENTIFY THE SUBORDINATE GROUP(S) INVOLVED AS A WHOLE

1. None
2. Cafeteria Personnel
3. Clerical Staff
4. Grade Chairman
5. Janitors
6. Para-Professional
7. Professional Staff
8. Students
9. Other

Teletype Interchange:

PURPOSE OF THE COMMUNICATION--TURN TO PAGE FIVE.

CHOICE(1)=?

:8

CHOICE(2)=?

:9

CHOICE(3)=?

:4

CHOICE(4)=?

:0

DID YOU USE ANY SLANG, COLLOQUIAL LANGUAGE OR FIRST NAMES
IN YOUR COMMUNICATION WITH THE SUBORDINATE(S).

1. YES
2. NO

CHOICE(1)=?

:1

Reprint from page 5 of the Interaction Manual:

Page 5

IDENTIFY THE PURPOSE(S) OF THE COMMUNICATION

1. To delegate or transfer the entire problem.
2. To give directions or suggestions (does not include telling secretary to type or mail something).
3. To set up some plans.
4. To make an acknowledgement.
5. To inform or give information (includes giving reminders).
6. To discuss.
7. To ask for advice, suggestions, or an opinion.
8. To ask for or indicate a need for additional information.
9. To arrange a conference or meeting or to set up a committee.

Teletype Interchange:

SUPERIOR(S) INVOLVED--PAGE FOUR (PART A)
CHOICE(1)=?
 :3
CHOICE(2)=?
 :0
PURPOSE OF THE COMMUNICATION--TURN TO PAGE FIVE
CHOICE(1)=?
 :5
CHOICE(2)=?
 :6
CHOICE(3)=?
 :0

Reprint from Page 4 of the Interaction Manual:

Page 4

Part A Individual	Position
1. Dr. James Brewer	Superintendent
2. Dr. Carl King	Assist. Supt. for Instructional Services
3. Mr. Walter Houser	Assist. Supt. for Business Management

4. Board of Education
5. Superintendent's Office or Secretary
6. Other

Teletype Interchange:

WHICH OF THE FOLLOWING BEST DESCRIBES THE COURSE(S)
OF ACTION THAT YOU TOOK IN HANDLING THIS ITEM.

(TURN TO PAGE THIRTY-THREE)

CHOICE(1)=?

:7

CHOICE(2)=?

:0

APPROX. HOW MANY DAYS BEFORE THESE ACTIVITIES ARE CARRIED OUT.
DAYS=?

:3

Reprint from Page 33 of the Interaction Manual:

Page 33

POSSIBLE COURSE(S) OF ACTION FOR ITEM 6.

(Remember--select only the action(s) which you actually took
in handling this item.)

1. No action--feel situation is insignificant.
2. File for later referral.
3. Secure additional information about the cafeteria procedures.
4. Plan to visit the cafeteria to check on the situation.
5. Communicate with Miss Strawn assuring her that you will look into the situation.
6. Communicate with Mrs. Martin requesting a conference.
7. Communicate with Miss Strawn requesting a conference.
8. Communicate with Miss Strawn to check into possible policy changes in the cafeteria.
9. Secure additional information regarding Miss Strawn and/or Mrs. Martin.
10. Communicate with Rosie Cox (cook-manager) in regard to the present Mrs. Martin-Miss Strawn conflict and/or in regard to conditions in the cafeteria in general.

11. Communicate with Miss Strawn essentially telling her to shape up and stating that two adult women ought to be able to cope with such financial matters.
12. Communicate with Miss Strawn informing her that Mrs. Martin will be notified of her complaint and thanking her for her concern.
13. Place on faculty meeting agenda.
14. Arrange a meeting with the cafeteria director and/or cafeteria personnel to review procedures.
15. Other.

Teletype Interchange:

TURN TO PAGE 37 FOR THE
APPROPRIATE FEEDBACK ITEM FOR YOUR RESPONSE.

AFTER READING THE FEEDBACK ITEM FOLLOW THE
DIRECTIONS AT THE BOTTOM OF THE PAGE.

Based on the course(s) of action the participant took in handling the original response, the computer directs the participant to the appropriate feedback item.

Reprint from page 37 of the Interaction Manual:

Page 37

Re: Conference with Miss Strawn

Miss Strawn says:

"Mrs. Martin drinks heavily and has been seen on many occasions in Dugan's bar on 9th street. Parents have talked to me about this since they didn't feel they could talk to anyone else."

"I have worked long and hard in this school, and I don't want anyone spoiling the good name of Edison."

For possible responses to this feedback item--See Page 47

Dependent upon the course(s) of action the participant took in handling the original response for item six, other possible feedback items might have been as follows:

(1) Dear Mr. Watkins:

I have not received any reply from you re: my note of August 26. I am usually listened to by my peers and colleagues in education. You will need help with this new principalship and I will certainly be available for advice. If nothing is done about Mrs. Martin, I will go directly to the Superintendent.

Linda Strawn

(2) Re: Communication with Miss Strawn

Says Mrs. Martin is unfriendly, uncooperative, poorly groomed, and selfish. Says that she should not work in the serving line where she deals directly with people.

Also is not in favor of a system of purchasing weekly lunch tickets in the office. Won't be tied to a weekly schedule.

(3) Memo to: Self

Subject: Miss Strawn and/or Mrs. Martin

1. Miss Strawn has problems. She has been teaching in the same room for forty years, lives alone, and even made a passing remark recently about committing suicide.
2. Must hostility present between Miss Strawn and Mrs. Martin.
3. Miss Strawn seems to be highly respected by children and parents.
4. General conflict between teachers and non-professional personnel.

(4) Phone call from Rosie Cox:

- Says:
1. Much hostility present.
 2. General conflict between teachers and non-professional personnel.
 3. Several employees demand action or they will resign.
 4. Staff feels student supervision must be improved in the cafeteria.

Dependent upon the feedback problem presented, there are different possible sets of feedback courses of action that the participant is referred to.

Teletype Interchange:

POSSIBLE COURSE(S) OF ACTION TO THE FEEDBACK ITEM.

CHOICE(1)=?

:1

CHOICE(2)=?

:8

CHOICE(3)=?

:0

THE ANALYSIS OF ITEM 6 IS COMPLETED.

NEXT ITEM PLEASE.

NUMBER=?

:

Reprint from page 47 of the Interaction Manual:

Page 47

POSSIBLE COURSE(S) OF ACTION TO THE FEEDBACK ITEM

1. Thank Miss Strawn for her concern and assure her that you are taking care of the matter.
2. Call meeting with both Miss Strawn and Mrs. Martin to straighten matters out.
3. Establish a cafeteria-teacher committee to study cafeteria procedures.
4. Meet with Mrs. Martin to discuss the matter.
5. Letter to Miss Strawn advising her that the topic of teacher responsibilities and the professional code of ethics will be discussed at the next faculty meeting.
6. Letter to Mrs. Martin reprimanding her actions.
7. Personally set up a ticket system that will obviate certain problems that now exist in the cafeteria.
8. Memo to Mr. Houser requesting a conference in regard to Miss Strawn.
9. Other.

The preceding illustrates partial computer-respondent interaction for one item. There are five items included in the final version of the model.

Teletype Interchange:

RESULTS OF THE ANALYSIS.

PREPARATION FOR DECISION	39.447
ORGANIZING WORK	33.831
EXCHANGING INFORMATION AND DIRECTING	41.563
MAINTAINING ORGANIZATIONAL RELATIONSHIPS	65.069
RESPONDING TO OUTSIDERS	78.550
ANALYZING THE SITUATION	64.729
COMPLYING WITH SUGGESTIONS	34.768
DISCUSSING BEFORE ACTING	45.138

ANALYSIS COMPLETED.

THANK YOU FOR YOUR PARTICIPATION.

The above is an example of the type of administrative style profile that the participant receives from the computer upon completion of the analysis of his responses. The profile scores are presented as percentiles.

Instrumentation

The data to be used in this study were gathered from three sources (1) the computer-based feedback model, (2) a Background Data Questionnaire and Participant Reaction Form, and (3) the records of the Department of Educational Administration. In the following sections, the instrumentation used from these sources is described.

Computer-Based Feedback Model

The major source of data was information collected by the computer during its interaction with the participant. As stated previously, the basic scoring categories used were those identified by Hemphill, Griffiths and Frederiksen in the Whitman Elementary School study. A complete description of these scoring categories is provided in Appendix C. In addition, a complete breakdown of how each action was scored is provided in Appendix D.

To provide a reliability check for the responses evaluated by way of the computer model, a "Madison" in-basket evaluation sheet was also developed. This sheet gathered all of the same information as the computer-based feedback model except for those categories scored during the feedback process. A copy of this instrument is provided in Appendix F.

Background Data and Reaction Form

A second source of data was information collected from a Background Data Questionnaire and a Participant Reaction Form. These instruments were filled out by the participant at the completion of his participation in the computer-based analysis and feedback procedure. The Background Data Questionnaire consisted of the usual demographic type of data. The Background Data Questionnaire provided a means of obtaining some auxiliary information to determine if any relationships exist between certain background and experience characteristics and the Q-mode analysis groupings. A copy of this instrument is provided in Appendix G.

The Participant Reaction Form was developed by the investigator to measure the participant's reaction to the computer-based model as a tool for the feedback and analysis of the "Madison School District" simulation materials. The participant was asked to judge the model against a series of descriptive scales based on bipolar adjective pairs. To measure the consistency of a participant's responses, matched pairs of adjectives were used. They were as follows:

Dull	-	Exciting
Boring	-	Stimulating
Childish	-	Mature
Simple	-	Sophisticated
Meaningless	-	Meaningful
Nonrewarding	-	Rewarding
Static	-	Dynamic
Unreal	-	Real
Unsuccessful	-	Successful
Invalid	-	Valid

The bipolar pairs were randomly assigned within the instrument. In addition, for each set of matched pairs of bipolar adjectives one of the bipolar adjectives pairs was flipped. A copy of this instrument is also provided in Appendix G.

Department of Educational Administration Records

A third source of data was information from the files of the Department of Educational Administration at the University of Wisconsin made available to the investigator. Because of the nature of the final sample, data from a battery of tests given in connection with the Administrative Staff Development Program in Green Bay and certain background data and test scores on file in the office of the Department of Educational Administration were available to the investigator. The test battery variables were as follows: Miller Analogies Test, Watson-Glaser Critical Thinking Appraisal, Cooperative English Test, Concept Mastery Test, Edwards Personal Preference Schedule, and the Differential Values Inventory. These variables provided a means for which the relationship

of the behavioral dimensions of the administrator to a selected group of test variables could be examined on a limited basis. For a complete discussion of each of these test variables see Appendix G.

Statistical Procedures

All of the data gathered for this study were recorded in punched form on IBM cards. All coded data were verified. The data used in testing the objectives and ancillary questions were programmed and analyzed on a CDC 3600 computer.

The statistical procedures used to analyze the data gathered through the computer-based feedback model are as follows:

Category Scoring and Analysis

- (1) A scoring category was generally scored 0 or 1 depending on whether or not the behavior described by the scoring category occurred in the response to that item, except for those categories where specific instructions to the contrary occurred in the Scoring Manual.*
- (2) A scoring category score for the set of five items used in the final version of the computer-based feedback model was obtained by summing the recorded scores in that respective scoring column over the items. The results of a C* analysis in the original Whitman School Study for the category scores gave no reason to reject the procedure of adding item scores to obtain a total category score.² Also, a criterion for inclusion of a category in the analysis was the likelihood that it would be composed of homogeneous items.
- (3) The mean and standard deviation of each scoring category were computed.
- (4) Each scoring category was then standardized by subtracting the mean and multiplying by the reciprocal of the standard deviation...
- (5) A principal component analysis was done on the thirty-seven standardized scoring categories used in the computer-based feedback model. The computer program used to perform the component analysis was the Columbia Vector Analysis

² For a description of C*, see Ledyard R. Tucker, "Some Experiments in Developing a Behaviorally Determined Scale of Vocabulary," Research Memorandum 55-10 (Princeton, N.J.: Educational Testing Service, September, 1955. Multilithed report.

*See Appendix C.

program developed by Manson and Imbrie³ and adapted for the CDC 3600 by Dr. Donald McIsaac, Professor of Educational Administration at the University of Wisconsin.

- (6) Next, the component scores were computed. To obtain these scores a weight was assigned to each of the standardized scoring categories associated with a component and the weighted scores summed.
- (7) To obtain the scores for the administrative style profile, the component scores were converted to percentile scores.* Thus, the administrative style profile scores were presented to the participant as percentiles.
- (8) The percentile scores obtained from the computer-based model were correlated with the test data variables and the background data characteristics of the participants⁴ using the Pearson product moment correlation coefficient.⁴

Reliability of the Model

- (1) In assigning the scoring categories to the various actions used in the computer-based feedback model, a minimum reliability of .60 was used. If a scoring category was checked as applying to a particular action by three or more of the five scorers involved in the reliability check, that scoring category was used.
- (2) An estimate of the internal consistency reliabilities of the individual scoring categories and of the composite components was made using a KR-20 reliability coefficient.⁵
- (3) As a reliability check on the participant's interpretation of his responses, and to provide a uniform interpretation upon which category reliabilities could be based, the investigator used the "Madison" in-basket evaluation sheet**

³Vincent Manson and John Imbrie, Columbia Vector Analysis Program, (New York City: Columbia University, 1964).

*Dr. Donald McIsaac, Professor of Educational Administration at the University of Wisconsin, developed the computer program through which this conversion was performed. The program is written in WIPL and is available on the B-5500.

⁴William L. Hays, Statistics for Psychologists, (New York: Holt, Rinehart, and Winston, 1963), p. 505.

⁵J. P. Guilford, Psychometric Methods, (New York: McGraw-Hill, 2nd Ed., 1954), pp. 349-354.

**See Appendix F.

to evaluate all of the sets of responses obtained in the final sample of the computer-based feedback model.

- (4) As a check on the investigator's interpretation, a random sample consisting of thirty sets of responses was drawn from the total sample and randomly assigned to one of three groups. Charles Dzuiban and Richard Trumble, both graduate students in Educational Administration at the University of Wisconsin, and Dr. Robert Moser, Professor of Educational Administration at the University of Wisconsin, all of whom were familiar with the "Madison" in-basket simulation materials, each then evaluated one of these groups of ten. Again, the "Madison" in-basket evaluation sheet was used.

Ancillary Analysis

- (1) A second-order principal component analysis was performed on the investigator composite component scores.
- (2) A Q-mode analysis was performed to identify those groups of participants who tended to perform in similar patterns and to determine characteristics of these groups.*
- (3) Because of the nature of the final sample, an in-basket performance profile score computed by Professors Lipham, North, Fruth, Morrow and Maas, all of the Department of Educational Administration at the University of Wisconsin, using a revised version of the "Madison" in-basket score sheet was available for a limited portion of the final population.** These profile scores also were correlated with the computer-based feedback model scores.
- (4) Means and standard deviations were calculated on the bipolar adjectives used on the Participant Reaction Form.
- (5) A measure of internal consistency was computed for the Participant Reaction Form using a Pearson product moment correlation coefficient between the matched pairs of bipolar adjectives.

Summary

In this chapter, the development of the model, the study sample, the general operating procedures, a sample feedback interchange, the instrumentation, and the general statistical procedures used to analyze the data obtained in the research were described. In Chapter III, the basic data describing the background, experience and personal characteristics of the participants will be reported.

*The Columbia Vector Analysis program by Manson and Imbrie was also used for this analysis.

**See Appendix H.

CHAPTER III

THE PARTICIPANTS IN THE STUDY

In this chapter the basic data describing the background, experience and personal characteristics of the participants in the study are presented. Since the object of this research was to develop a reliable computer-based feedback model for simulation exercises rather than to establish norms for administrative behavior, no effort was made to obtain a sample that would be representative of the population with regard to any of the variables. Although it was reasoned that if a sample of participants could be obtained that was either actual school administrators or potential school administrators, with the primary emphasis on the elementary school administrator, then the participants would be likely to reflect in their behavior the different styles and approaches that characterize the population in the kind of school situation simulated by the experiment.

Background and Experience Characteristics

Of the one-hundred seventeen participants involved in the study, forty-one were from a Wisconsin public school district participating in a University of Wisconsin Administrative Staff Development Program, fifty-one were students enrolled in University of Wisconsin classes in administrator behavior, and twenty-five were members of a group of potential inner-city school administrators who were on the University of Wisconsin campus participating in an urban school administrator training program.

In Table 1 are presented the present positions of the participants for each of the major groups involved in the study. If the full-time educational students and the teachers are considered to be potential school administrators and the remaining participants are considered to be actual school administrators, Table 1 indicates that fifty-eight potential school administrators and fifty-nine actual school administrators were involved in the study. Of the fifty-nine actual administrators approximately 50 per cent were elementary principals and of the fifty-eight potential administrators all but two or three were potential elementary principals.

Since a concern of this study was to describe and understand the administrative behavior and dimensions of the school administrator, the remaining background and experience characteristics of the participants will be presented using an administrator - potential administrator categorization. Because of the nature of the sample, meaningful normative data on background and experience characteristics from comparable groups under similar conditions are not available. It is possible, however, to note differences between the two major groups of participants who participated in the study.

TABLE 1
PRESENT POSITION OF THE 117 PARTICIPANTS

	Administra- tor Staff Development Group	Administra- tor Behavior Group	Urban Fellows Group*	Total	
				Number	Per Cent
Full-Time Educational Administration Students	0	10	0	10	8.5
Teachers	13	15	20	48	41.0
Elementary Principals	24	4	2	30	25.6
Secondary Principals	0	3	0	3	2.6
Junior High Principals	0	1	0	1	0.8
Central Office Administrators	3	12	3	18	15.4
Superintendents	1	0	0	1	0.8
Other Types of Administrators	0	6	0	6	5.1

*The present position of the participants from the Urban-Fellows Groups was given as the position the participant held immediately prior to entering the Urban School Administration Program.

The data presented in Table 2 shows that there was no appreciable difference in either the number of women or the number of men who were actual school administrators and the number who were potential school administrators. There was, however, an appreciable difference between the total number of men and the total number of women involved in the study. Twenty-four of the participants were women and ninety-three were men.

TABLE 2
SEX OF THE 117 PARTICIPANTS

Position	Women		Men	
	Number	Percent	Number	Percent
Actual Administrator	12	20.3	47	79.7
Potential Administrator	12	20.7	46	79.3
Total	24	20.5	93	79.5

In Table 3 it is shown that the actual administrators in the sample were, on the average, ten years older than the potential administrators. Approximately 86 per cent of the potential administrators were between the ages of twenty-five and forty; whereas, only 53 per cent of the administrators were between these ages.

TABLE 3
AGE OF THE 117 PARTICIPANTS

Age	Actual Administrator		Potential Administrator		Total	
	Number	Percent	Number	Percent	Number	Percent
20-24	0	0.0	3	5.4	3	2.6
25-29	5	8.6	18	32.1	23	20.2
30-34	16	27.6	18	32.1	34	29.8
35-39	15	25.9	12	21.4	27	23.7
40-44	9	15.5	2	3.6	11	9.6
45-49	8	13.8	2	3.6	10	8.8
50-54	2	3.4	0	0.0	2	1.8
55-59	0	3.4	0	0.0	2	0.9
60 or Older	3	5.2	0	0.0	3	2.6
No Information (3)						
Mean	42.59		32.26		37.52	

The data presented in Table 4 show that the actual administrators had, on the average, 1.7 more years of teaching experience than did the potential administrators. However, it is likely that the potential administrators will have one or two more years of teaching experience before they are appointed to administrative positions.

TABLE 4

NUMBER OF YEARS OF TEACHING EXPERIENCE OF
THE 117 PARTICIPANTS

Age	Actual Administrator		Potential Administrator		Total	
	Number	Percent	Number	Percent	Number	Percent
0	3	5.2	4	7.1	7	6.1
1-2	4	6.9	3	5.4	7	6.1
3-5	9	15.5	14	25.0	23	20.2
6-10	19	32.7	18	32.1	37	32.4
11-15	10	17.2	12	21.4	22	19.3
16-20	7	12.1	4	7.1	11	9.6
21 or Over	6	10.3	1	1.8	7	6.1
No Information (3)						
Mean	9.91		8.21		9.07	

The data presented in Table 5 show that, on the average, those participants who were school administrators had 6.24 years of experience in supervision and/or administration. The data also show that 49.1 per cent of the administrators had five or less years of supervisory and/or administrative experience, indicating that about half of the participating administrators were relatively new to the field of administration.

TABLE 5

NUMBER OF YEARS OF SUPERVISORY AND/OR ADMINISTRATIVE EXPERIENCE
OF THE 59 ACTUAL ADMINISTRATORS*

Years	Actual Administrator	
	Number	Percent
1-2	11	20.0
3-5	16	29.1
6-10	13	23.6
11-15	7	12.7
16-20	4	7.3
21 or Over	4	7.3
Mean	6.24	

*Only the actual administrators were included in this table since supervisory and/or administrative experience was the criterion upon which the administrator - potential administrator classification was based.

Table 6 contains data regarding the number of years in present position of the participants. The potential administrators had been in their present position approximately 1.5 years more than had the actual administrators. It is worthy of note that the average number of years in supervision and/or administration of the actual administrator (6.24 years) was 2.36 years more than the average number of years in present position. This suggests that the participants in this study who were practicing administrators were a somewhat mobile group.

TABLE 6

NUMBER OF YEARS THE PARTICIPANTS HAVE SERVED IN PRESENT POSITION*

Years	Actual Administrator		Potential Administrator		Total	
	Number	Percent	Number	Percent	Number	Percent
1-2	22	39.3	6	10.7	28	25.0
3-5	25	44.6	17	30.4	52	46.4
6-10	7	12.5	19	33.9	26	23.2
11-15	2	3.6	4	7.1	6	5.4
16 or Over	0	0.0	0	0.0	0	0.0
No Information (5)						
Mean	3.88		5.34		4.61	

*Full-time students were not included in this table.

In Table 7 are summarized data with regard to the educational background of the participants. Of the actual administrators 86 per cent held at least a master's degree; whereas, of the potential administrators only 50 per cent held at least a master's degree. It appears that the logical explanation of this difference is that the potential administrators are currently in the process of obtaining their advanced formal training. This becomes more obvious when one reflects that the primary reason the potential administrators were included in the sample was that they were involved in some kind of formal training in educational administration which was coordinated through the University of Wisconsin. The potential administrators were either enrolled in a graduate course in administrative behavior, were participating in an Administrative Staff Development Program, or were participating in the Urban School Administrative Program.

Examination of Table 7 also reveals that there was no appreciable difference between members of the two groups in terms of their area of undergraduate concentration. Forty-eight per cent of the participants had an undergraduate concentration in some aspect of elementary education, i.e., special education, elementary education, intermediate elementary

education or upper elementary education. Other than education, the major area of undergraduate concentration of the participants was social science, followed by science, the applied arts and sciences, and speech and English.

In terms of graduate credits in educational administration, the actual administrators had an average of 17.2 credits; whereas, the potential administrators had an average of 5.8 credits. Again, this reflects the fact that the potential administrators were engaged in the process of obtaining their graduate work in administration.

TABLE 7
EDUCATIONAL BACKGROUND OF THE 117 PARTICIPANTS

	Actual Administrator		Potential Administrator		Total		
	Number	Percent	Number	Percent	Number	Percent	
Professional Training							
Less than Bachelors	0	0.0	0	0.0	0	0.0	
Bachelors Degree	2	3.4	18	32.1	20	17.5	
Bachelors + 16	6	10.3	10	17.8	16	14.0	
Masters Degree	34	58.6	19	33.9	53	46.5	
Masters + 16	7	12.1	5	8.9	12	10.5	
Masters + 32	8	13.8	4	7.1	12	10.5	
Doctoral Degree	1	1.7	0	0.0	1	0.9	
No Information (3)							
Area of Concentration:							
Chemistry	} Science	17	30.4	12	21.4	29	25.9
Biology							
Physics							
Mathematics							
Geology							
Sociology	} Social Science	20	35.7	26	46.4	46	41.1
Political Sc.							
History							
Economics							
Home Ec.	} Applied Arts and Sciences	11	19.6	9	16.1	20	17.8
Physical Educ.							
Ind. Arts							
Business Adm.							
Accounting							

TABLE 7, CONTINUED

	Actual Administrator		Potential Administrator		Total	
	Number	Percent	Number	Percent	Number	Percent
Special Educ. Elem. Educ. } Inter. or } Educa- Upper Elem. } tion Educ.	26	46.4	28	50.0	54	48.2
Art } Music } Humanities Foreign } Language }	2	3.6	2	3.6	4	3.6
English or Speech	9	16.1	8	14.3	17	15.2
Library Science	0	0.0	1	1.8	1	0.9
Psychology or Counseling	0	0.0	1	1.8	1	0.9
No Information (5)						
Graduate Credits in Administration:						
0	2	3.5	21	3.5	23	20.3
1-5	5	8.8	7	12.5	12	10.6
6-10	16	28.1	18	32.1	34	30.1
11-15	10	17.5	6	10.7	16	14.2
16-20	4	7.0	2	3.6	6	5.3
21 or Over	20	35.1	2	3.6	22	19.5
No Information (4)						
Mean	17.2		5.8		11.5	

In Table 8 it is shown that there was no difference between the members of the two groups in terms of their previous participation in an administrative simulation exercise. Of the total group, 16 per cent had participated in previous administrative simulation exercises.

TABLE 8

PREVIOUS PARTICIPATION IN AN ADMINISTRATIVE
SIMULATION EXERCISE

	Actual		Potential		Total	
	Number	Percent	Number	Percent	Number	Percent
Yes	9	16.1	9	16.1	18	16.1
No	47	83.9	47	83.9	94	83.9
No Information (5)						

Personal Characteristics of a Selected Group of Participants

For those participants from the Administrative Staff Development Program, study data obtained from a battery of tests measuring such items as academic aptitude, value-orientation, critical thinking, and basic personality factors were made available to the investigator. The performance of the participants on these tests provides additional background information about them. Again, the participants were subdivided in terms of being either actual or potential administrators. Of the one-hundred seventeen participants in the study, test score data were available for forty-one of them; twenty-six of whom were administrators and fifteen of whom were potential administrators. Of the twenty-six administrators, twenty-four were elementary principals and of the fifteen potential administrators, all were potential elementary principals. Again, because of the nature of the sample of participants involved, normative data for these tests obtained from comparable groups under similar conditions are not available. However, where possible, differences between the two major groups of participants who participated in this study will be noted.

The data contained in Table 9 shows that on the academic aptitude tests the potential administrators obtained slightly higher scores than the administrators, although there was considerable fluctuation in the scores for both groups as indicated by the large standard deviations. Overall, the forty-one participants were above the fiftieth percentile on the Miller Analogies Test and the Cooperative English Test but below average on the Concept Mastery Test, utilizing Terman's norms.

The data presented in Table 10 show that on value-orientations both groups were somewhat more emergent than traditional in their values. Comparing the two groups, one may note that the potential administrator group was slightly more emergent than the actual administrator group. This slight difference between the two groups might be due either to the lack of administrative experience on the part of the potential

administrators or to an age difference, since the potential administrators were on the average ten years younger than actual administrators.

TABLE 9

PERFORMANCE OF 41 PARTICIPANTS ON TESTS OF ACADEMIC APTITUDE *

	<u>Actual Administrator</u>		<u>Potential Administrator</u>		<u>Total</u>	
	Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.
Miller Analogies Test	55.57	28.31	64.73	18.77	58.92	25.38
Concept Mastery Test	11.69	15.95	13.00	16.07	12.15	15.79
Cooperative English Test**						
Reading			64.66	20.79		
English			51.93	31.09		
Total Test			59.73	24.28		

*In each of the tables presented in this section except Table 10 the mean represents a mean percentile score.

**The Cooperative English Test scores were available only for the potential administrator group.

TABLE 10

PERFORMANCE OF 41 PARTICIPANTS ON A VALUE-ORIENTATION TEST

	<u>Actual Administrator</u>		<u>Potential Administrator</u>		<u>Total</u>	
	Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.
Differential Values Inventory						
Traditional	30.68	5.73	29.84	6.87	30.39	6.07
Emergent	33.28	5.60	34.69	7.11	33.76	6.10

In Table 11 data are presented indicating that the fifteen potential administrators for whom data were available scored above the fiftieth percentile on the Watson Glaser Test of Critical Thinking. These results tend to support the data on academic aptitude presented in Table 9 where on two of three tests the potential administrator group also scored above the fiftieth percentile.

TABLE 11

PERFORMANCE OF 15 PARTICIPANTS ON A TEST OF CRITICAL THINKING*

	Potential Administrator	
	Mean	St. Dev.
Watson-Glaser Critical Thinking Appraisal	62.4	27.17

*The Watson-Glaser Critical Thinking Appraisal test scores were available only for a limited group of potential administrators.

Data on basic personality factors are presented in Table 12. A t-test¹ was used to test for significant differences from the fiftieth percentile for the total group test scores. Of the fifteen personality variables measured by the Edwards Personal Preference Schedule, the forty-one participants who took this test scored significantly higher than the fiftieth percentile on variables of achievement, exhibition, intraception, dominance, and change and significantly lower than the fiftieth percentile on the variables of abasement, nurturance, endurance and order. The variables of achievement, intraception and dominance are believed to correlate positively with administrative success and the variables of deference, succorance, abasement, and nurturance are believed to correlate negatively with administrative success. Thus, on the variables of achievement, intraception, dominance, abasement, and nurturance the participants in this study scored in a fashion thought to be indicative of administrative success.

¹Hayes, op. cit., p. 311.

TABLE 12

PERFORMANCE OF 41 PARTICIPANTS ON 15 BASIC PERSONALITY FACTORS

	Actual Administrator		Potential Administrator		Total	
	Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.
Edwards Personal Preference Schedule:						
Achievement	62.80	27.04	63.46	33.32	**63.02	28.84
Deference	53.30	21.30	49.53	35.63	52.05	26.51
Order	41.42	29.21	37.00	29.64	**39.94	29.04
Exhibition	60.76	25.93	74.69	20.11	**65.41	24.78
Autonomy	41.15	30.09	52.84	25.57	45.05	28.87
Affiliation	52.11	30.85	46.84	25.57	50.35	28.96
Intraception	65.03	31.12	68.76	23.68	**66.28	28.59
Succorance	47.73	29.08	44.61	22.50	46.69	26.80
Dominance	76.00	20.05	79.46	19.07	**77.15	19.55
Abasement	37.84	26.97	21.61	21.22	**32.43	26.09
Nurturance	40.65	23.03	30.53	24.87	**37.28	23.83
Change	72.65	23.30	65.61	26.38	**70.30	24.25
Endurance	37.00	29.06	42.92	30.17	**38.97	29.17
Heterosexuality	54.00	28.45	50.61	26.68	52.87	27.57
Aggression	38.80	28.20	50.69	25.81	42.76	27.67

**Significantly different from the fiftieth percentile at the .05 level.

In addition to the total test score comparison, t-tests were also used to test for significant differences between the administrator--potential administrator groups. The only significant difference found between the two groups was on the variable of abasement, where the actual administrators scored significantly higher than did the potential administrators. Although the differences were not statistically significant, the actual administrators scored more than ten percentile points higher than the potential administrators on the variable of nurturance and ten or more percentile points lower than the potential administrators on the variables of exhibition, autonomy and aggression. Since abasement and nurturance are believed to correlate negatively with administrative success, it was rather surprising to find the administrators scoring ten or more percentile points higher than the potential administrators on these two variables.

In this chapter, the background, experience and personal characteristics of the participants were described and analyzed. In Chapter IV, the basic data collected through the administration of the computer-based feedback model and the relationship of that data to the background data described in this chapter will be presented and analyzed.

CHAPTER IV

PRESENTATION AND ANALYSIS OF THE IN-BASKET DATA

In this chapter the scoring categories and dimensions of performance of the in-basket data collected through the administration of the computer-based feedback model will be presented and analyzed. In addition, the reliability of the categories and dimensions and the relationship of the dimensions to the background data and test score variables presented in Chapter III will be examined. The data are presented in four sections: (1) category performance and reliability, (2) identification of the administrative performance dimensions, (3) composite component performance and reliability, and (4) correlation with other variables.

Category Performance and Reliability

The response of each participant to each of the five items used in the computer-based feedback model of the "in-basket" materials was scored for thirty-seven categories of performance. The score for an item was in the form of either a "0" or a "1," except for those categories where specific instructions to the contrary were given in the scoring manual (Appendix C), "0" indicating that the category or type of behavior was not present in the participant's response and "1" indicating that it was present. A participant's score on a specific scoring category was then obtained by summing the recorded scores in that respective scoring column over the five items.

Each of the participants interpreted his own set of responses guided by a computer program stored in a B-5500 computer. Teletypewriter terminals were used as remote access units through which the participant could interact with the computer. Also, to check the reliability of the participant's interpretation of his responses, the investigator, using the "Madison" in-basket evaluation sheet (Appendix F), evaluated all of the sets of responses. In addition, as a check on the investigator's interpretation, a random sample of thirty sets of responses was drawn from the total sample and randomly assigned into three groups. Three reliability scorers, using the "Madison" in-basket evaluation sheet, each then evaluated one of these groups of ten.

In Table 13 are presented the means and standard deviations of each of the thirty-seven scoring categories for each of the groups' interpretations. Of the one-hundred seventeen participants who took the original in-basket materials, one-hundred thirteen participated in the computer-based feedback procedures; thus, the participants' means and standard deviations are based on one-hundred thirteen respondents. The investigator's means and standard deviations are based on the total one-hundred seventeen participants. The reliability scorers' means and standard deviations are based on a random sample of thirty responses drawn from the one-hundred seventeen participants.

TABLE 13

MEANS AND STANDARD DEVIATIONS OF THE 37 SCORING CATEGORIES

Scoring Category	<u>Participant</u>		<u>Investigator</u>		<u>Reliability Scorer</u>	
	Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.
1. Estimated Number of Words	17.48	2.36	17.86	2.14	17.80	2.14
2. Unusual Courses of Action	0.07	0.36	0.13	0.36	0.10	0.32
3. Usual Courses of Action	9.48	2.72	9.11	1.99	9.05	2.20
4. Number of Subordinates Involved Individually	2.76	1.64	2.47	1.38	2.23	1.33
5. Number of Subordinate Groups Involved	1.99	1.84	1.33	1.22	1.25	1.02
6. Number of Superiors Involved	1.05	0.77	1.16	0.77	0.97	0.76
7. Number of Outsiders Involved	1.91	0.90	2.12	0.78	2.10	0.88
8. Courtesy to Subordinates	1.04	0.98	0.92	1.02	0.83	0.94
9. Courtesy to Outsiders	0.78	0.72	0.73	0.72	0.63	0.72
10. Takes Leading Action	2.96	0.91	2.89	0.89	2.73	0.97
*11. Carelessness or Inappropriate Action	0.97	0.90	0.12	0.26	0.10	0.30
*12. Conceptual Analysis	2.24	1.00	0.10	0.19	0.08	0.18
*13. Uses Program Values In Analysis	1.18	0.86	0.06	0.13	0.04	0.12
14. Discusses with Subordinates	0.89	0.82	1.00	0.89	0.73	0.75
15. Discusses with Superiors or Outsiders	0.52	0.70	0.57	0.67	0.47	0.62
16. Ask for Advice or Suggestions or an Opinion from Subordinates	1.02	1.07	0.90	0.94	0.93	1.08

TABLE 13, CONTINUED

Scoring Category	<u>Participant</u>		<u>Investigator</u>		<u>Reliability Scorer</u>	
	Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.
17. Requires Further Information	2.00	1.24	1.70	1.22	1.83	1.44
18. Delays or Postpones Decision, or Temporizes	2.60	1.23	2.51	1.16	2.47	1.30
19. Arrives at a Procedure for Deciding	2.79	1.26	2.71	1.18	2.50	1.53
20. Takes Terminal Action and/or Makes Concluding Decision	1.47	0.79	1.55	0.81	1.40	0.88
21. Makes Tentative or Definite Plans	3.06	1.40	2.87	1.47	3.00	1.41
22. Work Scheduled for Same or Following Day	1.70	1.30	0.94	1.01	0.93	1.23
23. Work Scheduled for Same or Following Week	2.13	1.18	1.61	1.05	1.53	1.09
24. Work Scheduled: Indefinite or No Time Specified	1.17	1.11	2.44	1.24	3.03	1.38
25. Gives Information to Subordinates	0.49	0.79	0.95	0.80	0.86	0.85
26. Gives Information to Outsiders	0.62	0.67	1.34	0.73	1.13	0.76
27. Follows Lead by Subordinates	0.77	0.42	0.77	0.42	0.67	0.50
28. Follows Lead by Superior	0.87	0.70	0.83	0.70	0.73	0.72
29. Follows Lead by Outsiders	1.63	0.54	1.62	0.56	1.56	0.62
**30. Follows a Pre-Established Structure	1.97	1.07	1.25	0.99	1.30	1.08
**31. Initiates a New Structure	.99	0.86	0.31	0.71	0.26	0.65
32. Gives Directions and/or Suggestions	0.87	0.96	1.75	1.29	1.16	1.15

TABLE 13, CONTINUED

Scoring Category	<u>Participant</u>		<u>Investigator</u>		<u>Reliability Scorer</u>	
	Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.
33. Communicates Face-To-Face	1.52	1.21	2.41	1.14	2.35	0.96
34. Communicates by Telephone	0.76	0.95	0.94	1.01	0.70	0.91
35. Communicates by Writing	2.93	1.47	2.88	1.44	2.83	1.43
36. Information to Subordinates	0.44	0.90	0.47	0.89	0.43	0.86
37. Generally Follows Lead	3.27	1.07	3.22	1.08	3.05	1.06

*Scored in analysis of feedback problems only except for item sixteen.

**Scored in both the analysis of the original items and in the feedback problems.

Since the feedback problems presented during the computer-based feedback procedures required a forced-choice selection, only participant data are available on these problems. Thus, the means and standard deviations of the investigator's and reliability scorer's data are lower than that of the participant's on scoring categories eleven, twelve, and thirteen, since these categories were scored only on item sixteen in addition to the feedback problems. Categories thirty and thirty-one were scored both on the original in-basket items and on the feedback problems; hence, the investigator and the reliability scorer means and standard deviations are also lower on these two categories. Further interpretation of Table 13 will be given later in the chapter after other tables are presented and the data from Table 13 is referenced to help in the explanation of these tables.

Two estimates of the reliability of the interpretation of the actions taken by participants were made for the thirty-seven scoring categories: (1) by correlating the participant interpretations with the investigator interpretations, and (2) by correlating the investigator interpretations with the reliability scorer interpretations. The correlations were computed using the Pearson product moment correlation coefficient and are presented in Table 14. For the reliability scorer estimates, three correlation coefficients were computed for each scoring category corresponding to each of the three reliability scorers. The three correlations corresponding to each of the scoring categories were then averaged to obtain single investigator - reliability scorer scoring

category interpretation reliability estimates. Again, since scoring categories eleven, twelve, and thirteen applied only to the feedback problems and only participant data was available on these parts, no reliability estimates could be calculated for these categories. For categories thirty and thirty-one the reliability estimates were based only on the original item responses.

