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A comparative analysis of the perceptions of the staff of the Amherst-Pelham Regional School District as they relate to the Performance Objective Program.

Joseph Martin Cangro

University of Massachusetts Amherst

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A COMPARATIVE ANALYSIS OF THE PERCEPTIONS OF THE STAFF OF THE AMHERST-PELHAM REGIONAL SCHOOL DISTRICT AS THEY RELATE TO THE PERFORMANCE OBJECTIVE PROGRAM

by

Joseph Martin Cangro

A Dissertation Submitted to the Graduate School of the University of Massachusetts in Partial Fulfillment of the Requirements for the Degree of

DOCTOR OF EDUCATION

School of Education
Amherst, Massachusetts

August, 1973
A COMPARATIVE ANALYSIS OF THE PERCEPTIONS OF THE STAFF
OF THE AMHERST-PELHAM REGIONAL SCHOOL DISTRICT
AS THEY RELATE TO
THE PERFORMANCE OBJECTIVE PROGRAM

A Dissertation

By

Joseph Martin Cangro

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School of Education
University of Massachusetts
Amherst, Massachusetts

August, 1973
A DISSENTATION ABSTRACT

A Comparative Analysis of the Perceptions of the Staff of the Amherst-Pelham Regional School District as they Relate to the Performance Objective Program (August, 1973)

Joseph M. Cangro, B.S., State College at Westfield
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Directed by: Dr. Arthur W. Eve
Purpose of the Study

The major objectives of the study were, through the utilization of a case-study approach, (a) to determine the attitudes of the professional staff in the school district concerning various aspects of the Performance Objective Program during the 1972-73 school year; and (b) to determine the differentiation of attitudes concerning the program among the elementary teachers and secondary teachers.

Procedures of the Study

The procedures used in the study included the following: (1) development of a descriptive survey approach for data collection; (2) development of background materials describing the school systems' Performance Objective Program; (3) development of selected issues and concerns as the base for the study; (4) development of a format and a procedural guide for use of assessment instruments; (5) establishment and conducting of interview sessions to generate items for the questionnaires; (6) the construction and administration of staff questionnaires to secure teacher attitude and perceptions toward various aspects of the Performance Objective Program in January, 1973; (7) conducting of personal interview sessions to gather any additional teacher inputs in January, 1973; (8) a repeat of items number six and seven above in May, 1973; (9) analysis, tabulation, and presentation of the data obtained.
through administration of the evaluation instruments and interviews; (10) presentation of the findings, conclusions, and recommendations for further study; and (11) presentation of the assessment materials used in the study.

Teacher concerns that the investigator determined as a base for the study were: (1) critical issues related to the use of performance objectives; (2) general concerns resulting from the implementation of the performance objective approach in the classroom; (3) issues surrounding the implementation of the Performance Objective Program in the school district; (4) concerns related to the teacher evaluation system used in the school district; (5) concerns related to the In-service Program being conducted by the school district; (6) concerns related to parent involvement in the activities of the school district; (7) the concern related to the student reporting system used by the school.

Conclusions

Conclusions were based upon the findings of the study, on the literature and research reviewed as a part of the study, and on the experiences of the writer in designing and administering the assessment instruments developed as part of the study.
STRENGTHS

1. The majority of the teachers agree that the use of the Performance Objective Approach is effective as a tool for managing continuous progress of students and is not dehumanizing for teachers or students.

2. A consensus of the teachers perceive they are satisfied with the in-service program and with their influence for direction of the program.

3. Teachers perceive parents have sufficient opportunity for involvement in school activities.

4. Teachers indicate no undue pressure to implement the Performance Objective Approach.

5. Teachers feel successful and competent in using the Performance Objective Approach in their classroom.

6. Most teachers in the district are satisfied with the present teacher evaluation format.

Recommendations for Further Study

1. Instruments should be constructed, validated, and made reliable, and an appropriate research design should be identified so that these could be incorporated to determine attitudinal and perceptual changes that take place due to the program.

2. Determination of the availability of participants to partake in the study.
3. The comparison of the Performance Objective Approach with other similar programs, where two equivalent approaches would be tested, focused on the same objectives.

4. The determination of differences that exist among a variety of non-equivalent groups as measured by attitudinal instruments for different categories of certain aspects of the program.

5. Various approaches, aside from the Likert-scale, should be tried, but whatever is used, a variety of other types of questions may be one appropriate technique.
Dedicated to
Dr. Roger H. Peck
a teacher,
a scholar,
a great humanitarian
and most important
a friend
ACKNOWLEDGEMENTS

The completion of this study required the assistance of many understanding and dedicated individuals. The sincere appreciation of the investigator is extended to the school administrators, teachers, secretaries, parents and students who gave many hours of their time to participate in the study.

A special debt of gratitude is expressed to the investigator's Graduate Advisory Committee for their guidance and encouragement:

Dr. Roger Peck who assisted in the design of the study, provided critical analysis throughout the study, and constantly offered valuable suggestions.

Dr. Arthur Eve, the investigator's major advisor, who provided constant support and demonstrated enthusiasm for life which he infused in many - including the investigator.

Dr. Kenneth Entel, who always found the time in his busy schedule to offer suggestions, encouragement, and support to the investigator.

Dr. Mark Rossman, who offered constructive suggestions not only during the study, but throughout the investigator's graduate program.
A special word of thanks to the East Longmeadow School Committee, and Dr. Wayne S. Porter, Superintendent of the East Longmeadow Public Schools, for the generous privilege granted the investigator.

A special thanks to the investigator's family and mother for their patience, moral support, and most of all spiritual support throughout the study.

A very special thanks to the Holy Spirit.
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CHAPTER I

INTRODUCTION

The need for curriculum reform in our educational institutions is widely recognized and frequently demanded. Teachers, often pressed to militancy, seek increased control over policy-making decisions not merely for personal gain but rather to bring about an improvement in an outdated system. Students, in increasing numbers, recognize the irrelevance of much of our traditional educational programs which answer the needs of a pathetically small minority of students. Parents and taxpayers demand both improved programs and increased economy, and they have the uneasy feeling that they are not getting the best education possible for the money spent.

An analysis of these desires and complaints has led many educators to the conclusion that a more individualized instructional program must be provided. Even the term "individualized instruction," however, leads to numerous definitions and images of each student functioning independently of all peers. Independent study and individualized instruction have frequently been misinterpreted to be synonymous. The resulting opposition declares that individualized instruction reduces the communication and cooperative learning experience necessary in schools.
In addition to pressures for curriculum reform, the most powerful force operating upon our educational institutions is the economic threat. The sputnik era provided an impetus to improve education regardless of the cost. Presently, funding is not as readily available.

The demands to reform education continue, but commensurate with them are equally vociferous calls to hold down the taxes. Revenue for educational expenses is still provided by the antiquated and inadequate local collection of property tax. Property taxes are exorbitant in most communities, and the local politicians, as well as the taxpayers, are pressing for reduced spending.

Consequently, across the nation our educational institutions are in financial turmoil. Contract negotiations break down, teachers are striking, and schools are closing. School bond issues are being rejected by the voters in increasing numbers. A large number of school districts are on the verge of bankruptcy.

Nevertheless, educational administrators are presently being pressed to accomplish two dramatically opposed goals: to improve curriculum and instruction in the schools, and to reduce spending. The options appear to be as follows: (1) reduce services, (2) increase spending, or (3) increase efficiency. Obviously, the task of the administrator is to increase efficiency. He must improve the curriculum. He
must hold expenses down and be able to justify expenditures.

In keeping with these goals, the Massachusetts Department of Education has published a list of ten broad common goals for all public elementary and secondary schools in the Commonwealth. In emphasizing a "results approach to education," Neil Sullivan, the former Commissioner of Education, fostered a long-term plan to institute broad and flexible educational aims statewide, while encouraging much greater specificity of objectives on a local level. Criterion referenced evaluation would then be possible with localities reporting instructional success in terms of their own stated objectives. This might be seen as an approach to a statewide, system by system accountability design so absolutely necessary if state financing of education does in fact result from future court decisions.

The Amherst-Pelham Regional School District has instituted a program designed to increase individualization of instruction and increase educational accountability. Considered a systems approach to individualized instruction, the project is attempting to rewrite the curriculum of the Amherst-Pelham Regional School District in terms of performance objectives, and to pursue the systems goals within a Planning Programming Budgeting System.

The program, called "The Performance Objective Program" was initiated in September of 1971 by the Amherst-Pelham
Regional School District. The system was designed for managing the instructional program and to fulfill the two conditions necessary for instruction, namely: (1) define specific performance levels that pupils are expected to reach, and (2) keep accurate records on each student's attainment of these performance levels.

POP, as it was called, was a direct outgrowth of the ungraded secondary school program which had been initiated in the fall of 1965. The new dimensions which were added in September of 1971 were:

a. A much stronger emphasis on kindergarten through grade twelve curriculum coordination among the secondary schools and the Amherst and Pelham elementary schools, an emphasis based upon careful review of the general learning goals being pursued in every subject and department.

b. Development of performance objective banks and related learning activity banks that are available to students and not just to teachers. (Some teachers started this important development much earlier than September of 1971.)

c. Providing more opportunities for students to participate in definition of some of their own learning goals and performance objectives and in selection of alternate learning activities.

d. Providing more opportunities for parents and other
adults to participate in curriculum building processes.

e. An initial revision of school district evaluation, reporting, and budgeting programs to capitalize on the management potential of performance objectives.

This new and different approach to educational programming has necessitated a change in attitudes of many of the district personnel. New and basically different approaches to educational decision-making, curriculum planning and student management have become part of the Amherst-Pelham School District teachers' life style. In-service training, management by objectives, have become watchwords in the district.

Within this ever-changing educational milieu, the attitudinal stance of the people involved are quite important. In the present study a comparative review and analysis of teacher perceptions was undertaken. Through perceptual-attitudinal research methodology, the investigator determined (a) the attitudes of the professional staff in the Amherst-Pelham Regional School District concerning various aspects of the Performance Objective Program during the 1972-73 school year; and (b) the differentiation of attitudes concerning the Program among the elementary teachers and secondary teachers.
Purpose of the Study

The major objectives of this study were, through the utilization of a case-study approach, (a) to determine the attitudes of the professional staff in the Amherst-Pelham Regional School District concerning various aspects of the Performance Objective Program during the 1972-73 school year; and (b) to determine the differentiation of attitudes concerning the Program among the elementary teachers and secondary teachers.

The purposes of the study were:

A. Through an analysis of the recorded observations of the investigator, to construct and administer an questionnaire in which the statements would focus on various aspects related to the Performance Objective Program. The questionnaire, through the use of "closed" questions, was designed to solicit reactions to a Likert five-scale response pattern including "strongly agree" to "strongly disagree." The questionnaire was administered to all of the professional staff in the Amherst-Pelham Regional School District in January, 1973, and again in May, 1973.

B. Through an analysis and synthesis of the data obtained from the administration of the questionnaire:

1. Determine the attitudes of the professional staff in the Amherst-Pelham Regional School District concerning various aspects of the Performance Objective Program.
More specifically, determination of the professional staff's attitude toward the following factors:

a. The level of agreement-disagreement toward statements related to the general goals and concepts proposed to be achieved through the performance objective approach. These goals and concepts focus on the nature of the learner, the instructional process, and curriculum development.

b. The level of agreement-disagreement toward statements related to the possible and/or actual achievement of the general goals through the performance objective approach.

c. The level of disagreement-agreement toward statements related to their understanding of, and feeling of competency in implementing the performance objective approach.

d. The level of agreement-disagreement toward statements related to the value of the Performance Objective Program, and/or the performance objective approach.

e. The level of agreement-disagreement to statements related to critical issues surrounding the implementation of the Performance Objective Program, and/or performance objective approach.

f. The staff's attitude toward various aspects related to the Performance Objective Program, such as (1) the extent to which they are being provided assistance in implementing the Program; (2) their attitude toward the teacher evaluation format being used to evaluate them in implementing the Program; (3) their perceptions of the students' and parents' attitudes toward the Program; (4) their perceptions as to the extent to which they are implementing the various components of the Performance Objective Program; and (5) the extent to which they feel they should be implementing these components of the Program.

2. Through an analysis and synthesis of the findings, compare the reactions of the elementary teachers
with the reactions of the secondary teachers to statements related to various aspects of the Performance Objective Program. The aspects of the Program to be determined are those listed in purpose statement B1 (above).

3. Determine the relationship between the teachers' perceived extent of use of the various components of the Performance Objective Program, and their level of agreement-disagreement toward statements related to (a) the general goals and concepts proposed to be achieved through the performance objective approach; (b) the possible and/or actual achievement of the general goals through the performance objective approach; (c) the value of the Performance Objective Program, and/or performance objective approach; and (d) critical issues surrounding the implementation of the Performance Objective Program, and/or performance objective approach.

4. Compare the reactions of the professional staff in January, 1973, with their reactions in May, 1973, to statements related to various aspects of the Performance Objective Program. The aspects to be determined are those listed in purpose statement B1 (above).

5. Compare the degree of change in attitude of the elementary teachers toward the Performance Objective Program, with the degree of change in attitude of the secondary teachers toward the Program. This refers to the change in these two groups concerning their reactions to statements
related to the Program in January, 1973, and their reactions to the same statements in May, 1973. The aspects to be determined are those listed in purpose statement B1 (above).

C. To develop conclusions based on the findings from the staff's reactions to statements related to various aspects of the Performance Objective Program, and/or performance objective approach. The list of study objectives presented in B1 through B5 above, will provide the framework for the development of these conclusions.

Definition of Terms

The following terms are defined as they are used in this study:

1. **Amherst-Pelham Regional School District** - a district in Western Massachusetts consisting of one elementary school in Pelham, four elementary units in Amherst, housed in six separate buildings (one elementary unit was housed in three different buildings), plus a Regional Junior High School and a Regional Senior High School taking students from the towns of Amherst, Pelham, Shutesbury and Leverett.

2. **Attitude** - the degree of positive or negative effect associated with some psychological object.
3. **Performance Objective** - a statement or description of a visible or audible behavior which indicate that a student has learned or achieved something. A performance objective is referred to as well-defined or properly constructed when it states or implies the quality of the behavior sought and the conditions under which it will be expected.

4. **Performance Objective Program** - an E.S.E.A. Title III project in the Amherst-Pelham schools designed to individualize instruction by assisting teachers, students and parents to prepare performance objectives and alternative learning activities covering the entire planned curriculum from kindergarten through twelfth grade. The title of the program will frequently be shortened to the acronym "POP".

5. **Learning Activity** - any action or process that will help the student to reach the desired performance objective.


7. **Student** - any child enrolled, K through 12, in the Amherst-Pelham Regional School District.

8. **Teacher** - any professional employee of the
Amherst-Pelham Regional School District.

9. **Training Session** - any instructional program offered by the project staff to foster the objectives of the program.

10. **P.O.P. Advisory Board** - an advisory council for aiding the Program Director and District Administrators in developing a viable working program for the district. Its function is to review materials, proposals and the like and make its recommendations to the district administrators.