The participant - investigator interpretation reliabilities ranged from a low of .33 on scoring categories fifteen, twenty-five, and twenty-six to a high of .94 on scoring category twenty-nine. Sixty-eight percent of the participant - investigator reliabilities were greater than .50. There was a tendency for those categories that were less than or equal to .50 to group into two main classifications:

TABLE 14

INTERPRETATION RELIABILITY ESTIMATES FOR THE 37 SCORING CATEGORIES

Scoring Category	Participant and Investigator Correlation	Investigator and Reliability Scorer Correlation
1. Estimated Number of Words	.91	.96
2. Unusual Courses of Action	.43	.78
3. Usual Courses of Action	.58	.83
4. Number of Subordinates Involved Individually	.68	.89
5. Number of Subordinate Groups Involved	.50	.84
6. Number of Superiors Involved	.88	1.00
7. Number of Outsiders Involved	.63	.94
8. Courtesy to Subordinates	.90	.94
9. Courtesy to Outsiders	.71	.78
10. Takes Leading Action	.76	.87
*11. Carelessness or Inappropriate Action		
*12. Conceptual Analysis		
*13. Uses Program Values in Analysis		
14. Discusses with Subordinates	.36	.82
15. Discusses with Superiors or Outsiders	.33	.86
16. Ask for Advice or Suggestions or an Opinion from Subordinates	.69	.87
17. Requires Further Information	.66	.85
18. Delays or Postpones Decision, or Temporizes	.76	.85
19. Arrives at a Procedure for Deciding	.64	.87
20. Takes Terminal Action and/or Makes Concluding Decision	.83	.86

TABLE 14, CONTINUED

Scoring Category	Participant and Investigator Correlation	Investigator and Reliability Scorer Correlation
21. Makes Tentative or Definite Plans	.67	.90
22. Work Scheduled for Same or Following Day	.48	.94
23. Work Scheduled for Same or Following Week	.42	.80
24. Work Scheduled: Indefinite or No Time Specified	.36	.89
25. Gives Information to Subordinates	.33	.82
26. Gives Information to Outsiders	.33	.82
27. Follows Lead by Subordinates	.79	.89
28. Follows Lead by Superior	.75	.93
29. Follows Lead by Outsider	.94	.95
**30. Follows a Pre-Established Structure	.72	.86
**31. Initiates a New Structure	.71	.87
32. Gives Directions and/or Suggestions	.37	.89
33. Communicates Face-to-Face	.48	.86
34. Communicates by Telephone	.83	.98
35. Communicates by Writing	.85	.98
36. Informality to Subordinates	.78	.92
37. Generally Follows Lead	.83	.92

*These categories applied only to the feedback portion and since only participant data was available on the feedback portion no interpretation reliability could be calculated.

**The correlations for these categories were based only on the original items since only participant data was available on the feedback portion.

(1) Discusses and Gives Information

- category 14: Discusses with subordinates
- category 15: Discusses with superiors or outsiders
- category 25: Gives information to subordinates
- category 26: Gives information to outsiders
- category 32: Gives directions and/or suggestions

(2) Work Scheduled:

- category 22: Work scheduled for same or following day
- category 23: Work scheduled for same or following week
- category 24: Work scheduled: indefinite or no time scheduled

The other low investigator - participant interpretation reliability categories were:

- category 2: Unusual courses of action
- category 5: Number of subordinate groups involved
- category 33: Communicates face-to-face

Apparently the number of times a category was scored is associated with the investigator - participant interpretation reliability. All of the categories listed above, with the exception of the "work scheduled" categories and "communicates face-to-face" had means of less than 1.00 (Table 13). It appears that participants had somewhat more difficulty interpreting consistently infrequently scored categories, although the data in Table 13 does indicate that some infrequently scored categories had high interpretation reliabilities (Table 14). As for inconsistencies on the work scheduled categories, Table 13 indicates that the means of the participant interpretations were considerably higher than those of the investigator and reliability scorer interpretations on the categories "work scheduled for same or following day" and "work scheduled for same or following week" and lower on the category "work scheduled indefinite or no time specified." Apparently on those responses where the participant did not state explicitly when the work was scheduled, the participant interpreted that the work would be performed within a shorter time period than his responses seemed to indicate. In general, most participants considered that the situations presented in the response items would be completely disposed of in from one to fourteen days; whereas, the investigator and reliability scorers interpreted many responses to infer an indefinite time schedule, or at least a schedule covering more than fourteen days. Thus, a problem of interpretation appeared to exist with regard to the "work scheduled" categories, which might explain the low interpretation reliability on these categories.

The same problem existed on the "communicates face-to-face" category. Here again, is a frequently-scored category where there was considerable discrepancy in means between the participant interpretations and the investigator and reliability scorer interpretations (Table 13). Some interpretative problem was expected, since the participants were not familiarized with the definition of the various scoring categories prior to participating in the computer-based feedback exercise. The participants were not familiarized with the scoring categories because

it was thought that this might influence their decision to select certain interpretations of their responses; thus, each participant used only his own judgment in making the interpretation decisions. It appears this procedure may have caused some difficulty in interpretation--especially on those categories where the definition of the scoring category was not clearly implied in the statement of the question or category. The results suggest the need for some modification of the computer-based feedback model to minimize the interpretation problem on the scoring categories in which it appears to exist. In summary, it appears that the low investigator - participant reliabilities that were found to exist on certain scoring categories can be counted for by either the infrequent scoring of the category or by differences in the interpretation of the action taken.

As for the investigator - reliability scorer interpretations reliabilities, they ranged from a low of .77 on category twenty-six to a high of 1.00 on category six, with an average interpretation reliability of .88. These reliabilities appear to be generally satisfactory.

To determine whether the participants were consistent in their performance on the in-basket response items, internal consistency reliability estimates were made for each of the thirty-seven scoring categories and are presented in Table 15. KR-20 reliability estimates were used:

$$KR-20 = \frac{k}{k-1} \cdot \left(1 - \frac{\sum s_g^2}{s_x^2} \right), \text{ where}$$

k = Number of items

s_g^2 = Variance of item g

s_x^2 = Variance of total category scores

Since five items is a very small number of items upon which to base an internal consistency reliability estimate, Spearman-Brown correction reliability estimates also were calculated to determine the effect of increasing the number of items to ten and to twenty. The Spearman-Brown reliability formula used was:

$$Rel. = \frac{n \cdot r_{xx}}{1 + (n-1) \cdot r_{xx}}, \text{ where}$$

r_{xx} = the initial estimate of the reliability

n = number of times the initial number of items has been increased

TABLE 15

INTERNAL CONSISTENCY RELIABILITY ESTIMATES FOR THE 37 SCORING CATEGORIES

Scoring Categories	Participant			Investigator		
	Number of Items			Number of Items		
	5	10	20	5	10	20
1. Estimated Number of Word	.45	.62	.76	.40	.57	.73
2. Unusual Courses of Action	.21	.35	.52	.04	.08	.14
3. Usual Courses of Action	.60	.75	.86	.30	.47	.63
4. Number of Subordinates Involved Individually	.39	.56	.72	.37	.54	.70
5. Number of Subordinate Groups Involved	.29	.45	.62	.22	.36	.53
6. Number of Superiors Involved	.17	.29	.45	.22	.36	.53
7. Number of Outsiders Involved	.21	.35	.52	.19	.32	.48
8. Courtesy to Subordinates	.29	.45	.62	.45	.62	.76
9. Courtesy to Outsiders	.04	.08	.14	.09	.16	.28
10. Takes Leading Action	.19	.32	.48	.08	.15	.26
11. Carelessness or Inappropriate Action	.22	.36	.53			
*12. Conceptual Analysis	.10	.18	.31			
*13. Uses Program Values in Analysis	.09	.16	.28			
14. Discusses with Subordinates	.23	.37	.54	.24	.39	.56
15. Discusses with Superiors or Outsiders	.10	.18	.31	.06	.43	.60
16. Ask for Advice or Suggestions or an Opinion from Subordinates	.44	.61	.76	.27	.43	.60
17. Requires Further Information	.35	.52	.68	.34	.48	.67
18. Delays or Postpones Decision, or Temporizes	.36	.53	.69	.27	.43	.60
19. Arrives at a Procedure for Deciding	.33	.50	.66	.23	.37	.54

TABLE 15, CONTINUED

Scoring Category	Participant Number of Items			Investigator Number of Items		
	5	10	20	5	10	20
20. Takes Terminal Action or Makes Concluding Decision	.22	.36	.53	.11	.20	.33
21. Makes Tentative or Definite Plans	.49	.66	.79	.54	.70	.82
22. Work Scheduled for Same or Following Day	.43	.60	.75	.38	.55	.71
23. Work Scheduled for Same or Following Week	.17	.29	.45	.13	.23	.37
24. Work Scheduled: Indefinite or No Time Specified	.39	.56	.72	.40	.57	.73
25. Gives Information to Subordinates	.40	.57	.73	.15	.26	.41
26. Gives Information to Out- siders	.02	.04	.08	.06	.11	.20
27. Follows Lead by Subordinates	.02	.04	.08	.02	.04	.08
28. Follows Lead by Superiors	.01	.02	.04	.00	.00	.00
29. Follows Lead by Outsiders	.06	.11	.20	.02	.04	.08
**30. Follows a Pre-Established Structure	.17	.29	.45	.01	.02	.04
**31. Initiates a New Structure	.01	.02	.04	.10	.18	.31
32. Gives Directions and/or Suggestions	.30	.46	.63	.42	.59	.74
33. Communicates Face-to-Face	.42	.59	.74	.19	.32	.48
34. Communicates by Telephone	.40	.57	.73	.38	.55	.71
35. Communicates by Writing	.55	.71	.83	.53	.69	.82
36. Informality to Subordinates	.63	.77	.87	.57	.73	.84
37. Generally Follows Lead	.19	.32	.48	.20	.33	.50

*These categories applied only to the feedback portion and since only participant data was available on the feedback portion no investigator internal consistency reliability could be computed.

**The investigator internal consistency reliabilities for these categories were based only on the original items since only participant data was available on the feedback portion.

As is shown in Table 15, for the most part those categories with low internal consistency reliabilities were also those categories that had low mean scores (Table 13). With one exception (follows lead by outsiders) no category that had a mean less than one had an estimated reliability for twenty items of less than .45 for the participant interpretations and .30 for the investigator interpretations. Excluding the five feedback scoring categories, the participant interpretations had category reliabilities higher than the investigator interpretations on 69 percent of the categories. This indicates that apparently the participants were more consistent in their interpretation of the in-basket data than was the investigator in his interpretation of the data. This is quite possible, since the participant might easily have developed a pattern in his interpretations; whereas, the investigator would probably tend to be more objective in his interpretations. The average estimated participant interpretation internal consistency reliability was .27 for five items, .39 for ten items, and .53 for twenty items. The average estimated investigator interpretation internal consistency reliability was .23 for five items, .34 for ten items, and .48 for twenty items. In summary, the scoring category internal consistency reliabilities were not as high as the investigator had hoped for, but they were satisfactory considering that only five items were used. However, of more importance than the category reliabilities are the administrative performance dimension reliabilities, which will be discussed in the next section.

Identification of Administrative Performance Dimensions

To identify the administrative performance dimensions, a principal component analysis was done on the thirty-seven scoring categories using the Columbia Vector Analysis program.

Because not all of the categories were scored in the form of a 0 or 1, all category scores were standardized prior to the principal component analysis to ensure that the scales for all categories would be consistent. Two analyses were performed; one from the participant interpretation of the data and the other from the investigator interpretation of the data. The reasons for this were (1) to determine whether the components making up the administrative performance dimensions would be aligned similarly in both cases in spite of some differences in interpretations and (2) to provide a component reliability check on the participant's interpretations.

In Tables 16 and 17 are presented respectively the participant and investigator intercorrelations among the standardized category scores for the thirty-seven scoring categories. In the investigator intercorrelation matrix for those categories involving the feedback problems (categories eleven, twelve, thirteen, thirty, and thirty-one), the participant response data was used for the feedback part. For ease of presentation the correlations were rounded to two decimal places and the decimal points omitted.

The data contained in Table 16 show that, for the participant interpretations, the category correlation scores ranged from a high value

TABLE 16

INTERCORRELATIONS AMONG THE 37 SCORING CATEGORIES
FOR THE PARTICIPANT INTERPRETATIONS

Cat.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.																		
2.	-02																	
3.	15	04																
4.	19	-21	26															
5.	07	-04	30	39														
6.	18	02	22	06	-05													
7.	24	-18	04	00	08	-03												
8.	22	-12	-03	45	16	-07	-13											
9.	22	-07	-18	02	12	-09	30	29										
10.	21	-26	28	17	10	23	21	00	12									
11.	-10	16	07	-06	01	-09	01	03	-05	-06								
12.	07	-09	09	11	10	-06	08	08	-03	23	14							
13.	18	-05	12	11	07	08	08	03	-01	24	08	59						
14.	11	-03	33	04	18	-06	22	00	01	19	-09	02	-00					
15.	10	00	09	-06	05	02	31	-14	11	12	08	04	-03	18				
16.	07	-13	34	42	07	00	-02	10	-25	23	-13	15	14	21	-10			
17.	-01	08	42	05	-06	08	-05	-15	-32	-01	03	01	13	17	-03	59		
18.	-13	18	41	15	-01	-07	-16	-13	-35	-28	10	-08	-20	10	02	22	53	
19.	17	-13	23	18	-02	21	35	05	03	38	-10	10	08	37	32	56	36	01
20.	03	03	23	-18	06	25	14	-18	-08	-06	03	-04	09	-03	-02	-23	-14	-16
21.	-13	08	44	08	19	00	-12	02	-23	-24	-13	-08	-03	10	-03	17	46	44
22.	-08	19	-27	-07	-15	02	04	03	11	08	-11	-05	-05	-03	-07	-16	-29	-22
23.	22	-08	15	21	19	-02	-07	11	-15	-08	12	22	04	01	05	15	07	17
24.	-12	-14	16	-12	-01	00	02	-14	02	-02	-15	-09	02	02	05	25	25	09
25.	04	-06	07	22	38	04	-15	25	04	-18	00	14	12	-06	-07	-03	-06	07
26.	27	06	10	09	06	10	25	08	30	03	15	12	11	13	08	12	11	-00
27.	03	-29	22	24	03	13	09	11	12	50	07	16	16	08	-06	06	-10	-11
28.	15	-01	30	-02	10	61	01	04	05	25	-08	-05	05	02	07	01	04	-17
29.	26	-29	18	14	-06	02	44	02	30	36	-16	03	00	21	24	-01	-18	-20
30.	09	-04	49	24	19	-02	-15	12	-26	-20	09	-02	-04	04	-00	18	05	29
31.	19	-06	12	01	00	-10	09	01	15	03	-01	10	21	01	08	08	05	-09
32.	03	-05	-06	32	19	-14	12	35	27	-17	04	-13	-03	09	-04	-17	-21	-07
33.	28	-14	33	21	10	24	24	03	04	29	-14	10	08	32	07	33	20	-04
34.	-03	-06	16	12	16	18	18	-25	-15	27	01	02	01	17	26	10	07	05
35.	36	-11	-15	21	08	04	04	48	36	10	03	18	-01	10	-07	-04	-35	-31
36.	14	-04	-00	50	07	-04	-09	45	07	-08	-03	00	12	-06	-23	18	-07	09
37.	22	-25	37	15	06	47	24	08	22	53	-10	05	10	14	13	03	-09	-25

TABLE 16, CONTINUED

Cat.	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
20.	-15																	
21.	-04	06																
22.	-05	11	-11															
23.	06	-03	03	-52														
24.	00	-09	09	-62	-35													
25.	-24	04	19	-01	08	-07												
26.	09	08	-07	-06	08	-01	22											
27.	14	01	-16	15	-10	-07	09	14										
28.	13	25	10	-09	-11	21	01	-05	02									
29.	17	17	-12	12	-13	-01	-11	11	18	18								
30.	-13	13	36	-14	17	-01	39	02	04	-05	03							
31.	-10	00	01	04	-12	06	00	07	-10	14	12	03						
32.	-10	04	-08	06	-02	-05	06	14	02	-06	-02	08	04					
33.	53	00	02	-06	-02	08	-04	06	13	26	20	-01	09	09				
34.	18	15	06	16	-18	-01	00	08	10	06	13	07	-17	-04	16			
35.	02	-04	-44	-03	23	-18	15	07	11	05	12	-04	13	13	01	-43		
36.	02	-18	08	01	10	-10	12	00	-01	01	-04	13	03	28	06	-16	31	
37.	22	25	-05	05	-17	11	-01	07	50	76	64	00	11	-04	32	14	13	01

TABLE 17

INTERCORRELATIONS AMONG THE 37 SCORING CATEGORIES
FOR THE INVESTIGATOR INTERPRETATIONS

Cat.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1.																			
2.	-02																		
3.	34	11																	
4.	29	-18	16																
5.	16	11	36	06															
6.	31	06	19	-07	-02														
7.	33	-12	18	06	-08	09													
8.	26	-12	-07	42	04	-11	-10												
9.	30	-08	-09	04	-12	09	24	22											
10.	20	-16	20	29	-16	37	34	-04	17										
11.	-04	14	-07	-07	-01	-07	-04	-01	-07	-11									
12.	17	-02	04	17	00	-03	03	08	03	08	08								
13.	17	16	09	04	03	06	01	01	-06	00	-02	61							
14.	19	-03	35	14	57	04	03	-10	-06	08	00	02	-06						
15.	15	-08	11	15	04	20	35	-01	-01	23	-03	-15	-05	17					
16.	03	06	26	37	30	-15	-26	22	-06	04	-09	15	19	21	02				
17.	05	13	44	-01	09	-07	-13	03	-21	-06	-09	10	25	09	02	43			
18.	-08	04	47	-05	-05	-10	-22	-03	-20	-09	-01	07	-02	09	-17	22	54		
19.	17	-11	33	37	29	02	-02	19	-06	36	-12	03	04	51	33	52	34	03	
20.	10	07	00	-23	03	31	16	-11	-08	-24	06	-12	03	-06	08	-24	-22	-21	
21.	-31	10	37	-18	27	-15	-20	-23	-42	-20	-01	-14	-08	21	02	31	50	44	
22.	13	02	-33	-10	-33	22	09	-08	16	04	02	07	02	-21	05	-23	-49	-29	
23.	08	06	37	-06	07	02	16	-14	-08	10	-12	-06	04	15	14	12	44	25	
24.	-22	-09	-12	16	23	-24	-27	24	-05	-16	12	01	-07	02	-21	08	-05	-01	
25.	19	-04	00	12	26	03	-02	17	04	-03	06	15	20	-21	-12	-08	-07	-20	
26.	46	04	21	06	06	19	60	-04	48	20	-08	04	10	07	-06	-18	-17	-15	
27.	05	-23	09	27	-14	06	06	-04	10	38	06	04	00	17	01	06	-17	-06	
28.	22	-06	25	-07	10	68	07	-12	00	10	00	08	-05	06	18	-05	-08	-14	
29.	43	-12	36	14	-07	22	43	08	26	29	-15	08	-06	06	16	-17	-08	00	
30.	13	-07	41	06	41	-12	-12	04	-28	-38	12	-02	04	29	-04	19	23	35	
31.	20	00	13	-06	22	07	07	-01	07	-11	-01	15	20	14	10	01	07	02	
32.	27	-03	06	42	02	-09	04	42	23	-03	-03	02	-10	-03	-06	00	-27	-01	
33.	16	00	20	62	32	-01	14	-04	08	31	00	03	-02	44	29	24	-01	-20	
34.	06	-03	23	-02	15	18	15	-22	-29	11	-01	04	04	20	-02	-03	14	18	
35.	44	-16	-17	33	-04	19	09	40	46	14	-04	17	-01	-14	02	-09	-39	-31	
36.	12	-13	04	42	10	-08	-12	37	08	-10	-07	02	07	-01	-02	-15	-04	-04	
37.	38	-19	38	13	-03	58	34	-06	18	37	-05	01	-07	14	21	-10	-16	-11	

TABLE 17, CONTINUED

Cat.	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
20.	-27																	
21.	16	-03																
22.	-30	36	-34															
23.	23	-21	27	-58														
24.	02	-09	01	-28	-62													
25.	-20	20	-14	-07	-14	23												
26.	-12	15	-29	15	02	-17	08											
27.	15	00	-06	08	-07	01	13	11										
28.	02	29	-05	07	04	-11	-01	19	-04									
29.	03	12	-17	-16	-02	-13	-08	55	10	19								
30.	04	10	34	-27	13	11	12	-14	00	06	-04							
31.	-14	11	-09	-06	09	-04	08	18	-13	15	10	10						
32.	02	04	-42	18	-23	10	08	16	-07	03	14	08	-04					
33.	47	-24	-02	-27	10	14	-07	05	28	-04	06	02	00	-07				
34.	13	07	23	-08	09	-03	-03	06	-01	09	21	16	-19	-06	04			
35.	-08	02	-70	29	-26	03	28	29	03	12	23	-16	14	45	-02	-40		
36.	04	-04	-11	-03	-11	16	20	-01	00	05	-05	11	01	37	-16	-10	30	
37.	09	25	-15	16	-01	-14	00	45	42	74	68	02	10	06	11	16	21	01

value of .76 between "generally follows lead" and "follows lead by superior" to a negative value of -.62 between "work scheduled for same or following day" and "work scheduled: indefinite or no time specified." The investigator category correlation scores ranged from a high value of .68 between "number of superiors involved" and "follows lead by superiors" to a negative value of -.70 between "makes tentative or definite" plans and "communicates by writing." The patterns of complex relationships represented by the two correlations matrices are best described by turning to the results of the component analyses.

Table 18 contains the eigenvalues of the two intercorrelation matrices and lists, in order of size, those eigenvalues greater than 1.0. The percents of communality over all thirty-seven components are also presented.

TABLE 18
EIGENVALUES AND PERCENTS OF COMMUNALITY FOR THE
INTERCORRELATION MATRICES

Order	<u>Eigenvalues</u>		<u>Percents of Communality</u>	
	Participant	Investigator	Participant	Investigator
I	4.60	5.17	12.40	14.00
II	3.85	4.44	10.40	12.00
III	3.28	3.43	8.90	9.30
IV	2.29	2.50	6.20	6.70
V	1.94	2.51	5.30	5.80
VI	1.92	1.92	5.20	4.90
VII	1.86	1.71	5.00	4.60
VIII	1.55	1.63	4.20	4.40
IX	1.48	1.30	4.00	3.50
X	1.30	1.21	3.50	3.30
XI	1.20	1.12	3.20	3.10
XII	1.06	1.08	2.90	2.90
XIII	1.02	1.00	2.80	2.70

Inspection of the order and size of the eigenvalues for the participant interpretations suggested either seven or nine components. A noticeable, although small, change in the rate of decrease of the per cent of communality accounted for can be seen at both of these points. An unrotated orthogonal component matrix, a rotated orthogonal matrix, a rotated oblique component matrix, and a reordered rotated oblique component matrix were computed for both seven and nine components. After the resulting components were examined, a more meaningful structure emerged from the seven components. Table 18 shows that these seven components accounted for approximately 53 per cent of the communality. The resulting reordered oblique projection matrix for the seven components is presented in Table 20.

TABLE 19
SCORING CATEGORY COMMUNALITIES

Scoring Categories	<u>Participant</u> Communality Over 7 Components	<u>Investigator</u> Communality Over 8 Components
1. Estimated Number of Words	.378	.643
2. Unusual Courses of Action	.171	.238
3. Usual Courses of Action	.751	.763
4. Number of Subordinates Involved Individually	.701	.678
5. Number of Subordinate Groups Involved	.389	.789
6. Number of Superiors Involved	.523	.745
7. Number of Outsiders Involved	.594	.654
8. Courtesy to Subordinates	.628	.621
9. Courtesy to Outsiders	.586	.511
10. Takes Leading Action	.654	.698
11. Carelessness or Inappropriate Action	.241	.142
12. Conceptual Analysis	.620	.678
13. Uses Program Values in Analysis	.494	.770
14. Discusses with Subordinates	.405	.605
15. Discusses with Superiors and Outsiders	.403	.444
16. Ask for Advice or Suggestions or an Opinion from Subordinates	.722	.596
17. Requires Further Information	.700	.725
18. Delays or Postpones Decision, or Temporizes	.594	.725

TABLE 19, CONTINUED

Scoring Category	<u>Participant</u> Communality Over 7 Components	<u>Investigator</u> Communality Over 8 Components
19. Arrives at a Procedure for Deciding	.703	.750
20. Takes Terminal Action or Makes Concluding Decision	.486	.553
21. Makes Tentative or Definite Plans	.569	.702
22. Work Scheduled for Same or Following Day	.744	.544
23. Work Scheduled for Same or Following Week	.530	.622
24. Work Scheduled: Indefinite or No Time Specified	.490	.702
25. Gives Information to Subordinates	.471	.397
26. Gives Information to Outsiders	.304	.733
27. Follows Lead by Subordinates	.395	.499
28. Follows Lead by Superior	.764	.751
29. Follows Lead by Outsiders	.517	.696
30. Follows a Pre-Established Structure	.545	.626
31. Initiates a New Structure	.122	.405
32. Gives Directions and/or Suggestions	.462	.571
33. Communicates Face-To-Face	.454	.732
34. Communicates by Telephone	.541	.444
35. Communicates by Writing	.694	.794
36. Informality to Subordinates	.530	.480
37. Generally Follows Lead	.877	.858

TABLE 20

REORDERED OBLIQUE PROJECTION MATRIX FOR PARTICIPANT COMPONENT ANALYSIS

Scoring Category	Components						
	I	II	III	IV	V	VI	VII
16.	1.00	0.00	0.00	0.00	0.00	0.00	0.00
19.	0.86	-0.30	-0.06	0.12	0.48	-0.07	0.03
17.	0.78	0.18	-0.52	-0.06	-0.08	-0.14	-0.30
33.	0.57	-0.03	0.04	0.35	0.33	-0.14	-0.03
20.	-0.53	0.52	-0.39	0.44	-0.06	0.22	0.06
30.	0.00	1.00	0.00	0.00	0.00	0.00	0.00
3.	0.38	0.83	-0.36	0.41	0.12	0.03	-0.19
21.	0.33	0.82	-0.37	0.00	-0.13	-0.36	-0.04
25.	-0.32	0.76	0.27	0.02	-0.09	0.30	0.06
5.	-0.07	0.76	0.24	0.00	0.36	0.11	0.02
18.	0.48	0.62	-0.36	-0.34	-0.01	-0.30	-0.12
8.	0.00	0.00	1.00	0.00	0.00	0.00	0.00
35.	-0.39	-0.46	0.95	0.13	-0.03	0.39	-0.30
36.	0.22	0.02	0.81	-0.05	-0.16	-0.12	0.05
4.	0.49	0.41	0.67	0.03	0.18	-0.01	0.23
9.	-0.43	-0.29	0.67	0.04	0.63	-0.10	-0.13
32.	-0.18	0.31	0.67	-0.21	0.49	-0.32	0.13
1.	-0.10	-0.03	0.41	0.23	0.36	0.30	-0.32
2.	-0.18	0.20	-0.30	-0.22	-0.15	0.02	0.01
37.	0.00	0.00	0.00	1.00	0.00	0.00	0.00
28.	-0.11	-0.03	-0.15	0.98	-0.42	-0.11	-0.33
6.	0.02	0.01	-0.28	0.82	-0.51	0.12	-0.06
10.	0.41	-0.31	-0.06	0.54	0.15	0.33	0.25
7.	0.00	0.00	0.00	0.00	1.00	0.00	0.00
15.	-0.04	0.15	-0.26	-0.08	0.78	0.02	-0.12
14.	0.47	0.30	-0.10	-0.08	0.74	-0.23	0.09
29.	-0.01	-0.01	0.12	0.41	0.61	-0.12	0.10
26.	-0.16	0.32	0.13	-0.09	0.61	0.31	-0.15
12.	0.00	0.00	0.00	0.00	0.00	1.00	0.00
13.	0.00	0.03	-0.06	0.17	-0.13	0.88	0.06
24.	-0.05	0.20	0.23	-0.25	0.03	0.56	-0.44
11.	-0.33	-.23	-0.13	-0.20	0.09	0.48	-0.18
22.	0.00	0.00	0.00	0.00	0.00	0.00	1.00
34.	0.36	0.55	-0.57	0.09	0.41	-0.07	0.58
27.	0.20	0.06	0.11	0.38	0.03	0.31	0.44
31.	-0.20	-0.07	0.15	0.14	0.12	0.12	-0.34
23.	0.05	-0.18	-0.21	0.23	-0.03	-0.51	-0.69

TABLE 21

REORDERED OBLIQUE PROJECTION MATRIX FOR INVESTIGATOR COMPONENT MATRIX

Scoring Category	Components							
	I	II	III	IV	V	VI	VII	VIII
26.	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.	0.83	-0.17	-0.15	0.06	0.22	-0.17	0.15	-0.03
29.	0.78	0.09	0.13	-0.32	0.34	-0.18	0.67	0.14
9.	0.63	-0.45	0.40	0.14	-0.07	-0.15	-0.26	-0.06
1.	0.61	0.07	0.50	0.16	0.16	0.24	-0.01	0.37
16.	-0.55	0.27	0.50	0.25	0.46	0.36	0.34	0.07
30.	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
21.	-0.46	0.68	-0.45	-0.14	0.48	-0.04	0.32	-0.13
22.	0.18	-0.54	-0.09	-0.27	-0.49	0.02	-0.04	0.32
8.	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
4.	-0.06	0.08	0.92	0.11	0.24	0.05	0.72	0.05
35.	0.42	-0.43	0.83	0.18	-0.40	0.06	-0.38	0.31
36.	-0.83	0.19	0.80	-0.12	-0.06	0.01	0.07	0.16
32.	0.31	0.10	0.80	-0.16	-0.14	-0.22	0.05	0.05
33.	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
5.	0.05	0.75	-0.05	0.92	-0.36	0.18	-0.18	0.16
14.	0.02	0.48	-0.07	0.79	0.07	-0.05	-0.07	0.14
15.	-0.09	-0.36	0.11	0.55	0.25	-0.17	-0.20	0.53
24.	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
17.	-0.33	0.43	0.11	-0.27	0.92	0.34	0.41	-0.14
18.	-0.16	0.64	0.07	-0.77	0.82	0.02	0.81	-0.33
3.	0.21	0.72	0.12	-0.11	0.73	0.12	0.63	0.20
19.	-0.40	0.05	0.47	0.57	0.60	0.02	0.51	0.21
11.	-0.00	0.21	-0.29	0.12	-0.44	0.13	-0.16	-0.10
20.	0.24	0.15	-0.40	-0.05	-0.59	0.05	-0.46	0.52
25.	0.21	0.32	0.09	0.14	-0.63	0.42	-0.27	0.01
23.	-0.17	0.52	0.09	0.26	-0.70	-0.02	0.04	-0.31
13.	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
12.	0.10	0.05	0.13	-0.09	-0.02	0.86	0.32	-0.17
27.	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
10.	0.06	-0.49	0.22	0.04	0.52	0.00	0.98	0.21
34.	0.06	0.54	-0.41	-0.33	0.26	0.02	0.85	-0.03
37.	0.40	0.05	0.07	-0.16	0.18	-0.10	0.74	0.72
2.	-0.02	0.01	-0.30	0.18	-0.09	0.31	-0.64	0.00
31.	0.34	0.10	-0.01	0.41	-0.18	0.35	-0.87	0.21
28.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
6.	0.02	-0.27	-0.05	-0.06	0.09	0.16	0.16	0.96

Inspection of the order and size of the eigenvalues for the investigator's interpretations suggested eight components. Thus, an unrotated orthogonal component matrix, a rotated orthogonal component matrix, a rotated oblique component matrix, and a reordered rotated oblique component matrix were computed for eight components. For eight components, the total per cent of communality accounted for was approximately 62 per cent. The resulting reordered oblique projection matrix for eight components is presented in Table 21.

In Table 19 are presented both the scoring category communalities over seven components for the participant component analysis and the scoring category communalities over eight components for the investigator component analysis. A comparison of the communality squared of each participant's scoring category with the corresponding participant estimates of reliability (Table 15) suggests that, for most of the categories, the seven components account for all of the reliably measured variance. The only notable exceptions were (1) "number of words written" and (2) "unusual courses of action." For the investigator's components, a comparison of the communality squared of each scoring category with the corresponding investigator estimates of reliability (see Table 15) suggests that the eight components account for virtually all of the reliably measured variance of most of the categories. The one notable exception was the category "informality to subordinates."

Only a tentative interpretation of the components will be made at this time. In later sections, the reliabilities of the components and the relationships between each component and the other variables will be examined. These relationships will help to illuminate the nature of the components. In describing the components, those scoring categories with loadings from the reordered oblique projection matrices (Tables 20 and 21) of $\pm .50$ or larger on the components were used. Those components that appeared to measure the same administrative dimensions from the participant oblique projection matrix and from the investigator oblique projection matrix were presented together to facilitate comparison of the two sets of components.

The components represented in Table 22 quite clearly relate to the preparation for decision, i.e. requires further information, indefinite work schedule, delays or postpones decision, arrives at a procedure for deciding, and a negative loading for takes terminal action or makes concluding decision. A comparison of Component I (Participant) with Component V (Investigator), revealed that three scoring categories (requires further information, arrives at a procedure for deciding, and takes terminal action or makes concluding decision) were common to both components.

TABLE 22

SCORING CATEGORIES FOR THE PREPARATION FOR DECISION COMPONENT FOR THE PARTICIPANT AND INVESTIGATOR INTERPRETATIONS

	Loading
Component I (Participant)	
16. Ask for advice, suggestions or an opinion from subordinates	1.00
19. Arrives at a procedure for deciding	0.86
17. Requires further information	0.78
33. Communicates face-to-face	0.57
20. Takes terminal action or makes concluding decisions	-0.53
Component V (Investigator)	
24. Work scheduled: indefinite or no time specified	1.00
17. Requires further information	0.92
18. Delays or postpones decision, or temporizes	0.82
3. Usual courses of action	0.73
19. Arrives at a procedure for deciding	0.60
10. Takes leading action	0.52
23. Work scheduled for same or following week	-0.70
25. Gives information to subordinates	-0.63
20. Takes terminal action or makes concluding decision	-0.59

The components presented in Table 23 appear to be related to an orderly, systematic approach to work, i.e., follows a pre-established structure, makes tentative or definite plans, and delays or postpones decisions, or temporizes, at least insofar as the scheduling of work is concerned. Thus, this component was called organizing work. Table 23 also indicates some inconsistency for the participant component in that category twenty is somewhat contradictory in nature to categories eighteen and twenty-one.

TABLE 23

SCORING CATEGORIES FOR THE ORGANIZING WORK COMPONENT
FOR THE PARTICIPANT AND INVESTIGATOR INTERPRETATIONS

	Loading
Component II (Participant)	
30. Follows a pre-established structure	1.00
3. Usual courses of action	0.83
21. Makes tentative or definite plans	0.82
25. Gives information to subordinates	0.76
5. Number of subordinate groups involved	0.76
18. Delays or postpones decision, or temporizes	0.62
34. Communicates by telephone	0.55
20. Takes terminal action or makes concluding decisions	0.52
Component II (Investigator)	
30. Follows a pre-established structure	1.00
5. Number of subordinate groups involved	0.76
3. Usual courses of action	0.72
21. Makes tentative or definite plans	0.68
18. Delays or postpones decision, or temporizes	0.64
34. Communicates by telephone	0.54
23. Work scheduled for same or following week	0.52
22. Work scheduled for same or following day	-0.54

A comparison of the corresponding participant and investigator components revealed that six scoring categories were common to both components (follows a pre-established structure, usual courses of action, makes tentative or definite plans, number of subordinate groups involved, delays or postpones decision, or temporizes and communicates by telephone).

The components presented in Table 24 relate to both exchanging of information (estimated number of words, number of subordinates involved individually, and asked for advice, suggestions or an opinion from subordinates) and directing (gives information and/or suggestions, and communicates by writing). The exchanging of information and directing seems to be oriented more toward subordinates than toward any of the other

TABLE 24

SCORING CATEGORIES FOR THE EXCHANGING INFORMATION AND DIRECTING
COMPONENT FOR THE PARTICIPANT AND INVESTIGATOR INTERPRETATIONS

Component III (Participant)

8. Courtesy to subordinates	1.00
35. Communicates by writing	0.95
36. Informality to subordinates	0.81
4. Number of subordinates involved individually	0.67
9. Courtesy to outsiders	0.67
32. Gives information and/or suggestions	0.67
1. Number of words	0.41
34. Communicates by telephone	-0.57
17. Requires further information	-0.52

Component III (Investigator)

8. Courtesy to subordinates	1.00
4. Number of subordinates involved individually	0.92
35. Communicates by writing	0.83
36. Informality to subordinates	0.80
32. Gives information and/or suggestions	0.80
1. Estimated number of words	0.50
16. Ask for advice, suggestions or an opinion from subordinates	0.50

groups. Interestingly, "showing courtesy" and "informality" also had quite high loadings on this component. In comparing Component III (Participant) with Component III (Investigator), it was noted that again six scoring categories were common to both components--courtesy to subordinates, number of subordinates involved individually, communicates by writing, informality to subordinates, and gives information and/or suggestions, and estimated number of words.

The participant component presented in Table 25 primarily involves the participant's relationships with superiors; whereas, in the investigator's interpretation there was an involvement with both superiors and outsiders. The investigator's interpretation also indicates a positive loading for "takes terminal action or makes concluding decision," which suggests that the content was regarded by the participant as important. Thus, this component was labeled maintaining organizational relationships (involvement of superiors and outsiders, generally follows lead and takes terminal action or makes concluding decisions) although in this case the label fits the investigator's interpretation better than it does the interpretation of the participants. The maintaining of relationships was externally oriented in the sense that there was little involvement of subordinates. Three scoring categories were common to both components--

generally follows lead, follows lead by superiors and number of superiors involved.

TABLE 25

SCORING CATEGORIES FOR THE MAINTAINING ORGANIZATIONAL RELATIONSHIPS
COMPONENT FOR THE PARTICIPANT AND INVESTIGATOR INTERPRETATIONS

	Loading
Component IV (Participant)	
37. Generally follows lead	1.00
28. Follows lead by superiors	0.98
6. Number of superiors involved	0.82
10. Takes leading action	0.54
Component VIII (Investigator)	
28. Follows lead by superiors	1.00
6. Number of superiors involved	0.82
37. Generally follows lead	0.72
15. Discusses with superiors or outsiders	0.53
20. Takes terminal action or makes concluding decision	0.52

The participant component presented in Table 26 reflects both a responsiveness to outsiders (number of outsiders involved, follows lead by outsiders, and gives information to outsiders) and discussing before acting (discusses with superiors or outsiders and discusses with subordinates). In the investigator's interpretation, however, the scoring categories resolved themselves into two separate components. One component represented responsiveness to outsiders; the other represented discussing before acting. Low interpretation correlations on categories fourteen, fifteen, and thirty-three (Table 14) partially explain the failure on the part of the participant scoring categories to discriminate between the two components of responding to outsiders and discussing before acting. Four scoring categories from the participant component (number of outsiders involved, gives information to outsiders, follows lead by outsiders, and courtesy to outsiders) were common to Component I of the investigator's interpretation and two scoring categories (discusses with subordinates, and discusses with superiors or outsiders) were common to Component IV (investigator).

TABLE 26

SCORING CATEGORIES FOR THE RESPONDING TO OUTSIDERS AND DISCUSSING BEFORE ACTING COMPONENT FOR THE PARTICIPANT AND INVESTIGATOR INTERPRETATIONS

Component V (Participant)

7. Number of outsiders involved	1.00
15. Discusses with superiors or outsiders	0.78
14. Discusses with subordinates	0.74
9. Courtesy to outsiders	0.63
29. Follows lead by outsiders	0.61
26. Gives information to outsiders	0.61
6. Number of superiors involved	-0.51

Component I (Investigator)

26. Gives information to outsiders	1.00
7. Number of outsiders involved	0.83
29. Follows lead by outsiders	0.78
9. Courtesy to outsiders	0.63
1. Estimated number of words	0.61
16. Ask for advice, suggestions or an opinion from subordinates	-0.55

Component IV (Investigator)

33. Communicates face-to-face	1.00
5. Number of subordinate groups involved	0.92
14. Discusses with subordinates	0.79
19. Arrives at a procedure for deciding	0.57
15. Discusses with superiors or outsiders	0.55

The components presented in Table 27 relate to a broad "situational" analysis of the problems presented by the in-basket items. The scoring categories involved in analyzing this component were those that were scored based on the feedback problems. The category of "carelessness or inappropriate action" did not have a loading of $\pm .5$ on any component. There appears to be some inconsistency in this component in that one would expect that the category "carelessness or inappropriate action" should have had a negative loading. A possible explanation might be that, since the feedback responses were presented in a forced choice format, the participant became overly involved in the feedback process and as a result may have overreacted causing some inconsistencies in his performance on the feedback problems. In comparing the two components presented in

TABLE 27

SCORING CATEGORIES FOR THE ANALYZING THE SITUATION COMPONENT
FOR THE PARTICIPANT AND INVESTIGATOR INTERPRETATIONS

	Loading
Component VI (Participant)	
12. Conceptual analysis	1.00
13. Uses program values in analysis	0.88
24. Work scheduled: indefinite or no time specified	0.56
11. Carelessness or inappropriate action	0.48
Component VI (Investigator)	
13. Uses program values in analysis	1.00
12. Conceptual analysis	0.86
11. Carelessness or inappropriate action	0.13

Table 27, it was noted that three categories (uses program values in analysis, conceptual analysis, and carelessness or inappropriate action) were common to both the participant's and the investigator's interpretations. This was expected since, with the exception of sixteen, all of the data available on categories eleven, twelve, and thirteen was participant data.