11. **Attitudinal Changes** - the degree to which participation and experience provided by the Performance Objective Program affect changes in the participants' attitude.

12. **Perception** - the degree of conceptualizing and verbalizing managerial principles and practices.


14. **Likert Scale** - a science based management approach designed to elicit the perception of what an individual believes are the present characteristics of his organization as well as the determination of what he would like the characteristics of the organization to be.
Assumptions in the Study

1. Respondents would respond candidly and honestly to questions concerning the strengths, weaknesses and value of the performance objective approach to learning, and the Performance Objective Program of the Amherst-Pelham schools.

2. Respondents would react to an attitude measurement in terms of their own attitudes as felt at the time of responding to the items.

3. Attitudes expressed by the respondents would be those generated by this program, and not preconceived biases.

Limitations of the Study

1. The present study will concern itself only with the perceptions of the teachers of the school district as they relate to the Performance Objective Program.

2. Since the instruments used to measure these perceptions were developed from interviews where a certain degree of subjectivity is present, the instruments used to measure these perceptions may lack precision.

Assessment Procedures Used in the Study

The study incorporated a sophisticated form of the descriptive survey approach, involving three aspects of data
collection: (1) the conducting of interviews, (2) the con-
struction and administration of an attitudinal questionnaire
(close-ended), and (3) the construction and administration
of an attitudinal questionnaire (open-ended).

The construction and administration
of the staff questionnaire

The staff questionnaire was constructed by developing
attitudinal statements gleaned from (1) the information ob-
tained in interview sessions with members of the administra-
tive and teaching staff of the Amherst-Pelham School District;
and (2) statements that have been included on questionnaires
administered to the professional staff in January, 1972, and
again in May, 1972.

The establishment and conducting of
the interview sessions to generate
items for the questionnaire

To establish the interview sessions, the investigator
worked through the POP Advisory Board, which is made up of
teachers from the elementary, junior high school, and senior
high school. With the assistance of this advisory board, a
total of twenty teachers, five administrators, in addition to
the seven teachers on the POP Advisory Board, were interviewed.

Each interview was conducted in basically the same man-
ner. The interviews were unstructured, with the investigator
asking no pre-determined questions. At points, however, it
became necessary to ask some definite questions. The directed
questions were designed to either clarify the perceptions of
the interviewee in the mind of the investigator, or to obtain a further elaboration of the interviewee's verbalized perceptions.

At the beginning of each interview, the investigator stated to the interviewee that the interview was an unstructured exchange for the purpose of receiving some of the interviewee's concerns, opinions and perceptions about the Performance Objective Program, and/or the performance objective approach.

Following the interviews, the investigator recorded the statements from the data gained in each interview. These items were analyzed and synthesized in order to combine similar statements and concerns, and to eliminate the items which did not appear to be relevant to the present study.

The selection of items from the questionnaires administered previously in January and May, 1972.

In January, 1972, a questionnaire had been administered to the professional staff of the Amherst-Pelham School District. Again, in May, 1972, another questionnaire was administered to this professional staff. In both questionnaires the staff was asked to react to statements focused on various aspects of the Performance Objective Program, and/or the performance objective approach. Several of the items were the same in both questionnaires; on the other hand, for the questionnaire administered in May, several of the items from the
January questionnaire were deleted, and many new items were added.

The items from both the January questionnaire and the May questionnaire were analyzed. Those items which appeared to be relevant to the present study were selected for inclusion in the present questionnaire.

The selection and clustering of items for inclusion in the questionnaire

The following is a list of the concerns that the investigator analyzed in the present study:

1. Critical issues related to the use of performance objectives.

2. General concerns resulting from the implementation of the Performance Objective approach in the classroom.

3. Issues surrounding the implementation of the Performance Objective Program in the school district.

4. Concerns related to the teacher evaluation system used in the school district.

5. Concerns related to the In-Service Program being conducted by the school district.

6. Concerns related to parent involvement in the activities of the school district.

7. The concern related to the student reporting system used by the school.

These categories of issues were used as the basis for the selection and clustering of the items in the questionnaire.

The five-scale Likert type of response pattern was used in the questionnaires. For all of the closed statements, the participants were asked to react to the item according to the
following: (1) "strongly agree"; (2) "agree"; (3) "undecided"; (4) "disagree"; and (5) "strongly disagree."

The administration of the questionnaires

Two forms of the questionnaire were developed. The purpose of the two forms was to increase the scope of item variation in the questionnaires, while maintaining questionnaire brevity. The same response patterns were used in both questionnaires, and a number of the same items were included in both forms. The questionnaires differed in the respect that each form of the questionnaire emphasized different aspects of the Performance Objective Program.

The determination as to who will receive form A or B of the questionnaire was accomplished by equally dividing the professional staffs of each school in the Amherst-Pelham School District. This was achieved by taking the faculty listings in the district personnel booklet, and assigning the even-numbered positions one form of the questionnaire, and the odd-numbered positions the other form of the questionnaire.

The final determination as to what form each staff member received was left up to the POP Advisory Board members in the respective schools of the district. In addition, a series of numbers were assigned to each building for each Advisory Board member to assign to staff members.

Each form of the questionnaire was administered twice
to the staff, once in January, 1973, and again in May, 1973. The questionnaires were given to members of the POP Advisory Board, who distributed them to the faculty members in their respective schools.

For the purpose of processing the data, the investigator worked in conjunction with a computer programmer to write a computer program to carry out the necessary statistical analysis of the data obtained from the questionnaires. The answer sheets were scanned at the Optical Scanning Center, University of Massachusetts. The punched cards obtained from the scanning of the teachers' mark sense sheets were sorted, checked and prepared for computer analysis. The punched cards were programmed for the computer in the Computer Science Department, University of Massachusetts.

The analysis of the data

Through an analysis and synthesis of the data obtained from the administrations of the questionnaires, the following findings were made:

1. A determination of the level of staff agreement-disagreement toward statements related to the general goals and concepts proposed to be achieved through the performance objective approach. These goals and concepts focused on the nature of the learner, the instructional process, and curriculum development.

2. A determination of the level of staff agreement-
disagreement toward statements related to the possible and/or actual achievement of the general goals through the performance objective approach.

3. A determination of the level of staff agreement-disagreement toward statements related to their understanding of, and feeling of competency in implementing the performance objective approach.

4. A determination of the level of staff agreement-disagreement toward statements focused on critical issues related to the Performance Objective Program and/or the performance objective approach.

5. A determination of the level of staff agreement-disagreement toward statements related to issues surrounding the implementation of the Performance Objective Program.

6. A determination of the staff's attitude toward various aspects related to the Performance Objective Program such as (a) the extent to which staff members feel they are being provided assistance in implementing the Program; (b) their attitude toward the teacher evaluation format being used to evaluate them in implementing the Program; (c) their perceptions of the students' and parents' attitudes toward the Program; (d) their perceptions as to the extent to which they are implementing the various components of the Performance Objective Program; and (e) the extent to which they feel they
should be implementing these components of the Program.

7. A comparison of the reactions of the elementary teachers with the reactions of the secondary teachers to statements related to various aspects of the Performance Objective Program. The aspects of the Program to be determined are those listed above.

8. A comparison of the reactions of the secondary teachers with the reactions of the elementary teachers to statements focused on various aspects of the Performance Objective Program. The aspects of the program that were determined are those listed above, in items one through five.

9. A determination of the relationship between the teachers' perceived extent of use of the various components of the Performance Objective Program, and their level of agreement-disagreement toward statements related to (a) the general goals and concepts proposed to be achieved through the performance objective approach; (b) the possible and/or actual achievement of the general goals through the performance objective approach; (c) the critical issues related to the Performance Objective Program and/or the performance objective approach; and (d) the issues surrounding the implementation of the Performance Objective Program.

10. A comparison of the reactions of the professional staff in January, 1973, with their reactions in May, 1973, to statements related to various aspects of the Performance
Objective Program. The aspects determined were those listed in items one through five above.

11. A comparison of the degree of change in attitude of the elementary teachers with the degree of change in attitude of the secondary teachers toward the various aspects of the Performance Objective Program. This refers to the change in these two groups concerning their reactions in statements related to the Program in January, 1972, and their reactions to the same statements in May, 1973. The aspects to be determined are those listed in items one through five above.

Treatment of the data; A summary:

The list of concerns (items one through eleven above), in addition to the questions posed by the measurement instruments used in the study, provided the framework for the analysis and treatment of the data collected. The data were presented in such narrative, tabular, or graphic form as dictated by the data encountered. This was done in order to most appropriately depict the findings.

The investigator made use of weighted mean scores, level of significance and percentages in the presentation of the major findings. Whenever comparisons were made between the reactions of two groups of respondents, the level of statistical significance was determined through the use of and analysis of variance.
Any "t" score that had a level of significance above the .05 level was so signified.

Significance of the Study

The present study will assist the district administrators and staff to obtain needed information concerning the perceptual frame of reference of the district personnel toward the Performance Objective Program.

Secondly, the present study will assist other school districts to obtain viable information concerned with perceptual-attitudinal paradigm involved in implementing and managing an approach similar to the performance objective approach. The perception of the teacher vis-a-vis growth stages will be assessed and reported on. These data should enable other school districts to obtain a "hands on" concept to staff attitudinal development and staff attitudinal evaluation.

Lastly, the extensive use of perceptual-attitudinal instruments will be of interest to other researchers interested in working with or developing similar instruments for other research projects dealing with the attitudinal measurement.
Organization of the Dissertation

Chapter I of the dissertation consists of a statement of the need for the study, its purposes, its significance, the general design of the study, the assumptions and limitations. Chapter II presents a review of the literature and research related to the performance objective approach to education. Chapter III is a chronological report of the major incidents, events and decisions of the project. Chapter IV describes the assessment methodology, the instruments used, and also the population involved in the study. In Chapter V is the presentation and analysis of the data. Chapter VI consists of the summary, conclusions, and recommendations.
CHAPTER II

REVIEW OF RELATED RESEARCH
AND RELATED LITERATURE

The present study concerned itself with an analysis of the perceptions of teachers and administrators of a local school district as they relate to the systems approach to managing an instructional program.

For purpose of clarification the review of the research and literature has been divided into the following sections: (1) a brief overview of the systems approach in education; (2) formulating behavioral and performance objectives in education and their use in curriculum development; (3) research studies on the attitudinal and perceptual characteristics in management; (4) an overview of the purpose and construction of measurements with focus on attitude scale and opinionnaires; and (5) the assessment of training: problems and approaches.

The Systems Approach in Education

In an age when problems seem to generate faster than we can identify them, and change appears to be the only certainty, we are eager to find ways to define and resolve our problems - complex as they are - and to cope with change,
perpetual though it may be.

Evidence from various realms of our contemporary life indicate that in the systems concept we have available a way of thinking with which we can deal with complex problems and their changing relationships. In the systems approach we have a methodology, the use of which enables us to develop and manage complex entities. In fact, the systems approach may provide techniques by which we can not only cope with our environments, but also be able to shape and master it and make change work for us.

Recognizing the potential power in systems theory, many educators have turned with increased interest toward the exploration of the systems concept and the use of the systems approach in educational planning. Although the educational application of systems approach is still in the early stage, educational personnel are encouraged by the results already achieved. Other educators, however, have suggested that the application of a "systems approach" or "systems analysis" to education conjures up notions of perplexing organization, computerized instructional decision-making, control of humans by machines, and in general a deterioration of personification in the schools. Defined as "a set or assemblage of things connected, associated or interdependent, so as to form a complex unit; a whole composed of parts in orderly arrangement according to some scheme or plan; rarely applied to a simple
or small assemblage of things,\textsuperscript{1} the word "system" has connotations of numerous mathematical equations, each defining a step in a complex process, necessitating computerization. Emphasizing that the systems approach has traditionally been employed in areas in which the impinging variables are highly quantifiable, Desmond L. Cook justifies use of mathematical formulations. He further states:

This situation is quite disturbing to many educational personnel because they recognize that many of the variables cannot, at least at the present time, be expressed in quantitative terms. To such individuals, the variables are very quantitative in nature and the translation of them into qualifiable terms is alien to both their rationale and emotionism. To those who have concern over the representation of systems by mathematical formulas, attention should be focused on the fact that an equally valuable way of representing systems is through some type of descriptive flow-graph procedure.\textsuperscript{2}

Further, Kuezevich emphasizes the fact that since education is not highly quantifiable, mathematical tools cannot infallibly identify the best course of action. It is very unlikely that mathematics will ever permit symbolic manipulation of anything as complex as a school district. Nevertheless, disregarding the inappropriate mathematical models, the systems approach can be a powerful tool to the school


\textsuperscript{2}Desmond L. Cook, The Impact of Systems Analysis on Education, (Educational Research Management Center Columbus, Ohio State University, 1968) pp. 4-5.
administrator. Systems cannot make the decisions. It is implied that, "although systems may not solve the really significant policy dilemmas that confront school administrators in the sense of computing with infallible precision the optimum course of action, it can be employed to generate alternatives and frame issues in a manner that will sharpen the intuition and judgment of the educational decision-maker."

Glen L. Immegart offers the following:

The systems movement, for example, offers a real, and as yet somewhat untried potential for improving the practice of educational administration. In particular, the systems movement offers a perspective for the administrator that, it can in itself, facilitate his job. The system movement has also resulted in numerous techniques, procedures, and methodology (which can be discussed and classified as a management support system) that can greatly relieve many of the burdensome aspects of administering. Available in the systems movement are ways to free the educational administrator so that he can cope with some of the more important matters that face him."

Immegart further points out that definitions and terminology need not be taken too seriously since there is no widely accepted "systems theory." Rather, it is argued, the systems movement has produced a mode of thought which provide a new perspective and conceptual apparatus.

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Systems thought is holistic thought; it is contextual thought. Not only does the systems view focus on wholes and relevant (component) parts, but also this view is concerned with environmental context. By definition open systems exist and flourish in a dynamic exchange relationship with their environment(s).

A more comprehensive statement of a systems definition can be found in the work of Bela Banathy. Banathy states: Systems are assemblages of parts that are designed and built by man into organized wholes for the attainment of specific purposes. The purpose of a system is realized through processes in which interacting components of the system engage in order to produce a pre-determined output. Purpose determines the process required, and the process will imply the kinds of components that will make up the system. A system receives its purpose, its input, its resources, and its constraints from its supra-system. In order to maintain itself, a system has to produce an output which satisfies the supra-system.

The initial starting point then of any system must be a purpose. The defined needs to be fulfilled, the purpose of the design, become the nucleus of the system, and each component of the whole is based on that initial statement of purpose. Banathy asserts that the purpose of education is to ensure the attainment of specific knowledge, skills, and attitudes - thus "learning" is the purpose around which the

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5Glenn L. Immegart, op. cit., p. 2.

system is to grow. Banathy has distinguished learning and instruction by claiming that learning is the true purpose while instruction is the process of education.  

It is here in the initial value decisions regarding the system design that educators must be wary. A study of the history of educational administration in the United States will reveal some unwise paths taken, due to initial acceptance of inappropriate values.