The components presented in Table 28 related to a compliance with suggestions or maintenance man type of orientation, e.g., follows lead, communicates by telephone, and high negative loadings for initiation of new structure and unusual actions. The inverse of this component would be an innovative type of position (unusual actions, initiates new structure and little compliance with suggestions). In comparing the participant and investigator components, it was noted that the participant compliance was an active compliance (immediate scheduling of work); whereas, the investigator compliance was passive (takes leading action and delays or postpones or temporizes). Four scoring categories were common to the two components (communicates by telephone, follows lead by outsider, initiates new structure, and unusual courses of action).

The foregoing interpretations of the components have been restricted to their more general features. Their full meaning will become clear as their relationships with the other variables of the study are examined.

TABLE 28

SCORING CATEGORIES FOR THE COMPLYING WITH SUGGESTIONS COMPONENT
FOR THE PARTICIPANT AND INVESTIGATOR INTERPRETATIONS

	Loading
Component VII (Participant)	
22. Work scheduled for same or following day	1.00
34. Communicates by telephone	0.58
27. Follows lead by outsiders	0.44
2. Unusual courses of action	0.01
23. Work scheduled for same or following week	-0.69
31. Initiates new structure	-0.34
Component VII (Investigator)	
27. Follows lead by subordinates	1.00
10. Takes leading action	0.98
34. Communicates by telephone	0.85
37. Generally follows lead	0.74
18. Delays or postpones decision or temporizes	0.81
3. Usual courses of action	0.63
19. Arrives at a procedure for deciding	0.51
4. Number of subordinates involved individually	0.72
29. Follows lead by outsiders	0.67
5. Number of subordinate groups involved	-0.72
31. Initiates new structure	-0.87
2. Unusual courses of action	-0.64

Composite Component Performance and Reliability

As the first step in the analysis of the reliability of the administrative performance dimensions and the relationship between these dimensions and the other variables of the study, certain category scores were combined to form approximations of component scores to represent each component. Henceforth, these scores will be referred to as composite component scores. The weights which were assigned to form the composite components were as follows: (1) those category scores which had an absolute value loading of .5 or higher on a single component were given a weight of six, (2) those category scores which had an absolute value loading of .5 or higher on two components were given a weight of three, (3) those category scores which had an absolute value loading of .5 or higher on three components were given a weight of two, and (4) those category scores that did not have an absolute value loading of .5 or higher on any of the components were given a weight of one. When this procedure was used each category score then carried a weight of one toward the

TABLE 29

COMPOSITION OF COMPOSITE COMPONENT PERFORMANCE DIMENSIONS

Composite Component	Scoring Category	Weight
Preparation for Decision:		
(Participant)		
	16. Asks for advice, suggestions or an opinion from subordinates	6
	19. Arrives at a procedure	6
	33. Communicates face-to-face	6
	17. Requires further information	3
	*20. Takes terminal action or makes concluding decision	2
(Investigator)		
	24. Work scheduled: indefinite or no time specified	6
	17. Requires further information	6
	*25. Gives information to subordinates	6
	18. Delays or postpones decision, or temporizes	3
	19. Arrives at a procedure for deciding	3
	3. Usual courses of action	3
	10. Takes leading action	2
	*20. Takes terminal action or makes concluding decision	2
	*23. Work scheduled same or following week	2
Organizes Work:		
(Participant)		
	30. Follows a pre-established structure	6
	21. Makes tentative or definite plans	6
	5. Number of subordinate groups involved	6
	18. Delays or postpones decision, or temporizes	6
	3. Usual courses of action	6
	25. Gives information to subordinates	6
	20. Takes terminal action or makes concluding decision	3
	34. Communicates by telephone	2

TABLE 29, CONTINUED

Composite Component	Scoring Category	Weight
	(Investigator)	
	30. Follows a pre-established structure	6
	21. Makes tentative or definite plans	6
	*22. Work scheduled for same or following day	6
	23. Work scheduled for same or following week	3
	5. Number of subordinate groups involved	3
	34. Communicates by telephone	3
	18. Delays or postpones decision, or temporizes	2
	3. Number of courses of action	2
	Exchanging of Information and Directing:	
	(Participant)	
	8. Courtesy to subordinates	6
	35. Communicates by writing	6
	36. Informality to subordinates	6
	4. Number of subordinates involved individually	6
	32. Gives directions and/or suggestions	6
	*17. Requires further information	3
	9. Courtesy to outsiders	3
	1. Estimated number of words	3
	*34. Communicates by telephone	2
	(Investigator)	
	8. Courtesy to subordinates	6
	35. Communicates by writing	6
	36. Informality to subordinates	6
	32. Gives directions and/or suggestions	6
	4. Number of subordinates involved individually	3
	1. Estimated number of words	3
	16. Ask for advice, suggestions or an opinion from subordinates	3
	Maintaining Organizational Relationships:	
	(Participant)	
	37. Generally follows lead	6
	28. Follows lead by superiors	6
	10. Takes leading action	6
	6. Number of superiors involved	3

TABLE 29, CONTINUED

Composite Component	Scoring Category	Weight
	(Investigator)	
	28. Follows lead by superiors	6
	6. Number of superiors involved	6
	37. Generally follows lead	3
	20. Takes terminal action or makes concluding decision	3
	15. Discusses with superiors or outsiders	3
	Responding to Outsiders and Discussing before Acting:	
	(Participant)	
	26. Gives information to outsiders	6
	7. Number of outsiders involved	6
	29. Follows lead by outsiders	6
	14. Discusses with subordinates	6
	15. Discusses with superiors or outsiders	6
	9. Courtesy to outsiders	3
	6. Number of superiors involved	3
	(Investigator)	
	26. Gives information to outsiders	6
	7. Number of outsiders involved	6
	9. Courtesy to outsiders	6
	29. Follows lead by outsiders	3
	1. Number of words written	3
	*16. Ask for advice, suggestions or an opinion from subordinates	3
	33. Communicates face-to-face	6
	14. Discusses with subordinates	6
	15. Discusses with superiors or outsiders	3
	5. Number of subordinate groups involved	3
	19. Arrives at a procedure for deciding	2
	Analyzing the Situation:	
	(Participant)	
	13. Uses program values in analysis	6
	12. Conceptual analysis	6
	24. Work scheduled: indefinite or no time specified	6
	*11. Carelessness or inappropriate action	3

TABLE 29, CONTINUED

Composite Component	Scoring Category	Weight
	(Investigator)	
	13. Uses program values in analysis	6
	12. Conceptual analysis	6
	*11. Carelessness or inappropriate action	3
Complying with Suggestions:		
	(Participant)	
	22. Work scheduled for same or following day	6
	*23. Work scheduled for same or following week	6
	*31. Initiates new structure	3
	*2. Unusual courses of action	3
	27. Follows lead by subordinates	3
	34. Communicates by telephone	2
	(Investigator)	
	27. Follows lead by subordinates	6
	*2. Unusual courses of action	6
	*31. Initiates new structure	6
	29. Follows lead by outsiders	3
	10. Takes leading action	3
	34. Communicates by telephone	3
	37. Generally follows lead	3
	4. Number of subordinates involved individually	3
	*5. Number of subordinate groups involved	3
	18. Delays or postpones decision or temporizes	2
	3. Usual courses of action	2
	19. Arrives at a procedure	2

total administrative profile of the participant except for those categories not having an absolute value loading of at least .5 and they carried a weight of .5 toward the total administrative profile. To obtain the individual participant composite component scores, the standardized scoring categories corresponding to the various components were then multiplied by their appropriate weights, summed, divided by the sum of the weights, and converted to percentiles. The composite component scores and their corresponding weights are presented in Table 29.

Composite component scores were computed for (1) the participant components based on the participant interpretations, (2) the investigator's components based on the investigator's interpretations, (3) the investigator's components based on the participant interpretations, and (4) the investigator's components based on the reliability scorer interpretations. Three sets of interpretation reliability estimates were computed for the composite component scores: (1) by correlating the participant composite component scores based on the participant interpretation with the investigator composite component scores based on the investigator interpretation, (2) by correlating the investigator composite component scores based on the investigator interpretation with the investigator composite component scores based on the reliability scorer interpretation, and (3) by correlating the investigator composite component scores based on the investigator interpretation with the investigator composite component scores based on the participant interpretation. These interpretation reliability estimates are presented in Table 30. Columns (1), (2), and (3) denote, respectively, the three correlations mentioned above.

TABLE 30
INTERPRETATION RELIABILITY ESTIMATES FOR THE
COMPOSITE COMPONENT SCORES

Composite Components	(1) Correlation	(2) Correlation	(3) Correlation
I. Preparation for Decision	.51	.92	.62
II. Organizes Work	.64	.91	.70
III. Exchanging Information	.86	.94	.86
IV. Maintaining Organizational Relationships	.72	.95	.86
V. Responding to Outsiders Discussing before Acting*	.71	.96	.80 .57
VI. Analyzing the Situation**	.88		.92
VII. Complying with Suggestions	.34	.89	.79

*Since the participant interpretation did not discriminate between two components--responding to outsiders and discussing before acting--the scores from the corresponding components for the investigator's interpretation were averaged together to obtain a single component score in order that a comparison with the participant component score could be made.

**No correlation could be computed since reliability scorer data did not exist for the scoring categories making up this component.

The column (1) interpretation reliabilities ranged from a low of .34 on the composite component Complying with Suggestions to a high of .88 on the composite component Analyzing the Situation. The low correlation on the composite component Complying with Suggestions resulted because the participant component represented an active compliance; whereas, the investigator component represented a passive compliance (see Table 28). The other rather low interpretation reliability was on the composite component Preparation for Decision. In analyzing the scoring categories that made up this component (Table 29), it was noted that for the participant component, the unique scoring categories were "asked for advice, suggestions or an opinion", "arrives at a procedure" and "communicates face-to-face" and for the investigator component the unique categories were "work scheduled: indefinite or no time specified", "requires further information" and a negative loading for "gives information to subordinates". Thus, none of the unique scoring categories were common to the two components. In addition, of the scoring categories just listed, it was found previously that three of them had quite low interpretation reliabilities (Table 14). With the above exceptions, the remaining column (1) interpretation reliabilities were quite satisfactory. Excluding Components I and VII, the remaining components had an average interpretation reliability estimate of .77.

The column (2) interpretation reliabilities represented the investigator - reliability scorer composite component correlations. Since there were three reliability scorers, three sets of correlations were computed. The correlations were then averaged, to obtain a single set of estimates. These estimates ranged from a low of .89 to a high of .96. The average interpretation reliability was .92 compared to an average interpretation reliability of .88 on the individual scoring categories (Table 14).

The column (3) interpretation reliabilities represented participant - investigator correlations with both interpretations based on the investigator composite components as opposed to the two interpretations being based on their own composite component scores as presented on column (1). The two low reliabilities were on the composite components Discussing before Acting and Preparation for Decision (.62). This was to be expected, since of the five scoring categories making up the Discussing before Acting component, four of them had low category reliability interpretations (Table 14), and of the three unique scoring categories making up the Preparation for Decision component, two had low category reliabilities. The average reliability for column (3) was .77, as compared to .67 on the individual scoring categories (Table 14). Thus, there was a substantial increase in the interpretation reliabilities using the composite components rather than the individual scoring categories. In fact, if one were to exclude the two low composite component reliabilities, the average reliability of the other six components would be .82, which is very satisfactory. Thus, the participant can do a satisfactory job of interpreting his responses by way of the computer-based feedback model using the composite components as identified by the investigator interpretation, especially if the participant interpretation of the discussing and work scheduled scoring categories can be improved.

To determine whether the participants were consistent in their performance on the in-basket response items in regard to the administrative performance dimensions, internal consistency reliability estimates

were made for: (1) the participant component scores as interpreted by the participant, and (2) the investigator component scores as interpreted by the investigator. These reliabilities are presented in Table 31.

TABLE 31

INTERNAL CONSISTENCY RELIABILITY ESTIMATES FOR THE COMPOSITE COMPONENT SCORES

Composite Components	Participant Number of Items			Investigator Number of Items		
	5	10	20	5	10	20
I. Preparation for Decision	.49	.66	.79	.48	.65	.79
II. Organizes Work	.63	.77q	.87	.52	.68	.81
III. Exchanging Information and Directing	.51	.68	.81	.53	.69	.82
IV. Maintaining Organizational Relationships	.25	.40	.57	.21	.35	.52
V. Responding to Outsiders Discussing before Acting**	.63	.77	.87	.55 .23	.71 .37	.83 .54
VI. Analyzing the Situation**	.32	.48	.65			
VII. Complying with Suggestions	.32	.48	.65	.36	.53	.69

*The participant interpretations did not discriminate between the Discussing before Acting component and the Responding to Outsiders component; thus, the two components were treated together as one for the participant interpretations.

**See footnote Table 15.

KR-20 reliability estimates were again used. Spearman-Brown correction reliability estimates were also calculated to determine what the affect on the reliabilities would be if the number of items were increased to ten or to twenty. Based on the five items used in the computer-based feedback model, the average internal consistency reliability estimate of the participant composite component scores was .45, as compared to .27 for the scoring categories (Table 15). The average internal consistency reliability estimate of the investigator composite component scores was .41, as compared to .23 for the scoring categories. If the number of items were to be increased to ten, the estimated average internal consistency reliability of the participant composite component scores became .61, as compared to .39 for the scoring categories and for the investigator, .57, as compared to .34 for the scoring categories.

Therefore, it appears that the internal consistency reliabilities of the composite component scores were considerably better than the scoring category internal consistency reliabilities.

It was also noted, that, even though some of the scoring categories differed in measuring the corresponding composite components for the participant and the investigator, the internal consistency reliabilities for the components were quite similar. In fact, of the six components for which a comparison can be made, 67 per cent of them had differences of less than or equal to .04 and the largest difference was only .11.

Correlation with Other Variables

Presented in this section are the correlations of the composite component scores with the background and test score variables that were described in Chapter III. The correlations based on the components identified through the participant interpretations are shown in Table 32 and the correlations based on the components identified through the investigator's interpretations are shown in Table 33.

It may be seen in Table 32 that the composite component Preparation for Decision (I) had significant positive correlations with number of years of administrative experience, autonomy, change and heterosexuality and significant negative correlations with deference and abasement. Although not statistically significant, Preparation for Decision also had quite high positive correlations with age, number of years in present position, academic aptitude test variables, and the traditional value orientation. Thus, according to the participant interpretations, the participant scoring high on Preparation for Decision appears to be the older, more experienced, somewhat traditional administrator with fairly high academic aptitude.

The composite component Organizes Work (II) had a significant positive correlation with intraception and significant negative correlations with abasement and nurturance. Table 32 shows that Organizes Work also had negative correlations with age, years in present position, administrative experience, professional training, graduate credits in administration and the academic aptitude tests. According to the participant interpretations, the participant that scored high on Organizes Work appears to be a younger, more inexperienced individual with less academic aptitude than some of the other participants.

The composite component Exchanging Information and Directing (III) had no significant positive correlations but significant negative correlations with succorance and nurturance. Although not statistically significant, the Exchanging Information and Directing component did have high positive correlations with sex, teaching experience, professional training, graduate credits in administration and critical thinking. Thus, based on the participant interpretation, the participant that scored high on the Exchanging Information and Directing component appears to be a male with considerable teaching experience and professional training but only an average amount of administrative experience.

TABLE 32

CORRELATION OF PARTICIPANT COMPOSITE COMPONENT SCORES WITH
BACKGROUND AND TEST SCORE VARIABLES

Variable	Composite Component Score						
	I	II	III	IV	V	VI	VII
Biographical							
Sex	.08	.07	.12	-.07	.01	.09	.07
Age	.11	-.07	.08	.02	.00	.09	-.02
Present Position (Yrs.)	.14	-.08	-.02	.09	.18*	-.03	-.01
Teaching Experience	.08	.16	.14	.03	.06	.14	.00
Administrative Experience	.17*	-.10	.07	.11	-.06	.05	.02
Professional Training	.00	-.05	.14	.14	.02	-.02	.03
Graduate Credits (Adm.)	.05	-.12	.17	.14	.01	.09	-.04
Academic Aptitude							
Miller Analogie Test	.27	.13	.04	.09	-.02	.17	.08
Concept Mastery Test	.21	-.18	.03	.01	.03	.23	.48**
Cooperative English Test							
Reading	.08	-.23	-.10	-.23	.12	.25	.12
English	.25	-.47	-.22	.23	.55**	-.03	-.14
Total Test	.12	-.40	-.21	-.02	.38*	.10	.02
Value Orientation							
Differential Values Inventory							
Traditional	.14	-.10	-.03	-.09	.00	-.07	-.04
Emergent	-.16	.06	.05	.09	.01	.10	.00
Critical Thinking							
Watson Claser Critical Thinking Appraisal	.04	-.47	.36	-.38	.01	.08	-.20
Basic Personality Factors							
Achievement	-.06	-.01	.08	-.22	-.01	.16	.10
Deference	-.45**	.10	.13	-.20	.07	-.04	-.05
Order	-.24	.21	.11	-.29*	.02	-.12	-.20
Exhibition	.22	-.11	.01	.23	-.06	-.20	-.07
Autonomy	.29*	-.12	.08	.24	.05	-.19	-.18
Affiliation	.05	-.01	-.02	-.17	.03	.14	.34**
Intracception	.23	.41**	.08	.00	.08	.29	.22
Succorance	.00	-.04	-.33*	-.02	.01	-.25	-.05
Dominance	.00	.21	.13	.08	-.04	.13	.08
Abasement	-.44**	-.45**	-.13	-.38**	-.23	-.32	-.10
Nurturance	-.17	-.32*	-.29*	.03	.10	-.09	.09
Change	.36**	.10	.21	-.15	-.02	.19	.18
Endurance	-.25	.13	.17	-.11	.01	-.06	.09
Heterosexuality	.41**	.09	-.04	.30*	.11	.32*	.12
Aggression	-.05	-.23	-.08	.57**	.16	.12	-.08

*Significant at the .10 level

**Significant at the .05 level

TABLE 33

CORRELATION OF INVESTIGATOR COMPOSITE COMPONENT SCORES WITH
BACKGROUND AND TEST SCORE VARIABLES

Variable	Composite Component Score							
	I	II	III	IV	V	VI	VII	VIII
Biographical								
Sex	.14	.11	.17	-.04	.05	.03	.10	.01
Age	.06	.02	.10	-.02	.00	-.06	.02	.09
Present Position (Yrs)	.14	-.03	-.07	.12	.24**	-.05	.10	.14
Teaching Experience	.08	.09	.17*	-.01	.04	.07	.03	.14
Administrative Experience	.07	-.03	.06	.03	-.10	-.07	.07	.10
Professional Training	.01	-.03	.11	.04	.02	-.12	.12	-.04
Graduate Credits (Adm.)	-.04	-.25**	.15	.00	.03	.04	.04	.04
Academic Aptitude								
Miller Analogies Test	.20	.27*	.26	-.07	-.07	.22	.29**	.13
Concept Mastery Test	.10	.12	.07	-.25	.05	.27*	.33**	.03
Cooperative English Test								
Reading	.49*	.36	.49*	-.54	.15	-.01	-.54**	-.08
English	.56**	-.06	.03	.02	.60**	.00	.10	.15
Total Test	.52*	.13	.21	-.29	.45	.01	.27	.05
Value Orientation								
Differential Values Inventory								
Traditional	.29*	.17	.00	.06	.02	-.16	-.04	.13
Emergent	-.28*	-.22	-.02	-.05	.02	.17	.12	-.06
Critical Thinking								
Watson-Glaser Critical Thinking Appraisal	.32	.01	.77**	-.61**	.00	-.21	.15	-.28
Basic Personality Factors								
Achievement	-.10	.06	-.01	-.13	.12	-.03	-.23	-.14
Deference	-.20	-.04	.11	.03	.00	-.07	-.23	.15
Order	-.02	.05	.06	.02	-.24	-.18	-.28*	.21
Exhibition	.22	-.13	-.02	-.12	.04	-.06	.14	-.18
Autonomy	.24	-.13	-.16	.25	-.01	.01	.09	.07
Affiliation	.06	.15	.11	-.18	.05	.15	.27	.04
Intracception	.01	.14	.01	.27	-.01	.30*	.11	.22
Succorance	.23	.10	-.15	.02	-.02	-.19	.39**	.02
Dominance	-.42**	-.09	.03	.21	-.01	.15	-.26	-.11
Abasement	-.31*	-.26	-.09	-.18	-.17	-.29*	.15	-.34**
Nurturance	-.08	-.06	-.28*	.05	.16	.04	.00	-.02
Change	.30*	.11	.25	-.36**	-.08	.12	.45**	.00
Endurance	-.09	.12	.03	.11	-.25	-.12	-.33**	.27
Heterosexuality	.19	.14	.14	-.10	.17	.29*	.12	-.03
Aggression	-.08	-.23	-.35**	.29*	.20	.12	-.10	-.03

*Significant at the .10 level

**Significant at the .05 level

The composite component Maintaining Relationships (IV) had significant positive correlations with heterosexuality and aggression and significant negative correlations with order and nurturance. This component had high positive correlations with years in present position, administrative experience, professional training, and graduate credits in administration and high negative correlations with sex and the critical thinking test. The participant that scored high on Maintaining Relationships appears to be an experienced administrator.

The composite component Responding to Outsiders and Discussing Before Acting (V) had a significant positive correlation with number of years in present position and no significant negative correlations, although it did have a high negative correlation with administrative experience. This component does not seem to be related to any of the other variables. It appears that the participant that scored high on this component was an immobile type of individual with little administrative experience.

The composite component Analyzing the Situation (VI) had a significant positive correlation with heterosexuality and a significant negative correlation with abasement. This component had high positive correlations with sex, age, Miller Analogies Test and Concept Mastery Test and above average positive correlations with the Cooperative English Total Test score and the Critical Thinking Test score. The participant that scored high on Analyzing the Situation appears to be an older individual with above-average academic aptitude.

The composite component Complying with Suggestions (VII) had significant positive correlations with the Concept Mastery Test and affiliation and no significant negative correlations although it did have a high negative correlation on order. This component showed no relationships with any of the other variables. Thus, based on the participant interpretations, it appears that the trait most characteristic of the participant that scored high on Complying with Suggestions was that of a need of belonging or affiliation.

In comparing the data displayed in Table 33 with that displayed in Table 32, one notices that for the most part the correlations of the composite component scores with the background and test score variables were quite similar. On the average there was only about one variable per composite component for which there was a noticeable difference in correlations. The only notable exceptions were as follows: (1) Preparation for Decision (I)--in Table 33 there was a significant negative correlation on the personality factor of dominance, whereas, in Table 32 there was no correlation with this factor; (2) Exchanging Information and Directing of Others (III)--in Table 33 there was a high positive correlation with the academic aptitude tests; whereas, in Table 32 there was a negative correlation with these tests; (3) Maintaining Relationships (IV)--in Table 33 there was little or no correlation with the administrative experience and professional training variables, whereas, in Table 32 there were high positive correlations with these variables; (4) Analyzing the Situation (VI)--Table 33 indicated a high negative correlation with the critical thinking test; whereas, in Table 32 there was a positive correlation with the critical thinking variable; and (5) Complying with Suggestions (VII)--Table 33 indicated a significant negative correlation

with endurance and a significant positive correlation with succorance, whereas, in Table 32 there was a positive correlation with endurance and a negative correlation with succorance. Since the Responding to Outsiders (V) and Discussing before Acting (VIII) components were subdivided into two components on the investigator's interpretation, there were some differences here, although Table 32 does represent somewhat of an average of the correlations presented in Table 33. The main characteristics of these two components, as indicated by Table 33, are as follows: (1) Responding to Outsiders had a significant positive correlation with years in present position and Cooperative English Test and no significant negative correlations, although it did have a high negative correlation with administrative experience; and (2) Discussing before Acting had no significant positive correlation but high positive correlations with years in present position, teaching experiences, and administrative experience and a significant negative correlation with abasement. A further analysis of the relationships of the background and test score variables to the composite component scores is presented in the Q-mode analysis section of the following chapter.

CHAPTER V

ANCILLARY ANALYSIS

The ancillary analysis is presented in four sections: (1) second-order components, (2) Q-mode analysis, (3) revised in-basket score sheet correlation, and (4) reaction to computer-based feedback model. Only the composite component scores identified through the investigator's interpretation were examined in the ancillary analysis. The reasons for this were (1) the average correlation between the composite component scores identified through the participant interpretations and those identified through the investigator interpretations was quite high, .69 (Table 30) when the participant interpretations were based on the participant components and .77 (Table 30) when the participant interpretations were based on the investigator components, (2) the correlations of the corresponding participant and investigator composite component scores with the background and test score data were very similar (Tables 32 and 33), (3) the investigator was looking for general relationships that might exist in the data and, since the correlations between the participant and investigator components were fairly high, the investigator was of the opinion that the results and implications of these relationships would be similar for both the participant and investigator composite component scores, and (4) the investigator's interpretations discriminated between the Responding to Outsiders and Discussing before Acting components; whereas, the participant interpretations treated these two components as one.

Second-Order Components

The eight investigator composite components were not entirely independent of one another. Table 34 contains the intercorrelations among these eight components.

TABLE 34

INVESTIGATOR COMPOSITE COMPONENT INTERCORRELATIONS

	<u>Composite Components</u>							
	I	II	III	IV	V	VI	VII	VIII
I	1.00							
II	.33	1.00						
III	-.15	-.15	1.00					
IV	-.03	-.11	.02	1.00				
V	-.02	-.29	.22	.29	1.00			
VI	.08	-.08	.13	-.03	.08	1.00		
VII	.24	.02	.17	.22	.25	-.02	1.00	
VIII	.30	.37	.06	.11	.04	-.02	.17	1.00

The largest positive correlation was .37 between the components Organizes Work (II) and Discussing before Acting (VIII). The largest negative correlation was -.29 between the components Organizes Work (II) and Responding to Outsiders (V). As a further analysis of the intercorrelations between the oblique components presented in Table 34, the components were themselves analyzed using a principal component analysis procedure to examine the possibility of meaningful second-order components. The results of this component analysis are presented in Table 35.

TABLE 35

**REORDERED OBLIQUE PROJECTION MATRIX FOR INVESTIGATOR
SECOND-ORDER COMPONENT ANALYSIS**

First-Order Composite Components	Second-Order Components		Communality Over 2 Components
	A	B	
VIII	1.00	0.00	.54
I	0.99	-0.20	.66
II	0.91	-0.67	.66
V	0.00	1.00	.59
IV	0.20	0.72	.34
III	-0.11	0.69	.28
VII	0.64	0.66	.52
VI	-0.06	0.23	.03

Two general second-order components were identified. They are as follows:

A. Preparation for Decision

Discussing before Acting (VIII)
Preparation for Decision (I)
Organizes Work (II)

B. Responsiveness and Compliance

Responding to Outsiders (V)
Maintaining Relationships (IV)
Exchanging Information and Directing (III)
Complying with Suggestions (VII)

The composite component Analyzing the Situation (VI) did not have a high loading on either of the second-order components. This was expected, since the Analyzing the Situation component was unique in that it was the only component that was scored completely on the basis of the feedback items. A further analysis of the second-order components reveals that the Preparation for Decision (A) component consisted of organization (Organizes Work), preparation (Preparation for Decision), and discussion (Discussing before Acting), and that the Responsiveness and Compliance (B) component consisted of external responsiveness (Responding

to Outsiders), internal responsiveness (Exchanging Information and Directing), external responsiveness and compliance (Maintaining Relationships), and general compliance (Complying with Suggestions). A Schematic representation of the second-order components is presented in Figure 2.

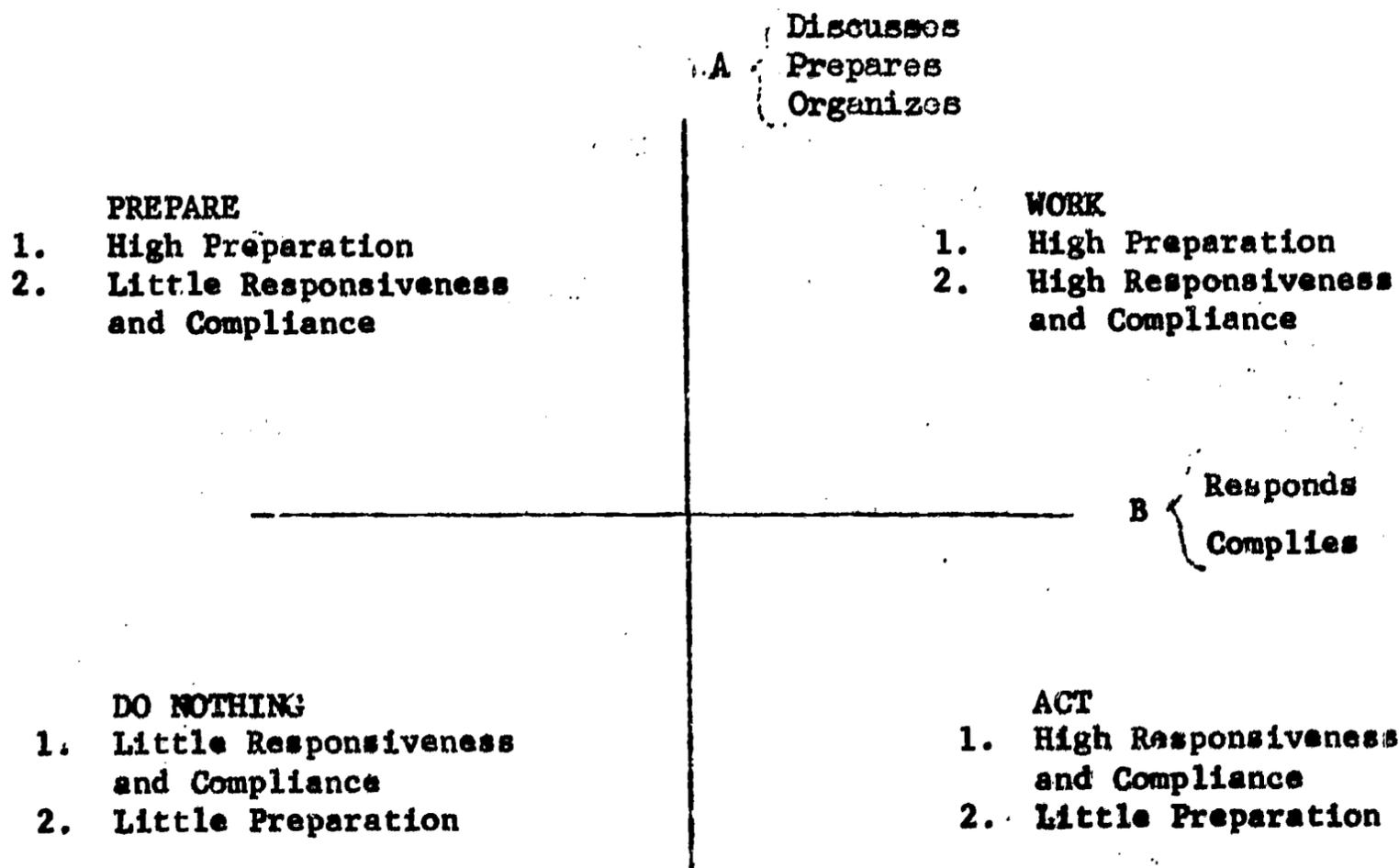


FIGURE 2

SCHEMATIC REPRESENTATION OF SECOND-ORDER COMPONENTS

Based on the schematic representation presented in Figure 2, it is possible to obtain a single general administrative performance dimension (Work, Prepare, Do Nothing, or Act) that will describe the performance of the participant on the in-basket simulation exercises. An application of the second-order components is presented in the Q-mode analysis section.

Q-Mode Analysis

A Q-mode analysis* was performed on the data to identify those groups of participants that tended to perform in similar patterns and to determine characteristics of these groups. The reordered oblique projection matrix resulting from the Q-mode analysis is presented in Appendix I.

*The Columbia Vector Analysis program by Manson and Imbrie also was used for this analysis.

TABLE 36

CHARACTERISTICS OF PARTICIPANTS CATEGORIZED IN GROUP 1
BY Q-MODE ANALYSIS*

Component	Variable
First Order:	Biographical Data:
Preparation for Decision (44.78)	Sex (90% male - 19% female)
Organizes Work (51.46)	Age (33.20)
Exchanging Information and Directing (38.02)	Present Position (3.90)
Maintaining Organizational Relationships (77.29)	Teaching Experience (7.84)
Responding to Outsiders (45.50)	Administrative Experience (2.89)
Analyzing the Situation (31.59)	Professional Training (masters)
Complying with Suggestions (49.18)	Graduate Credits Adm. (11.52)
Discussing before Acting (51.26)	Actual Administrators (42.1%)
Second Order:	Potential Administrators (57.9%)
Preparation for Decision (49.13)	Test Score Variables:
Responsiveness and Compliance (52.49)	Miller Analogies Test (54.4)
	Concept Mastery Test (5.0)
	Cooperative English Test
	Reading (56.2)
	English (49.8)
	Total (54.2)
	Differential Values Inventory
	Traditional (31.0)
	Emergent (33.0)
	Watson-Glaser Critical
	Thinking Appraisal (65.2)
	Edwards Personal Pref. Schedule
	Achievement (60.8)
	Exhibition (65.9)
	Affiliation (34.6)
	Intraception (61.4)
	Dominance (80.6)
	Abasement (36.3)

*Sample Sizes: Total Group Size (19), Test Score Variables (7)

Five distinct groups of participants were identified from the analysis. To determine the unique characteristics of the groups, means were calculated for each group on each of the composite components and on each of the background and test score variables. A summary of each of the groups identified and the corresponding characteristic means are presented below. For purposes of clarity in presenting the basic personality factors only those factors with extreme means (i.e., above the sixtieth percentile or below the fortieth percentile) are presented.

As shown in Table 36, Group 1 had averages on the second-order components of 49.13 on Preparation for Decision and 52.49 on Responsiveness and Compliance. In terms of Figure 2 (Second-Order Component Section), this would place Group 1 just into the ACT quadrant. This means that, in terms of a general administrative performance dimension, Group 1 showed a slightly greater tendency toward action than preparation for decision. On the feedback component (Analyzing the Situation), Group 1 was quite low (31.59). Examination of the Responsiveness and Compliance component reveals that the uniqueness of Group 1 was that it was low on Exchanging Information and Directing (internal responsiveness) and high on Maintaining Relationships (which is externally oriented). In comparing the background data characteristics means of Group 1 with those of the other groups, one finds that Group 1 was younger and more limited in teaching experience and administrative experience. As a further distinguishing characteristic, Group 1 consisted of a higher proportion of potential administrators than actual administrators.

The data displayed in Table 37 indicate that Group 2 had averages of 50.21 and 54.21 on the second-order components of Preparation for Decision and Responsiveness and Compliance, respectively. In terms of Figure 2, this places Group 2 into the WORL quadrant. This means that, in terms of general administrative performance, Group 2 did a large amount of work in handling the in-basket items (that is, the participant showed preparation in addition to responsiveness and compliance). On the feedback component (Analyzing the Situation), Group 2 was quite low (35.19). Further examination of the components in Table 37 reveals that the uniqueness of Group 2 was that its members were very high on Exchanging Information and Directing (internal responsiveness) and quite low on Responding to Outsiders (external responsiveness). This was almost the reverse of Group 1. In comparison to the other groups on the background characteristics, Group 2 was high on teaching experience, administrative experience, professional training and graduate credits in administration. A sizeable majority (75 percent) of the members of Group 2 were actual administrators as opposed to potential administrators. Also of interest is the fact that on the personality factors Group 2 showed a pronounced tendency toward dominance.

The data exhibited in Table 38 shows that on the second-order components of Preparation for Decision and Responsiveness and Compliance Group 3 had averages of 38.56 and 49.48, respectively. In terms of Figure 2, this places Group 3 into the DO NOTHING quadrant. Actually, however, Group 3 was about average on the Responsiveness and Compliance component; thus, the ACT dimension would probably be a more accurate description of the group's overall administrative performance than the DO NOTHING dimension. Further examination of the components in Table 38

TABLE 37

CHARACTERISTICS OF PARTICIPANTS CATEGORIZED IN GROUP 2
BY Q-MODE ANALYSIS*

Component	Variable
First Order:	Biographical Data:
Preparation for Decision (35.71)	Sex (88% male - 12% female)
Organizes Work (55.36)	Age (37.50)
Exchanging Information and Directing (80.35)	Present Position (2.80)
Maintaining Organizational Relationships (46.26)	Teaching Experience (10.25)
Responding to Outsiders (38.57)	Administrative Experience (5.12)
Analyzing the Situation (35.19)	Professional Training (masters)
Complying with Suggestions (51.66)	Graduate Credits Adm. (15.12)
Discussing before Acting (59.56)	Actual Administrators (75%)
Second Order:	Potential Administrators (25%)
Preparation for Decision (50.21)	Test Score Variables:
Responsiveness and Compliance (54.21)	Miller Analogies Test (50.8)
	Concept Mastery Test (5.0)
	Cooperative English Test
	Reading (69.0)
	English (36.0)
	Total (52.0)
	Differential Values Inventory
	Traditional (32.5)
	Emergent (30.8)
	Watson-Glaser Critical
	Thinking Appraisal (72.2)
	Edwards Personal Pref. Schedule
	Achievement (68.8)
	Deference (61.5)
	Autonomy (29.8)
	Affiliation (31.0)
	Intraception (72.0)
	Dominance (89.5)
	Abasement (35.5)
	Nurturance (17.8)
	Change (81.0)
	Aggression (32.0)

*Sample Sizes: Total Group Size (9), Test Score Variables (4)

reveals that the uniqueness of Group 3 was that it was very high (82.88) on the feedback component (Analyzing the Situation). The idea of analyzing also comes out in the Complying with Suggestions component where Group 3 scored quite low; thus, implying low maintenance and high innovation. In comparison with the other groups on the background characteristics, Group 3 was the oldest group and the most immobile (that is, the participants making up Group 3 had, on the average, been in their present position longer than any of the other groups of participants). Group 3 consisted mostly of potential administrators.