Some recent statements seem to support the distinctions made by Banathy. Hedegard juxtaposed two kinds of educational systems. In the first Hedegard states the learner's role is "active." The teacher selects content and learning experiences and the learner reacts to them. The teacher's thought processes involve organization, while the student only reacts by making passive connections of impressions. The learner's unique motives are rarely accepted, often discouraged, and sometimes even punished. In the second system the learner assumes an active role in selecting content and experiences. The learner's though process involves organization. He is required to do more than passively connect impressions. Experiences are sought that are personally satisfying to the learner.

In the systems view, instruction denotes processes and functions that are introduced into the environment of the learner in order to facilitate the mastering of specific learning tasks. Accordingly any interaction between the learner and his environment through which the learner is making progress toward the attainment of specific and purposed knowledge, skills, and attitudes is viewed as instruction. The effectiveness of an instructional system, therefore, can be measured by assessing the degree to which it provides for the learner a system for learning. The system serves its purpose to the extent to which it brings about in the environment of the learner all the possible interactions that result in the attainment of the desired performance.

The development of a system for learning is a decision-making operation. Moving beyond the "philosophical theorizing of the past," decisions have to be made about what should be learned, how, by whom, when and where; how learning should be evaluated and improved, and what resources should be involved in preparing for, providing for, and evaluating learning.

Morphet, Johns, and Reller warn that the "gospel of efficiency" which dominated the first third of the twentieth century failed to see human beings as living systems but rather as inanimate parts of an organization. Consequently little
emphasis was given to human relations, and attention centered on getting more from the workers and the organization.\(^9\)

Adapting a more systematic approach to educational reform yields a higher probability that we will move beyond theorizing of the past to something which approximates an empirically valid, scientifically managed renewal process. It is not the intent, however, to suggest uncritical adoption, as was done in the thirties, of systems analysis techniques of the Frederick Taylor "scientific management" type, originally designed for industry or the military. These centrally managed, often monolithic organizational structures are not compatible with the largely decentralized, consensus-oriented, collectively administered public school systems.\(^{10}\)

A compatible structure that is designed to apply to the needs of the educational systems approach must contain a statement that spells out what we expect the learner to do, know, and feel as a result of this learning experience. Specifically the system requires the formulation of objectives. Once the objectives have been formulated, the development of a criterion test based on these objectives should be incorporated to test the terminal proficiency.


Summary - Business has discovered principles of scientific management, and the efficiency expert is the hero of the day. Success is determined by the ratio of input to output and the public clamors for educators to apply the same principles to schools. The pupil is seen as the final product emerging from the factory and efficiency is sought by reducing money spent per child. The adoption of business-oriented solutions to educational problems and planning may ultimately determine the future educational progress by facilitating an environment containing all the possible interactions that result in a desired performance of the learner.

Formulating Objectives in Education and Their Use in Curriculum Development

The process of formulating objectives is viewed as a gradually unfolding specification, refinement, and description of the expected output performance of the learner. First, the overall purpose of the system must be identified. In a statement of purpose it is necessary that we identify the goal that the learner is to attain. Once the purpose or goal has been determined, performance objectives can be derived and described as specifically as it is possible and feasible. The strategies that comprise the formulation of objectives will establish the nucleus around which the system
should grow. In general terms a statement of purpose will tell us the reason for the system's existence. The very same statement should also reveal some key information about the system as a whole such as; the environment of the system and some of the broad constraints under which the system is to operate. Specific constraints will be considered only during the design phase of the development of the system. It must be clearly defined that a statement of purpose, is not a statement of objectives even though it is the point of departure in formulating objectives.\(^{11}\)

The systems approach confronts us with specific requirements as to how the objectives should be stated. Statements by Mager, Tyler, Smith and Gagne have concluded that objectives are to be deduced from the purpose of the system and that a statement of objectives should specify:

1. **What** the learner is expected to be able to do by
   a. Using verbs that denote observable action.
   b. Indicating the stimulus that is to evoke the behavior of the learner.
   c. Specifying resources (objects) to be used by the learner and persons with whom the learner should interact.

\(^{11}\)Bela Banathy, *op. cit.*, p. 33.
2. **How well** the behavior is expected to be performed by identifying
   a. Accuracy or correctness of response.
   b. Response length, speed, rate and so forth.

3. **Under what circumstances** the learner is expected to perform by specifying
   a. Physical or situational circumstances.
   b. Psychological conditions.

If the objective is formulated in this way, its attainment will be measureable and it can also serve as a basis for the development of the system.\(^{12}\)

In formulating objectives, the designer should strive for a continuous refinement of objectives. By doing so, the designer should arrive at a level of specificity which reaches down to the individual task level. Gagne defines this task level as:

> The smallest unit of performance which can be identified as having a distinct and independent purpose.\(^{13}\)

There are at least three reasons why the designer should be insistent on being quite specific in formulating objectives:

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\(^{13}\)Ibid., p. 12.
1. A description of terminal performance becomes a basis upon which to construct the criterion test. The criterion test is the measuring instrument that is used to assess the degree to which the objective has been achieved. It is the quality control of the system. Emphasis should be placed on stating objectives in measurable terms.

2. Objectives should be stated in sufficient detail to be used as a basis of departure for the actual development of the system they describe.

3. Objectives should be formulated in such a way that they will communicate clearly and unmistakably of what we are attempting to achieve to all involved in the system.\(^{14}\)

Further, the processes involved in stating the purpose of the system, in deriving objectives from that purpose and specifying these objectives, appear to be of two modes: analysis and synthesis. We subject the system to an analysis in order to arrive at operational and measurable descriptions of objectives. A further analysis leads to refinement of the objectives at the task level. The formulation of objectives includes synthesis inasmuch as they had to be constructed according to predetermined criteria. In designing systems, analysis and synthesis can be achieved in a complimentary and, or simultaneous way. Once the needs of the learner have been determined from a study of all the data sources, the

\(^{14}\)Bela Benathy, \textit{op. cit.}, p. 39.
curriculum designer can then develop a list of educational objectives that he feels will meet the needs he has identified and stated and apply this in the rationale for curriculum development. These educational objectives become the criteria by which materials are selected, content is outlined, instructional procedures are developed and test and examinations are prepared.

In the final analysis, objectives are matters of choice and they must therefore by the considered value judgments of those responsible for their application to instructional methodologies. As a rationale for the behavioral objectives approach to instruction, Tyler presents four questions which he establishes as a guideline in developing any curriculum using objectives approach. They are:

1. What educational purpose should the school seek to attain?

2. What educational experiences can be provided that are likely to attain these purposes?

3. How can these educational experiences be effectively organized?

4. How can we determine whether these purposes are being attained?\(^{15}\)

Further, Tyler suggests the use of philosophical and psychological screening techniques in selecting objectives.

The suggestions regarding educational objectives obtained from the three sources: (1) studies of the learners; (2) studies of contemporary life outside the school; and (3) subject specialists, should provide more than enough to incorporate into an educational program. However, for a statement of philosophy to serve most helpfully as a screen in selecting objectives it needs to be stated clearly, and for the main points the implications for educational objectives may need to be spelled out. Such a clear and analytical statement can then be used by examining every proposed objective and noting whether the objective is in harmony with a group of consistent highly important objectives involving school and educational philosophy. The psychological screen technique implies the using a psychology of learning in selecting objectives by writing down the important elements of a defensible psychology of learning, and then indicate in connection with each main point what possible implications it might have for educational objectives. Possible objectives when checked against this statement may be selected as appropriate or rejected from a psychological viewpoint because it is probably unattainably inappropriate to the age level, too general or too specific, or otherwise in conflict with the psychology of learning.\textsuperscript{16}

\textsuperscript{16}Ralph W. Tyler, Basic Principles of Curriculum and Instruction. pp. 33-43.
As a result of the curriculum maker obtaining objectives from several sources, they are likely to be stated in various ways. As a result certain steps must be adopted to elicit the most helpful mode for selecting learning experiences and in guiding teaching. They are:

1. Objectives are sometimes stated as things which the instructor is to do.
   
a. present the theory of evolution.
b. demonstrate nature of inductive proof.