TABLE 38

CHARACTERISTICS OF PARTICIPANTS CATEGORIZED IN GROUP 3
BY Q-MODE ANALYSIS*

Component	Variable
First-Order:	Biographical Data
Preparation for Decision (33.59)	Sex (91% male - 9% female)
Organizes Work (42.10)	Age (39.1)
Exchanging Information and Directing (45.44)	Present Position (4.36)
Maintaining Organizational Relationships (50.65)	Teaching Experience (9.54)
Responding to Outsiders (46.23)	Administrative Experience (4.45)
Analyzing the Situation (82.88)	Professional Training (Masters)
Complying with Suggestions (44.61)	Graduate Credits Adm. (15.09)
Discussing before Acting (40.01)	Administrators (36.4%)
Second-Order:	Potential (63.6%)
Preparation for Decision (38.56)	
Responsiveness and Compliance (49.48)	

*Sample Sizes: Total Group Size (11), Test Score Variables (0)

Analysis of the data contained in Table 39 indicates that Group 4 had averages on the second-order components of Preparation for Decision and Responsiveness and Compliance of 61.34 and 40.29, respectively. In

TABLE 39

CHARACTERISTICS OF PARTICIPANTS CATEGORIZED IN GROUP 4
BY Q-MODE ANALYSIS*

Component	Variable
First Order:	Biographical Data:
Preparation for Decision (61.60)	Sex (78% male - 22% female)
Organizes Work (66.38)	Age (38.1)
Exchanging Information and Directing (35.33)	Present Position (3.94)
Maintaining Organizational Relationships (35.96)	Teaching Experience (9.53)
	Administrative Experience (3.91)
	Professional Training (masters)
	Graduate Credits Adm. (8.59)
	Actual Administrators (50%)
	Potential Administrators (50%)
Responding to Outsiders (39.33)	Test Score Variables:
Analyzing the Situation (52.17)	Miller Analogies Test (65.7)
Complying with Suggestions (50.54)	Concept Mastery Test (16.2)
Discussing before Acting (56.05)	Cooperative English Test
	Reading (71.6)
	English (49.4)
	Total (63.4)
	Differential Values Inventory
	Traditional (31.2)
	Emergent (32.8)
Second Order:	Watson-Glaser Critical
Preparation for Decision (61.34)	Thinking Appraisal (68.6)
Responsiveness and Compliance (40.29)	Edwards Personal Pref. Schedule
	Achievement (63.4)
	Order (35.3)
	Exhibition (62.6)
	Autonomy (39.7)
	Affiliation (62.1)
	Intracception (64.8)
	Dominance (76.3)
	Abasement (24.6)
	Change (75.4)
	Endurance (38.3)
	Aggression (39.8)

*Sample Sizes: Total Group Size (32), Test Score Variables (15)

TABLE 40

CHARACTERISTICS OF PARTICIPANTS CATEGORIZED IN GROUP 5
BY Q-MODE ANALYSIS*

Component	Variable
First Order:	Biographical Data:
Preparation for Decision (51.25)	Sex (79% male -21% female)
Organizes Work (34.76)	Age (35.2)
Exchanging Information and Directing (57.86)	Present Position (4.31)
Maintaining Organizational Relationships (46.71)	Teaching Experience (9.24)
	Administrative Experience (3.10)
	Professional Training (masters plus Graduate Credits Adm. (12.93)
	Actual Administrators (58.6%)
	Potential Administrators (41.4%)
Responding to Outsiders (69.90)	Test Score Variables:
Analyzing the Situation (51.18)	Miller Analogies Test (64.6)
Complying with Suggestions (52.94)	Concept Mastery Test (17.8)
Discussing before Acting (41.93)	Cooperative English Test
	Reading (66.0)
	English (70.5)
	Total (68.5)
Second Order:	Differential Values Inventory
Preparation for Decision (42.67)	Traditional (30.4)
Responsiveness and Compliance	Emergent (34.3)
	Watson-Glaser Critical Thinking Appraisal (75.5)
	Edwards Personal Pref. Schedule
	Achievement (72.1)
	Order (28.1)
	Exhibition (77.1)
	Intracception (63.4)
	Dominance (77.7)
	Abasement (34.9)
	Change (71.1)
	Endurance (29.3)

*Sample Sizes: Total Group Size (29); Test Score Variables (10)

terms of Figure 2, this places Group 4 into the PREPARES quadrant. On the feedback component (Analyzing the Situation), Group 4 was slightly above average (52.17). The uniqueness of Group 4 was its high emphasis on preparation for decision. Group 4 was about average in comparison with the other groups on the background data variables. Academic aptitude was the main distinguishing feature of Group 4 as far as the other ancillary variables were concerned. Group 4 had very high scores on all of the academic aptitude tests (Miller Analogies Test = 65.7, Concept Inventory Test = 16.2, and Cooperative English Total Test score = 63.4), and also on the critical thinking test (Watson-Glaser = 68.6).

The data contained in Table 40 show that Group 5 had averages on the second-order components of Preparation for Decision and Responsiveness and Compliance of 42.67 and 56.85, respectively. In terms of Figure 2, this places Group 5 well into the ACT quadrant. On the feedback component (Analyzing the Situation), Group 5 was slightly above average (51.18). The uniqueness of Group 5 was its above average emphasis on responsiveness, both internal (Exchanging Information and Directing) and external (Responding to Outsiders). The external responsiveness of this group was exceptionally high (69.90). In regard to the background data variables, Group 5 was high on professional training and graduate credits in administration. Academic aptitude was a distinguishing feature of Group 5, as it was of Group 4. Group 5 contained a higher proportion of actual administrators than potential administrators.

In summary, the five groups of participants identified through the Q-mode analysis can be represented as follows:

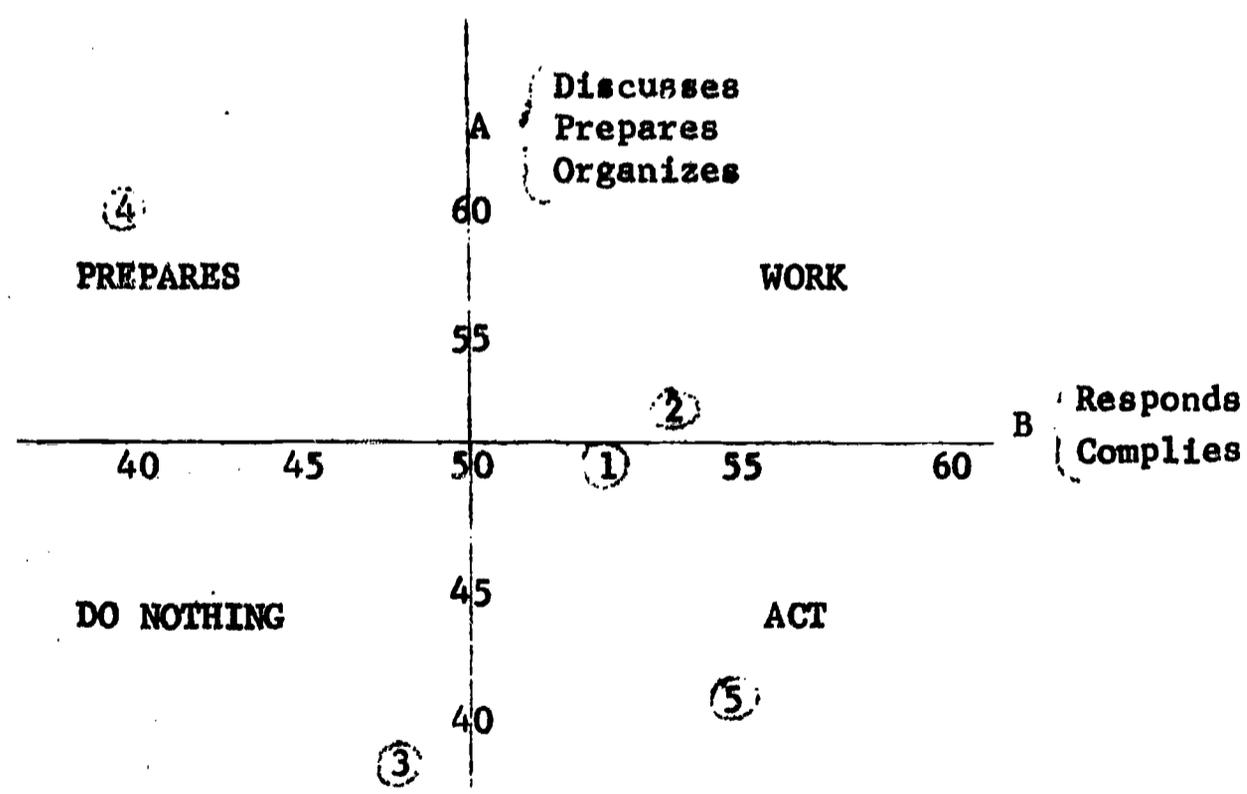


FIGURE 3
Q-MODE ANALYSIS GROUPS

- Group 1
 1. ACT
 2. Emphasis on maintaining relationships.
(externally oriented)

- Group 2
 1. WORK
 2. Emphasis on internal responsiveness.

- Group 3
 1. DO NOTHING
 2. Emphasis on analyzing the situation.
(Feedback component)

- Group 4
 1. PREPARE
 2. Emphasis on preparation and organization.

- Group 5
 1. ACT
 2. Emphasis on responsiveness.
(higher on external responsiveness than
internal although above average on both)

Overall, Group 4 and Group 5 were the two largest groups identified with group sizes of thirty-two and twenty-nine, respectively. In terms of Figure 3, Group 4 and Group 5 were the most bipolar in nature of any of the groups represented. Yet, in terms of the test score variables, the two groups were very similar (Tables 39 and 40). Both groups were exceptionally high on academic aptitude and had almost identical scores on the basic personality factors. The main distinguishing characteristics appeared to be that Group 5 was slightly younger, had more professional training and more graduate credits in administration, and somewhat less administrative experience than Group 4. Group 1 was the next largest group with a group size of nineteen. In terms of Figure 3, Group 1 fell approximately half way on a continuum between Group 4 and Group 5. It consisted of the youngest and most inexperienced group of participants in comparison with the other groups in terms of both teaching experience and administrative experience. Group 2 and Group 3 were relatively small, with group sizes of nine and eleven, respectively. They were also somewhat bipolar in nature but in the opposite direction than shown for Group 4 and Group 5. The main distinguishing characteristic between the two groups was that Group 2 consisted primarily of actual administrators and Group 3 of potential administrators.

Revised In-Basket Score Sheet Correlations

Because of the nature of the final sample, an in-basket performance profile score computed by several University of Wisconsin professors, all of the Department of Educational Administration, using a revised version of the "Madison" in-basket score sheet was available for a limited portion of the final sample.* Since this data was available, the

*See Appendix H for a copy of this University of Wisconsin revised in-basket score sheet.

investigator decided to correlate the results of the profile scores as computed using the University of Wisconsin revised in-basket score sheet to those obtained by the investigator using the scoring components identified through the computer-based feedback procedures. In comparing the revised in-basket score sheet components to those identified through the computer-based feedback model, one finds that five components are comparable. They were Discussing before Acting, Complying with Suggestions, Maintaining Organizational Relationships, Responding to Outsiders and Preparation for Decision. The correlations on these components between the revised in-basket score sheet profiles and the computer-based feedback are presented in Table 41.

TABLE 41

CORRELATIONS BETWEEN A REVISED IN-BASKET SCORE SHEET RATING AND THE COMPONENTS IDENTIFIED IN THIS STUDY*

Component	Correlation
Discussing before Acting	.62
Complying with Suggestions	.41
Maintaining Organizational Relationships	.77
Responding to Outsiders	.82
Preparation for Decision	.69

*Sample Size (55)

The correlations presented in Table 41 ranged from a low of .41 on Complying with Suggestions to a high of .82 on Responding to Outsiders. The average correlation was .68. In comparison with the correlations obtained between the components identified through the participant interpretations and those identified through the investigator interpretations, .68 was slightly less than the .69 obtained when the participant interpretations were based on the participant components and considerably less than the .77 obtained when the participant interpretations were based on the investigator components. In summary, based on the limited sample size for which data was available, the participants can interpret their own responses with considerable accuracy by using the computer-based feedback model--at least in comparison with interpretations made by professors using a revised in-basket score sheet.

Reaction to Computer-Based Feedback Model

A Participant Reaction Form* was developed by the investigator to measure the participant's reaction to the computer-based model as a method for providing feedback and analysis of the "Madison School District" simulation materials. The participant was asked to express an opinion about the model using a series of descriptive scales based on bipolar adjective pairs. A seven point scale was used. A measure of internal consistency was also provided by using matched pairs of bipolar adjectives and correlating the scores between the matched pairs. The results of the analysis of the reaction form are presented in Table 42.

The data in Table 42 show that the means on the bipolar adjective pairs ranged from a low of 5.19 on the adjective pair of invalid - valid to a high of 6.11 on the adjective pair of Boring - Stimulating. (A neutral reaction would be 4.00.) Thus, all of the means indicated a positive reaction.

TABLE 42
SUMMARY RESULTS OF PARTICIPANT REACTION FORM

Bipolar Adjective Pairs	Mean	St. Dev.	Matched Pairs Correlation
Dull - Exciting	5.86	0.96	
Boring - Stimulating	6.11	1.10	.69
Childish - Mature	6.09	0.94	
Simple - Sophisticated	5.50	1.10	.54
Meaningless - Meaningful	5.98	1.05	
Nonrewarding - Rewarding	5.86	1.16	.47
Static - Dynamic	5.62	0.96	
Unreal - Real	5.64	1.10	.42
Unsuccessful - Successful	5.53	1.18	
Invalid - Valid	5.19	1.39	.63

The internal consistency correlations ranged from a low of .42 on the matched pair (Static-Dynamic, Unreal-Real) to a high of .69 on the matched pair (Dull-Exciting, Boring-Stimulating). Hence, overall, the reaction of the participants to the computer-based model as a tool for the feedback and analysis of the "Madison School District" simulation materials was very favorable and exhibited a fair degree of consistency.

See Appendix G

CHAPTER VI

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

The previous chapters of this report have focused successively on the statement of the problem, the rationale for the study, the methodology employed, and the presentation and analysis of the data. In this chapter, attention will be directed toward summarizing the foregoing content and identifying conclusions which may be drawn from the study. In addition, consideration will be given to the significance and the limitations of the study.

Summary

The five stated objectives of the study were:

- (1) To develop a reliable computer-based model which would provide a consistent and objective feedback to simulation exercises for school administrators.
- (2) To expedite the collection and analysis of data resulting from a situational in-basket procedure.
- (3) To determine dimensions of performance in the school administrator and, thus, develop a better understanding of the nature of the job of the school administrator.
- (4) To provide information helpful in the solution of the problem of selecting school administrators.
- (5) To provide instrumentation for the preparation and training of school administrators.

Objectives one and two were primary objectives and objectives three, four, and five were secondary objectives.

The study was divided into four steps. The first step entailed the development of the model used in the analysis and feedback of the in-basket simulation materials. This development consisted of three phases: (1) identification of items, courses of action, and feedback problems, (2) development of computer-based analysis and feedback procedures, and (3) experimentation and refinement.

The second step entailed selecting a sample for the study. The final sample consisted of a total of one-hundred seventeen participants. The specific breakdown of the sample was as follows:

Administrative Staff Development Group	41
Graduate Students in Educational Administration	51
Administration Fellows in Urban Education	25

The Administrative Staff Development Group consisted of a group of practicing elementary principals and a group of potential elementary principals in a Wisconsin public school district. The Graduate Students in Educational Administration Group were enrolled in a Department of Educational Administration Administrator Behavior class taught on campus, one class, and in extension, one class. The Urban Fellows Group consisted of a group of potential inner-city administrators in residence on campus at the University of Wisconsin as part of an Urban School Administrator Training Program.

The third step consisted of the data collection. The major source of data was the coded information collected by the computer during its interaction with the participant. In addition, as a reliability check on the participant's interpretation of his responses and to provide a uniform interpretation of his responses upon which category reliabilities could be based, the investigator evaluated all of the sets of responses obtained in the final sample of the computer-based feedback model. Background data and participant reaction were secured by questionnaire, and from Departmental files.

The fourth step was concerned with the analysis of the data. Principal Component analysis, Pearson Product moment correlations and KR-20 reliability coefficients comprised the statistical analysis. The format of this analysis was as follows: (1) category performance and reliability, (2) identification of the administrative performance dimensions, (3) composite component performance and reliability, (4) correlation with the other variables, and (5) ancillary analysis.

Findings

Based on the above analysis of data format, the basic findings of the study were:

- (1) a. The average correlation between the participant's interpretations and the investigator's interpretations over the thirty-seven scoring categories was .67. (The scoring categories with the lowest correlations were the discussing, gives information, and work scheduled categories).
- b. The average correlations between the investigator's interpretations and the reliability scorer's interpretation over the thirty-seven scoring categories was .88.
- c. The average estimated participant scoring category internal consistency reliability estimate was .27 for the five items used in the computer-based feedback model and was estimated to be .53 if twenty items had been used.

d. The average estimated investigator scoring category internal consistency reliability estimate was .23 for the five items used in the computer-based feedback model and was estimated to be .48 if twenty items had been used.

(2) a. Based on the participant's interpretations, seven administrative performance components were identified. They were:

1. Preparation for Decision
2. Organizes Work
3. Exchanging Information and Directing
4. Maintaining Relationships
5. Responding to Outsiders and Discussing before Acting
6. Analyzing the Situation
7. Complying with Suggestions

b. Based on the investigator's interpretations, eight administrative performance components were identified. They were:

1. Preparation for Decision
2. Organizes Work
3. Exchanging Information and Directing
4. Maintaining Relationships
5. Responding to Outsiders
6. Analyzing the Situation
7. Complying with Suggestions
8. Discussing before Acting

There were two basic differences between the sets of components: (i) the participant interpretations did not discriminate between the two components of Responding to Outsiders and Discussing before Acting, and (ii) the participants' Complying with Suggestions component was a passive compliance; whereas, the investigator's Complying with Suggestions component was an active compliance.

(3) a. The average correlation between the participant composite component scores based on the participant's interpretation and the investigator component scores based on the investigator's interpretation was .69.

b. The average correlation between the investigator composite component scores based on the investigator's interpretation and the investigator composite component scores on the reliability scorer's interpretations was .92.

c. The average correlation between the investigator component scores based on the investigator interpretation and the investigator composite component scores based on the participant's interpretation was .77.

d. The average estimated participant composite component internal consistency reliability estimate was .45 for the five items used in the computer-based feedback model and was estimated to be .74 if twenty items had been used.

e. The average estimated investigator composite component internal consistency reliability estimate was .41 for the five items used in the computer-based feedback model and was estimated to be .71 if twenty items had been used.

(4) Several personalistic and background variables had significant correlations with the composite component scores. These correlations are summarized in Tables 32 and 33 for the participant and the investigator components, respectively.

(5) a. Two general second-order components were identified. They were (i) Preparation for Decision (discusses, prepares, and organizes), and (ii) Responsiveness and Compliance (responds and complies). The feedback component (Analyzing the Situation) did not have a high loading on either of the second-order components.

b. Five distinct groups of participants were identified.

Group 1 1. ACT (high responsiveness and compliance, little preparation)
2. Emphasis on maintaining relationships. (externally oriented)

Group 2 1. WORK (high responsiveness and compliance, high preparation)
2. Emphasis on internal responsiveness.

Group 3 1. DO NOTHING (little responsiveness and compliance, little preparation)
2. Emphasis on analyzing the situation. (feedback component)

Group 4 1. PREPARE (little responsiveness and compliance, high preparation)
2. Emphasis on preparation and organization.

Group 5 1. ACT (high responsiveness and compliance, little preparation)
2. Emphasis on responsiveness. (higher on external responsiveness than internal although above average on both)

c. The average correlation between five profile scores scored using a University of Wisconsin revised in-basket score sheet and those obtained by the investigator using the composite scoring components identified through the computer-based feedback procedures was .68.

d. The reaction of the participants to the computer-based model as a tool for the feedback and analysis of the "Madison School District" simulation materials measured over ten sets of bipolar adjective pairs was on the average 5.74 on a seven point scale.

Conclusions

The investigator has developed a prototype of a model that attempts to move beyond the one-shot, in-basket item format to the more complex and sequenced feedback and that efficiently and objectively collects, stores, codes, and selectively disseminates data concerning the participant's behavior.

The reliability of the model, both in terms of the scoring categories and in terms of the composite components (administrative performance dimensions), was quite satisfactory. It appeared that the few low reliabilities that did exist could be accounted for by either the infrequent scoring of a category or by a need for clarification. The scoring categories revealing problems of clarity were: (1) discusses, (2) gives information, and (3) work scheduled. Some modification of the interaction manual might minimize the problem.

It was found that, for the most reliable model, the participant's interpretation should be based on the composite components identified through the investigator's interpretations. This suggests that a more dynamic model using some linguistic analysis model with a cathode ray display might be more reliable. A model of this type would eliminate the need for participants to interpret their own responses.

The administrative performance dimensions identified in the study were quite similar to those identified by Hemphill, Griffiths, and Frederiksen in the Whitman Elementary School project. Both studies identified eight first-order administrative performance dimensions, six of which were in common. The main differences between the administrative performance dimensions identified in the two studies were: (1) the Hemphill, Griffiths, and Frederiksen study discriminated between the components "Exchanging Information" and "Directing of Others"; whereas, this study did not, and (2) the Hemphill, Griffiths and Frederiksen study did not identify a first-order Preparation for Decision component; whereas, this study did.

In regard to the second-order components, both studies identified two components. The Hemphill, Griffiths, and Frederiksen study identified a Preparation for Decision component and an Amount of Work Done component; this study identified a Preparation for Decision component and a Responsiveness and Compliance component. The main difference between the second-order components identified in the two studies was basically one of labeling of the components.

On the basis of the second-order dimensions, along with the first-order dimensions, it was possible to identify several groups of participants who exhibited distinct types of administrative performance patterns and to establish relationships between these general administrative

performance dimensions and some of the background and personal variables. This suggests that simulated situations for educational administrators may have utility in terms of identifying groups of participants with selected background characteristics which would be useful in the selection of school administrators. In addition, simulated exercises of this type may also provide a framework in which school administrators may obtain practice in decision-making.

In general, the opinion of the participants toward the computer-based feedback model as a tool for the feedback and analysis of simulation materials was favorable.

Limitations

There were restrictions on the dimensions of performance described by the in-basket scores because any simulation lacks some realism due to the simplifications necessary to reduce the variables to practical proportions. In addition, to prevent complexities and detail from clouding major strategy and policy issues and to keep the simulation within the bounds necessary to permit effective analysis and decision-making, it was necessary that certain arbitrary rules be imposed.

The main sources of unreliability in the study were the size and type of sample used and the number of items used. The sample was restrictive in that it consisted of only one-hundred seventeen participants and was not a random sample. Thus, generalizations based on the findings of the study must be made with care whenever extension beyond the sample is intended for the population as the whole. Also, only five items were used in the computer-based feedback model. Other possible sources of unreliability were inconsistencies in the participant's behavior from item to item, attenuation by any lack of agreement among reliability scorers in how the scoring categories should be applied to the responses in setting up the model, any heterogeneity among items making up a scoring category, and the number of times a scoring category was scored. Additional limitations were imposed in the results of the component analysis because any apparently forced dependencies among categories introduced by the scoring system affect the correlations between category scores and, thus, affect the final results of the component analysis.

Implications

This study has possible implications of both theoretical and practical significance.

Theoretical

It is hoped that others who are interested in computer simulation will find the model presented in this study useful in providing a basis for the development of additional and improved kinds of computer-based feedback and analysis of simulation materials. In addition, it is hoped

that the administrative performance dimensions identified in this study will provide a framework that will be useful in obtaining new information about administrative decision-making behavior and the cognitive and affective context in which it takes place.

Practical

Also, emerging from the model presented in this study were some implications for the practice of administration. One implication was in regard to the selection of school administrators. Success in determining the dimensions of the performance of school administrators (such as the dimensions identified in this study), and the development of knowledge within these dimensions as related to other performance characteristics, suggest some discriminating procedures for the selection of school administrators.

A second practical application was in the preparation and training of school administrators. In recent years there has been a change in thinking about the preparation of school administrators. As Moore¹ puts it:

The changes which seem to be most promising are those which recognize administration as a job primarily of action and that while action must be based on essential knowledges, more of our training in the future must center on successful behavior on the part of administrators. Training people to deal with situations, not just know about them is the crux of the matter.

The instrumentation in this study included a model for the interaction and feedback of situational in-basket simulation exercises. This model offers the participant practical experiences in both decision-making techniques and in computer applications.

Further Research

This concluding section notes some implications for future research:

- (1) Presently, there are plans of extending the use of the model to an urban-core school type of simulation exercise. It is through such application of the model that further refinement will be achieved.
- (2) It is desirable that this investigation be replicated with effort consciously exerted toward refinement of the model and of the methodological procedures so as to remove some of the limitations which arose during the course of the present study.
- (3) A study should be made of the possibility of extending the use of the basic framework of the model to a more complex and sequenced feedback situation based on a multiple feedback format.

¹Hollis Moore, Studies in School Administration, (Washington, D.C.: American Association of School Administrators, 1957), p. 66.

(4) There is a need for "reality" testing of the dimensions of administrative performance found in this study.

BIBLIOGRAPHY

BIBLIOGRAPHY

Books

- Barnard, Chester. The Functions of the Executive. Cambridge, Massachusetts: Harvard University Press, 1948.
- Basil, Douglas C. Simulation Methods. Columbus, Ohio: C. E. Merrill Books, 1965.
- Bonini, Charles P. Simulation and Information Systems and Decision Systems in the Firm. Englewood Cliffs, New Jersey: Prentice Hall, 1964.
- Charafas, Dimitri. Systems and Simulation. New York: Academic Press, 1965.
- Cronbach, Lee J. Essentials of Psychological Testing. 2d ed. New York: Harper and Row, Publishers, 1960.
- Cyert, R. M. and March, J. G. A Behavioral Theory of the Firm. Englewood Cliffs, New Jersey: Prentice-Hall, 1963.
- Fattu, Nicholas A., and Elam, Stanley. (eds.). Simulation Models for Education. Fourth Annual Phi Delta Kappa Symposium on Educational Research. Bloomington, Indiana: Phi Delta Kappa, Inc., 1965.
- Festinger, L., and Katz, D. Research Methods in the Behavioral Sciences. New York: Holt, Rinehart, and Winston, 1953.
- Griffiths, Daniel E. Administrative Theory. New York: Appleton-Century-Crofts, Inc., 1959.
- Griffiths, Daniel E. (ed.). Behavioral Science and Educational Administration. Sixty-third Yearbook of the Society for the Study of Education, Part II. Chicago: The University of Chicago Press.
- Guilford, J. P. Psychometric Methods. 2d ed. New York: McGraw Hill, 1954.
- Halpin, Andrew W. (ed.). Administrative Theory in Education. Chicago: Midwest Administrative Center, University of Chicago, 1958.
- Hare, Van Court, Jr. System Analysis: A Diagnostic Approach. New York: Harcourt, Brace and World, 1967.

- Harman, Harry H. Modern Factor Analysis. Chicago: The University of Chicago Press, 1967.
- Hays, William L. Statistics for Psychologists. New York: Holt, Rinehart, and Winston, 1963.
- Hemphill, John K., Griffiths, Daniel E., and Frederiksen, Norman. Administrative Performance and Personality. New York: Bureau of Publications, Teachers College, Columbia University, 1962.
- Kershaw, J. A., and McKean, R. N. System Analysis and Education. Santa Monica: Rand Corporation, 1959.
- Lord, Frederic M., and Novick, Melvin R. Statistical Theories of Mental Test Scores. Reading, Massachusetts: Addison-Wesley Publishing Company, Inc., 1968.
- Loughary, John W. Man-Machine Systems in Education. New York: Harper and Row, Publishers, 1966.
- Moore, Hollis. Studies in School Administration. Washington, D.C.: American Association of School Administrators, 1957.
- Simon, Herbert. Administrative Behavior. 2d ed. New York: Mac Millan Company, 1957.
- Whitehead, Alfred N. The Aims of Education and Other Essays. New York: MacMillan Company, 1929.

Articles and Periodicals

- Frederiksen, Norman D., Saunders, D. R., and Wand, Barbara. "The In-Basket Test," Psychological Monographs, Vol. 71, No. 9 (Whole No. 438, 1957), 21-25.
- Fritz, W. B. "Selected Definitions," Communications of the ACM, (January, 1963), 152-158.
- McCamy, James. "An Analysis of the Process of Decision Making," Public Administrative Review, VII, No. 1 (1947), 41.
- McIntyre, Kenneth E. "Six Studies on the Prediction of Administrative Behavior," Educational Administration Quarterly, (Winter, 1968), 53-54.
- Wynn, Richard. "Simulation: Terrible Reality in the Preparation of School Administrators," Phi Delta Kappan, XLVI (December, 1964), 170-173.

Reports and Bulletins

Bessent, Wailand. "A Computer Assisted Instruction Feedback Procedure for an Administrative In-basket Problem." University of Texas, 1967. Report made available by University Council for Educational Administration. Ohio: Columbus, 29 West Woodruff Avenue, 1967.

Manson, Vincent, and Imbrie, John. Columbia Vector Analysis Program. New York: Columbia University, 1964.

Ohm, Robert H. "A Game Theory Derived Rationale for Constructing Feedback to In-basket Items Used in the Madison School System Simulation." University of Oklahoma, 1967. Report made available by University Council for Educational Administration. Columbus, Ohio: 29 West Woodruff Avenue, 1967.

_____. "Leadership Game-Secondary Principalship." University of Oklahoma, 1967. Report made available by University Council for Educational Administration. Columbus, Ohio: 29 West Woodruff Avenue, 1967.

Sweitzer, Robert E. "Madison Schools Simulation RES Decision Problems." Pennsylvania State University, March, 1967. Report made available by University Council for Educational Administration. Columbus, Ohio: 29 West Woodruff Avenue, 1967.

System Development Corporation. "New Solutions to Implementing Instructional Media through Analysis and Simulation of School Organization." Technical Memorandum 14931201100, U.S. Office of Education Grant No. 7-14-9120-217, 1966.

Tucker, Ledyard R. "Some Experiments in Developing a Behaviorally Determined Scale of Vocabulary." Research Memorandum 55-10. Princeton, New Jersey: Educational Testing Service, September, 1955. Multilithed report.

University Council for Educational Administration. Madison School System Simulation. Columbus, Ohio: 29 West Woodruff Avenue, 1967.

_____. Madison Public Schools Resource Materials Packet. Columbus, Ohio: 29 West Woodruff Avenue, 1967.

University of Wisconsin Computing Center. WIPL. Document No. 1000. Madison, University of Wisconsin, September, 1968.

U.S. Department of Health, Education, and Welfare. "The Design and Development of Prototype Instructional Materials for Preparing Educational Administrators." Project No. 5-0998, January, 1968.

General Reference Works

Gove, Philip B. (ed.). Webster's Third New International Dictionary. Chicago: Encyclopedia Britannica, Inc., 1966.

Unpublished Materials

Brown, Robert S. "Predictability of Administrative Behavior from In-Basket Simulation Responses." An unpublished Ph.D. dissertation, University of Texas, 1967.

Cross, Wilton Ray. "Relationships between In-Basket Performance and the On-the-Job Behavior of Elementary School Principals." An unpublished Ph.D. dissertation, University of Texas, 1967.

Gibbs, Gordon C. "Use of Computer Simulation to Examine the Validity of Getzel's and Guba's Model in Terms of its Ability to Predict Administrative Behavior." An unpublished Ph.D. dissertation, Iowa State University, 1968.

Ohm, Robert H. "A Game Model Analysis of Conflicts of Interest Situations in Administration." An unpublished report, University of Oklahoma, 1967.

APPENDIXES

APPENDIX A
RESPONSE ITEMS

INTRODUCTION TO LABOR DAY IN-BASKET

September 5, 1966

The materials in Envelope #1 were left in your "in-basket" for you by your secretary, Linda Shepherd. You accepted the position of principal of Edison School in May, but you had already agreed to spend the summer as a camp director some distance away. You were able to get into Madison on the afternoon of September first. The next day was occupied with moving into a temporary home and generally getting settled. However, you managed to visit your office for a few minutes at which time you met your secretary and asked her to get together any materials you should see and put them on your desk. The materials in Envelope #1 are those she has left you.

Today is Labor Day, September 7th. You have just arrived in your office and have only two hours before you will have to leave for an appointment with a real estate agent. You do not plan to return to your office. You are aware that tomorrow is likely to be a difficult day and that you will not have time to do any substantial amount of work. You hope that the two hours you have this morning will give you a chance to plan for some of the problems that you would need to be concerned with in the near future.

No one is in your office except yourself. Your secretary volunteered to change her plans for a Labor Day week-end trip and to come to your office, but you had declined her offer. You must, therefore, do what you can with the materials in Envelope #1 without help.

Your task is to read these materials and take appropriate actions. You should behave as if you are actually on the job. Use the materials provided to write down everything you decide or plan to do. Write memos to yourself about things you want to do later. Draft letters, if appropriate, for your secretary to prepare. (Record in the form of notes what you say on the phone.) Outline plans or agenda of meetings you want to call. Sign papers, if appropriate.

Everything you decide or do must be in writing. You should always take as much action as you can with the information available to you, but you must avoid making any assumptions that are not reasonably supported by the background information you have been given or by the "in-basket" material itself.

When you prepare a letter, memo, or the like, unless it is obvious from its contents, try to identify it in such a way that we will know to what material you are referring, or simply clip it to the material involved. We know that many of the items would normally be handled more informally, but we must be able to know what you do. Be yourself, Pat Watkins!

Behave as though you were really on the job. Do not merely write descriptions of what you would write; instead, write the actual letters and memos.

In your work you may use any or all of the background materials which have been provided. Are there any questions about the situation or what you are to do?

Mr. Watkins,

I attached a December, 1965 letter from Mrs. Cahn to
the memorandum from Dr. Brewer. Just background information.

Linda Shepherd

MADISON PUBLIC SCHOOLS

Madison, LaFayette

MEMO

DATE: August 14, 1966

TO: All Principals
FROM: James L. Brewer
SUBJECT: School Board Advisory Committees

The members of the School Board recognize that the degrees of usefulness of our School Board Advisory Committees varies considerably from school to school each year, depending on the situation and needs in the local school community. However, after discussing this at two recent meetings, the Board concluded that the important role of the Advisory Committees in the recent discussion of area boundaries and in analyzing long range building needs in most schools has amply demonstrated the value of having a small, built-in group of parent leaders to facilitate communication with the Board. Also, the reaction we have received to a recent questionnaire indicates that this year's special effort to maintain continuity of contact and information with committee members through "NEWS for Madison Educators" and other informational publications has been very well received.

The Board voted 5 - 0 at its July 26 meeting to select the members of the 1966-67 Advisory Committees in the next several weeks so that the new members can begin receiving information and become acquainted with their responsibilities before the fall semester. A five-member committee, to include the PTA president, vice-president, treasurer and two "at large" members, will be named by the Board for each school. (If one of the PTA officers is unable to serve, we probably will ask you to help us select another PTA officer to assure that a majority of elected parent leaders is maintained on your Committee.) The following thoughts may prove useful as you consider your recommendations for at-large members:

1. Feel free to recommend persons who have served on previous Advisory Committees, but "new blood" also may be desirable.
2. You may want to consider such factors as geography within your school district, the various grade levels of the committee members' children, or getting a variety of viewpoints in filling these positions. This is not required, however.

EP-4

3. Persons whose wife or husband is employed by the school system are ineligible, and it is advisable that all members of the committee have children in the school.

4. To avoid potential embarrassment, do not notify any parents that they have been recommended; since final choices will be made by the Board.

Under the new procedure, your Advisory Committee will take office as soon as it is appointed this spring. However, if you believe it is desirable for your present Committee to continue or to work jointly with the new Committee, until September this is certainly permissible.

Please send your completed nomination form to my office by September 8. You are asked to provide biographical information on your new PTA leaders as well as your nominees for at-large Committee members. The latter in order of your preference. We will appreciate any suggestions you may have for making the Advisory Committees more effective in 1966-67.

(signed)

James L. Brewer

EP-4

FOR YOUR INFORMATION

December 16, 1965

To: Edison School Advisory Committee

From: School Board's Advisory Council on Curriculum

The School Board has requested that the Advisory Council consider, "What implication do changes which have taken place (program offerings, instructional patterns, services provided) have for the construction of new buildings or the modernizing of our present buildings?" In discussing ways to secure material on which to base advice to the Board, the Advisory Council has concluded that no better way exists than to invite each school Advisory Committee to examine this topic as it relates to their own school.

The Council feels that each School Advisory Committee should conduct its study in the manner that it deems most advisable. In some instances the Committee itself, in conjunction with the Principal could accomplish this survey. In other instances, the Advisory Committee may feel it helpful to bring other patrons of the school and members of the school staff in addition to the Principal into the study. In any event, the Advisory Council would like the Committee to direct its attention to those aspects of the school plant which no longer serve the students adequately--especially those plant inadequacies that are the result of changes which have taken place in the way that students are instructed; in the way that students are provided help by special personnel; and in the way that programs of studies are arranged.

The Advisory Council has designated Mrs. Elmer Keller, a member of the Council, to serve the Committee in any way that the Committee would deem helpful. Mrs. Keller will be getting in touch with you soon to talk with you about any services that you might need that either she or the Advisory Council could provide. In order that the information sent to the Advisory Council from the School Advisory Committee be ordered in a similar fashion, a suggested form is enclosed for your convenience in reporting. It is the hope of the Advisory Council to conclude this study by June of 1966. In order that the Council have time to combine and deliberate on the information from the Advisory Committees, it is hoped that you can furnish your report to the Council by March 29.

The Advisory Council knows that you are aware of the contribution that a citizen survey of this kind can make to the future of our school system. It is pleased to join with you in this important study.

Sincerely,
(signed)

Mrs. James Cahn, Chairman
Advisory Council on Curriculum

Enclosures

EP-4

Suggested cover letter for reporting results of Advisory Committee Study

**TO: School Board's Advisory Council on Curriculum
Attn: Mrs. James Cahn
1426 Quincy Street
Madison, Lafayette**

**FROM: Advisory Committee of _____
(School)**

The Advisory Committee of _____ in conducting the study requested by the School Board's Advisory Council on Curriculum involved the following (patrons of the school, members of the school staff, other interested Madison citizens):

The Committee concludes that attention should be given to the items identified in the enclosure.

EP-4

Mr. Watkins,

Mr. Parker did not complete this item. He felt the new principal might want to express his views.

Linda Shepherd

EP-5

MADISON PUBLIC SCHOOLS

Madison, Lafayette

COPY

Office of
The Superintendent

June 2, 1966

MEMORANDUM

TO: All Directors, Supervisors, Principals and
Administrative Staff

FROM: Walter Houser, Assistant Superintendent
Business Management

SUBJECT: Budget Matters

Some budget matters and procedures require more time for deliberation than our present budget cycle permits. The Administrative staff would like to begin considering some of these items during the summer months.

Therefore, will you send me (5 copies would be helpful) a brief statement on:

- a) Major changes in policy, programs, or capital needs which you feel appropriate for study for next year.
- b) Budget procedures which you feel could be improved before next fall.
- c) Problem areas which you can identify but which are not necessary within the scope of your area of supervision.

This report by you will in no way replace any existing budget procedure and does not eliminate the need for you to make a specific request at the proper time. This device is merely an effort to get wheels in motion for more effective consideration of requests.

COPY

EP-5

August 26, 1966

Dear Mr. Watkins,

I wish to make a formal complaint concerning the actions of Mrs. Judith Martin at the Edison School Cafeteria.

On many occasions, in front of both children and my peers, she has berated me for not having the proper change for my lunch.

In other instances, many children have been intimidated by her negative attitude. Many teachers have similar complaints concerning her behavior to both children and themselves and I feel that this can no longer be overlooked.

I trust that you will look into this matter further when school opens.

Yours truly,

(signed)

Linda Strawn

EP-6

Dear Mr. Watkins,

The P.T.A. Committee was very interested in non-graded schools last spring. When we met in July we developed a series of questions we thought would be interesting for discussion during our first P.T.A. meeting in September (See attached).

It's our feeling that with your new fresh approach to Edison School, your comments and suggestions would be most appreciated.

Thank you.

Sincerely,

(signed)
Marion Smith

209 Oak Road
QE 2-9966

EP-11

1. What is a non-graded school?
2. How does the elimination of grades (class assignments) affect the performance of the individual student?
3. What incentive does the student have for high performance if no grades (letter) are used in reporting pupil progress?
4. How does a college evaluate a student's performance and thus his eligibility if no (letter) grades are available?
5. Inasmuch as grades (class assignments) have been used in schools for many years why is it that some educators believe a non-graded school provide this stimulus?
6. How does a graded school place a student from a non-graded school into their curriculum and vice-versa?
7. What advantages and disadvantages have been proven in non-graded schools to date?
8. Competition has always been a major stimulus for achievement-how does a non-graded school provide this stimulus?
9. What special provisions must be made to have an effective non-graded school? Teachers? Equipment?

Submitted to the Principal

EP-11

August 25, 1966

Dear Mr. Watkins:

It is my feeling that a harmonious relationship is best achieved by having a clear understanding right at the start. Mr. Parker and I had our difficulties but it is my hope that you and I will have no difficulty once you understand my position.

My home is on the corner of Elm Street and Oak Road. That's where I was born and that's where I shall die. A man's home may be his castle, but so is a woman's. I spend most of my time there and expend great effort in keeping its appearance attractive. I feel very strongly that ownership of property requires maintenance. However, I feel even more strongly that respect for private property is a concept to be cherished and protected, and this thought must be instilled in all children. Therefore, you can see why I will not tolerate rowdy children picking flowers, knocking down bushes and cluttering the lawn. And I'm afraid that-all-too often, the Edison School children have been guilty of just such actions.

All too frequently I have been obliged to make known this disrespect for private property and lack of proper training on the part of the children to Mr. Parker. And all too frequently his response meant little in terms of improved conduct.

I'm quite sure that you will agree with me on the importance of respect for private property and proper discipline. Surely emphasis on these areas must be a part of every school program. Therefore, I am confident that having brought the matter to your attention you will take a firm hand in an area that has been somewhat neglected to date.

After all, even though I do not have any children, I do pay taxes to support the schools and I certainly hate to believe that such a support results only in property destruction and an abridgment of my right to property protection.

And so, with confidence in the fact that we can and will be happy neighbors, I'll close.

Thank you.

Millicent B. Andrews

EP-16

APPENDIX B
INTERACTION MANUAL

**INTERACTION
MANUAL
FOR
COMPUTER-BASED FEEDBACK MODEL**

INTRODUCTION

The interaction manual has been developed to aid in the analysis and feedback of the "Madison" in-basket simulation exercises. It contains both the basic instructions needed for the use of the computer-based feedback model and the communication groups, purposes of communications, courses of action and feedback items that you will need to analyze your responses. During the analysis and feedback there will be a continual interaction between you, the computer, and the manual. The computer will guide this interaction process.

Below are the basic instructions for the use of the B-5500 teletype terminal (TTY) and for the use of the computer-based feedback model (CDMOD).

(a) Instructions for Use of B-5500

There are a couple of basic operating rules that you must remember in using the B-5500. They are:

1. Each line must be terminated by a left arrow (←)
2. A command may be entered from the teletype only after a colon. (:)
3. To correct an error you use a left inequality (<)

In order to make use of the terminal, it is necessary to "log in", a process which identifies you as a valid user of the computer. To make initial contact with the B-5500 it is necessary to dial 2-9501. The computer answers with a high-pitched tone. The knob on the front of the teletype should be switched to "line" and the audio-coupler turned on. The phone is then placed in the coupler so that the wire leading to the receiver extends in the same direction as the wires leading to the audio-coupler.

The TTY types:

UWCC B-5500 xx/yy

indicating the computer is up, running, and available for use.

The TTY may type:

TO LOG IN, TYPE
?LI PROJ#/USER#

You type:

?LI ppppUnnnn ←

where pppp is the user project number and nnnn is the user identification number.

The TTY may type some general message followed by:

#STATION 1/n: YOUR NAME LOGGED IN AT TIME

You type:

??RUN WIPL ←

The TTY types:

n: WIPL/WIPL = BOJ TIME FROM DATE
TYPE HELP IF YOU HAVE QUESTIONS

indicating WIPL is ready
where n is the number assigned to WIPL in the mix or

n: WIPL/WIPL = RUNNING TIME FROM DATE

indicating WIPL is running or

n: WIPL/WIPL = SCHEDULED TIME FROM DATE

indicating insufficient memory available.

Wait for message #1 (BOJ).

When you desire to stop using WIPL, the command QUIT is entered. If the terminal is not going to be used for running any other programs, you log out of the system by typing the system command:

?LO ←

This disconnects the teletype and frees the line for other users.

(b) Instructions for Use of Computer-Based Feedback Model

1. The computer-based model will analyze items 4, 5, 6, 11, and 16 of the "Madison" in-basket items. You will find the number in the lower right hand corner.

2. In general to respond to the computer's questions, you will type: N when N is the number of your choice. You may use multiple responses in your choices to the questions.
3. Whenever you complete your choice(s), type: 0
4. After you have completed the analysis of all of your items and the TTY again types: Number=? where Number refers to the item number, you type: 0 This terminates the analysis and prints out the results
5. The other directions are explicit within the program.

Once you have logged in and WIPL has begun,

You type:

LOAD CBMOD ←

The TTY types:

LOADED

This will take a few minutes.

You type:

RUN ←

This initiates the execution of the program.

Note: If during the execution of the program the TTY types:

DO YOU WISH TO CONTINUE ...

You type:

YES ←

When all of the appropriate items have been analyzed and the TTY types:

NUMBER=?

You type:

0 ←

The summary results will now be printed out.

The TTY types:

SUMMARY RESULTS COMPLETED.

STOP AT STATEMENT 20.98

You type:

ERASE 1.12 TO 23.0 ←

You type:

LIST ←

The TTY types:

1.10 DIMENSION CHOICE (7), SS (2,37)

You type:

LOAD PROFILE ←

The TTY types:

LOADED

You type:

RUN ←

The TTY types:

DEC=?

You type:

0 ←

Note: If it is necessary to type the category totals in individually, type 1 -- instead.

Your administrative profile results will not be printed out.

To log out of the system, follow the instructions in part (a).

Note: If you inadvertently discontinue or terminate your interaction with the computer-based feedback model program, you may jump to various key points in the program without having to start over again.

Key Points:

1. If you wish to begin with a new item

You type: 1.10 GO TO 1.42 ←

2. If you wish to begin with communication with subordinates

You type: 1.10 GO TO 2.60 ←

with superiors

You type: 1.10 GO TO 2.61 ←

with outsiders

You type: 1.10 GO TO 2.62 ←

3. If you wish to begin with purposes of communication

You type: 1.10 GO TO 4.0 ←

4. If you wish to begin with courses of action

You type: 1.10 GO TO 10.10 ←

5. If you wish to begin with a print out of your summary matrix

You type: 1.10 GO TO 20.04 ←

After you type the 1.10 statement, then

You type: RUN ←

The computer will now jump to the appropriate point in the computer-based feedback model program that you selected.

TABLE OF CONTENTS

1. Page 2 Part A Types of communication
 Part B Communication groups
2. Page 3 Part A Subordinate individuals
 Part B Subordinate groups
3. Page 4 Part A Superiors
 Part B Outsiders
4. Page 5 Purposes of communication
5. Page 6 Possible courses of action for item 4
6. Pages 7-15 Feedback items for item 4
7. Pages 16-19 Courses of action for feedback items for item 4
8. Page 20 Possible courses of action for item 5
9. Pages 21-29 Feedback items for item 5
10. Pages 30-32 Courses of action for feedback items for item 5
11. Page 33 Possible courses of action for item 6
12. Pages 34-44 Feedback items for item 6
13. Pages 45-47 Courses of action for feedback items for item 6
14. Page 48 Possible courses of action for item 11
15. Pages 49-57 Feedback items for item 11
16. Pages 58-60 Courses of action for feedback items for item 11
17. Page 61 Possible courses of action for item 16
18. Pages 62-64 Feedback items for item 16

Part A IDENTIFY THE TYPE(S) OF COMMUNICATION THAT YOU USED

1. Letter
2. Memo (include any memos or notes to secretary)
3. Telephone Call
4. Face to face (include any conference or meeting or the intention of such)
5. Note or memo to self

Part B IDENTIFY THE COMMUNICATION GROUP(S) INVOLVED

(Also include any individuals that you explicitly indicated in your response that you plan or intend to communicate with)

1. Subordinate(s) (any staff or non-professional personnel)
2. Superior(s) (superintendent, his office or secretary, assistant superintendent, or Board of Education)
3. Outsider(s) (parents, city officials, PTA, former principal-Parker, etc.)
4. Peer(s) (fellow principals in the "Madison School District")
5. None of the above.

Part A IDENTIFY THE SUBORDINATE(S) INVOLVED INDIVIDUALLY

Individual	Position
1. None	
2. Adams, Eugene	Head Custodian
3. Barnes, Jane (Mrs.)	Third (Gr. Chrm.)
4. Cox, Rosie (Mrs.)	Cook-Manager
5. Martin, Judith (Mrs.)	Food Service Helper
6. Shepherd, Linda (Mrs.)	School Secretary
7. Strawn, Linda	Second
8. Timberlake, Phyllis (Mrs.)	Fourth (Gr. Chrm.)
9. Other	

Part B IDENTIFY THE SUBORDINATE GROUP(S) INVOLVED AS A WHOLE

1. None
2. Cafeteria Personnel
3. Clerical Staff
4. Grade Chairman
5. Janitors
6. Para-Professional
7. Professional Staff
8. Students
9. Other

Part A IDENTIFY THE SUPERIOR(S) INVOLVED

Individual	Position
1. Dr. James Brewer	Superintendent
2. Dr. Carl King	Assist. Supt. for Instructional Services
3. Mr. Walter Houser	Assist. Supt. for Business Management
4. Board of Education	
5. Superintendent's Office or Secretary	
6. Other	

Part B IDENTIFY THE OUTSIDER(S) INVOLVED

1. Parent(s)
2. City Official(s)
3. Lafayette University Personnel
4. PTA Officer(s) Mrs. Lodge - President
Mr. Fuller - Vice President
Mrs. Johnson - Treasurer
5. Edison School Board Advisory Committee (PTA officers plus two members-at-large; Mrs. Cabot and Mrs. Carver)
6. Mr. Harold Parker (Former Principal)
7. Marion Smith (A concerned individual)
8. Mrs. Cahn (Chairman of Advisory Council on Curriculum)
9. Mrs. Elmer Keller (Member of Advisory Council on Curriculum)
10. Mrs. Andrews (A property owner)
11. Other

IDENTIFY THE PURPOSE(S) OF THE COMMUNICATION

1. To delegate or transfer the entire problem.
2. To give directions or suggestions (does not include telling secretary to type or mail something).
3. To set up some plans.
4. To make an acknowledgement.
5. To inform or give information (includes giving reminders).
6. To discuss.
7. To ask for advice, suggestions, or an opinion.
8. To ask for or indicate a need for additional information.
9. To arrange a conference or meeting or to set up a committee.

POSSIBLE COURSE(S) OF ACTION FOR ITEM 4

(Remember-select only the action(s) which you actually took in handling this item.)

1. No action--feel that you are not in a position to make any recommendations.
2. File for later referral.
3. Secure additional information in regard to possible nominations.
4. Plan to survey the reports of the previous committee.
5. Communicate with either the PTA president, the three PTA officers, or the five members of the existing committee in regard to PTA affairs in general and/or potential candidates.
6. Communicate with Mrs. Cahn and/or Mrs. Keller in regard to potential candidates.
7. Elicit from the staff and/or Mrs. Barnes and Mrs. Timberlake (grade chairmen) the names of parents who might be good candidates.
8. Communicate with Linda (school secretary) requesting information about the PTA committee and/or the advisory committee.
9. Communicate with Mr. Brewer requesting more background information and/or possible suggestions.
10. Check with Mr. Parker (former principal).
11. Communicate with Mr. Brewer (superintendent) to request an extension of the deadline in order to better assess qualifications of potential members.
12. Communicate with Mr. Brewer indicating that you do not feel that you are in a position to make a decision in regard to the nominations.
13. Communicate with Mr. Brewer recommending that the members of last year's advisory committee be reappointed.
14. Communicate with Mr. Brewer recommending that a new committee be appointed. Make several suggestions as to possible nominations.
15. Other.

Mr. Watkins,

Here is a summary of the activities of the Edison School Board Advisory Committee.

Linda Shepherd

(1) An Abstract of the Committee's Annual Report

This report represents the viewpoint of a majority of the committee members, but it is not a unanimous expression, and the dissenting minority also filed a separate report with the council.

The major findings of the Committee are that the general educational picture of Edison School is not a healthy one. The committee finds much to criticize in terms of staff, instructional programs and facilities.

(2) A Minority Summary

The instructional program is excellent as is, and not in need of major change. The building with the addition of a couple of movable partitions will adequately serve our needs for years to come.

Signed: Mrs. Lodge, PTA President
Mrs. Cabot, Member-at-large

(3) A Reply by Parker to the Committee's Report

It is my belief that the Committee has been unwise and lacking in tact and without the wise and mediating presence of the PTA Vice President, Mr. Fuller, it would long since ceased functioning. It is common knowledge that Mrs. Lodge and Mrs. Cabot have tried to represent the voice of reason in the community, but they have been hard-pressed to withstand the aggressive tactics of Mrs. Johnson (PTA treasure) and Mrs. Carver (member-at-large) who seem totally determined to disrupt the existing equilibrium for reasons known only to themselves.

(4) Editorial in Madison Daily News

The Madison Board of Education voted last night to table a report submitted by the Edison School Advisory Committee which contained a number of hard-hitting, controversial recommendations.

This paper can only applaud the courage and wisdom exhibited by the Advisory Committee in its recommendations.

For possible responses to this feedback item--See Page 16

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Mr. Watkins

FROM: Linda Shepherd

SUBJECT: Meeting with Edison School PTA Officer(s)

I have tried to contact the members of the Committee for the meeting you requested, and found that

- 1) Mrs. Lodge is on vacation in New England.
- 2) Mr. Fuller is in the hospital undergoing major surgery.
- 3) Mrs. Johnson is available and is waiting for confirmation.

Linda

For possible responses to this feedback item--See Page 17

Page 9

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Self

FROM:

SUBJECT: Meeting with Mrs. Cahn and/or Mrs. Keller

Only name suggested for nomination to new Advisory
Committee was that of Marion Smith.

For possible responses to this feedback item--See Page 18

Page 10

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Self

FROM:

SUBJECT: School Board Advisory Committee

The staff and/or grade chairmen suggested no names for nominations but they did warn against Marion Smith.
"She doesn't have the students interests' at heart."
"She is a climber." "She seeks power-wants to run for school board."

For possible responses to this feedback item--See Page 18

Mr. Watkins,

Here is a summary of the activities of the Edison School Board Advisory Committee.

Linda Shepherd

(1) An Abstract of the Committee's Annual Report

This report represents the viewpoint of a majority of the committee members, but it is not a unanimous expression, and the dissenting minority also filed a separate report with the council.

The major findings of the Committee are that the general educational picture at Edison School is not a healthy one. The committee finds much to criticize in terms of staff, instructional programs and facilities.

(2) A Minority Summary

The instructional program is excellent as is, and not in need of major change. The building with the addition of a couple of movable partitions will adequately serve our needs for years to come.

Signed: Mrs. Lodge, PTA President
Mrs. Cabot, Member-at-large

(3) A Reply by Parker to the Committee's Report

It is my belief that the Committee has been unwise and lacking in tact and without the wise and mediating presence of the PTA Vice President, Mr. Fuller, it would long since cease functioning. It is common knowledge that Mrs. Lodge and Mrs. Cabot have tried to represent the voice of reason in the community, but they have been hard-pressed to withstand the aggressive tactics of Mrs. Johnson (PTA treasure) and Mrs. Carver (member-at-large) who seem totally determined to disrupt the existing equilibrium for reasons known only to themselves.

(4) Editorial in Madison Daily News

The Madison Board of Education voted last night to table a report submitted by the Edison School Advisory Committee which contained a number of hard-hitting, controversial recommendations.

This paper can only applaud the courage and wisdom exhibited by the Advisory Committee in its recommendations.

For possible responses to this feedback item--See Page 16

Mr. Watkins,

Here is a summary of the activities of the Edison School Board Advisory Committee.

James Brewer

(1) An Abstract of the Committee's Annual Report

This report represents the viewpoint of a majority of the committee members, but it is not an unanimous expression, and the dissenting minority also filed a separate report with the council.

The major findings of the Committee are that the general educational picture at Edison School is not a healthy one. The committee finds much to criticize in terms of staff, instructional programs and facilities.

(2) A Minority Summary

The instructional program is excellent as is, and not in need of major change. The building with the addition of a couple of movable partitions will adequately serve our needs for years to come.

Signed: Mrs. Lodge, PTA President
Mrs. Cabot, Member-at-large

(3) A Reply by Parker to the Committee's Report

It is my belief that the Committee has been unwise and lacking in tact and without the wise and mediating presence of the PTA Vice President, Mr. Fuller, it would long since cease functioning. It is common knowledge that Mrs. Lodge and Mrs. Cabot have tried to represent the voice of reason in the community, but they have been hard-pressed to withstand the aggressive, tactics of Mrs. Johnson (PTA treasure) and Mrs. Carver (member-at-large) who seems totally determined to disrupt the existing equilibrium for reasons known only to themselves.

(4) Editorial in Madison Daily News

The Madison Board of Education voted last night to table a report submitted by the Edison School Advisory Committee which contained a number of hard-hitting, controversial recommendations.

This paper can only applaud the courage and wisdom exhibited by the Advisory Committee in its recommendations.

For possible responses to this feedback item--See Page 16

Page 13

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Self

FROM:

SUBJECT: School Board Advisory Committee

Parker suggests no names for nominations but did warn against Marion Smith.

For possible responses to this feedback item--See Page 18

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

TO: Pat Watkins

FROM: James Brewer

SUBJECT: Request for delay in submitting nominees for
School Board Advisory Committee

It is certainly reasonable for you to request a delay on this matter, but I am afraid it will have to be denied. You must be aware by now of the controversy which surrounds the present committee, and of the Board's interest in resolving as amicably as possible what has become a public issue. It is imperative that you comply with this request as swiftly and prudently as possible.

For possible responses to this feedback item--See Page 19

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Pat Watkins

FROM: James Brewer

SUBJECT: Advisory Committee

It is certainly reasonable for you to feel that you are not in a position to make a decision, but you must be aware by now of the controversy which surrounds the present committee, and of the Board's interest in resolving as amicably as possible what has become a public issue. Thus, it is imperative that you comply with this request as swiftly and prudently as possible.

For possible responses to this feedback item--See Page 19

POSSIBLE COURSE(S) OF ACTION TO THE FEEDBACK ITEM

1. Recommend that Mrs. Carver (member-at-large) not be reappointed to the advisory committee.
2. Talk to Mr. Fuller (Vice President, PTA) to discuss the school's problems.
3. Memo to self to do something about the organizational set up of the Edison School Advisory Committee.
4. Inform Mr. Brewer that you do not feel that you are in a position to make a decision in regard to the nominations, but indicate a desire to discuss the committee and its function.
5. Note to self to study possibility for re-appointment of the same committee.
6. Recommend to Mr. Brewer that the same committee be re-appointed.
7. Recommend to Mr. Brewer that a new committee be appointed.
8. Inform Mr. Brewer that for the present you can offer no nominations but for the future that you are supportive of the idea of a professional advisory committee rather than a lay advisory committee.
9. Letter to Mr. Brewer requesting more time.
10. Note to self to seek new sources of information.
11. Other.

POSSIBLE COURSE(S) OF ACTION TO THE FEEDBACK ITEM

1. Send a get well card to Mr. Fuller.
2. Visit Mr. Fuller in the hospital.
3. Communicate with Linda (school secretary) whose experiences may provide information about the PTA committee.
4. Inform Mr. Brewer that you do not feel that you are in a position to make a decision in regard to the nominations, but indicate a desire to discuss the committee and its function.
5. Send a letter to Mrs. Lodge setting a date to discuss the annual report of the Edison Advisory committee.
6. Recommend to Mr. Brewer that the same committee be re-appointed.
7. Recommend to Mr. Brewer that a new committee be appointed.
8. Inform Mr. Brewer that for the present you can offer no nomination but for the future that you are supportive of the idea of a professional advisory committee rather than a lay advisory committee.
9. Tell Mrs. Johnson that since the other members are unavailable that you will contact her later in regard to this matter.
10. Note to self to seek new sources of information.
11. Letter to Mr. Brewer requesting more time.
12. Other.

POSSIBLE COURSE(S) OF ACTION TO THE FEEDBACK ITEM

1. Recommend and/or warn against Marion Smith as a nomination for the advisory committee.
2. Memo to self to check on Marion Smith.
3. Memo to self to do something about the organizational set up of the Edison School Advisory Committee.
4. Inform Mr. Brewer that you do not feel that you are in a position to make a decision in regard to the nominations, but indicate a desire to discuss the committee and its functions.
5. Contact Marion Smith.
6. Recommend to Mr. Brewer that the same committee be re-appointed.
7. Recommend to Mr. Brewer that a new committee be appointed.
8. Inform Mr. Brewer that for the present you can offer no nominations but for the future that you are supportive of the idea of a professional advisory committee rather than a lay advisory committee.
9. Memo to Mr. Brewer that you are scheduling appointments and that the nominations will be forthcoming.
10. Note to self to seek new sources of information.
11. Other.

POSSIBLE COURSE(S) OF ACTION TO THE FEEDBACK ITEM

1. Memo to Mr. Brewer that you are scheduling appointments and that the nominations will be forthcoming.
2. Inform Mr. Brewer that you would like to meet to discuss the committee and its function.
3. Memo to self to survey the reports of the previous committee to analyze leadership roles of present committee.
4. Call last year's board and discuss the school's problems.
5. Communicate with Linda (school secretary) whose experience may provide information about the PTA committee.
6. Recommend to Mr. Brewer that the same committee be re-appointed.
7. Recommend to Mr. Brewer that a new committee be appointed.
8. Inform Mr. Brewer that for the present you can offer no nominations but for the future that you are supportive of the idea of a professional advisory committee rather than a lay advisory committee.
9. Letter to Mr. Brewer requesting more time.
10. Note to self to seek new sources of information.
11. Other.

POSSIBLE COURSE(S) OF ACTION FOR ITEM 3

(Remember--select only those actions which you actually took in handling this item.)

1. No action--feel situation is closed and time is past for suggestions.
2. File for later referral.
3. Secure additional information about the budget matters and procedures.
4. Place on faculty meeting agenda.
5. Communicate with Mr. Houser (Assistant Superintendent for Business) to make an appointment to meet in regard to the budget matters.
6. Inform the staff to start thinking about suggestions and recommendations in regard to budget needs in their area.
7. Communicate with Mr. Houser requesting revisions on policy changes which may have taken place during the summer.
8. Request secretary to locate any reports in regard to the budget that are available.
9. Communicate with grade chairmen requesting them to submit new facility and equipment needs to office immediately.
10. Communicate with Mr. Houser requesting information on present budgeting procedures and policies.
11. Communicate with Mr. Houser informing him that your budget recommendations will be forthcoming.
12. Communicate with Mr. Houser to ask if the memorandum still requires a response since the consultations have already been held.
13. Communicate with Mr. Houser stating that no recommendations are possible until you gain more knowledge of procedures.
14. Communicate with Mr. Houser outlining one or more recommendations for changes in either policies, new programs, or budget procedures.
15. Other.

Page21

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Pat Watkins

FROM: Walter Houser

SUBJECT: Financial Procedures

Feel free to observe procedures this year--
include observations and opinions in your
recommendations for the administrative
workshops for next summer.

For possible responses to this feedback item--See Page 32

Phone call from Walter Houser:

It has come to my attention that you plan to discuss budget needs at the next faculty meeting.

Since the budget needs and financial policy changes for this year have already been determined, might I suggest that you feel free to observe procedures this year and include observations and opinions in your recommendation for the administrative workshop for next summer.

For possible responses to this feedback item--See Page 32

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Pat Watkins

FROM: Walter Houser

SUBJECT: Financial Procedures

Thank you for your reply to my June 2 memo. I would like you to serve on the next committee of principal's soon to be formed, which will discuss policy changes in the area of budgeting. I am recommending you to the superintendent. We are pushing for central processing. Together, we may yet win this fight.

I belong to the Cedar Park Country Club and would enjoy your company at golf next Saturday--please call my secretary when you make arrangements.

For possible responses to this feedback item--See Page 30

Phone call from Walter Houser:

It has come to my attention that you are requiring recommendations in regard to budget needs. Might I inform you that the budget needs and financial policy changes for this year have already been determined.

The memo should not have reached you in the first place--Mr. Parker should have destroyed it if he didn't wish to respond.

For possible response to this feedback item--See Page 31

MADISON PUBLIC SCHOOL

Madison, Lafayette

MEMO

DATE:

TO: Pat Watkins

FROM: Walter Houser

SUBJECT: Financial Procedures

Thank you for your reply to my June 2 memo. We discussed central processing, as we have for many years in this district, but I have not yet been able to rally enough support for the idea. I would like you to serve on the next committee of principals soon to be formed. Together, we may yet win this fight!

I belong to the Cedar Park Country Club and would enjoy your company at golf next Saturday--please call my secretary when you make arrangements.

For possible responses to this feedback item--See Page 30

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Pat Watkins

FROM: Linda Shepherd

SUBJECT: Financial Procedures

No report is available from the summer study done by the administrative staff. Mr. Houser's secretary said that the topics discussed and the decisions reached were confidential.

Phone call from Walter Houser:

Memo should not have reached you in the first place -- Mr. Parker should have destroyed it if he didn't wish to respond.

For possible response to this feedback item--See Page 31

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Pat Watkins
FROM: Walter Houser
SUBJECT: Financial Procedures

Thank you for your reply to my June 2 memo. Obviously, the original memo was to discover areas needing discussion the past summer. We did discuss central processing procedures, as we have for many years in this district, but I have not yet been able to rally enough support for the idea. I am recommending you to the superintendent. Together, we may yet win this fight!

Also, I would like you to serve on the next committee of principals, soon to be formed, which will discuss policy changes in the area of purchasing.

I belong to the Cedar Park Country Club and would enjoy your company at golf next Saturday--please call my secretary when you make arrangements.

For possible responses to this feedback item--See Page 30

Phone call from Walter Houser:

Memo should not have reached you in the first place -- Mr. Parker should have destroyed it if he didn't wish to respond.

For possible responses to this feedback item--See Page 31

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Pat Watkins

FROM: W. Houser

SUBJECT: Financial Procedures

Feel free to observe procedures this year - include observations and opinions in your recommendations for the administrative workshops next summer.

For possible responses to this feedback item--See Page 32

POSSIBLE COURSE(S) OF ACTION TO THE FEEDBACK ITEM

1. Memo to self on points to discuss at a future meeting with Mr. Houser.
2. Communicate with Mr. Houser expressing an interest to serve on the principals' committee.
3. Request information on present budgeting procedures.
4. Appoint faculty committee to investigate present budgeting needs, policies, and procedures.
5. Letter to Mr. Houser expressing a disinterest in the opportunity to serve on the principals' committee.
6. Note to self to support central processing..
7. Memo to Mr.KKing (Assistant Superintendent for Instructional Services) making an appointment to meet in regard to program budgeting.
8. Check with the Citizens Advisory Committee on Property and Building Needs requesting any pertinent reports or information they might have.
9. Memo to self to attend the next meeting of fiscal committee.
10. Accept golf invitation.
11. Decline golf invitation.
12. Other.

POSSIBLE COURSE(S) OF ACTION TO THE FEEDBACK ITEM

1. Thank Mr. Houser for his call and his attention on this item.
2. Mental note to find out more information about Mr. House and his policies.
3. Note to self to investigate budgeting needs, policies, and procedures.
4. Appoint faculty committee to study existing budgeting needs, policies, and procedures.
5. No action--feel situation is closed and time is past for suggestions.
6. Letter to Mr. Houser outlining several recommendations for changes in either policies, new programs, or budgeting procedures.
7. Memo to Mr. King (Assistant Superintendent for Instructional Services) making an appointment to meet in regard to program budgeting.
8. Check with the Citizens Advisory Committee on Property and Building Needs requesting any pertinent reports or information they might have.
9. Memo to self to attend next meeting of fiscal committee.
10. Other.

POSSIBLE COURSE(S) OF ACTION TO THE FEEDBACK ITEM

1. Memo to all staff to start thinking about suggestions and recommendations in regard to budget needs in their area.
2. Communicate with Mr. Houser requesting a copy of last year's report, information on present budgeting procedures and policies, and a synopsis of the summer study.
3. Call Mr. Houser and inquire about the nature of the topics discussed and the decisions reached at the summer study done by the administrative staff.
4. Appoint a faculty committee to study existing budgeting policies, procedures, and needs.
5. Letter to Mr. Houser outlining one or more recommendations for changes in either policies, new programs, or budgeting procedures.
6. Memo to self on points to discuss at a future meeting with Mr. Houser.
7. Memo to Mr. King (Assistant Superintendent for Instructional Service) to make an appointment to meet in regard to program budgeting.
8. Check with the Citizens Advisory Committee on Property and Building Needs requesting any pertinent reports or information they might have.
9. Memo to self to attend next meeting of fiscal committee.
10. Other.

POSSIBLE COURSE(S) OF ACTION FOR ITEM 6

(Remember--select only the action(s) which you actually took in handling this item.)

1. No action--feel situation is insignificant.
2. File for later referral.
3. Secure additional information about the cafeteria procedures.
4. Plan to visit the cafeteria to check on the situation.
5. Communicate with Miss Strawn assuring her that you will look into the situation.
6. Communicate with Mrs. Martin requesting a conference.
7. Communicate with Miss Strawn requesting a conference.
8. Communicate with Miss Strawn to check into possible policy changes in the cafeteria.
9. Secure additional information regarding Miss Strawn and/or Mrs. Martin.
10. Communicate with Rosie Cox (Cook-manager) in regard to the present Mrs. Martin-Miss Strawn conflict and/or in regard to conditions in the cafeteria in general.
11. Communicate with Miss Strawn essentially telling her to shape up and stating that two adult women ought to be able to cope with such financial matters.
12. Communicate with Miss Strawn informing her that Mrs. Martin will be notified of her complaint and thanking her for her concern.
13. Place on faculty meeting agenda.
14. Arrange a meeting with the cafeteria director and/or cafeteria personnel to review procedures.
15. Other.

September 8, 1966

Dear Mr. Watkins,

I have not received any reply from you re: my note of August 26. I am usually listened to by my peers and colleagues in education. You will need help with this new principalship and I will certainly be available for advice. If nothing is done about Mrs. Martin, I will go directly to the Superintendent.

Linda Strawn

For possible responses to this feedback item--See Page 45

Dear Mr. Watkins:

I received your letter stating that you intend to "look into the situation". I want you to know the facts. Mrs. Martin drinks heavily and has been seen on many occasions in Dugan's bar on 9th Street. Parents have talked to me about this since they didn't feel they could talk to anyone else.

I have worked long and hard in this school, Mr. Watkins, and I don't want anyone spoiling the good name of Edison.

Yours truly,

Linda Strawn

For possible response to this feedback item--See Page 47

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Self

FROM:

SUBJECT: Meeting with Mrs. Martin

1. Much hostility present.
2. General conflict between teachers and non-professional personnel.
3. Several employees demand action or they will resign.
4. Staff feels that student supervision must be improved in the cafeteria.

For possible response to this feedback item--See Page 46

RE: Conference with Miss Strawn

Miss Strawn says:

"Mrs. Martin drinks heavily and has been seen on many occasions in Dugan's bar on 9th Street. Parents have talked to me about this since they didn't feel they could talk to anyone else."

"I have worked long and hard in this school, and I don't want anyone spoiling the good name of Edison."

For possible responses to this feedback item--See Page 47

RE: Communication with Miss Strawn

 Says Mrs. Martin is unfriendly, uncooperative, poorly groomed, and selfish. Says that she should not work in the serving line where she deals directly with people.

 Also is not in favor of a system of purchasing weekly lunch tickets in the office. Won't be tied to a weekly schedule.

For possible responses to this feedback item--See Page 47

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Self

FROM:

SUBJECT: Miss Strawn and/or Mrs. Martin

1. Miss Strawn has problems. She has been teaching in the same room for forty years, lives alone, and even made a passing remark recently about committing suicide.
2. Much hostility present between Miss Strawn and Mrs. Martin.
3. Miss Strawn seems to be highly respected by children and parents.
4. General conflict between teachers and non-professional personnel.

For possible responses to this feedback item--See Page 47

Phone call from Rosie Cox:

- Says:
1. Much hostility present.
 2. General conflict between teachers and non-professional personnel.
 3. Several employees demand action or they will resign.
 4. Staff feels student supervision must be improved in the cafeteria.

For possible responses to this feedback item--See Page 46

Dear Mr. Watkins:

I have received your note in answer to my complaint about Mrs. Martin. You seem to have missed the point. Mrs. Martin is unfriendly, uncooperative, poorly groomed, selfish, and I could go on. She should not work in the serving line where she deals directly with people.

I assume you will agree with me about Mrs. Martin after you have met her.

Linda Strawn

For possible responses to this feedback item--See Page 47

Dear Mr. Watkins:

I have received your note in answer to my complaint about Mrs. Martin. You seemed to have missed the point. Mrs. Martin is unfriendly, uncooperative, poorly groomed, selfish, and I could go on. She should not work in the serving line where she deals directly with people.

I want you to know the facts. Mrs. Martin drinks heavily and has been seen on many occasions in Dugan's bar on 9th Street. Parents have talked to me about this since they didn't feel they could talk to anyone else.

I have worked long and hard in this school, and I don't want anyone spoiling the good name of Edison. If nothing is done about Mrs. Martin, I will go directly to the Superintendent.

Linda Strawn

For possible responses to this feedback item--See Page 47

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Self

FROM:

SUBJECT: Meeting with Faculty

1. Much hostility present.
2. General conflict between teachers and non-professional personnel.
3. Several employees demand action or they will resign.
4. Staff feels student supervision must be improved in the cafeteria.

For possible responses to this feedback item--See Page 46

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Self

FROM:

SUBJECT: Meeting with Cafeteria Director and/or
Cafeteria Personnel

1. Much hostility present.
2. General conflict between teachers and non-professional personnel.
3. Several employees demand action or they will resign.
4. Staff feels student supervision must be improved in the cafeteria.

For possible responses to this feedback item--See Page 46

POSSIBLE COURSE(S) OF ACTION TO THE FEEDBACK ITEM

1. Thank Miss Strawn for her concern and assure her that the matter is being taken care of.
2. Communicate with Miss Strawn requesting a conference.
3. Establish a cafeteria-teacher committee to study cafeteria procedures.
4. Meet with Mrs. Martin to discuss the matter.
5. Letter to Miss Strawn indicating that if you need her advice on any matters that you will certainly call on her.
6. Letter to Miss Strawn expressing appreciation for her readiness to assist the principal, but politely tell her to mind her own business and that you can handle the administrative affairs.
7. Check with Mr. Houser in regard to funds for hiring additional help for the cafeteria.
8. Memo to Mr. Houser requesting a conference in regard to Miss Strawn.
9. Other.

POSSIBLE COURSE(S) OF ACTION TO THE FEEDBACK ITEM

1. Memo to self to work out a policy for more suitable administration of the cafeteria.
2. Secure additional information about the cafeteria procedures.
3. Establish a cafeteria-teacher committee to study cafeteria procedures.
4. Visit the cafeteria to check on the situation.
5. Arrange meeting between teachers and cafeteria staff to discuss and try to arrive at a plan for resolving those issues upon which there appears to be some difference of opinion.
6. Discuss the topic of teacher responsibilities and the professional code of ethics at the next faculty meeting.
7. Personally set up a ticket system that will obviate certain problems that now exist in the cafeteria.
8. Memo to Mr. Houser requesting a conference in regard to the cafeteria situation.
9. Other.

POSSIBLE COURSE(S) OF ACTION TO THE FEEDBACK ITEM

1. Thank Miss Strawn for her concern and assure her that you are taking care of the matter.
2. Call meeting with both Miss Strawn and Mrs. Martin to straighten matters out.
3. Establish a cafeteria-teacher committee to study cafeteria procedures.
4. Meet with Mrs. Martin to discuss the matter.
5. Letter to Miss Strawn advising her that the topic of teacher responsibilities and the professional code of ethics will be discussed at the next faculty meeting.
6. Letter to Mrs. Martin reprimanding her actions.
7. Personally set up a ticket system that will obviate certain problems that now exist in the cafeteria.
8. Memo to Mr. Houser requesting a conference in regard to Miss Strawn.
9. Other.

POSSIBLE COURSE(S) OF ACTION FOR ITEM 11

(Remember--select only those action(s) which you actually took in handling this item.)

1. No action--feel that the questionnaire is inappropriate.
2. File for later referral.
3. Secure additional information in regard to the PTA and/or non-graded classes.
4. Determine the official view of non-graded classes by contacting either the Assistant Superintendent or peers.
5. Meet with Marion Smith and/or the PTA Program Committee to test the depth of their interest and/or to discuss plans.
6. Arrange for an outside speaker.
7. Place on the faculty meeting agenda.
8. Communicate with Marion Smith emphasizing the complexity of the problem and urging a go-slow approach.
9. Communicate with Marion Smith requesting better clarification on how they want you to participate.
10. Accept the invitation to speak at the PTA meeting.
11. Request postponement of the presentation to improve the "package."
12. Communicate with Marion Smith acknowledging receipt of the questionnaire and expressing interest.
13. Inform Marion Smith that you have answered the questions and a copy of the answers is forthcoming.
14. Communicate with Marion Smith and/or the PTA Committee in which you offer some suggestions for the presentation and/or offer your personal guidance in planning the study rather than having the PTA attempt a study without your help.

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Self

FROM:

SUBJECT: Non-graded Schools

Assistant Superintendent and/or peers indicated very little interest in looking into non-gradedness. Consensus was that it was just another educational plan for someone to get rich quick. It would pass.

For possible responses to this feedback item--See Page 58

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Self

FROM:

SUBJECT: RE: Meeting with Marion Smith and/or PTA
Program Committee

1. They do not want any more "go-slow" tactics.
2. The last principal made no change for years.
Expect you to make up for it.
3. This group wants some pride and prestige from
being first with a new idea for a change.

For possible responses to this feedback item--See Page 59

TELEPHONE MESSAGE FROM DR. Fisher at Lafayette University

Dr. Fisher will not be able to speak to the PTA on the date you gave him. He suggests you contact Dr. Miller, also in his department, who is well-qualified to speak on non-graded schools.

Linda Shepherd

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Self

FROM:

SUBJECT: Non-graded schools

At faculty meeting, only three staff members indicated an interest in looking into non-gradedness. Consensus was that it was just another educational plan for someone to get rich quick. It would pass.

For possible responses to this feedback item--See Page 58

Mr. Watkins:

I was disappointed in your reply. We met all last year in regard to non-gradedness. We even visited non-graded schools in Lookatmee, Ohio, and Kopyit, Indiana.

The questions we submitted were for consideration to discuss in our general meeting--to inform everyone who doesn't know about the concept.

I hope you are more interested than your note would indicate since our committee is anxious to start this at Edison as soon as possible.

Sincerely,

Marion Smith

For possible responses to this feedback item--See Page 59

MADISON PUBLIC SCHOOLS

Madison, Layette

MEMO

DATE:

TO: Self

FROM:

SUBJECT: RE: Telephone call with Marion Smith

1. They do not want any more "go-slow" tactics.
2. The last principal made no changes for years. Expect you to make up for it.
3. This group wants some pride and prestige from being first with a new idea for a change.

For possible responses to this feedback item--See Page 59

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Pat Watkins

FROM: Carl King

SUBJECT: Non-Graded Classes

Suggest you forget non-graded schools for the time being. Edison is not right for that kind of innovation at this time. We're thinking of a pilot project in one of our better schools (that is, a school where the students are more capable.).

For possible responses to this feedback item--See Page 60

Dr. Watkins:

We are disappointed that you request postponement of the presentation. Our committee is interested in starting non-graded classes at Edison as soon as possible.

1. They do not want anymore "go-slow" tactics.
2. The last principal made no changes for years.
3. This group wants some pride and prestige from being first with a new idea for a change.
4. We met all last year in regard to non-gradedness. We even visited non-graded schools in Lookatmee, Ohio, and Kopyit, Indiana.

Sincerely,

Marion Smith

For possible responses to this feedback item--See Page 59

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Pat Watkins

FROM: Carl King

SUBJECT: Non-Graded Classes

Suggest you forget non-graded schools for the time being. Edison is not right for that kind of innovation at this time. We're thinking of a pilot project in one of our better schools (that is, a school where the students are more capable).