2. Objectives are often stated by listing topics, concepts, generalizations, or other elements of content to be dealt with in a learning experience.

3. Another form for stating objectives is to express them in terms which identify both the kind of behavior to be developed in the student and the content or area of life in which this behavior is to operate.

4. Finally, objectives are sometimes stated in the form of generalized patterns of behavior which fail to indicate more specifically the area of life or the content to which the behavior applies.

By defining the various modes involved in stating objectives for development of curriculum, a clearer indication of the behavioral aspects and the content aspects provides a conceptual schema for selecting the criteria content for learning experiences.

The learning experiences have been considered in terms of their characteristics but not in terms of their organization. It is necessary for the procedures used for organizing
learning experiences into units, courses, and programs to be coherent. Important changes in human behavior are not produced overnight. No single learning experience has a very profound influence upon the learner. In order for educational experiences to produce a cumulative effect, they must be organized as to reinforce each other. Organization is thus seen as an important problem in curriculum development because it greatly influences the efficiency of instruction and the degree to which major educational changes are brought about in learners. The three major criteria to be met in building an effectively organized group of learning experiences are:

2. Sequence - successive experience - build upon preceding one.
3. Integration - unify views and to unify behavior in relation to elements dealt with.

It is not only necessary to recognize that learning experiences need to be organized to achieve continuity, sequence and integration, and that major elements must be identified to serve as organizing threads for these learning experiences, it is also essential to identify the organizing principles by which these threads shall be woven together to provide a psychological organization which broadens and
deepens the learners' commands of the elements involved.\textsuperscript{17}

Goodlad's model for curriculum planning may be summarized in the following manner:

1. Selection of values.
2. Formulation of educational aims.
3. Refinement into specific objectives.
4. Selection of learning opportunities.
5. Designation of the organizing centers for learning.

Goodlad disagrees with Tyler's rationale to gather data-sources - i.e., society, learners, subject matter specialists. He also disagrees with Tyler's rationale for designing objectives, and utilizing philosophical and psychological screens. Goodlad states:

We propose turning to values as the primary data source in developing and selecting objectives for the learning experiences of the school and as a data source in making all subsequent curricular decisions.\textsuperscript{18}

Goodlad further states that the decision making process must involve more than a mere analysis of data; it includes utilization of values and data, simultaneously. The value conflicts natural to a pluralistic society such as ours puts public education in a very uncomfortable position. Toffler

\textsuperscript{17}Ralph W. Tyler, Basic Principles of Curriculum and Instruction. pp. 95-96.

states it in the following manner:

Value turnover is now faster than ever before in history. While in the past a man growing up in a society could expect that its public value system would remain largely unchanged in his life time, except in isolated pre-technological communities. He further identifies that the philosophy of central care of commonly shared values is now expanding into a new broader consensus toward diversity, using the objective approach conservatively.  

A main functional question is on instructional means and satisfying the needs of the students. The teacher must decide what observable behavior the learner should have at the conclusion of instruction. Popham states:

Measurable instructional objectives are designed to counteract what is to me the most serious deficit in American education today, namely, a preoccupation with process without assessment of consequences. Measurable objectives are designed in part to alleviate that particular difficulty. There are at least three realms in which measurable objectives have considerable potential dividends; in curriculum (what goals are selected); in instruction (how to accomplish those goals); and in evaluation (determining whether objectives of the instructional sequence have been realized).

From the three realms mentioned, evaluation can be attained on the basis of having reached, or not having reached specified goals. The curriculum can be examined as to appropriateness of the behavioral objectives and the means-ends relationship of those activities designed to reach stated


performance objectives.

Benjamin S. Bloom states:

Most students (90%) can master what we have to teach them and it is the task of instruction to find the means which will enable our students to master the subject under consideration. Our basic task is to determine what we mean by mastery of the subject and to search for the methods and materials which will enable the largest proportion of our students to attain such mastery. \(^{21}\)

To the curriculum developer, "what we mean by mastery" would be signified in terms of measurable student objectives. The following statements become the basis for activities associated with education.

1. Textbooks no longer dictate the student's experiences, but rather they become subordinate to the design of the curriculum.

2. Educational activities then become the methods by which teachers help learners attain goals.

Gagne describes further:

Possibly the most fundamental reason of all for the central importance of defining educational objectives is that such definition makes possible the basic distinction between content and method. It is the defining of objectives that brings an essential clarity into the area of curriculum design and enables both educational planners and researchers to bring their practical knowledge to bear on the matter. As an example of the kind of clarification which results from defining content as "descriptions of the expected capabilities of students," the following may be noted. Once objectives have been defined, there is no step in curriculum design that can legitimately be entitled "selecting content". This is because the

capabilities of the learner are directly derivable from the objectives themselves, as when from the objective "adds fractions" one derives the content statement "capability of adding fractions." One can select textbooks, motion pictures, laboratory equipment, even torches; but one does not select content. 22

"Students should not have to play guessing games about objectives; students should not have difficulty discriminating objectives from instructional clarification content, irrelevant content or enrichment and interest only content." 23

Most recent curriculum writers specify a methodology of curriculum preparation within the following categories. Of the cognitive or knowledge, domain, Bloom describes the organized taxonomy as containing the following categories:

1. Knowledge
2. Comprehension
3. Application
4. Analysis
5. Synthesis
6. Evaluation 24

In a companion volume, Krathwohl, Bloom and Masia designated additional categories of affective on attitudinal objectives accordingly:


1. Receiving
2. Responding
3. Valuing
4. Organization
5. Characterization by a value or value complex

A third domain, the psycho-motor, has been categorized by Elizabeth Jane Simpson, but as yet has not had the effect of the earlier volumes. The psycho-motor domain is concerned primarily with muscular movement or sensory perception. Such objectives are common to most subject matter areas.

Most influential in its effect on the working of objectives in curriculum development is a book by Robert Mager entitled, "Preparing Instructional Objectives." His Standard for objectives in curriculum building are as follows:

1. Does the statement describe what the learner will be doing when he is demonstrating that he has reached the objective?

2. Does the statement describe the important conditions (givens or restrictions) under which the learner will be expected to demonstrate his competence?

3. Does the statement indicate how the learner will be evaluated? Does it describe the lower limit of performance?

This is not to claim that everyone involved with curriculum development supports this position. In an analysis of the behavioral objective approach, Elliot Eisner declares:

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At first view this seems to be a reasonable way to proceed with curriculum construction: one should know where he is headed before embarking on a trip. Yet, while the procedure of first identifying objectives before proceeding to identify activities is logically defensible, it is not necessarily the most psychologically efficient way to proceed. One can, and teachers often do, identify activities that seem useful, appropriate or rich in educational opportunities and from a consideration of what can be done in a class, identify the objectives or possible consequences of using these activities.\textsuperscript{27}

Atkin states his feelings about behavioral objectives and their use in curriculum building this way:

Early articulation of behavioral objectives by the curriculum developer inevitably tends to limit the range of his exploration. He becomes committed to designing programs that achieve these goals. Thus, if specific objectives in behavioral terms are identified early, there tends to be a limiting factor built into the new curriculum. The innovator is less alert to potentially productive tangents.\textsuperscript{28}

Arguments pro and con are too numerous to mention concerning the use of the behavioral objective approach in curriculum building. Staff members are threatened by evaluation, and students by the threat of being programmed. W. James Popham refutes a number of opposing arguments by pointing out the need for empirical data since nearly all


arguments for or against behavioral objective approach in curriculum development are based primarily on deductive reasoning.\textsuperscript{29}

The field of curriculum is certainly divided in opinion with many authorities maintaining positions defendable only by "theoretical justification" and not by empirical data. Nevertheless, some essentials are highly agreed upon, and these should be distinguishable. Broad educational goals, derived from a thoroughly considered philosophy of education, should yield more specific learner behavioral objectives. These objectives then should be associated with alternative learning activities offering the student more than one avenue to achieve the objective. Learner and staff evaluation must, therefore, be based on attainment of specified objectives - a pre-determined performance criteria. It may be seen that this design for education readily lends itself to a systems design.

These new and different approaches to educational programming has necessitated a change in attitudes and perceptions of many staff and administrative personnel in public education management.

Summary - The task of the curriculum worker is to engineer a wide variety of approaches to education and to generate

alternative institutional forms in which they can be embodied. The result should be to increase on a continual basis the options which are available to the learning population, and the flexibility with which the options can be made available. By developing more options, and giving students the alternatives to educate themselves, the curriculum worker will be making his contribution for an increasingly efficient and profitable educational purpose. Presently, school curriculums offer limited alternatives to students' needs and desires. A wider range of alternatives of higher order nature will enable students to become a full participant, in creative thinking and in dealing with critical issues.

The ultimate is to provide society the rational of discovery in which bureaucratic routine is accursed and self-discovery and cooperative action are favored.

Attitudinal and Perceptual Characteristics in Management

New and basically different approaches to educational decision making, curriculum planning and student management have become part of public education style today. In-service training, management by objectives and systems approach have become watchwords in contemporary American public education. Within this ever-changing educational milieu the attitudinal and perceptual stance of the people involved are quite
important. There seems little doubt on the basis of the researched evidence that there is a strong relationship between occupational groupings and general socioeconomic attitudes. In a typical study, a nationwide sample of the adult white male population was subdivided into the following occupational groups: large business, professional, small business, white collar, skilled manual, semi-skilled manual, and unskilled manual. This breakdown was then related to socioeconomic attitudes. John Miner states:

The greatest conservatism was found in the two business groups and among the professionals, the greatest radicalism among the manual workers, and the greatest variation among the white-collar workers. Apparently many white-collar employees identify with the business management and professional groups, whereas others react in a manner commensurate with their income levels. The greatest conservatism was found in the two business groups and among the professionals, the greatest radicalism among the manual workers, and the greatest variation among the white-collar workers. Apparently many white-collar employees identify with the business management and professional groups, whereas others react in a manner commensurate with their income levels. ³⁰

Taken as a whole, these results provide some indication of the amount of unconflicted support for organizational goals, that may be expected in different occupational groups. Research indicates that managers as a group have a homogeneous set of values that are highly pragmatic in nature. Furthermore, "top level managers differ significantly from middle managers in that they view themselves as being more dynamic, daring, and less cautious." And this trend extends down in

the organization according to Miner. There is little like-
lihood that differences between managers working in the
various areas of specialization are not entirely a consequence
of experiences occurring after managerial responsibilities
have been assumed.

In an extensive study of personalities at the higher
levels of management, a number of personality tests such as:
the Minnesota Multiphasic Personality Inventory, Bernreuter
Personality Inventory and Thematic Apperception Test were
administered to a large group of managers. The results are
summarized in a general way:

1. Sales managers tend to be highly dominant,
sociable, thick-skinned, people-oriented,
and to some extent self-centered.

2. Production managers are somewhat defensive
in nature, and are marked by strong self-
control; they shy away from self-analysis
and tend to prefer the practical.

3. Administrative and accounting managers are
not very creative or original and are given
to moods of depression.\textsuperscript{31}

It is from the studies described that managerial positions
do contain individuals with certain specific personality
characteristics and there is reason to believe that major
differences exist among managers working in different areas.
Individual and group differences can serve as a constraint
against growth of any kind, because many of the characteris-
tics noted appear to be required for all managerial work,

\textsuperscript{31} John B. Miner, \textit{Personnel and Industrial Relations},
\textit{op. cit.}, p. 60.
and a small organization is simply not likely to have resources available in sufficient quantity.

One procedure for analyzing management is the attitude survey. Attitude surveys are normally handled on a group basis to evaluate the overall level of morale in a given unit. Surveys of this kind normally contain questions dealing with working conditions, supervisory behavior, attitude toward the job itself, loyalty to the company as a whole, company policies and other considerations. The communications aspect is particularly important and evident when questions are included to determine the extent.

**Attitude Management**

When we move to the matter of attitude measurement, the primary focus is on factors related to a company's organizational maintenance objective. The major techniques are management estimation, interviews, questionnaires, attitude scales and indirect measures. The techniques of sociometry should probably be added to the above list, although they are based on somewhat different considerations.

**Management Estimation**

Rating procedures can be employed to obtain information regarding a person's attitudes and the behavior that is a consequence of these attitudes. Immediate supervisors are in a good position to observe their subordinates. Almost all rating firms contain some items having to do with cooperation,
and they deal directly with behavior that is a consequence of job attitudes and job satisfaction. Many supervisors may not wish to inform higher management regarding any wide-spread dissatisfaction within their groups for fear this condition will reflect on their own competence or they may not actually be aware of the degree of discontent.

**Interviews**

One obvious approach is to ask employees how they feel. The difficulty is that many will not feel free to express negative attitudes because of fear of retaliation. It has been found desirable to have interviews conducted by a consulting firm or representatives of a university to ensure anonymity and bias. In this case, management is given a report in terms of group frequencies, rather than individual's attitude. This represents a major loss insofar as the process of comparing employees against role prescriptions is concerned. Interviews may be guided or unguided. In the latter instance the interviewer encourages the employee to express himself in various areas but does not follow a definite format. Attitudes are assessed by the interviewer based on what happens in the interview as a whole. Because unguided interviews are difficult to quantify, the tendency has been to resort primarily to the guided approach.

**Questionnaires**

In the past it has been a common practice to enclose
attitude questionnaires with paychecks, to mail them to the employee's home, or even to hand them out at quitting time. This procedure elicits a response of 50 percent or considerably less and it is difficult to know what the results mean. Because anonymity is usually protected in order to foster valid answers, it is not possible to follow up on those who do not return completed forms. A more desirable procedure, now widely adopted, is to assemble the employees in groups and have them complete the forms on company time. This yields to a response rate comparable to those obtained with personal interviews. The topics covered in an attitude questionnaire vary with the particular needs of a company at a given time. Attitude questionnaires are of two basic types: fixed alternative and open-ended. The former category contains questions with simple yes-no alternatives as well as multiple choice. Open-ended responses must be categorized after results are obtained, followed by coding the responses according to the category applicable. This technique is more costly and time-consuming.