For possible responses to this feedback item--See Page 60

POSSIBLE COURSE(S) OF ACTION TO THE FEEDBACK ITEM

1. Memo to PTA Committee requesting postponement of presentation. Indicate that the general consensus of the staff is one of disinterest in non-graded classes.
2. Memo to Marion Smith emphasizing the complexity of the problem and urging a go-slow approach.
3. Plan to update the staff and improve its functioning in the existing graded structure.
4. Meet with Mr. King to discuss the possibility of making Edison the pilot school for any attempt at ungradedness and to discuss non-graded schools in general.
5. Accept the invitation to make a presentation on non-graded schools to the PTA.
6. Letter to Marion Smith stating that you have definite ideas regarding a non-graded school and that you would be happy to discuss them at the next meeting.
7. Call Mr. Houser to inquire about possible funds for hiring teachers for three weekends to do research on existing non-graded schools.
8. Inform Marion Smith that you are referring the study to the Instructional Council for their consideration and opinion.
9. Other.

POSSIBLE COURSE(S) OF ACTION TO THE FEEDBACK ITEM

1. Letter to Marion Smith accepting the invitation to speak at the PTA.
2. Set up a short meeting with faculty to discuss the non-graded school question.
3. Inform Marion Smith that you have made arrangements for Dr. Miller from Lafayette University to speak at the next meeting on non-graded schools.
4. Send a letter to the PTA Committee in which you outline a plan of study utilizing a joint staff-parents committee rather than having the PTA attempt a study without your personal guidance.
5. Request postponement of discussion of non-graded schools at the PTA meeting. Continue to emphasize the complexity of the problem and urge a "go-slow" approach.
6. Letter to Marion Smith stating that you have definite ideas regarding a non-graded school and that you would be happy to discuss them at the next meeting.
7. Call Mr. Houser to inquire about possible funds for hiring teachers for three weekends to do research on existing non-graded schools.
8. Refer the study to the Instructional Council for their consideration and opinion.
9. Note to self to continue to study the problems and questions associated with non-graded schools.

POSSIBLE COURSE(S) OF ACTION TO THE FEEDBACK ITEM

1. Follow Mr. King's lead in regard to the non-graded school idea.
2. Letter to Mr. King advising him that you are studying the situation and will keep him informed of any information that you receive.
3. Letter to Mr. King that you plan only to discuss the pros and cons of non-graded schools and are not pushing for one or the other.
4. Personal invitation to Mr. King to discuss the possibility of making Edison the pilot school for any attempt to ungradedness and to discuss non-graded schools in general.
5. Letter to Marion Smith suggesting that the PTA set up a committee to further investigate non-graded schools.
6. Request postponement of discussion of non-graded schools at the PTA meeting.
7. Call Mr. Houser to inquire about possible funds for hiring teachers for three weekends to do research on existing non-graded systems.
8. Refer the study to the Instructional Council for their consideration and opinion.
9. Note to self to continue to study the problems and questions associated with non-graded schools.
10. Other.

POSSIBLE COURSE(S) OF ACTION FOR ITEM 16

(Remember--select only the action(s) which you actually took in handling this item.)

1. No action--feel situation does not warrant it.
2. File for later referral.
3. Secure additional information in regard to this matter.
4. Communicate with Linda Shepherd (school secretary) in regard to past experiences with Mrs. Andrews.
5. Place on the faculty meeting agenda.
6. Set up a committee to study the problem of enforcement of student behavior to and from classes.
7. Personally inform the students on the need for respect for school and private property (for example, use public address announcement or all-school bulletin.)
8. Have the teachers inform the students of the need for respect for school and private property.
9. Communicate with Mrs. Andrews acknowledging receipt of the letter and thanking her for her concern.
10. Inform Mrs. Andrews that if the problem continues and/or if you can be of any further help in the future that you would appreciate her notifying you.
11. Inform Mrs. Andrews that the school is not an all-pervasive force which can control the performance of each pupil in and out of school.
12. Inform Mrs. Andrews that if the situation becomes intolerable to call the police or the pupil's parents (if names are available).
13. Visit Mrs. Andrews at her home and/or invite Mrs. Andrews to visit the school.
14. Other.

Mr. Watkins,

Some time ago I brought to your attention the fact that children from your school were destroying my property. Your lack of attention to this shows me that you intend to do nothing about it. Since the former principal did nothing about the little hoodlums, and you have let the destruction continue, I am putting you on warning. I will not tolerate any more destruction of my property. You had better warn those hoodlums not to cross my property again because there will be severe consequences.

As an American citizen and taxpayer, I have the ability to protect my rights and I intend to do so. I have bent over backwards to cooperate with your school and have continually suffered for it. It is a real shame when a public servant fails to perform his responsibilities.

Mrs. Andrews

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Mr. Watkins

FROM: Linda

SUBJECT:

While you were out, Mr. Cavanaugh called. He said that Mrs. Andrews had accosted his son, Billy, on the way home from school. Mr. Cavanaugh is going to the police and intends to press charges against her. He wants to see you immediately about the situation. (He sounded quite upset.)

Page 64

MADISON PUBLIC SCHOOLS

Madison, Lafayette

MEMO

DATE:

TO: Mr. Watkins

FROM: Linda

SUBJECT: Police Call

Sergeant Jenkins from the fourth precinct called about several complaints from Mrs. Andrews that our pupils were destroying her property. Please call him immediately! (He wants to know what you have done about it.)

APPENDIX C
SCORING MANUAL

SCORING MANUAL

General Directions

The scoring manual provides directions for each of the specific scoring categories. There are, however, the following directions which apply to many categories. Code: (S. = Subject)

- (1) Score what S. actually says or does or plans, not what he should have said or done or might have said or done. That is, score only when presented with some specific evidence. In general, the scorer should allow himself only one step of inference: e.g., if the S. should say "I'll call Smith" the scorer can infer that the S. will speak to Smith, but not what he will say when he speaks.
- (2) Unless the S. specifies otherwise, assume that the S. himself means to do things. If, for example, that the S. should write "call" and not specify further, assume that the S. himself intends to call. The two exceptions here are filing and typing.
- (3) Unless the S. states otherwise, assume that all notes, memos, etc. that S. prepares will not leave his desk until after the conclusion of the test period.
- (4) Score with each item everything referring to that item, regardless of where found. Thus, if the S. writes out an agenda for himself, each point which relates to a particular item is to be scored along with that item.

- (5) Quite often, the S.'s response will involve a contingency. If his decision as to what to do or plan to do is contingent upon other things, score as though the contingency will be met.
- (6) Most items can pose more than a single problem for the S. and the S. may thus choose to take more than a single action in his response to an item. It is not always possible to identify definitely the various problems that the S. sees in an item, but these can be inferred from the different courses of action he takes or plans to take in response to that item.
- (7) Enter a 1 for any category which applies to the S.'s response, except for those categories where specific instructions to the contrary occur in the Scoring Manual. Enter a 0 for any category which does not apply to the S.'s response.
- (8) Whenever the scorer feels that the S.'s plans or actions are so unclear as to be unscorable, score that response only as much as possible, or whenever the scorer feels that he is reasonably certain of the S.'s intentions. Score for that part, in short, of which the scorer is sure.

Table of Contents

The following are the scoring categories in the order in which they appear in the Scoring Manual. Each category is prefaced by the number formerly used to designate that category.

- (1) ESTIMATED NUMBER OF WORDS
- (2) UNUSUAL COURSES OF ACTION
- (3) USUAL COURSES OF ACTION
- (4) NUMBER OF SUBORDINATES INVOLVED INDIVIDUALLY
- (5) NUMBER OF SUBORDINATE GROUPS INVOLVED
- (6) NUMBER OF SUPERIORS INVOLVED
- (7) NUMBER OF OUTSIDERS INVOLVED
- (8) COURTESY TO SUBORDINATES
- (9) COURTESY TO OUTSIDERS
- (10) TAKES LEADING ACTION
- (11) CARELESSNESS OR INAPPROPRIATE ACTION
- (12) CONCEPTUAL ANALYSIS
- (13) USES PROGRAM VALUES IN ANALYSIS
- (14) DISCUSSES WITH SUBORDINATES
- (15) DISCUSSES WITH SUPERIORS OR OUTSIDERS
- (16) ASK FOR ADVICE, SUGGESTIONS OR AN OPINION FROM SUBORDINATES
- (17) REQUIRES FURTHER INFORMATION
- (18) DELAYS OR POSTPONES DECISION, OR TEMPORIZES
- (19) ARRIVES AT A PROCEDURE FOR DECIDING
- (20) TAKES TERMINAL ACTION OR MAKES CONCLUDING DECISION
- (21) MAKES TENTATIVE OR DEFINITE PLANS ONLY
- (22) WORK SCHEDULED FOR SAME OR FOLLOWING DAY

- (23) WORK SCHEDULED FOR SAME OR FOLLOWING WEEK
- (24) WORK SCHEDULED: INDEFINITE OR NOT TIME SPECIFIED
- (25) GIVES INFORMATION TO SUBORDINATES
- (26) GIVES INFORMATION TO OUTSIDERS
- (27) FOLLOWS LEAD BY SUBORDINATES
- (28) FOLLOWS LEAD BY SUPERIORS
- (29) FOLLOWS LEAD BY OUTSIDERS
- (30) FOLLOWS A PRE-ESTABLISHED STRUCTURE
- (31) INITIATES A NEW STRUCTURE
- (32) GIVES DIRECTIONS AND/OR SUGGESTIONS
- (33) COMMUNICATES FACE-TO-FACE
- (34) COMMUNICATES BY TELEPHONE
- (35) COMMUNICATES BY WRITING
- (36) INFORMALITY TO SUBORDINATES
- (37) GENERALLY FOLLOWS LEAD

Specific Scoring Categories

(1) ESTIMATED NUMBER OF WORDS

General Definition: Estimate the total number of words written by the S. in response to each item.

- 0 - nothing written
- 1 - very short: 1-6 words written
- 2 - short: 7-15 words written
- 3 - medium: 16-40 words written
- 4 - long: 41-100 words written
- 5 - very long: 101-200 words written
- 6 - extremely long: more than 200 words written

The following rules are included as guides for estimating the number of words:

Rule a: Count articles.

Rule b: Count each abbreviation as one word.

Rule c: Count each contradiction and each possessive as a single word.

Rule d: Count each arabic or roman numeral sequence as a single word.

Rule e: In a hyphenated compound, count each word of the compound as a separate word only if it can stand alone.

Rule f: Handle dates in the following manner:

month - 1 word
day - 1 word
year - 1 word

Rule g: Handle time in the following manner:

6:30 - 1 word
6:30 p.m. - 2 words

Rule h: Do not count words written on paper that is obviously scrap paper to be thrown away.

Rule i: Do not count words which the S. has erased or crossed out.

Rule j: Count signatures -- each word in a signature counts as one word.

Rule k: Count any single group of initials as one word.

(2) UNUSUAL COURSES OF ACTION

General Definition: Any action taken other than those listed below under usual courses of action.

(3) USUAL COURSES OF ACTION

There follows, for each item in the computer-based feedback model, a list of those courses of action considered usual. For any of the courses of action S. takes or plans to take score a 1. Unless otherwise specified, the following rules apply.

Rule a: Score plans and contingent plans the same as actual actions.

Rule b: Score for a course of action regardless of whether the S. actually takes the action or merely considers taking that action.

Rule c: For those courses of action in which the S. refers or plans to refer a problem to another, score regardless of whether the S. refers the problem directly or through his secretary.

POSSIBLE COURSE(S) OF ACTION FOR ITEM 4

1. No action--feel that you are not in a position to make any recommendations.
2. File for later referral.
3. Secure additional information in regard to possible nominations.
4. Plan to survey the reports of the previous committee.
5. Communicate with either the PTA president, the three PTA officers, or the five members of the existing committee in regard to PTA affairs in general and/or potential candidates.
6. Communicate with Mrs. Cahn and/or Mrs. Keller in regard to potential candidates.
7. Elicit from the staff and/or Mrs. Barnes and Mrs. Timberlake (grade chairmen) the names of parents who might be good candidates.
8. Communicate with Linda (school secretary) requesting information about the PTA committee and/or the advisory committee.
9. Communicate with Mr. Brewer requesting more background information and/or possible suggestions.
10. Check with Mr. Parker (former principal).
11. Communicate with Mr. Brewer (superintendent) to request an extension of the deadline in order to better assess qualifications of potential members.
12. Communicate with Mr. Brewer indicating that you do not feel that you are in a position to make a decision in regard to the nominations.
13. Communicate with Mr. Brewer recommending that the members of last year's advisory committee be reappointed.
14. Communicate with Mr. Brewer recommending that a new committee be appointed. Make several suggestions as to possible nominations.

POSSIBLE COURSE(S) OF ACTION FOR ITEM 5

1. No action--feel situation is closed and time is past for suggestions.
2. File for later referral.
3. Secure additional information about the budget matters and procedures.
4. Place on faculty meeting agenda.
5. Communicate with Mr. Houser (Assistant Superintendent for Business) to make an appointment to meet in regard to the budget matters.
6. Inform the staff to start thinking about suggestions and recommendations in regard to budget needs in their area.
7. Communicate with Mr. Houser requesting revisions on policy changes which may have taken place during the summer.
8. Request secretary to locate any reports in regard to the budget that are available.
9. Communicate with Mr. House requesting information on present budgeting procedures and policies.
10. Communicate with Mr. Houser requesting information on present budgeting procedures and policies.
11. Communicate with Mr. Houser informing him that your budget recommendations will be forthcoming.
12. Communicate with Mr. Houser to ask if the memorandum still requires a response since the consultations have already been held.
13. Communicate with Mr. Houser stating that no recommendations are possible until you gain more knowledge of procedures.
14. Communicate with Mr. Houser outlining one or more recommendations for changes in either policies, new programs, or budget procedures.

POSSIBLE COURSE(S) OF ACTION FOR ITEM 6

1. No action--feel situation is insignificant.
2. File for later referral.
3. Secure additional information about the cafeteria procedures.
4. Plan to visit the cafeteria to check on the situation.
5. Communicate with Miss Strawn assuring her that you will look into the situation.
6. Communicate with Mrs. Martin requesting a conference.
7. Communicate with Miss Strawn requesting a conference.
8. Communicate with Miss Strawn to check into possible policy changes in the cafeteria.
9. Secure additional information regarding Miss Strawn and/or Mrs. Martin.
10. Communicate with Rosie Cox (Cook-manager) in regard to the present Mrs. Martin-Miss Strawn conflict and/or in regard to conditions in the cafeteria in general.
11. Communicate with Miss Strawn essentially telling her to shape up and stating that two adult women ought to be able to cope with such financial matters.
12. Communicate with Miss Strawn informing her that Mrs. Martin will be notified of her complaint and thanking her for her concern.
13. Place on faculty meeting agenda.
14. Arrange a meeting with the cafeteria director and/or cafeteria personnel to review procedures.

POSSIBLE COURSE(S) OF ACTION FOR ITEM 11

1. No action--feel that the questionnaire is inappropriate.
2. File for later referral.
3. Secure additional information in regard to the PTA and/or non-graded classes.
4. Determine the official view of non-graded classes by contacting either the Assistant Superintendent or peers.
5. Meet with Marion Smith and/or the PTA Program Committee to test the depth of their interest and/or to discuss plans.
6. Arrange for an outside speaker.
7. Place on the faculty meeting agenda.
8. Communicate with Marion Smith emphasizing the complexity of the problem and urging a go-slow approach.
9. Communicate with Marion Smith requesting better clarification on how they want you to participate.
10. Accept the invitation to speak at the PTA meeting.
11. Request postponement of the presentation to improve the "package."
12. Communicate with Marion Smith acknowledging receipt of the questionnaire and expressing interest.
13. Inform Marion Smith that you have answered the questions and a copy of the answers is forthcoming.
14. Communicate with Marion Smith and/or the PTA Committee in which you offer some suggestions for the presentation and/or offer your personal guidance in planning the study rather than having the PTA attempt a study without your help.

POSSIBLE COURSE(S) OF ACTION FOR ITEM 16

1. No action--feel situation does not warrant it.
2. File for later referral.
3. Secure additional information in regard to this matter.
4. Communicate with Linda Shepherd (school secretary) in regard to past experiences with Mrs. Andrews.
5. Place on the faculty meeting agenda.
6. Set up a committee to study the problem of enforcement of student behavior to and from classes.
7. Personally inform the students on the need for respect for school and private property (for example, use public address announcement or all-school bulletin.)
8. Have the teachers inform the students of the need for respect for school and private property.
9. Communicate with Mrs. Andrews acknowledging receipt of the letter and thanking her for her concern.
10. Inform Mrs. Andrews that if the problem continues and/or if you can be of any further help in the future that you would appreciate her notifying you.
11. Inform Mrs. Andrews that the school is not an all-pervasive force which can control the performance of each pupil in and out of school.
12. Inform Mrs. Andrews that if the situation becomes intolerable to call the police or the pupil's parents (if names are available.)
13. Visit Mrs. Andrews at her home and/or invite Mrs. Andrews to visit the school.

(4) NUMBER OF SUBORDINATES INVOLVED INDIVIDUALLY

General Definition: Enter here the number of individual subordinates involved by the S. in his action or plans for action.

Rule a: It does not matter how deeply or superficially the person is involved, but the S., in his response, must in some way explicitly recognize the involvement.

Rule b: Score here even if the person is involved only contingently, i.e., through a contingent decision

Rule c: Where letters are involved, if the S. signs his name to a letter, the person to whom the communication is going is scored here.

Rule d: Do not score here if the S. merely mentions someone without involving him. Involvement implies that the person involved will know about the S.'s course of action as a consequence of the action itself or of the planned action.

Rule e: Do not score here if the S. merely asks his secretary to type or to transmit a letter or a memo; however, score here if the S. asks or plans to ask his secretary to do any other chores.

Rule f: Score here even if the S. merely suggests involvement to another.

Rule g: Whenever the S. merely says "file" assume that he plans to have his secretary file, and score the secretary for involvement.

Rule h: Do not score if the S. says that he will merely "observe" a subordinate.

(5) NUMBER OF SUBORDINATE GROUPS INVOLVED

General Definition: Enter here the number of subordinate groups involved by the S. in his action or plans for action.

Scored here would be, e.g.: the faculty of the school, all of the teachers of a particular grade, the entire student body, any entire particular class, all the custodians, all the special consultants, etc. Score as a group unless the S. in some way specified or singles out individuals.

(6) NUMBER OF SUPERIORS INVOLVED

General Definition: Enter here the number of superiors involved by the S. in his action or plans for action.

This class includes school system personnel superior in status to the principal of the school. Included here are the superintendent, his office or secretary, any assistant superintendent, or the board of education.

(7) NUMBER OF OUTSIDERS INVOLVED

General Definition: Enter here the number of individual outsiders involved by the S. in his action or plans for action. This class includes all persons formally outside of the school system, whether or not they are members of related groups. Included here are: parents, city officials, PTA groups, etc.

(8) COURTESY TO SUBORDINATES

General Definition: Score here any expression or act of courtesy directed by the S. to subordinates. The courtesy may be formal, such as "please", "thank you", "sorry", "appreciate", or it may be more expansive.

Rule a: Score here any response which expresses solicitude or appreciation.

Rule b: Score here if the act itself is courteous, even though nothing actually courteous in itself is explicitly stated by the S.

Rule c: Do not score here headings, formal greetings, salutations, and complimentary closings. That is, do not score here merely because the S. starts a letter with "Dear" before the addressee's name, or because he signs a letter with a formal complimentary closing such as "Sincerely" or "Very truly yours", or because he greets someone with "Hello" or "Good Morning".

(9) COURTESY TO SUPERIORS

General Definition: Score here any expression or act of courtesy directed by the S. to superiors. The courtesy may be formal, such as "please", "thank you", "sorry", "appreciate", or it may be more expansive. (Rules for scoring same as above under Category 8)

(10) TAKES LEADING ACTION

General Definition: Score here if the S. takes action (other than planning) which has the effect of getting things moving toward a solution but falls short of terminal action. The S. acts in such a way that his action will not be his final action but may lead to other actions that would be final.

Rule a: Include here calling a meeting to discuss a problem, writing a memo asking for information needed to solve a problem, having a subordinate start work that the S. will complete later, etc.

Rule b: If a meeting is already scheduled before the S. begins the test, his mere planning to discuss a problem at this meeting is not a leading action, but should instead be scored as a "plan" in PLO; to be scored here, a response must indicate that the S. himself has in some way initiated the action.

(11) CARELESSNESS OR INAPPROPRIATE ACTION

General Definition: Score here any response which reveals carelessness or a definite inappropriateness of action.

(12) CONCEPTUAL ANALYSIS

General Definition: This category refers to the S.'s recognition of implications of the problem and/or action and/or solution. Score here if the S. makes it clear in his response that he has seen more than the immediate implications of the problem(s) presented by the item. The S. perceives the problem as involving more than was immediately obvious in the stimulus materials.

Rule a: Score here any response which indicates the S.'s recognition that an action, fact, problem, plan, etc., will involve more than seems apparent.

Rule b: Score here any response which indicates that the S. generalizes from a specific situation and sees how this specific situation can have an effect on other things.

Rule c: Score here any response which indicates that the S. sees the problem in relation to the total situation.

Rule d: Score here any response which indicates that the S. is branching out in his conception of the consequences of the particular item.

Rule e: Score here if the S. mentions such things as "Public Relations," "Morale", "Community Support," "Organizational Efficiency," etc.

Rule f: Do not score for mere discussion.

Rule g: Do not score here if the S. merely asks for more information or states the need for more information.

Rule h: Do not score here if the S. merely notes priority or urgency.

Rule i: Do not score here if the S. merely states a need for guidance or help.

(13) USES PROGRAM VALUES IN ANALYSIS

General Definition: Score here if the S. shows concern for community support of the school, public relations, instructional program, group morale, educational opportunity, etc. Almost all responses scored here will be scored in "Conceptual Analysis" as well.

(14) DISCUSSES WITH SUBORDINATES

General Definition: Score here any response in which the S. discusses or plans to discuss with subordinates.

Rule a: Do not score here if the S. merely plans to inform another or something or if the S. merely asks for information. Discussion implies a two-way "give-and-take."

(15) DISCUSSES WITH SUPERIORS OR OUTSIDERS

General Definition: Score here any response in which the S. discusses or plans to discuss with superiors or outsiders.

Rule a: Do not score here if the S. merely plans to inform another or something or if the S. merely asks for information. Discussion implies a two-way "give-and-take."

Rule b: Do not score here if the S. merely returns or plans to return a phone call.

(16) ASKS FOR ADVICE, SUGGESTIONS OR AN OPINION FROM SUBORDINATES

General Definition: Score here any communication, actual or planned, in which the S. asks subordinates for advice, suggestions, or an opinion.

Rule a: Score here if the S. attempts to get a subordinate's reaction.

Rule b: Do not score here if the S. is asking a merely rhetorical question.

(17) REQUIRES FURTHER INFORMATION

General Definition: Score here any response which explicitly indicates the S.'s feeling a need for additional information before arriving at a decision, whether or not he takes any action toward securing this information.

Rule a: Do not score here, if the S. merely indicates he needs to study, look over again, etc., before arriving at a decision.

Rule b: Score here even if the S. does not indicate how he will get the information, etc.

(18) DELAYS OR POSTPONES DECISION, OR TEMPORIZES

General Definition: Score here if the S. clearly delays or postpones decision on the item. Score also any response communicated to another that indicates that the S., after having considered the item, is unwilling to commit himself to a decision at the present time. E.g., in response to a request of some sort, the S. neither complies fully nor refuses to comply, but merely stalls for time by stating that he will think about it, study it, get further information, etc., but takes no steps to get the further information.

(19) ARRIVES AT A PROCEDURE FOR DECIDING

General Definition: This category refers to the S.'s setting up the procedures that will be used in reaching a decision

decision about how the problem posed by the item is to be solved (e.g., to discuss, to ask for advice, suggestions or an opinion, to ask for or indicate a need for additional information, to arrange a conference or meeting or to set up a committee).

(20) TAKES TERMINAL ACTION AND/OR MAKES CONCLUDING DECISION

General Definition: Score here if the S. takes action which assures him that no problem posed by the item will require his attention again or if the S. makes a concluding decision. Concluding decisions are decisions that are made as the end disposition of the problem. The S. has made up his mind in responses under this subtype. He makes no provision for further checking or revision of his decision on any part of the problem or problems posed by an item.

(21) MAKES TENTATIVE OR DEFINITE PLANS ONLY

General Definition: Score here any responses which indicate that the S. has made tentative plans for further action, no part of which he has yet acted upon. Score here only if the S. has taken no action on any part of the item.

Rule a: The S.'s writing out an agenda, making a note to himself, etc., is to be scored here if it constitutes a plan.

(22) WORK SCHEDULED FOR SAME OR FOLLOWING DAY

General Definition: Score here any response in which the S. specifically schedules an activity for himself for later the same day or for the following day.

Rule a: Score here if the S. asks his secretary to place a call for him, even if he does not specify the day.

Rule b: Score here if the S. specifies that he will do something "now."

(23) WORK SCHEDULED FOR SAME OR FOLLOWING WEEK

General Definition: Score here any response specifically indicating an activity to be accomplished by the S. during the two weeks following test day exclusive of test day and the day after. This includes work scheduled 2-14 days after test day. Included are matters scheduled for an indefinite time during this period as well as those scheduled for a particular day.

(24) WORK SCHEDULED: INDEFINITE TIME OR NO TIME SPECIFIED

General Definition: Score here all responses referring to future actions or activities or the S., where no indication is given as to specified time. This includes work scheduled two or more weeks in the future.

(25) GIVES INFORMATION TO SUBORDINATES

General Definition: Score here any response in which the S., himself or through another person, gives, or plans to give, substantive, non-trivial, objective information to a subordinate.

Rule a: Score here if the S. gives information for either explicit reasons or general, background reasons.

Rule b: Score here if the S. "reminds" or plans to "remind" someone of something.

Rule c: Do not score here if the S. merely gives instructions or directions or suggestions or merely delegates or refers a task or decision.

(26) GIVES INFORMATION TO OUTSIDERS

General Definition: Score here any response in which the S., himself or through another person, gives, or plans to give, substantive, non-trivial, objective information to an outsider.

(Rules for scoring same as those listed above under Category 25).

(27) FOLLOWS LEAD BY SUBORDINATE

General Definition: Score here if the S. complies or plans to comply with instructions, suggestions, or requests explicitly addressed to him by a subordinate.

Rule a: If the S. is asked to call someone and does so, score here. If the S. is instructed to offer suggestions and does so, score here, etc.

Rule b: Score here if the S. specifically replies or plans to reply back to the communication group that initiated the response item.

Rule c: Do not score here if the S. plans or takes a leading action that indirectly leads toward compliance if this action was not explicitly suggested by the communication group that initiated the response item.

Rule d: Score here if the S. calls back upon receiving notice that someone has called him.

(28) FOLLOWS LEAD BY SUPERIORS

General Definition: Score here if the S. complies or plans to comply with instructions, suggestions or requests explicitly addressed to him by a superior. (Rules for scoring same as above under Category 27).

(29) FOLLOWS LEAD BY OUTSIDERS

General Definition: Score here if the S. complies or plans to comply with instructions, suggestions, or requests explicitly addressed to him by an outsider. (Rules for scoring same as those listed above under 27).

(30) FOLLOWS A PRE-ESTABLISHED STRUCTURE

General Definition: Score here any response which indicates that the S. merely uses a routine, complies with suggestions or follows a formal regulation or written rule without being specifically instructed to do so. Score here also if the S. uses or plans to use one or more of the following routines.

Rule a: Distributing, posting, or announcing information only to the entire staff.

Rule b: Signing or initiating standard forms prepared for the S.'s signature.

Rule c: Announcing (not discussing) the content of an item at a faculty or staff meeting -- no further action planned.

Rule d: Having his secretary or another subordinate mimeograph, duplicate or distribute.

Rule e: Filing, or having his secretary file, in its proper place such things as a pupil's folder, a teacher's personal folder, an officer's folder, etc. Also, taking something out of a file, or having his secretary do so.

Rule f: Referring a problem to already existing committees or individuals (whose function is to deal with such problems) for study, or action or recommendations.

Rule g: Making his secretary place a call.

Rule h: Having his secretary place a call.

Rule i: Returning calls.

Rule j: Having his secretary relay a message by telephone or face-to-face.

(31) INITIATES A NEW STRUCTURE

General Definition: Score here any response which indicates that the S. is not merely using a routine, complying with instructions, or following a formal regulation, but rather that he is developing or using a new procedure which he devises to fit the specific problem, (e.g., setting up an ad hoc committee).

Rule a: Score here if the S. combines routines in a new way in his solution of the problem.

Rule b: Score if the subject specifically changes, broadens, or narrows a subordinate's duties.

Rule c: Do not score here if the S. merely asks for information or gives information, nor if he merely commends.

Rule d: Score here even if the S. has been asked to give suggestions to a superior if the suggestions he gives would initiate a new structure.

(32) GIVES DIRECTIONS AND/OR SUGGESTIONS

General Definition: Score here any response in which the S. plans to, or actually gives directions and/or suggestions to others (subordinates, superiors, or outsiders).

Rule a: Do not score if the S. tells his secretary merely to type, to mail, or to forward.

Rule b: Score here if the S. delegates or transfers the entire problem.

(33) COMMUNICATES FACE-TO-FACE

General Definition: Score here actual or planned face-to-face communication by the S. Include meetings, individual discussions, etc.

Rule a: Invitations extended by the S. to others to visit the school or office are scored here if they are definite in the sense that it can be inferred that the S. actually plans that such a meeting take place. Do not score such perfunctory invitations as "Hope to see you sometime"; "Drop in when you're around"; "Why don't we have a long talk when you're free"; etc.

Rule b: If the S. writes, that he will confer, and doesn't specify how he will confer, assume that the conference will be face-to-face and score here.

(34) COMMUNICATES BY TELEPHONE

General Definition: Score here actual or planned telephone communication. Include calls returned and calls made in compliance with requests to call back.

Rule a: Score here if the S. uses or plans to use an intercom.

(35) COMMUNICATES BY WRITING

General Definition: Score here all communications written or planned to be written to others by the S. including memos, letters, telegrams, and notes. Include posting memos, transmitting materials written by others, signing letters written by others, distributing memos, etc.

Rule a: Do not score her notes, memos, calendars, etc., written to the S. by himself.

Rule b: Do not score here the written contents of an actual telephone call.

(36) INFORMALITY TO SUBORDINATES

General Definition: Score here any response which contains an act or expression of informality by the S. to a subordinate. Include here the use of slang or colloquial language, the use of first names, etc.

Rule a: Score here if the S. uses his own first name in signing a note, memo, or letter.

Rule b: To be scored here, the S. must be informal to the person whom he is directly addressing. Do not score here if, for example, in a note to one person he uses the first name of another person.

Rule c: Do not score here if the S. signs a note or letter with his initials, nor if he addresses another person by using that person's initials.

(37) **GENERALLY FOLLOWS LEAD**

General Definition: Score here if the S. complies or plans to comply with instructions, suggestions, or requests explicitly addressed to him by either a subordinate, superior, or an outsider. This category provides a general measure of follows lead.

Rule a: Score here any time categories 27, 28, or 29 are scored.

APPENDIX D
COMPUTER MODEL SCORING SUMMARY

SCORING CATEGORY SUMMARY

Described below is a summary of how each of the components of the computer-based feedback model is being scored. A code sheet for the scoring categories is attached at the end.

Scoring Category	Type of Communication
<u>35</u>	1. Letter
<u>35</u>	2. Memo
<u>34</u>	3. Telephone Call
<u>33</u>	4. Face to Face
<u>21</u>	5. Note or memo to self

Scoring Category for (Sub.)	Scoring Category for (Sup.)	Scoring Category for (Out.)	Purpose of Communication
<u>20,32</u>	<u>20,32</u>	<u>20,32</u>	1. To delegate or transfer the entire problem.
<u>32</u>	<u>32</u>	<u>32</u>	2. To give directions or suggestions.
<u>21</u>	<u>21</u>	<u>21</u>	3. To set up some plans.
<u>8</u>	<u>9</u>	<u>9</u>	4. To make an acknowledgement.
<u>25</u>	<u>26</u>	<u>26</u>	5. To inform or give information.
<u>14, 19</u>	<u>15, 19</u>	<u>15, 19</u>	6. To discuss.
<u>16, 19</u>	<u>19</u>	<u>19</u>	7. To ask for advice, suggestions, or an opinion.
<u>16,17,19</u>	<u>17,19</u>	<u>17,19</u>	8. To ask for or indicate a need for additional information.
<u>19,33</u>	<u>19,33</u>	<u>19,33</u>	9. To arrange a conference or meeting or to set up a committee.

POSSIBLE COURSE(S) OF ACTION FOR ITEM 4

Scoring
Category

- | | |
|-----------------|--|
| <u>18,20</u> | 1. No action--feel that you are not in a position to make any recommendation. |
| <u>18,30</u> | 2. File for later referral. |
| <u>18,21,17</u> | 3. Secure additional information in regard to possible nominations. |
| <u>18,21</u> | 4. Plan to survey the reports of the previous committee. |
| <u>10</u> | 5. Communicate with either the PTA president, the three PTA officers, or the five members of the existing committee in regard to PTA affairs in general and/or potential candidates. |
| <u>10</u> | 6. Communicate with Mrs. Cahn and/or Mrs. Keller in regard to potential candidates. |
| <u>10</u> | 7. Elicit from the staff and/or Mrs. Barnes and Mrs. Timberlake (grade chairman) the names of parents who might be good candidates. |
| <u>18,30</u> | 8. Communicate with Linda (School secretary) requesting information about the PTA committee and/or the advisory committee. |
| <u>10,28</u> | 9. Communicate with Mr. Brewer requesting more background information and/or possible suggestions. |
| <u>10</u> | 10. Check with Mr. Parker (former principal) |
| <u>10,18,28</u> | 11. Communicate with Mr. Brewer (superintendent) to request an extension of the deadline in order to better assess qualifications of potential members. |
| <u>20,28</u> | 12. Communicate with Mr. Brewer indicating that you do not feel that you are in a position to make a decision in regard to the nominations. |
| <u>20,28,30</u> | 13. Communicate with Mr. Brewer recommending that the member of last year's advisory committee be reappointed. |
| <u>20,28,31</u> | 14. Communicate with Mr. Brewer recommending that a new committee be appointed. Make several suggestions as to possible nominations. |
| <u>2</u> | 15. Other |

POSSIBLE COURSE(S) OF ACTION FOR ITEM 5

Scoring
Category

- | | |
|------------------|---|
| <u>18,20</u> | 1. No action--feel situation is closed and time is past for suggestions. |
| <u>18,30</u> | 2. File for later referral. |
| <u>18,21, 17</u> | 3. Secure additional information about the budget matters and procedures. |
| <u>21,30</u> | 4. Place on faculty meeting agenda. |
| <u>10,28</u> | 5. Communicate with Mr. Houser (Assistant Superintendent for Business) to make an appointment to meet in regard to the budget matters. |
| <u>10</u> | 6. Inform the staff to start thinking about suggestions and recommendations in regard to budget needs in their area. |
| <u>10,28</u> | 7. Communicate with Mr. Houser requesting revisions on the policy changes which may have taken place during the summer. |
| <u>18,30</u> | 8. Request secretary to locate any reports in regard to the budget that are available. |
| <u>10</u> | 9. Communicate with grade chairmen requesting them to submit new facility and equipment needs to office immediately. |
| <u>10,28</u> | 10. Communicate with Mr. Houser requesting information on present budgeting procedures and policies. |
| <u>18,28</u> | 11. Communicate with Mr. Houser informing him that your budget recommendations will be forthcoming. |
| <u>10,18,28</u> | 12. Communicate with Mr. Houser to ask if the memorandum still requires a response since the consultations have already been paid. |
| <u>10,18</u> | 13. Communicate with Mr. Houser stating that no recommendations are possible until you gain more knowledge of procedures. |
| <u>20,28</u> | 14. Communicate with Mr. Houser outlining one or more recommendations for changes in either policies, new programs, or budget procedures. |
| <u>2</u> | 15. Other |

POSSIBLE COURSE(S) OF ACTION FOR ITEM 6

Scoring Category	
<u>18,20</u>	1. No action--feel situation is insignificant.
<u>18,30</u>	2. File for later referral.
<u>18,21,17</u>	3. Secure additional information about the cafeteria procedures.
<u>21</u>	4. Plan to visit the cafeteria to check on the situation.
<u>10,27</u>	5. Communicate with Miss Strawn assuring her that you will look into the situation.
<u>10,27</u>	6. Communicate with Mrs. Martin requesting a conference.
<u>10,27</u>	7. Communicate with Miss Strawn requesting a conference.
<u>10,27</u>	8. Communicate with Miss Strawn to check into possible policy changes in the cafeteria.
<u>17,18</u>	9. Secure additional information regarding Miss Strawn and/or Mrs. Martin.
<u>10</u>	10. Communicate with Rosie Cox (cook-manager) in regard to the present Mrs. Martin-Miss Strawn conflict and/or in regard to conditions in the cafeteria in general.
<u>20</u>	11. Communicate with Miss Strawn essentially telling her to shape up and stating that two adult women ought to be able to cope with such financial matters.
<u>20,27</u>	12. Communicate with Miss Strawn informing her that Mrs. Martin will be notified of her complaint and thanking her for her concern.
<u>21,30</u>	13. Place on faculty meeting agenda.
<u>10,21</u>	14. Arrange a meeting with the cafeteria director and/or cafeteria personnel to review procedures.
<u>2</u>	15. Other

POSSIBLE COURSE(S) OF ACTION FOR ITEM 11

Scoring
Category

- | | |
|-----------------|---|
| <u>18,20</u> | 1. No action--feel that the questionnaire is inappropriate. |
| <u>18,30</u> | 2. File for later referral. |
| <u>18,21,17</u> | 3. Secure additional information in regard to the PTA and/or non-graded classes. |
| <u>10</u> | 4. Determine the official view of non-graded classes by contacting either the Assistant Superintendent or peers. |
| <u>10,29</u> | 5. Meet with Marion Smith and/or the PTA Program Committee to test the depth of their interest and/or to discuss plans. |
| <u>20</u> | 6. Arrange for an outside speaker. |
| <u>21,30</u> | 7. Place on the faculty meeting agenda. |
| <u>10,29</u> | 8. Communicate with Marion Smith emphasizing the complexity of the problem and urging a go-slow approach. |
| <u>10,29</u> | 9. Communicate with Marion Smith requesting better clarification on how they want you to participate. |
| <u>10,29</u> | 10. Accept the invitation to speak at the PTA meeting. |
| <u>10,18,29</u> | 11. Request postponement of the presentation to improve the "package." |
| <u>10,29</u> | 12. Communicate with Marion Smith acknowledging receipt of the questionnaire and expressing interest. |
| <u>20,29</u> | 13. Inform Marion Smith that you have answered the questions and a copy of the answers is forthcoming. |
| <u>10,29</u> | 14. Communicate with Marion Smith and/or the PTA Committee in which you offer some suggestions for the presentation and/or offer your personal guidance in planning the study rather than having the PTA attempt a study without your help. |
| <u>2</u> | 15. Other |

POSSIBLE COURSE(S) OF ACTION FOR ITEM 16

Scoring
Category

- | | |
|-----------------|--|
| <u>11,18,20</u> | 1. No action--feel situation does not warrant it. |
| <u>11,18,30</u> | 2. File for later referral. |
| <u>18,21,17</u> | 3. Secure additional information in regard to this matter. |
| <u>12,21</u> | 4. Communicate with Linda Shepherd (school secretary) in regard to past experiences with Mrs. Andrews. |
| <u>21,30</u> | 5. Place on the faculty meeting agenda. |
| <u>12,31</u> | 6. Set up a committee to study the problem of enforcement of student behavior to and from classes. |
| <u>20,30</u> | 7. Personally inform the students on the need for respect for school and private property (for example, use public address announcement or all-school bulletin). |
| <u>20,30</u> | 8. Have the teachers inform the students of the need for respect for school and private property. |
| <u>20,29</u> | 9. Communicate with Mrs. Andrews acknowledging receipt of the letter and thanking her for her concern. |
| <u>10,20,29</u> | 10. Inform Mrs. Andrews that if the problem continues and/or if you can be of any further help in the future that you would appreciate her notifying you. |
| <u>11,20,29</u> | 11. Inform Mrs. Andrews that the school is not an all-pervasive force which can control the performance of each pupil in and out of school. |
| <u>20,29</u> | 12. Inform Mrs. Andrews that if the situation becomes intolerable to call the police or the pupil's parents (if names are available) |
| <u>20,29</u> | 13. Visit Mrs. Andrews at her home and/or invite Mrs. Andrews to visit the school. |
| <u>2</u> | 14. Other |

Feedback Actions

For the corresponding sets of feedback actions see the Interaction Manual (Appendix A).

Scoring Category for Item 4	Scoring Category for Item 5	Scoring Category for Item 6	Scoring Category for Item 11	Feedback Actions*
_____	_____	_____	_____	1.
<u>12,13</u>	<u>12</u>	_____	<u>30</u>	2.
<u>12</u>	_____	<u>31</u>	<u>12,13</u>	3.
<u>12,13</u>	<u>31</u>	<u>12</u>	<u>31</u>	4.
_____	<u>11</u>	<u>11</u>	<u>11</u>	5.
<u>30</u>	_____	<u>11</u>	<u>11</u>	6.
<u>31</u>	<u>12,13</u>	<u>31</u>	<u>31</u>	7.
<u>31</u>	<u>12,13</u>	<u>12</u>	<u>30</u>	8.
_____	<u>12</u>	_____	_____	9.
<u>12</u>	_____	_____	_____	10.

*The categories used in scoring the feedback actions were 11,12,13,30, and 31. No feedback actions were identified for item 16 although there are feedback problems; hence, to provide uniformity in scoring throughout the five items used in the computer-based feedback model the feedback scoring categories were applied to the original courses of action for this item.

Code Sheet

Each scoring category is prefaced by the number formerly used to designate that category.

- (1) ESTIMATED NUMBER OF WORDS
- (2) UNUSUAL COURSES OF ACTION
- (3) USUAL COURSES OF ACTION
- (4) NUMBER OF SUBORDINATES INVOLVED INDIVIDUALLY
- (5) NUMBER OF SUBORDINATE GROUPS INVOLVED
- (6) NUMBER OF SUPERIORS INVOLVED
- (7) NUMBER OF OUTSIDERS INVOLVED
- (8) COURTESY TO SUBORDINATES
- (9) COURTESY TO OUTSIDERS
- (10) TAKES LEADING ACTION
- (11) CARELESSNESS OR INAPPROPRIATE ACTION
- (12) CONCEPTUAL ANALYSIS
- (13) USED PROGRAM VALUES IN ANALYSIS
- (14) DISCUSSES WITH SUBORDINATES
- (15) DISCUSSES WITH SUPERIORS OR OUTSIDERS
- (16) ASK FOR ADVICE, SUGGESTIONS OR AN OPINION FROM SUBORDINATES
- (17) REQUIRES FURTHER INFORMATION
- (18) DELAYS OR POSTPONES DECISION, OR TEMPORIZES
- (19) ARRIVES AT A PROCEDURE FOR DECIDING
- (20) TAKES TERMINAL ACTION OR MAKES CONCLUDING DECISION
- (21) MAKES TENTATIVE OR DEFINITE PLANS ONLY
- (22) WORK SCHEDULED FOR SAME OR FOLLOWING DAY

- (23) WORK SCHEDULED FOR SAME OR FOLLOWING WEEK
- (24) WORK SCHEDULED: INDEFINITE OR NOT TIME SPECIFIED
- (25) GIVES INFORMATION TO SUBORDINATES
- (26) GIVES INFORMATION TO OUTSIDERS
- (27) FOLLOWS LEAD BY SUBORDINATES
- (28) FOLLOWS LEAD BY SUPERIORS
- (29) FOLLOWS LEAD BY OUTSIDERS
- (30) FOLLOWS A PRE-ESTABLISHED STRUCTURE
- (31) INITIATES A NEW STRUCTURE
- (32) GIVES DIRECTIONS AND/OR SUGGESTIONS
- (33) COMMUNICATES FACE-TO-FACE
- (34) COMMUNICATES BY TELEPHONE
- (35) COMMUNICATES BY WRITING
- (36) INFORMALITY TO SUBORDINATES
- (37) GENERALLY FOLLOWS LEAD

APPENDIX E
COMPUTER PROGRAM FOR B-5500

PROGRAM CBMOD

1.10 DIMENSION CHOICE(7),SS(2,37)
1.25 SET J=1
1.30 DO PART 5.0 FOR I=1,36
1.32 TYPE"THIS IS A COMPUTER-BASED MODEL FOR ANALYZING YOUR"
1.33 TYPE"RESPONSES TO THE MADISON IN-BASKET SIMULATION EXER-"
1.34 TYPE"CISES. YOUR COOPERATION IS APPRECIATED."
1.38 TYPE""
1.39 TYPE"ENTER THE ITEM NUMBER OF THE RESPONSE THAT YOU"
1.40 TYPE"WISH TO ANALYZE."
1.42 READ NUMBER
1.43 SET NU=NUMBER
1.45 J=2
1.46 DO PART 5.0 FOR I=1,36
1.55 IF NU=0 THEN GO TO 20.20
1.60 TYPE"ESTIMATE THE TOTAL NUMBER OF THE WORDS THAT YOU USED."
1.62 READ WORDS
1.64 IF WORDS GT 0 THEN SET SS(2,1)=1
1.65 IF WORDS GT 6 THEN SET SS(2,1)=SS(2,1)+1
1.66 IF WORDS GT 15 THEN SET SS(2,1)=SS(2,1)+1
1.67 IF WORDS GT 40 THEN SET SS(2,1)=SS(2,1)+1
1.68 IF WORDS GT 100 THEN SET SS(2,1)=SS(2,1)+1
1.69 IF WORDS GT 200 THEN SET SS(2,1)=SS(2,1)+1
1.70 TYPE"TYPES OF COMMUNICATION--TURN TO PAGE TWO (PART A)."
1.96 SET QUEST=0
2.0 SET I=0
2.1 SET I=I+1
2.2 READ CHOICE(I)
2.21 IF QUEST=3.0 THEN GO TO 2.5
2.22 IF QUEST=3.1 THEN GO TO 2.4
2.23 IF QUEST=3.2 THEN GO TO 2.45
2.24 IF QUEST=4.0 THEN GO TO 6.0
2.25 IF QUEST=3.3 THEN GO TO 7.0
2.26 IF QUEST=7.10 THEN GO TO 7.5
2.27 IF QUEST=3.4 THEN GO TO 8.0
2.28 IF QUEST=8.1 THEN GO TO 8.5
2.33 IF CHOICE(I)=0 THEN GO TO 3.0

2.34 IF CHOICE(I) LE 2 THEN SET SS(2,35)=1
 2.36 IF CHOICE(I)=3 THEN SET SS(2,34)=1
 2.37 IF CHOICE(I) = 4 THEN SET SS(2,33)=1
 2.38 IF CHOICE(I)=5 THEN SET SS(2,21)=1
 2.39 GO TO 2.1
 2.40 IF CHOICE(I)=1 THEN GO TO 3.27
 2.41 IF CHOICE(I)=0 THEN SET SS(2,4)=I-1 ELSE GO TO 2.1
 2.42 IF CHOICE(I)=0 THEN GO TO 3.27
 2.45 IF CHOICE(I)=0 THEN GO TO 4.0
 2.46 IF CHOICE(I)=0 THEN SET SS(2,5)=I-1 ELSE GO TO 2.1
 2.47 IF CHOICE(I)=0 THEN GO TO 4.0
 2.50 IF CHOICE(I)=1 THEN SET SS(2,4)=1
 2.51 IF CHOICE(I)=2 THEN SET SS(2,6)=1
 2.52 IF CHOICE(I)=3 THEN SET SS(2,7)=1
 2.53 IF CHOICE(I)=0 THEN GO TO 2.6
 2.54 IF CHOICE(I)=5 THEN GO TO 10.0
 2.55 GO TO 2.1
 2.60 IF SS(2,4)=1 THEN GO TO 3.2
 2.61 IF SS(2,6)=1 THEN GO TO 3.35
 2.62 IF SS(2,7)=1 THEN GO TO 3.45
 2.63 GO TO 10.0
 3.0 TYPE"COMMUNICATION GROUPS INVOLVED--PAGE TWO (PART B)."
 3.12 GO TO 2
 3.2 SET QUEST=3.1
 3.21 TYPE"SUBORDINATE INDIVIDUALS INVOLVED--PAGE THREE (PART A)."
 3.26 GO TO 2.0
 3.27 TYPE"NOW LOOK AT PART B (SAME PAGE)."
 3.31 SET QUEST=3.3
 3.42 GO TO 2.0
 3.45 TYPE"OUTSIDER(S) INVOLVED--PAGE FOUR (PART B)."
 3.51 SET QUEST=3.4
 3.52 GO TO 2.0
 4.0 TYPE"PURPOSE OF THE COMMUNICATION--TURN TO PAGE FIVE."
 4.05 IF QUEST=3.2 THEN SET QUEST=4.0
 4.06 IF QUEST=3.13 THEN SET QUEST=7.10
 4.07 IF QUEST=3.4 THEN SET QUEST=8.10

4.10 GO TO 2.0
 5.0 SET SS(J,I)=0
 6.0 IF CHOICE(I)=0 THEN GO TO 6.20
 6.01 IF CHOICE(I)=6 THEN SET SS(2,14)=1
 6.02 IF CHOICE(I)=7 THEN SET SS(2,16)=1
 6.03 IF CHOICE(I)=8 THEN SET SS(2,16)=1
 6.04 IF CHOICE(I)=5 THEN SET SS(2,25)=1
 6.05 IF CHOICE(I)=4 THEN SET SS(2,8)=1
 6.07 IF CHOICE(I)=3 THEN SET SS(2,21)=1
 6.08 IF CHOICE(I) LE 2 THEN SET SS(2,32)=1
 6.09 IF CHOICE(I)=8 THEN SET SS(2,17)=1
 6.10 IF CHOICE(I) GE 6 THEN SET SS(2,19)=1
 6.14 IF CHOICE(I)=9 THEN SET SS(2,33)=1
 6.15 IF CHOICE(I)=1 THEN SET SS(2,20)=1
 6.19 GO TO 2.1
 6.20 IF SS(2,35)=0 THEN GO TO 2.61
 6.21 TYPE" DID YOU USE ANY SLANG, COLLOQUIAL LANGUAGE OR FIRST NAMES"
 6.22 TYPE" IN YOUR COMMUNICATION WITH THE SUBORDINATE(S)."
 6.24 TYPE" 1. YES 2. NO"
 6.26 READ CHOICE(1)
 6.27 IF CHOICE(1)=1 THEN SET SS(2,36)=1
 6.28 IF SS(2,35)=0 THEN GO TO 10.0
 6.29 TYPE" DID YOU USE ANY EXPRESSION OR ACT OF COURTESY SUCH"
 6.30 TYPE" AS PLEASE, THANK YOU, SORRY, APPRECIATE, ETC."
 6.32 TYPE 1. YES 2. NO"
 6.34 READ CHOICE(1)
 6.35 IF QUEST=8.10 THEN GO TO 9.98
 6.39 IF CHOICE(1)=1 THEN SET SS(2,8)=1
 6.40 GO TO 2.61
 7.0 IF CHOICE(I)=0 THEN SET SS(2,6)=I-1
 7.01 IF CHOICE(I)=0 THEN GO TO 4.0
 7.02 GO TO 2.1
 7.50 IF CHOICE(I)=0 THEN GO TO 2.62
 7.51 IF CHOICE(I)=6 THEN SET SS(2,15)=1
 7.56 GO TO 6.07
 8.0 IF CHOICE(I)=0 THEN SET SS(2,7)+I-1
 8.01 IF CHOICE(I)=0 THEN GO TO 4.0
 8.02 GO TO 2.1
 8.50 IF CHOICE(I)=0 THEN GO TO 6.28
 8.51 IF CHOICE(I)=5 THEN SET SS(2,26)=1
 8.52 IF CHOICE(I)=4 THEN SET SS(2,9)=1
 8.53 IF CHOICE(I)=6 THEN SET SS(2,15)=1
 8.60 GO TO 6.07

8.75 IF CHOICE(I)=8 THEN SET CHOICE(I)=2 ELSE GO TO 8.77
 8.76 GO TO 11.0
 8.77 IF CHOICE(I)=4 THEN SET SS(2,21)=1
 8.78 IF CHOICE(I)=4 THEN SET SS(2,18)=1
 8.79 IF CHOICE(I) LE 4 THEN GO TO 10.51
 8.80 IF CHOICE(I)=11 THEN SET SS(2,18)=1
 8.82 IF CHOICE(I) LE 11 THEN SET SS(2,10)=1 ELSE GO TO 8.84
 8.83 GO TO 8.90
 8.84 IF CHOICE(I)=13 THEN SET SS(2,30)=1
 8.85 IF CHOICE(I) LE 14 THEN SET SS(2,20)=1
 8.86 IF CHOICE(I)=14 THEN SET SS(2,31)=1
 8.87 IF CHOICE(I)=15 THEN SET SS(2,2)=1
 8.88 IF CHOICE(I) LE 14 THEN SET SS(2,28)=1
 8.90 IF CHOICE(I)=9 THEN SET SS(2,28)=1
 8.92 IF CHOICE(I)=11 THEN SET SS(2,28)=1
 8.95 GO TO 10.51
 9.00 IF CHOICE(I)=8 THEN SET CHOICE(I)=2 ELSE GO TO 9.02
 9.01 GO TO 11.0
 9.02 IF CHOICE(I)=4 THEN SET SS(2,21)=1
 9.03 IF CHOICE(I)=4 THEN SET SS(2,30)=1
 9.04 IF CHOICE(I) LE 4 THEN GO TO 10.51
 9.05 IF CHOICE(I)=10 THEN SET SS(2,28)=1
 9.06 IF CHOICE(I) LE 10 THEN SET SS(2,10)=1 ELSE GO TO 9.10
 9.07 GO TO 9.18
 9.10 IF CHOICE(I) LE 13 THEN SET SS(2,18)=1
 9.11 IF CHOICE(I) LE 12 THEN SET SS(2,28)=1
 9.12 IF CHOICE(I)=12 THEN SET SS(2,10)=1
 9.13 IF CHOICE(I)=13 THEN SET SS(2,10)=1
 9.14 IF CHOICE(I)=14 THEN SET SS(2,20)=1
 9.15 IF CHOICE(I)=15 THEN SET SS(2,2)=1
 9.16 IF CH2=13 THEN SET CH2=12
 9.18 IF CHOICE(I) =5 THEN SET SS(2,28)=1
 9.19 IF CHOICE(I)=7 THEN SET SS(2,28)=1
 9.20 IF CHOICE(I)=14 THEN SET SS(2,28)=1
 9.21 IF CH1=9 THEN SET CH1=6
 9.22 IF CH2=9 THEN SET CH2=6
 9.23 IF CH1=13 THEN SET CH1=12
 9.24 GO TO 10.51
 9.25 IF CHOICE(I)=4 THEN SET SS(2,21)=1
 9.28 IF CHOICE(I) LE 4 THEN GO TO 10.51
 9.30 IF CHOICE(I) GE 9 THEN GO TO 9.33
 9.31 SET SS(2,10)=1
 9.32 SET SS(2,27)=1
 9.33 IF CHOICE(I)=9 THEN SET SS(2,18)=1
 9.34 IF CHOICE(I)=9 THEN SET SS(2,17)=1
 9.35 IF CHOICE(I)=10 THEN SET SS(2,10)=1
 9.36 IF CHOICE(I)=11 THEN SET SS(2,20)=1
 9.37 IF CHOICE(I)=12 THEN SET SS(2,20)=1
 9.38 IF CHOICE(I)=12 THEN SET SS(2,27)=1
 9.39 IF CHOICE(I)=13 THEN SET SS(2,30)=1
 9.40 IF CHOICE(I)=13 THEN SET SS(2,21)=1
 9.41 IF CHOICE(I)=14 THEN SET SS(2,10)=1
 9.42 IF CHOICE(I)=14 THEN SET SS(2,21)=1
 9.43 IF CHOICE(I)=15 THEN SET SS(2,21)=1

9.44 GO TO 10.51
 9.50 IF CHOICE(I)=6 THEN SET SS(2,20)=1
 9.51 IF CHOICE(I)=4 THEN SET SS(2,10)=1
 9.52 IF CHOICE(I)=7 THEN SET SS(2,21)=1
 9.53 IF CHOICE(I)=7 THEN SET SS(2,30)=1
 9.54 IF CHOICE(I)=5 THEN SET SS(2,10)=1
 9.55 IF CHOICE(I)=5 THEN SET SS(2,29)=1
 9.60 IF CHOICE(I) LE 7 THEN GO TO 10.51
 9.61 IF CHOICE(I) LE 12 THEN SET SS(2,10)=1
 9.62 IF CHOICE(I) LE 14 THEN SET SS(2,29)=1
 9.63 IF CHOICE(I)=13 THEN SET SS(2,20)=1
 9.64 IF CHOICE(I)=14 THEN SET SS(2,10)=1
 9.65 IF CHOICE(I)=15 THEN SET SS(2,2)=1
 9.66 IF CHOICE(I)=11 THEN SET SS(2,18)=1
 9.67 IF CH1 GE 13 THEN SET CH1 = 12
 9.68 IF CH2 GE 13 THEN SET CH2=12
 9.69 GO TO 10.51
 9.75 IF CHOICE(I)=4 THEN SET SS(2,21)=1
 9.76 IF CHOICE(I)=5 THEN SET SS(2,21)=1
 9.77 IF CHOICE(I)=5 THEN SET SS(2,30)=1
 9.78 IF CHOICE(I)=6 THEN SET SS(2,31)=1
 9.79 IF CHOICE(I) LE 2 THEN SET SS(2,11)=1
 9.80 IF CHOICE(I)=4 THEN SET SS(2,12)=1
 9.81 IF CHOICE(I)=6 THEN SET SS(2,12)=1
 9.83 IF CHOICE(I) LE 6 THEN GO TO 10.51
 9.85 IF CHOICE(I)=11 THEN SET SS(2,11)=1
 9.86 IF CHOICE(I) LE 13 THEN SET SS(2,20)=1
 9.87 IF CHOICE(I)=10 THEN SET SS(2,18)=1
 9.89 IF CHOICE(I) LE 8 THEN SET SS(2,30)=1 ELSE GO TO 9.91
 9.90 GO TO 9.92
 9.91 IF CHOICE(I)=14 THEN SET SS(2,2)=1 ELSE SET SS(2,29)=1
 9.92 IF CH2=13 THEN SET CH2=12
 9.93 IF CH1=13 THEN SET CH1=12
 9.95 GO TO 10.51
 9.98 IF CHOICE(I)=1 THEN SET SS(2,9)=1
 10.00 TYPE"WHICH OF THE FOLLOWING BEST DESCRIBES THE COURSE(S)"
 10.01 TYPE"OF ACTION THAT YOU TOOK IN HANDLING THIS ITEM."
 10.12 IF NU=4 THEN TYPE"(TURN TO PAGE SIX)"
 10.13 IF NU=5 THEN TYPE"(TURN TO PAGE TWENTY)"
 10.14 IF NU=6 THEN TYPE"(TURN TO PAGE THIRTY-THREE)"
 10.15 IF NU=11 THEN TYPE"(TURN TO PAGE FORTY EIGHT)"
 10.07 IF NU=16 THEN TYPE"(TURN TO PAGE SIXTY ONE)"
 10.48 SET QT=0
 10.5 SET I=0
 10.51 SET I-I+1
 10.52 READ CHOICE(I)
 10.55 SET CH1=CHOICE(1)
 10.56 SET CH2=CHOICE(2)
 10.57 IF QT=1 THEN GO TO 14.10
 10.98 IF CHOICE(I)=0 THEN GO TO 11.80
 11.00 IF CHOICE(I) LE 3 THEN SET SS(2,18)=1
 11.01 IF CHOICE(I)=1 THEN SET SS(2,20)=1
 11.02 IF CHOICE(I)=2 THEN SET SS(2,30)=1

11.03 IF CHOICE(I)=3 THEN SET SS(2,21)=1
 11.04 IF CHOICE(I)=3 THEN SET SS(2,17)=1
 11.10 IF NU=4 THEN GO TO 8.75
 11.11 IF NU=5 THEN GO TO 9.0
 11.12 IF NU=6 THEN GO TO 9.25
 11.13 IF NU=11 THEN GO TO 9.50
 11.14 IF NU=16 THEN GO TO 9.75
 11.80 SET SS(2,3)=I=1
 12.0 IF CH1=1
 12.01 IF CH1=2 THEN SET SS(2,24)=1
 12.02 IF CH1=3 THEN SET SS(2,24)=1
 12.03 IF CH1 LE 3 THEN GO TO 12.28
 12.10 TYPE"APPROX. HOW MANY DAYS BEFORE ALL OF THESE ACTIVITIES"
 12.11 TYPE"ARE CARRIED OUT."
 12.2 READ DAYS
 12.21 IF DAYS LE 2 THEN SET SS(2,22)=1
 12.22 IF DAYS GE 14 THEN SET SS(2,24)=1 ELSE GO TO 12.25
 12.23 GO TO 12.28
 12.25 IF DAYS GT 2 THEN SET SS(2,23)=1
 12.28 IF NU=6 THEN GO TO 15.12
 12.29 IF NU=16 THEN GO TO 15.12
 12.32 IF CH1 GT 12 THEN GO TO 20.0
 12.40 IF CH1 LE 3 THEN GO TO 15.10
 13.0 IF NU=4 THEN SET L=7
 13.01 IF NU=5 THEN SET L=21
 13.02 IF NU=6 THEN SET L=34
 13.03 IF NU=11 THEN SET L=49
 13.04 IF NU=16 THEN SET L=62
 13.50 SET LL=4
 13.51 IF NU=5 THEN SET LL=3
 13.60 IF CH1 LE LL THEN TYPE"TURN PAGE",L,"FOR THE"ELSE SET L=L+1
 13.65 IF CH1 LE LL THEN GO TO 13.90
 13.66 SET LL=LL+1
 13.67 IF NU=16 THEN SET LL=LL+3
 13.70 GO TO 13.60
 13.9 TYPE"APPROPRIATE FEEDBACK ITEM FOR YOUR RESPONSE."
 13.94 TYPE""
 13.95 TYPE"AFTER READING THE FEEDBACK ITEM FOLLOW THE"
 13.96 TYPE"DIRECTIONS AT THE BOTTOM OF THE PAGE."
 13.97 TYPE""
 14.0 TYPE"POSSIBLE COURSE(S) OF ACTION TO THE FEEDBACK ITEM."
 14.03 SET QT=1
 14.05 GO TO 10.5
 14.30 IF CHOICE(I)=2 THEN GO TO 14.80
 14.31 IF CHOICE(I)=3 THEN GO TO 14.81
 14.32 IF CHOICE(I)=4 THEN GO TO 14.80
 14.33 IF CHOICE(I)=6 THEN SET SS(2,30)=1
 14.34 IF CHOICE(I)=7 THEN SET SS(2,31)=1
 14.35 IF CHOICE(I)=8 THEN SET SS(2,31)=1
 14.36 IF CHOICE(I)=10 THEN GO TO 14.81
 14.38 GO TO 10.51
 14.40 IF CHOICE(I)=2 THEN GO TO 14.81
 14.41 IF CHOICE(I)=4 THEN SET SS(2,31)=1
 14.42 IF CHOICE(I)=5 THEN SET SS(2,11)=1

```

14.43 IF CHOICE(I)=7 THEN GO TO 14.80
14.44 IF CHOICE(I)=8 THEN GO TO 14.80
14.45 IF CHOICE(I)=9 THEN GO TO 14.81
14.46 GO TO 10.51
14.50 IF CHOICE(I)=3 THEN SET SS(2,31)=1
14.51 IF CHOICE(I)=4 THEN GO TO 14.81
14.52 IF CHOICE(I)=5 THEN SET SS(2,11)=1
14.53 IF CHOICE(I)=6 THEN SET SS(2,11)=1
14.54 IF CHOICE(I)=7 THEN SET SS(2,31)=1
14.55 IF CHOICE(I)=8 THEN GO TO 14.81
14.58 GO TO 10.51
14.60 IF CHOICE(I) LE 2 THEN SET SS(2,30)=1
14.61 IF CHOICE(I)=3 THEN GO TO 14.80
14.62 IF CHOICE(I)=4 THEN SET SS(2,31)=1
14.63 IF CHOICE(I)=5 THEN SET SS(2,11)=1
14.64 IF CHOICE(I)=6 THEN SET SS(2,11)=1
14.65 IF CHOICE(I)=7 THEN SET SS(2,31)=1
14.66 IF CHOICE(I)=8 THEN SET SS(2,30)=1
14.68 GO TO 10.51
15.10 IF CH2 LE 3 THEN GO TO 13.0 ELSE GO TO 15.11
15.11 IF CH2 GT 12 THEN GO TO 20.0 ELSE SET CH1=CH2
15.12 IF CH2 LE 3 THEN GO TO 13.0 ELSE SET CH1=CH2
15.15 GO TO 13.0
20.00 TYPE"THE ANALYSIS OF ITEM",NU,"IS COMPLETED."
20.02 P=2
20.05 TYPE""
20.06 DO PART 21.0 FOR I=1,6
20.08 DO PART 22.0 FOR K=1,36
20.09 TYPE""
20.10 TYPE"NEXT ITEM PLEASE."
20.15 GO TO 1.42
20.20 TYPE""
20.21 TYPE"SUMMARY RESULTS COMPLETED"
20.22 TYPE""
20.23 P=1
20.25 DO PART 21.0 FOR I=1,6
20.95 TYPE""
20.98 STOP
21.0 SET K=(I-1)*6+1
21.1 SET S=SS(P,K)
21.2 PRINT S,SS(P,K+1),SS(P,K+2),SS(P,K+3),SS(P,K+4),SS(P,K+5)
22.0 SET SS(1,K)=SS(2,K)+SS(1,K)

```

PROGRAM PROFILE

```

1.10  DIMENSION CHOICE(7),SS(2,37)
1.12  READ DEC
1.13  IF DEC=1 THEN DO PART 5.0 FOR I=1,37
1.15  SS(1,37)=SS(1,27)+SS(1,28)+SS(1,29)
1.24  SS(1,1)=(SS(1,1)-17.86)/2.14
1.25  SS(1,2)=(SS(1,2)-.14)/.36
1.26  SS(1,3)=(SS(1,3)-9.11)/1.99
1.27  SS(1,4)=(SS(1,4)-2.47)/1.38
1.28  SS(1,5)=(SS(1,5)-1.33)/1.22
1.29  SS(1,6)=(SS(1,6)-1.16)/.77
1.30  SS(1,7)=(SS(1,7)-2.12)/.78
1.31  SS(1,8)=(SS(1,8)-.92)/1.02
1.32  SS(1,9)=(SS(1,9)-.73)/.72
1.33  SS(1,10)=(SS(1,10)-2.89)/.89
1.34  SS(1,11)=(SS(1,11)-.97)/.90
1.35  SS(1,12)=(SS(1,12)-2.24)/1.0
1.36  SS(1,13)=(SS(1,13)-1.18)/.86
1.37  SS(1,14)=(SS(1,14)-1.00)/.89
1.38  SS(1,15)=(SS(1,15)-.57)/.67
1.39  SS(1,16)=(SS(1,16)-.90)/.94
1.40  SS(1,17)=(SS(1,17)-1.70)/1.22
1.41  SS(1,18)=(SS(1,18)-2.51)/1.16
1.42  SS(1,19)=(SS(1,19)-2.71)/1.18
1.43  SS(1,20)=(SS(1,20)-1.55)/.81
1.44  SS(1,21)=(SS(1,21)-2.87)/1.47
1.45  SS(1,22)=(SS(1,22)-.94)/1.01
1.46  SS(1,23)=(SS(1,23)-1.61)/1.05
1.47  SS(1,24)=(SS(1,24)-2.44)/1.24
1.48  SS(1,25)=(SS(1,25)-.95)/.80
1.49  SS(1,26)=(SS(1,26)-1.34)/.73
1.50  SS(1,27)=(SS(1,27)-.77)/.42
1.51  SS(1,28)=(SS(1,28)-.83)/.70
1.52  SS(1,29)=(SS(1,29)-1.62)/.56
1.53  SS(1,30)=(SS(1,30)-1.97)/1.07
1.54  SS(1,31)=(SS(1,31)-.99)/.86
1.55  SS(1,32)=(SS(1,32)-1.75)/1.29
1.56  SS(1,33)=(SS(1,33)-2.41)/1.14
1.57  SS(1,34)=(SS(1,34)-.94)/1.01
1.58  SS(1,35)=(SS(1,35)-2.88)/1.44
1.59  SS(1,36)=(SS(1,36)-.47)/.89
1.60  SS(1,37)=(SS(1,37)-3.22)/1.08
1.70  SS(2,1)=6.*(SS(1,24)+SS(1,17)-SS(1,25))+3.*(SS(1,10))
1.71  SS(2,1)=SS(2,1)+3.*(-SS(1,20)-SS(1,24))+2.*SS(1,18)
1.72  SS(2,1)=SS(2,1)+2.*(SS(1,19)+SS(1,3))
1.73  SS(2,1)=SS(2,1)/33.0
1.75  SS(2,2)=6.*(SS(1,30)+SS(1,21)-SS(1,22)+SS(1,23))
1.76  SS(2,2)=SS(2,2)+3.*(SS(1,5)+SS(1,34))+2.*(SS(1,18)+SS(1,3))
1.77  SS(2,2)=SS(2,2)/31.0

```

```

1.80 SS(2,3)=6.*(SS(1,8)+SS(1,35)+SS(1,36)+SS(1,32))
1.81 SS(2,3)=3S(2,3)+3.*(SS(1,4)+SS(1,1)+SS(1,16))
1.82 SS(2,3)=SS(2,3)/33.0
1.85 SS(2,4)=6.*(SS(1,28)+SS(1,61)+3.*(SS(1,37)+SS(1,20)+SS(1,15))
1.86 SS(2,4)=SS(2,4)/21.0
1.90 SS(2,5)=6.*(SS(1,26)+SS(1,7)+SS(1,9))+3.*(SS(1,29)+SS(1,1))
1.91 SS(2,5)=SS(2,5)-3.*SS(1,16)
1.92 SS(2,5)=SS(2,5)/27.0
1.95 SS(2,6)=6.*(SS(1,13)+SS(1,12))-3.*SS(1,11)
1.96 SS(2,6)=SS(2,6)/15.0
2.00 SS(2,7)=6.*(SS(1,27)-SS(1,31)-SS(1,2))+3.*(SS(1,29)+SS(1,10))
2.01 SS(2,7)=SS(2,7)+3.*(SS(1,34)+SS(1,37)+SS(1,4)-SS(1,5))
2.02 SS(2,7)=SS(2,7)+2.*(SS(1,18)+SS(1,3)+SS(1,19))
2.03 SS(2,7)=SS(2,7)/42.0
2.05 SS(2,8)=6.*(SS(1,33)+SS(1,14)+3.*(SS(1,15)+SS(1,5))
2.06 SS(2,8)=SS(2,8)+2.*SS(1,19)
2.07 SS(2,8)=(2,8)/20.0
2.08 SS(2,9)=SS(1,1)+SS(1,2)+SS(1,8))/3.0
2.09 SS(2,10)=(SS(1,3)+SS(1,4)+SS(1,5)+SS(1,7))/4.0

3.12 I=1
3.13 STP=.01
3.2 GO TO 6.0
3.21 AREA=AREA*100.0
3.26 SET SS(2,1)=AREA
3.27 IF I=10 THEN GO TO 6.8 ELSE SET I=I+1
3.31 GO TO 6.0

5.0 READ SS(I,I)

6.0 XFNL=ABS(SS(2,I))
6.01 X=0.
6.02 AREA=0.
6.03 XSFNL=X+STP
6.04 IF (XSFNL-SFNL) 6.05, 6.15, 6.15
6.05 XF=(XSFNL+S)/2.0
6.07 YORD=.3989422*EXP(-XF**2*.5)
6.08 AREA=AREA+YORD*STP
6.09 X=XSFNL
6.10 GO TO 6.03
6.15 XF=(XFNL+X)/2.0
6.16 YORD=.3989422*EXP(-XF**2*.5)
6.19 AREA=AREA+YORD*(XFNL-X)
6.20 IF (SS(2,I)) 6.21, 6.24, 6.24
6.21 AREA=.5-AREA
6.22 GO TO 3.21
6.24 AREA=AREA+.5
6.26 GO TO 3.21
6.8 TYPE""
7.0 TYPE"RESULTS OF THE ANALYSIS."
7.01 TYPE""
7.02 TYPE"PREPARATION FOR DECISION",SS(2,1)
7.50 TYPE"ORGANIZES WORK",SS(2,2)
7.51 TYPE"EXCHANGING INFORMATION AND"

```

7.52	TYPE"DIRECTING	" ,SS (2,3)
7.56	TYPE"MAINTAINING RELATIONSHIPS	" ,SS (2,4)
7.60	TYPE"RESPONDING TO OUTSIDERS	" ,SS (2,5)
7.70	TYPE"ANALYZING THE SITUATION	" ,SS (2,6)
7.80	TYPE"COMPLYING WITH SUGGESTIONS	" ,SS (2,7)
7.90	TYPE"DISCUSSING BEFORE ACTING	" ,SS (2,8)
7.95	TYPE""	
7.96	TYPE""	
8.00	TYPE"PREPARATION	" ,SS (2,9)
8.10	TYPE"RESPONSIVENESS AND"	
8.12	TYPE" COMPLIANCE	" ,SS (2,10)
8.50	TYPE""	
8.54	TYPE"ANALYSIS COMPLETED."	
8.55	TYPE""	
8.56	TYPE"THANK YOU FOR YOUR PARTICIPATION"	
8.60	STOP	

7.52	TYPE"DIRECTING	" ,SS (2,3)
7.56	TYPE"MAINTAINING RELATIONSHIPS	" ,SS (2,4)
7.60	TYPE"RESPONDING TO OUTSIDERS	" ,SS (2,5)
7.70	TYPE"ANALYZING THE SITUATION	" ,SS (2,6)
7.80	TYPE"COMPLYING WITH SUGGESTIONS	" ,SS (2,7)
7.90	TYPE"DISCUSSING BEFORE ACTING	" ,SS (2,8)
7.95	TYPE""	
7.96	TYPE""	
8.00	TYPE"PREPARATION	" ,SS (2,9)
8.10	TYPE"RESPONSIVENESS AND"	
8.12	TYPE" COMPLIANCE	" ,SS (2,10)
8.50	TYPE""	
8.54	TYPE"ANALYSIS COMPLETED."	
8.55	TYPE""	
8.56	TYPE"THANK YOU FOR YOUR PARTICIPATION"	
8.60	STOP	

APPENDIX F
"MADISON" IN-BASKET EVALUATION SHEET
and
CORRESPONDING COMPUTER PROGRAM

EVALUATION SHEET FOR MADISON IN-BASKET ITEMS

CODE NO. _____
 WORDS _____

DIRECTIONS:

In the boxes below each of the items being analyzed, please mark the number of the scoring categories that most apply.

SCORING CATEGORIES	ITEM NUMBER				
	4	5	6	11	16
Type of Communication 1. Letter 2. Memo (include any memos or notes to secretary) 3. Telephone Call 4. Face to Face (include any conference or meeting or the intention of such) 5. Note or Memo to self					
Communication Groups Involved (Also include any individuals that you explicitly indicated in your response that you plan or intend to communicate with) 1. Subordinate(s) 2. Superior(s) 3. Outsider(s) 4. Peer(s) 5. None of the above					
Subordinate(s) Involved Individually 1. None 2. Adams, Eugene 3. Barnes, Jane (Mrs.) 4. Cox, Rosie (Mrs.) 5. Martin, Judith (Mrs.) 6. Shepherd, Linda (Mrs.) 7. Strawn, Linda 8. Timberlake, Phyllis (Mrs.) 9. Other					

SCORING CATEGORIES ITEM NUMBER

	4	5	6	11	16
Subordinate Group(s) Involved as a Whole 1. None 2. Cafeteria Personnel 3. Clerical Staff 4. Grade Chairman 5. Janitors 6. Para-Professional 7. Professional Staff 8. Students 9. Other					
Purpose of the Communication with Subordinates 1. To delegate or transfer the entire problem. 2. To give directions or suggestions (does not include telling sec. to type or mail something). 3. To set up some plans. 4. To make an acknowledgement. 5. To inform or give information (includes giving reminders). 6. To discuss. 7. To ask for advice, suggestions, or an opinion. 8. To ask for or indicate a need for additional information. 9. To arrange a conference or meeting or to set up a committee.					
Subordinate Informality (Use of any slang, colloquial language or first names) 1. Yes 2. No					
Subordinate Courtesy (Use of any expression or act of courtesy such as please, thank you, sorry, appreciate, etc.) 1. Yes 2. No					
Superior(s) Involved 1. Dr. James Brewer 2. Dr. Carl King 3. Mr. Walter Houser 4. Board of Education 5. Superintendent's Office or Sec. 6. Other					



SCORING CATEGORIES

ITEM NUMBER

	4	5	6	11	16
<p>Purpose(s) of Communication with Superiors</p> <ol style="list-style-type: none"> 1. To delegate or transfer the entire problem. 2. To give directions or suggestions (does not include telling sec. to type or mail something). 3. To set up some plans. 4. To make an acknowledgement. 5. To inform or give information (includes giving reminders). 6. To discuss. 7. To ask for advice, suggestions, or an opinion. 8. To ask for or indicate a need for additional information. 9. To arrange a conference or meeting or to set up a committee. 					
<p>Outsider(s) Involved</p> <ol style="list-style-type: none"> 1. Parent(s) 2. City Official(s) 3. Lafayette University Personnel 4. PTA Officer(s) - Mrs. Lodge, Mr. Fuller and/or Mrs. Johnson 5. Mr. Parker (Former Principal) 6. Edicson School Board Advisory Comm. 7. Marion Smith 8. Mrs. Cahn 9. Mrs. Elmer Keller 10. Mrs. Andrews 11. Other 					
<p>Purpose(s) of Communication with Outsiders</p> <ol style="list-style-type: none"> 1. To delegate or transfer the entire problem. 2. To give directions or suggestions (does not include telling sec. to type or mail something). 3. To set up some plans. 4. To make an acknowledgement. 5. To inform or give information (includes giving reminders). 6. To discuss. 7. To ask for advice, suggestions, or an opinion. 8. To ask for or indicate a need for additional information. 9. To arrange a conference or meeting or to set up a committee. 					

SCORING CATEGORIES

	4	5	6	11	16
Outsider Courtesy (Use of any expression or act of courtesy such as please, thank you, sorry, appreciate, etc.) 1. Yes 2. No					
Courses of Action (Which of the following best describes the course(s) of action that were taken in handling this item). See Packet A					
Number of Days (Approx. how many days before all of the activities are carried out). 1. 1-2 days (immediate work schedule) 2. 3-13 days (intermediate work schedule) 3. 14 or more days (indefinite work schedule) 4. No indication given.					

POSSIBLE COURSE(S) OF ACTION FOR ITEM 4

(Remember--select only the action(s) which you actually took in handling this item.)

1. No action--feel that you are not in a position to make any recommendations.
2. File for later referral.
3. Secure additional information in regard to possible nominations.
4. Plan to survey the reports of the previous committee.
5. Communicate with either the PTA president, the three PTA officers, or the five members of the existing committee in regard to PTA affairs in general and/or potential candidates.
6. Communicate with Mrs. Cahn and/or Mrs. Keller in regard to potential candidates.
7. Elicit from the staff and/or Mrs. Barnes and Mrs. Timberlake (grade chairmen) the names of parents who might be good candidates.
8. Communicate with Linda (school secretary) requesting information about the PTA committee and/or the advisory committee.
9. Communicate with Mr. Brewer requesting more background information and/or possible suggestions.
10. Check with Mr. Parker (former principal).
11. Communicate with Mr. Brewer (superintendent) to request an extension of the deadline in order to better assess qualifications of potential members.
12. Communicate with Mr. Brewer indicating that you do not feel that you are in a position to make a decision in regard to the nominations.
13. Communicate with Mr. Brewer recommending that the members of last year's advisory committee be reappointed.
14. Communicate with Mr. Brewer recommending that a new committee be appointed. Make several suggestions as to possible nominations.
15. Other.

POSSIBLE COURSE(S) OF ACTION FOR ITEM 5

(Remember--select only those actions which you actually took in handling this item.)

1. No action--feel situation is closed and time is past for suggestions.
2. File for later referral.
3. Secure additional information about the budget matters and procedures.
4. Place on faculty meeting agenda.
5. Communicate with Mr. Houser (Assistant Superintendent for Business) to make an appointment to meet in regard to the budget matters.
6. Inform the staff to start thinking about suggestions and recommendations in regard to budget needs in their area.
7. Communicate with Mr. Houser requesting revisions on policy changes which may have taken place during the summer.
8. Request secretary to locate any reports in regard to the budget that are available.
9. Communicate with grade chairmen requesting them to submit new facility and equipment needs to office immediately.
10. Communicate with Mr. Houser requesting information on present budgeting procedures and policies.
11. Communicate with Mr. Houser informing him that your budget recommendations will be forthcoming.
12. Communicate with Mr. Houser to ask if the memorandum still requires a response since the consultations have already been held.
13. Communicate with Mr. Houser stating that no recommendations are possible until you gain more knowledge of procedures.
14. Communicate with Mr. Houser outlining one or more recommendations for changes in either policies, new programs, or budget procedures.
15. Other.

POSSIBLE COURSE(S) OF ACTION FOR ITEM 6

(Remember--select only the action(s) which you actually took in handling this item.)

1. No action--feel situation is insignificant.
2. File for later referral.
3. Secure additional information about the cafeteria procedures.
4. Plan to visit the cafeteria to check on the situation.
5. Communicate with Miss Strawn assuring her that you will look into the situation.
6. Communicate with Mrs. Martin requesting a conference.
7. Communicate with Miss Strawn requesting a conference.
8. Communicate with Miss Strawn to check into possible policy changes in the cafeteria.
9. Secure additional information regarding Miss Strawn and/or Mrs. Martin.
10. Communicate with Rosie Cox (cook-manager) in regard to the present Mrs. Martin-Miss Strawn conflict and/or in regard to conditions in the cafeteria in general.
11. Communicate with Miss Strawn essentially telling her to shape up and stating that two adult women ought to be able to cope with such financial matters.
12. Communicate with Miss Strawn informing her that Mrs. Martin will be notified of her complaint and thanking her for her concern.
13. Place on faculty meeting agenda.
14. Arrange a meeting with the cafeteria director and/or cafeteria personnel to review procedures.
15. Other.

POSSIBLE COURSE(S) OF ACTION FOR ITEM 11

(Remember--select only those action(s) which you actually took in handling this item.)

1. No action--feel that the questionnaire is inappropriate.
2. File for later referral.
3. Secure additional information in regard to the PTA and/or non-graded classes.
4. Determine the official view of non-graded classes by contacting either the Assistant Superintendent or peers.
5. Meet with Marion Smith and/or the PTA Program Committee to test the depth of their interest and/or to discuss plans.
6. Arrange for an outside speaker.
7. Place on the faculty meeting agenda.
8. Communicate with Marion Smith emphasizing the complexity of the problem and urging a go-slow approach.
9. Communicate with Marion Smith requesting better clarification on how they want you to participate.
10. Accept the invitation to speak at the PTA meeting.
11. Request postponement of the presentation to improve the "package."
12. Communicate with Marion Smith acknowledging receipt of the questionnaire and expressing interest.
13. Inform Marion Smith that you have answered the questions and a copy of the answers is forthcoming.
14. Communicate with Marion Smith and/or the PTA Committee in which you offer some suggestions for the presentation and/or offer your personal guidance in planning the study rather than having the PTA attempt a study without your help.
15. Other.

POSSIBLE COURSE(S) OF ACTION FOR ITEM 16

(Remember--select only the action(s) which you actually took in handling this item.)

1. No action--feel situation does not warrant it.
2. File for later referral.
3. Secure additional information in regard to this matter.
4. Communicate with Linda Shepherd (school secretary) in regard to past experiences with Mrs. Andrews.
5. Place on the faculty meeting agenda.
6. Set up a committee to study the problem of enforcement of student behavior to and from classes.
7. Personally inform the students on the need for respect for school and private property (for example, use public address announcement or all-school bulletin.)
8. Have the teachers inform the students of the need for respect for school and private property.
9. Communicate with Mrs. Andrews acknowledging receipt of the letter and thanking her for her concern.
10. Inform Mrs. Andrews that if the problem continues and/or if you can be of any further help in the future that you would appreciate her notifying you.
11. Inform Mrs. Andrews that the school is not an all-pervasive force which can control the performance of each pupil in and out of school.
12. Inform Mrs. Andrews that if the situation becomes intolerable to call the police or the pupil's parents (if names are available).
13. Visit Mrs. Andrews at her home and/or invite Mrs. Andrews to visit the school.
14. Other.

COMPUTER DATA CARD FORMAT

Described below is the computer data card format for a CDC 3600 analysis of data gathered by the "Madison" In-Basket Evaluation Sheet.

Col. 1-3 code number of participant
Col. 4 code number of scorer
Col. 5 item number (Code: 4=4, 5=5, 6=6, 11=2, and 16=3)
Col. 6-8 number of words (I3 format)
Col. 9-13 type of communication (I1 format)
Col. 14-18 communication groups involved (Code: 1=yes and 0=no)

col. 14 subordinates
col. 15 superiors
col. 16 outsiders
col. 17 peers
col. 18 none of these

Col. 19 number of subordinates involved individually
Col. 20 number of subordinate groups involved
Col. 21-28 purpose of communication with subordinates (I1 format)
Col. 29 subordinate informality (Code: 1=yes and 0=no)
Col. 30 subordinate courtesy (Code: 1=yes and 0=no)
Col. 31 number of superiors involved
Col. 32-40 purpose of communication with superiors (I1 format)
Col. 41 number of outsiders involved
Col. 42-50 purpose of communication with outsiders (I1 format)
Col. 51 outsider courtesy (Code: 1=yes and 0=no)
Col. 52-63 courses of action taken (I2 format)
Col. 64-65 number of days (I2 format)
Col. 66-77 feedback actions taken when available (I2 format)
Col. 80 feedback actions available (Code: 1=yes and 0=no)

PROGRAM CBMOD
DIMENSION M(2,37). N(80), F(10), A(37)

```
2 DO 3 I=1,37
3 M(1,I)=0
DO 4 I=1,5
DO 5 I=1,37
M(2,I)=0
5 CONTINUE
READ 8, (N(K),K=1,61)
8 FORMAT (I3,2I1, I3,43I1,6I2,1X,I1,6I2,2X,I1)
IF (N(1) .EQ. 999) GO TO 100
J1=0
L=0
IF (N(4) .GT. 0) M(2,1)=1
IF (N(4) .GT. 6) M(2,1)=M(2,1)+1
IF (N(4) .GT. 15) M(2,1)+M(2,1)+1
IF (N(4) .GT. 40) M(2,1)=M(2,1)+1
IF (N(4) .GT. 100) M(2,1)=M(2,1)+1
IF (N(4) .GT. 200) M(2,1)+M(2,1)+1
DO 9 J=5,9
IF (N(J) .EQ. 2) M(2,35)=1
IF (N(J) .EQ. 1) M(2,35)=1
IF (N(J) .EQ. 3) M(2,34)=1
IF (N(J) .EQ. 4) M(2,33)=1
IF (N(J) .EQ. 5) M(2,21)=1
9 CONTINUE
T=1
IF (N(10) .EQ. 1) GO TO 20
13 L=1
IF (N(11) .EQ. 1) GO TO 25
14 L=2
IF (N(12) .EQ. 1) GO TO 30
IF (N(13) .EQ. 1) M(2,2)=1
IF (N(13) .EQ. 0) M(2,2)=0
IF (N(13) .EQ. 1) GO TO 35
IF (N(14) .EQ. 1) GO TO 35
GO TO 35
25 J1=28
J2=33
M(2,6)=N(27)
GO TO 40
30 J1=38
J2=43
M(2,7)=N(37)
GO TO 40
20 J1=17
J2=22
M(2,4) N(15)
M(2,5)=N(16)
40 DO 21 J=J1,J2
IF (L .EQ. 1) GO TO 22
IF (L .EQ. 2) GO TO 23
```

```

IF (N(J) .EQ. 6) M(2,14)=1
IF (N(J) .EQ. 7) M(2,16)=1
IF (N(J) .EQ. 8) M(2,16)=1
IF (N(J) .EQ. 5) M(2,25)=1
IF (N(J) .EQ. 4) M(2,8)=1
26 IF (N(J) .EQ. 1) M(2,20)=1
IF (N(J) .EQ. 1) M(2,32)=1
IF (N(J) .EQ. 2) M(2,32)=1
IF (N(J) .EQ. 3) M(2,21)=1
IF (N(J) .EQ. 8) M(2,17)=1
IF (N(J) .EQ. 9) M(2,33)=1
IF (N(J) .GE. 6) M(2,19)=1
GO TO 21
22 IF (N(J) .EQ. 6) M(2,15)=1
GO TO 26
23 IF (N(J) .EQ. 4) M(2,9)=1
IF (N(J) .EQ. 5) M(2,26)=1
IF (N(J) .EQ. 6) M(2,15)=1
GO TO 26
21 CONTINUE
IF (J1 .EQ. 17) GO TO 13
IF (J1 .EQ. 28) GO TO 14
35 M(2,36)=N(25)
M(2,8)=N(26)
M(2,9)=N(47)
L=0
DO 200 I=48,53
IF (N(I) .EQ. 0) GO TO 200
6 IF (N(I) .LE. 3) M(2,18)=1
IF (N(I) .EQ. 1) M(2,20)=1
IF (N(I) .EQ. 2) M(2,30)=1
IF (N(I) .EQ. 3) M(2,21)=1
IF (N(I) .EQ. 4) GO TO 140
IF (N(3) .EQ. 5) GO TO 150
IF (N(3) .EQ. 6) GO TO 160
IF (N(3) .EQ. 2) GO TO 110
IF (N(3) .EQ. 3) GO TO 120
GO TO 98
140 IF (N(I) .NE. 8) GO TO 41
N(I)=2
GO TO 6
41 IF (N(I) .EQ. 4) M(2,21)=1
IF (N(I) .EQ. 4) M(2,18)=1
IF (N(I) .LE. 4) GO TO 98
IF (N(I) .EQ. 11) M(2,18)=1
IF (N(I) .GT. 11) GO TO 42
M(2,10)=1
GO TO 43
42 IF (N(I) .EQ. 13) M(2,30)=1
IF (N(I) .LE. 14) M(2,20)=1
IF (N(I) .EQ. 14) M(2,31)=1
IF (N(I) .EQ. 15) M(2,2)=1
IF (N(I) .LE. 14) M(2,28)=1

```

```

43  IF (N(I) .EQ. 9) M(2,28)=1
    IF (N(I) .EQ. 11) M(2,28)=1
    GO TO 98
150 IF (N(I) .NE. 8) GO TO 51
    N(I)=2
    GO TO 6
51  IF (N(I) .EQ. 4) M(2,21)=1
    IF (N(I) .EQ. 4) M(2,30)=1
    IF (N(I) .LE. 4) GO TO 98
    IF (N(I) .EQ. 10) M(2,28)=1
    IF (N(I) .GT. 10) GO TO 52
    M(2,10)=1
    GO TO 53
52  IF (N(I) .LE. 13) M(2,18)=1
    IF (N(I) .LE. 12) M(2,28)=1
    IF (N(I) .EQ. 12) M(2,10)=1
    IF (N(I) .EQ. 13) M(2,10)=1
    IF (N(I) .EQ. 14) M(2,20)=1
    IF (N(I) .EQ. 15) M(2,2)=1
53  IF (N(I) .EQ. 5) M(2,28)=1
    IF (N(I) .EQ. 7) M(2,28)=1
    IF (N(I) .EQ. 14) M(2,28)=1
    GO TO 98
160 IF (N(I) .EQ. 4) M(2,21)=1
    IF (N(I) .LE. 4) GO TO 98
    IF (N(I) .GE. 9) GO TO 61
    M(2,10)=1
    M(2,27)=1
61  IF (N(I) .EQ. 9) M(2,18)=1
    IF (N(I) .EQ. 9) M(2,17)=1
    IF (N(I) .EQ. 10) M(2,10)=1
    IF (N(I) .EQ. 11) M(2,20)=1
    IF (N(I) .EQ. 12) M(2,20)=1
    IF (N(I) .EQ. 12) M(2,27)=1
    IF (N(I) .EQ. 13) M(2,30)=1
    IF (N(I) .EQ. 13) M(2,21)=1
    IF (N(I) .EQ. 14) M(2,10)=1
    IF (N(I) .EQ. 14) M(2,10)=1
    IF (N(I) .EQ. 14) M(2,21)=1
    IF (N(I) .EQ. 15) M(2,2)=1
    GO TO 98
110 IF (N(I) .EQ. 6) M(2,20)=1
    IF (N(I) .EQ. 4) M(2,10)=1
    IF (N(I) .EQ. 7) M(2,21)=1
    IF (N(I) .EQ. 7) M(2,30)=1
    IF (N(I) .EQ. 5) M(2,10)=1
    IF (N(I) .EQ. 5) M(2,29)=1
    IF (N(I) .LE. 7) GO TO 98
    IF (N(I) .LE. 12) M(2,10)=1
    IF (N(I) .LE. 14) M(2,29)=1
    IF (N(I) .EQ. 13) M(2,20)=1
    IF (N(I) .EQ. 14) M(2,10)=1
    IF (N(I) .EQ. 15) M(2,2)=1
    IF (N(I) .EQ. 11) M(2,18)=1
    GO TO 98

```

```

120  IF (N(I) .EQ. 4) M(2,21)=1
      IF (N(I) .EQ. 5) M(2,21)=1
      IF (N(I) .EQ. 5) M(2,30)=1
      IF (N(I) .EQ. 6) M(2,31)=1
      IF (N(I) .LE. 2) M(2,11)=1
      IF (N(I) .EQ. 4) M(2,12)=1
      IF (N(I) .EQ. 6) M(2,12)=1
      IF (N(I) .LE. 6) GO TO 98
      IF (N(I) .EQ. 11) M(2,11)=1
      IF (N(I) .LE. 13) M(2,20)=1
      IF (N(I) .EQ. 10) M(2,18)=1
      IF (N(I) .GT. 8) GO TO 121
      M(2,30)=1
      GO TO 98
121  IF (N(I) .NE. 14) M(2,29)=1
      IF (N(I) .EQ. 14) M(2,2)=1
98   L=L+1
200  CONTINUE
      M(2,3)=L
      IF (N(54) .EQ. 1) M(2,22)=1
      IF (N(54) .EQ. 2) M(2,23)=1
      IF (N(54) .EQ. 3) M(2,24)=1
      DO 300 J=55,60
      IF (N(J) .EQ. 0) GO TO 300
      IF (N(3) .EQ. 4) GO TO 240
      IF (N(3) .EQ. 5) GO TO 250
      IF (N(3) .EQ. 6) GO TO 260
      IF (N(3) .EQ. 2) GO TO 220
      GO TO 300
240  IF (N(J) .EQ. 2) GO TO 10
      IF (N(J) .EQ. 3) GO TO 11
      IF (N(J) .EQ. 4) GO TO 10
      IF (N(J) .EQ. 6) M(2,30)=1
      IF (N(J) .EQ. 7) M(2,31)=1
      IF (N(J) .EQ. 8) M(2,31)=1
      IF (N(J) .EQ. 10) GO TO 11
      GO TO 300
250  IF (N(J) .EQ. 2) GO TO 11
      IF (N(J) .EQ. 4) M(2,31)=1
      IF (N(J) .EQ. 5) M(2,11)=1
      IF (N(J) .EQ. 7) GO TO 10
      IF (N(J) .EQ. 8) GO TO 10
      IF (N(J) .EQ. 9) GO TO 11
      GO TO 300
260  IF (N(J) .EQ. 3) M(2,31)=1
      IF (N(J) .EQ. 4) GO TO 11
      IF (N(J) .EQ. 5) M(2,11)=1
      IF (N(J) .EQ. 6) M(2,11)=1
      IF (N(J) .EQ. 7) M(2,31)=1
      IF (N(J) .EQ. 8) GO TO 11
      GO TO 300
220  IF (N(J) .LE. 2) M(2,30)=1
      IF (N(J) .EQ. 3) GO TO 10

```

```

IF (N(J) .EQ. 4) M(2,31)=1
IF (N(J) .EQ. 5) M(2,11)=1
IF (N(J) .EQ. 6) M(2,11)=1
IF (N(J) .EQ. 7) M(2,31)=1
IF (N(J) .EQ. 8) M(2,30)=1
GO TO 300
10 M(2,13)=1
11 M(2,12)=1
300 CONTINUE
DO 4 I=1,37
M(1,I)=M(1,I)+M(2,I)
2 CONTINUE
M(1,37)=M(2,27)+M(2,28)+M(2,29)
DO 500 J=1,37
A(J)=M(1,J)
500 CONTINUE
A(1)=(A(1)-17.86)/2.14
A(2)=(A(2)-.13)/.36
A(3)=(A(3)-9.11)/1.99
A(4)=(A(4)-2.47)/1.38
A(5)=(A(5)-1.33)/1.22
A(6)=(A(6)-1.16)/.77
A(7)=(A(7)-2.12)/.78
A(8)=(A(8)-.92)/1.02
A(9)=(A(9)-.73)/.72
A(10)=(A(10)-2.89)/.89
A(14)=(A(14)-1.00)/.89
A(15)=(A(15)-.57)/.67
A(16)=(A(16)-.90)/.94
A(17)=(A(17)-1.70)/1.22
A(18)=(A(18)-2.51)/1.16
A(19)=(A(19)-2.71)/1.18
A(20)=(A(20)-1.55)/.81
A(21)=(A(21)-2.87)/1.47
A(22)=(A(22)-.94)/1.01
A(23)=(A(23)-1.61)/1.05
A(24)=(A(24)-2.44)/1.24
A(25)=(A(25)-.95)/.80
A(26)=(A(26)-1.34)/.73
A(27)=(A(27)-.77)/.42
A(28)=(A(28)-.83)/.70
A(29)=(A(29)-1.62)/.56
A(32)=(A(32)-1.75)/1.29
A(33)=(A(33)-2.41)/1.14
A(34)=(A(34)-.94)/1.01
A(35)=(A(35)-2.88)/1.44
A(36)=(A(36)-.47)/.89
A(37)=(A(37)-3.22)/1.08
IF (N(61) .EQ. 0) GO TO 510
A(11)=(A(11)-.97)/.90
A(12)=(A(12)-2.24)/1.00
A(13)=(A(13)-1.18)/.86
A(30)=(A(30)-1.97)/1.07
A(31)=(A(31)-.99)/.86
GO TO 520

```

```

510  A(11)=(A(11)-.12)/.26
      A(12)=(A(12)-.10)/.19
      A(13)=(A(13)-.06)/.13
      A(30)=(A(30)-1.25)/.99
      A(31)=(A(31)-.31)/.71
520  F(1)=(6.*(A(24)+A(17)-A(25))+3.*(A(10)-A(20)-A(23))+2.*(A(18)
      +A(19)+A(3)))/33.0
      F(2)=(6.*(A(30)+A(21)-A(22))+3.*(A(23)+A(5)+A(34))+2.*(A(18)
      +A(3)))/31.0
      F(3)=(6.*(A(8)+A(35)+A(36)+A(32))+3.*(A(4)+A(1)+A(16)))/33.0
      F(4)=(6.*(A(28)+A(6))+3.*(A(37)+A(20)+A(15)))/21.0
      F(5)=(6.*(A(26)+A(7)+A(9))+3.*(A(29)+A(1)-A(16)))/27.0
      F(6)=(6.*(A(13)+A(12)-3.*A(11)))/15.0
      F(7)=(6.*(A(27)-A(31)-A(2))+3.*A(29)+A(10)+A(34)+A(37)+A(4)-A(5))
      +2.*(A(18)+A(3)+A(19)))/42.0
      F(8)=(6.*(A(33)+A(14))+3.*(A(15)+A(5))+2.*A(19)).20.0
      F(9)=(F(1)+F(2)+F(8))/3.0
      F(10)=(F(3)+F(4)+F(5)+F(7))/4.0
      I=1
      STP=.01
      GO TO 600
821  AREA=AREA*100.0
      F(I)=AREA
      IF (I .EQ. 10) GO TO 680
      IF (I .NE. 10) I=I+1
600  XFNL=ABS(F(I))
      X=0
      AREA=0.
603  XSFNL=X+STP
      IF (XSFNL-XFNL) 605,613,615
605  XF=(XSFNL+X)/2.0
      YORD=.3989422*EXP(-XF**2*.5)
      AREA=AREA+YORD*STP
      X=XSFNL
      GO TO 603
615  Xf=(XFNL+X)/2.0
      YORD+.3989422*EXP(-XF**2*.5)
      AREA=AREA+YORD*(XFNL-X)
      IF (F(I)) 521,624,624
621  AREA=.5-Area
      GO TO 821
624  AREA=.5+AREA
      GO TO 821
680  PRINT 700,N(1)
700  FORMAT (1H,4HCODE,I4/)
      PRINT 701, F(1)
701  FORMAT (1H ,24HPREPARATION FOR DECISION,IX,F7.2/)
      PRINT 702 F(2)
702  FORMAT (1H ,14HORGANIZES WORK,11X,F7.2/)
      PRINT 703, F(3)
703  FORMAT (1H ,22HEXCHANGING INFORMATION,3X/1H .13HAND DIRECTING,
      12X,F7.2/)
      PRINT 704, F(4)

```

704 FORMAT (1H ,18MAINTAINING ORGAN./1H ,13RELATIONSHIPS,12X,F7.2/)
 PRINT 705, F(5)
705 FORMAT (1H ,23HRESPONDING TO OUTSIDERS,2X,F7.2/)
 PRINT 706, F(6)
706 FORMAT (1H ,23HANALYZING THE SITUATION,2X,F7.2/)
 PRINT 707, F(7)
707 FORMAT (1H ,25HCOMPLYING WITH SUGGESTION,F7.2/)
 PRINT 708,F(8)
708 FORMAT (1H ,24HDISCUSSING BEFORE ACTING,1X,F7.2///)
 GO TO 815
810 PRINT 707, F(7)
 PRINT 708, F(8)
815 PRINT 709, F(9)
 FORMAT (1H, 11HPREPARATION,14X,F7.2/)
 PRINT 710, F(10)
710 FORMAT (1H ,18HRESPONSIVENESS AND/1H ,10COMPLIANCE,15X,F7.2///)
 GO TO 2
100 CONTINUE
 CALL EXIT
 END

APPENDIX G
INSTRUMENTATION

BACKGROUND DATA

1. Code Number _____
2. Sex Male _____ Female _____
3. Age (circle) 1. 20-24 4. 35-39 7. 50-54
2. 25-29 5. 40-44 8. 55-59
3. 30-34 6. 45-49 9. 60-65
4. Title of position _____
5. Number of years in present position _____
6. Number of years of teaching experience _____
7. Number of years in administration or supervision _____
8. Bachelor degree: Major _____ Minor _____
9. Highest level of professional training (circle)
- 1. Less than Bachelors
 - 2. Bachelors Degree
 - 3. Bachelors + 16 Credits
 - 4. Masters Degree
 - 5. Masters + 16 Credits
 - 6. Masters + 32 Credits
 - 7. Doctors Degree
10. Graduate credits in administration _____
11. Have you ever participated in an administrative simulation exercise before? Yes _____ No _____
- If yes? When and Where _____

Code # _____

PARTICIPANT REACTION FORM

The purpose of this instrument is to measure your reaction to the computer-based model as a tool for the feedback and analysis of the "Madison School District" simulation materials. You are to judge the model against a series of descriptive scales based on bipolar adjective pairs.

Place a check-mark on the scale in the appropriate space describing your reactions to the model. The direction toward which you check depends upon which of the two ends of the scale seem most characteristic of your reaction.

Please place your check-mark in the middle of the spaces, not on the boundaries.

		Like This			Not This		
		:	:	X	:	:	X
1.	Dull	:	:	:	:	:	Exciting
2.	Mature	:	:	:	:	:	Childish
3.	Meaningless	:	:	:	:	:	Meaningful
4.	Static	:	:	:	:	:	Dynamic
5.	Successful	:	:	:	:	:	Unsuccessful
6.	Real	:	:	:	:	:	Unreal
7.	Stimulating	:	:	:	:	:	Boring
8.	Simple	:	:	:	:	:	Sophisticated
9.	Rewarding	:	:	:	:	:	Nonrewarding
10.	Invalid	:	:	:	:	:	Valid

COMMENTS:

EXPLANATION OF PERSONAL ASSESSMENT MEASURES

A. Miller Analogies Test

The Miller Analogies Test measures academic aptitude for advanced college or university study. High scores on this examination have borne a high correlation with success in completing the requirements for the Ph.D. degree, particularly in areas such as education, languages, social sciences, and other fields requiring excellent verbal facility.

B. Concept Mastery Test

The Concept Mastery Test is a measure of ability to deal with abstract ideas at a high level. The items have been so selected as to draw on concepts from a wide variety of subject matter fields, such as physical and biological sciences, mathematics, history, geography, literature, music, and so forth.

The test was called the Concept Mastery Test because it deals chiefly with abstract ideas. Abstractions are the shorthand of the higher thought processes, and a subject's ability to function at the upper intellectual levels is determined largely by the number and variety of concepts at his command and by his ability to see relationships between them. It is believed the CMT is an efficient measure of ability to deal with abstractions of the kind involved in scholastic aptitude and in administrative decision making.

C. Edwards Personal Preference Schedule

This is an instrument to provide measures of a number of relatively independent "normal" personality variables. The manifest needs associated with each of the variables are:

***Achievement:** To do one's best, to accomplish tasks requiring skill and effort, to be a recognized authority, to do a difficult job well, to solve difficult problems, and to do things better than others.

****Deference:** To get suggestions from others, to find out what others think, to follow instructions and do what is expected, to praise others to conform to custom and avoid the unconventional, to let others make decisions.

*Believed to correlate positively with administrative success.

**Believed to correlate negatively with administrative success.

Order: To have written work neat and organized, to make plans before starting a difficult task, to have things arranged so that they run smoothly without change.

Exhibition: To say witty and clever things, to have others notice and comment upon one's appearance, to say things just to see what effect it will have on others, to be the center of attention.

Autonomy: To be able to come and go as desired, to say what one thinks about things, to feel free in what one wants to do, to avoid responsibilities and obligations.

Affiliation: To be loyal to friends, to do things for friends, to share things with friends, to form strong attachments, to participate in friendly groups.

***Intracception:** To analyze one's motives and feelings, to understand how others feel about problems, to analyze the motives of others, to predict how others will act.

****Succorance:** To have others provide help when in trouble, to seek encouragement from others, to have others be kindly, sympathetic, and understanding about personal problems.

***Dominance:** To argue for one's point of view, to be a leader in groups to which one belongs to make group decisions, to settle arguments and disputes between others, to tell others how to do their jobs.

****Abasement:** To feel guilty when one does something wrong, to accept blame when things do not go right, to feel the need for punishment for wrong doing, to feel timid in the presence of superiors, to feel inferior to others in most respects.

****Nurturance:** To help friends when they are in trouble, to assist others less fortunate, to treat others with kindness sympathy, to forgive others, to do small favors for others, to have others confide in one about personal problems.

Change: To do new and different things, to travel, meet new people, to experience novelty and change in daily routine, to participate in new fads and fashions.

***Believed to correlate positively with administrative success.**
****Believed to correlate negatively with administrative success.**

Endurance: To keep at a job until it is finished, to complete any job undertaken, to stay up late working in order to get a job done, to avoid being interrupted while at work.

Heterosexuality: To go out with members of the opposite sex, to engage in social activities with the opposite sex, to be regarded as physically attractive by those of the opposite sex, to become sexually excited.

Aggression: To attack contrary points of view, to tell others what one thinks about them, to get revenge for insults, to blame others when things go wrong, to read newspaper accounts of violence.

D. Differential Values Inventory

The instrument was designed to obtain responses to a series of items, each of which contains two statements. One of the statements represents a "traditional" value-orientation while the other represents an "emergent" orientation. The following discussion, based on an article that appeared in the Spring, 1957, issue of The School Review, provides an explanation of these two orientation patterns.

1. Traditional Values

Work-success ethic: Values of achievement take precedence over values of being. Anyone can get to the top if he tries hard enough, and everyone has an obligation to try hard enough. Success can even excuse one having intermittently broken the Golden Rule.

Future-time orientation: The future, not the past or even the present, is important. We must be "forward looking." Time becomes a value in its own right. The present is undervalued for the sake of the future, and immediate needs must be denied satisfaction for greater satisfactions to come.

Independence, or the autonomous self: The self is inviolable and, as such, is of greater ultimate significance than the group. Self-determination, self-activity, and self-perception are the general criteria of personal worth. Mastery becomes a value, and we must master our world both from within and without.

Puritan morality or moral commitment: Respectability, thrift, self-denial, hard work, sexual constraint--these are the marks of common decency. To be sure, there is the holiday, the opportunity to "blow off steam" and "have fun." But this is kept outside the values of everyday living. Sociability for the sake of sociability is held to be akin to sloth--and sloth is a sin second only to idolatry.

2. Emergent Values

Sociability: Emphasis is placed upon frictionless interpersonal relations. The hard-working, self-determined Horatio Alger hero as a national model is giving way to the affable young man in the gray flannel suit. Solitary activities are looked upon with suspicion.

Present-time orientation: No one can tell what the future will hold; therefore, one should enjoy the present--within the limits of the well-rounded, balanced personality and group. "A penny saved is a penny earned" is giving way to "no down payment necessary," and wealth is measured more by how much a man owes than by how much he owns.

Conformity: Emphasis is placed upon compliance to the group. As David Riesman has observed, we are replacing our inner gyroscope with a built in radar that alerts us to the feelings of others. The goal of behavior is not recititude but consensus, not originality but adjustment.

Relativistic moral attitude: Absolutes in right and wrong are questionable. In a sense, morality has become a statistical rather than an ethical concept: morality is what the group thinks is moral.

E. Watson-Glaser Critical Thinking Appraisal

This test measures ability to think clearly and logically, to understand relationships among complex phenomena, to view decision alternatives clearly. In administration, these abilities are believed to be related to (1) consistency in administrative performance; and (2) the "hot water" index--the tendency for a person to make illogical decisions or precipitate problems without examining the logical results of their actions.

F. Cooperative English Test

This test measures the extent to which a person is able (1) to read and understand complex material; and (2) to express oneself accurately in writing. High scores bear a positive correlation to ability to complete the writing requirements of advanced graduate study. It is believed to be positively correlated with (1) the extent to which an administrator reads widely in his professional field; and (2) the extent to which an administrator used correctly oral expression.

APPENDIX H

REVISED VERSION OF MADISON IN-BASKET
PERFORMANCE PROFILE SCORE SHEET

THE UNIVERSITY OF WISCONSIN
Department of Educational Administration
 Revised Version of
Madison In-Basket Performance Profile
Score Sheet

	Low	Average	High
Factor X: Preparation for Decision			
Factor Y: Amount of work done in handling items			
Factor A: Exchanging information			
Factor B: Discussing before acting			
Factor C: Complying with suggestions made by others			
Factor E: Maintaining organizational relationships			
Factor FH: Organizing work and directing the work of others			
Factor G: Responding to outsiders			

UNIVERSITY OF WISCONSIN
Department of Educational Administration

In-Basket Scoring Factors

FACTOR A EXCHANGING INFORMATION

Asks subordinates for information or advice
Gives subordinates information
Wants more information
Gives outsiders information
Gives recognition for good work

FACTOR B DISCUSSING BEFORE ACTING.

Schedules his work for the future
Makes plans for discussions
Plans to communicate face-to-face

FACTOR C COMPLYING WITH SUGGESTIONS

Makes concluding decisions
Follows subordinates' suggestions
Takes terminal action
Follows superiors' suggestions
Follows the organizational procedure

FACTOR D ANALYZING THE SITUATION

Uses program values in analysis
Uses human values in analysis
Makes conceptual analyses
Gives recognition for good work
Shows awareness of poor work

FACTOR E MAINTAINING RELATIONSHIPS.

Involves superiors
Discusses with superiors or outsiders
Involves outsiders
Relates to background information
Keeps superiors informed and seeks their advice

FACTOR F ORGANIZING WORK

Schedules work for the future
Follows the organizational procedure
Relates to background information
Coordinates work for others
Sets deadlines

FACTOR G RESPONDING TO OUTSIDERS

Gives information to outsiders
Shows courtesy to outsiders
Follows suggestions from outsiders
Involves outsiders
Explains his actions to outsiders

FACTOR H DIRECTING OTHERS

Takes leading action
Shows courtesy to subordinates
Communicates by writing
Gives directions and suggestions
Shows courtesy to outsiders

FACTOR X PREPARATION FOR DECISION

Decides how to reach a decision
Wants more information
Makes plans for discussion
Refrains from concluding decisions
Takes few terminal actions

FACTOR Y AMOUNT OF WORK

Writes a large number of words
Takes many courses of action
Involves outsiders
Involves subordinates
Gives directions and suggestion

APPENDIX I

Q-MODE REORDERED OBLIQUE PROJECTION MATRIX

Q-MODE ANALYSIS GROUPS - REORDERED OBLIQUE PROJECTION MATRIX

LOADINGS

Index	Group 1	Group 2	Group 3	Group 4	Group 5
2	1.00	0.00	0.00	0.00	0.00
11	0.80	-0.20	-0.03	0.30	0.19
53	0.69	-0.09	0.29	-0.43	0.47
61	0.68	-0.05	-0.08	0.48	0.06
3	0.67	0.44	-0.18	0.26	-0.15
33	0.65	-0.13	-0.23	0.43	0.36
77	0.65	-0.11	-0.03	0.50	-0.24
32	0.64	-0.17	0.02	0.24	0.37
52	0.63	-0.24	0.06	0.46	0.19
31	0.60	0.29	-0.02	0.32	-0.11
64	0.60	-0.15	0.30	0.19	0.16
24	0.54	-0.16	-0.39	0.47	0.27
94	0.50	-0.04	0.40	0.35	-0.11
75	0.50	0.05	0.35	0.07	0.06
51	0.49	0.40	-0.26	0.32	0.13
88	0.46	-0.12	0.01	0.46	0.31
81	0.46	0.30	-0.03	0.28	0.11
9	0.46	0.26	0.21	-0.06	0.21
63	0.35	0.12	0.32	0.27	0.09
59	0.00	1.00	0.00	0.00	0.00
74	-0.04	0.70	0.03	0.00	0.34
96	0.06	0.67	0.47	-0.36	0.19
90	0.11	0.65	-0.03	0.41	-0.11
27	0.12	0.54	-0.15	0.47	0.06
79	0.11	0.52	-0.08	0.17	0.36
13	0.13	0.48	-0.03	0.11	0.41
16	-0.18	0.47	0.44	0.11	0.22
1	0.22	0.43	0.37	-0.02	0.10
49	0.00	0.00	1.00	0.00	0.00
69	-0.04	0.09	0.80	0.21	0.01
35	-0.47	0.28	0.75	-0.10	0.53
67	0.33	-0.55	0.73	0.46	0.04
45	-0.43	0.23	0.65	0.09	0.40
36	0.00	-0.29	0.62	0.17	0.57
97	0.06	0.06	0.59	0.09	0.29
89	0.08	0.31	0.53	-0.12	0.28
84	0.28	0.03	0.46	0.07	0.19
48	0.26	-0.03	0.39	0.26	0.24
17	0.17	0.11	0.38	0.08	0.34

REORDERED OBLIQUE PROJECTION MATRIX, CONTINUED

Index	Group 1	Group 2	Group 3	Group 4	Group 5
46	0.00	0.00	0.00	1.00	0.00
93	0.21	0.01	-0.36	0.99	0.17
80	-0.18	-0.55	0.57	0.96	0.15
12	-0.04	-0.38	0.02	0.93	0.51
62	-0.19	0.13	0.09	0.92	0.04
78	-0.13	-0.43	0.08	0.86	0.67
15	0.06	0.34	-0.16	0.80	-0.02
20	-0.12	0.27	0.10	0.74	0.08
29	0.19	-0.31	-0.06	0.73	0.55
68	0.47	-0.42	0.16	0.72	0.16
5	0.04	0.05	-0.36	0.71	0.62
54	-0.44	-0.11	0.51	0.71	0.32
37	0.25	-0.17	-0.15	0.68	0.51
85	0.01	-0.39	0.41	0.67	0.39
91	0.03	0.13	0.07	0.66	0.18
72	-0.30	-0.04	0.49	0.65	0.27
58	-0.12	0.48	-0.14	0.65	0.12
39	-0.01	0.16	-0.26	0.64	0.54
18	-0.38	0.20	0.61	0.63	-0.06
57	-0.07	0.04	0.30	0.60	0.16
86	0.11	-0.12	0.14	0.58	0.40
26	0.30	0.06	-0.16	0.58	0.34
28	-0.28	0.36	0.26	0.55	0.17
99	0.33	-0.09	-0.07	0.54	0.42
23	0.40	-0.17	0.32	0.52	0.01
10	0.47	0.03	-0.14	0.49	0.27
73	0.13	0.09	0.08	0.49	0.31
34	0.48	-0.21	0.31	0.49	0.04
83	0.21	0.42	-0.14	0.45	0.14
87	0.03	0.24	0.09	0.43	0.31
43	0.36	-0.17	0.31	0.39	0.22
41	0.24	0.14	0.21	0.39	0.16
6	0.00	0.00	0.00	0.00	1.00
22	-0.24	-0.25	0.40	0.21	0.91
38	0.02	0.11	0.06	-0.08	0.91
8	-0.25	0.29	0.24	-0.01	0.78
7	-0.04	0.05	0.22	0.09	0.75
47	-0.25	-0.02	0.23	0.21	0.74
66	-0.38	0.28	0.28	0.13	0.72
55	0.09	-0.28	0.47	0.15	0.65
56	-0.16	-0.46	0.48	0.56	0.64
98	0.10	0.16	0.02	0.20	0.64
40	0.43	0.15	-0.04	-0.10	0.61
70	0.33	-0.28	-0.05	0.49	0.61

REORDERED OBLIQUE PROJECTION MATRIX, CONTINUED

LOADINGS

Index	Group 1	Group 2	Group 3	Group 4	Group 5
76	0.08	-0.19	0.40	0.26	0.55
25	0.13	0.18	-0.03	0.30	0.54
50	0.49	-0.26	-0.22	0.49	0.53
14	-0.10	0.15	0.38	0.10	0.53
82	0.06	0.26	0.36	-0.14	0.53
42	0.15	-0.13	0.28	0.29	0.53
21	0.22	0.16	-0.22	0.43	0.51
44	0.22	0.18	0.22	-0.03	0.50
65	0.43	0.12	0.14	-0.15	0.50
00	0.41	-0.33	0.46	0.02	0.50
95	0.12	0.04	0.23	0.25	0.49
60	-0.11	0.42	-0.10	0.41	0.48
19	0.08	0.34	0.24	-0.06	0.46
92	0.33	-0.10	0.30	0.12	0.46
71	0.29	-0.15	0.12	0.42	0.46
4	-0.21	0.24	0.34	0.27	0.45
30	0.22	-0.12	0.26	0.31	0.43