Attitude Scales

Attitude scales are frequently utilized in instances where a more precise and reliable measure is desired than can be obtained from questionnaire items. A common factor among attitude scales is that various scores or weights are attached to different alternatives to indicate the degree of
feeling characterized by a person's response.\textsuperscript{32}

Roethlisberger and Dickson's description of the industrial organization closely parallels the three levels of culture. Roethlisberger and Dickson's abbreviated scheme is as follows:

Technical Organization refers to the requirements of the productive processes, such as tools, materials, conversion processes, and products. Above the level of the individual, the human organization features two important levels: The formal and informal organizations. The formal organization consists of explicit sets of rules and regulations which prescribe the authority hierarchy and the relationships between the technical organization, that is, the logics of work and the social organization. The informal organization consists of actual behavior patterns and sentiments, regardless of the formal prescriptions. Since the actual behaviors and sentiments of work groups are based on largely unrecognized social norms, values and traditions, they correspond to formal and informal levels of culture.\textsuperscript{33}

Further, Roethlisberger and Dickson's description of the total organization focuses on the concept of equilibrium as such:

That any change in one part is accompanied by changes in the other parts. Any change in external pressures on the total system will result in tendencies within the system to maintain, or return to, its original condition. Any particular activity pattern within the total organization contains elements of the technical, formal,

\textsuperscript{32} John B. Miner, \textit{Personnel and Industrial Relations, op. cit.}, pp. 233-237.

and informal systems. An attempted change in a technical procedure, for example, will affect other technical procedures, formal activities, and especially the informal organization of interactions, activities and sentiments.\(^{34}\)

Attempted changes in organizational behavior patterns are usually introduced in terms of specific and explicit modifications of technical or formal requirements. Management does not, normally address the informal patterns of behavior and sentiments, mainly because there is a lack of awareness of the existence of such patterns. Another reason is that the change agent has no socially legitimate way of addressing it without overstepping the boundaries of his formal and technical role. As a result organizational changes which are consummated successfully, inevitably involve informal behavior patterns.

Rensis Likert, who has conducted extensive research in the field of organizational management covering a wide range of industries, hospitals, government and even women's clubs disclosed that:

Consistent differences exist between highly productive managers and low producers. That high producers were found to be what Likert describes as "employee-centered" while the less productive managers were called "job-centered". Managers with relatively poor production records tend to concentrate on keeping subordinates busily engaged in going through a specific work cycle. Managers with

the best records of performance focus primary attention on the human aspects of their subordinates' problems. The job-centered manager does not really understand his employee or how to motivate him. \(^{35}\)

Likert further states:

That the high producing manager's attitude is to let people do their job the way that they want to so long as they accomplish the objective. \(^{36}\)

Likert adds, highly productive managers have the confidence and respect of their workers and, because of their skills in human relationships, receive greater co-operation and productivity from subordinates. High peer-group loyalty (loyalty among the workers toward one another irrespective of their attitude toward their supervisor) is not necessarily associated with high productivity. Data show the great importance of the quality of leadership. The general style of leadership throughout the organization are usually much more important in influencing results than such general factors as attitudes toward the company and interest in the job itself.

**Communication: Its Effect on Organizational Performance**

Viewed as one of the most important processes of management, communication systems of most companies have serious flaws. Communication is a complex process involving many

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\(^{36}\) Ibid., pp. 179-180.
dimensions such as:

1. Transmission of material from sender to the target audience.

2. Its reception and comprehension.

3. Acceptance or rejection.

4. Assumption that information placed before employees has been communicated, understood and accepted.

5. Diverse nature of the material to be transmitted.

I. There is Cognitive Material such as:

1. Information or facts as to the current situation, problems, progress toward goals.

2. Ideas, suggestions, experiences.

3. Knowledge with regard to objectives, policies, actions.

II. Motivational and emotional material such as:

1. Emotional climate or atmosphere

2. Attitudes and reactions

3. Loyalties and hostilities

4. Feelings of support, appreciation or rejection

5. Goals and objectives\(^{37}\)

In view of the complex processes and the varied character of the material, it is not surprising that the communication process often breaks down. In addition, unfavorable attitudes on the part of members of the organization create

serious blocks to the transmission and acceptance of information. Hostility, fear, distrust and similar attitudes tend not only to reduce the flow and acceptance of relevant information, but also to evoke motives to distort communications both upward and downward. Many studies reflect evidence of the inaccuracy and inadequacy of communication processes.

Summary - The data show the great importance of the quality of leadership. For every criterion, such as productivity, absence, attitudes and promotability of the supervisor the same basic patterns of supervision yield the best results. Supervision and the general style of leadership throughout the organization are usually more important in influencing results than such general factors as attitudes toward the organization and interest in the job itself. With data indicating that people are less willing to accept pressure and close supervision than the case a decade ago, the trend is toward giving the individual greater freedom and initiative in participating in decision making which affect them. Most of the research findings on which the newer theory is based have come from studies in business. But application of the theory is not limited to these enterprises. It is equally applicable to other kinds of organized human activity. While specific procedures will vary with the organization, the basic theory can be applied to all.
An Overview of the Purpose and Construction of Measurements with Focus on Attitude Scale and Opinionnaires

A series of important scientific developments have occurred during the past quarter of a century of great potential value to administrators in business, government, hospitals and schools. The Social Sciences, along with mathematics and statistics, have created methodologies for measuring and analyzing variables valuable both for helping and enterprise decide on which management system to use and for appraising the present state of its human organization.

These methodological developments make it possible now to measure the causal and intervening variables with accuracies approaching or exceeding the accuracy of measurement of the end-result variables. End-result information provides after-the-fact information, usually when it is too late to take corrective action. End-result measurements, moreover, usually provide neither adequate information about the causes of the undesired results nor the best clues to guide decisions to solve them or prevent them.

Likert states:

Only the causal and intervening variables provide information correctly describing the current internal state of the organization as a human enterprise. Especially important are the causal variables, which provide data enabling one to predict with reasonable accuracy the future trends in the organization. 38

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We are coming to recognize with increasing clarity that the capacity of an organization to function well depends both upon the quality of its decision-making processes and upon the adequacy and accuracy of the information used. Sound decisions require accurate information about the relevant dimensions of the problem as well as correct interpretation of that information. Inaccurate information used in decision-making processes result in diagnostic decisions being in error and the action taken, inappropriate.

The information obtained anonymously from each person concerning his behavior, perceptions, reactions, attitudes, and similar variables should be confidential. The measurements of the responses obtained should be such that it can be analyzed by operating units down to the lowest levels in the organization. When confidentiality of responses cannot be assured because of smallness of the units, the data should be combined with other small units to maintain anonymity in interpreting cause and effect and its analysis. An important focus, as a result, should be on building and maintaining a highly effective, highly motivated human organization using the science-based system of management.

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Likert's four management systems are defined according to an organizational and performance characteristic response to seven organizational variables. The seven organizational variables described by Likert are the following:

1. Leadership process used.
2. Character of motivational force.
3. Character of communication process.
4. Character of interaction influence process.
5. Character of decision-making process.
6. Character of goal-setting or ordering.
7. Character of control process.

In the first organizational variable, the extent to which superiors have confidence and trust in subordinates range from having no confidence and trust in subordinates in System I, to having condescending confidence and trust, such as master has to servant in System II, to substantial but not complete confidence and trust; still wishes to keep control of decisions in System III, and in System IV, complete confidence and trust in all matters.

In the second organizational variable, the character of motivational forces and the manner in which motives are used range from fear, threats, punishment and occasional

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rewards in System I to rewards and some actual or potential punishment in System II. In System III, rewards, occasional punishment, and some involvement; to economic rewards based on a compensation system developed through participation; group participation and involvement in setting goals, improving methods, appraising progress toward goals in System IV.

The third organizational variable, the character of communication process, concentrates on the amount of interaction and communication aimed at achieving organizations' objectives ranges from very little in System I, to little in System II, while in System III quite a bit, to much with both individuals and groups in System IV.

The fourth organizational variable focuses on the character of interaction, influence process and the amount and character of interaction. In System I there is little interaction and always with fear and distrust, while in System II there is little interaction and usually with some condescension by superiors; fear and caution by subordinates. In System III there is a moderate interaction, often with a fair amount of confidence and trust, while in System IV there is extensive, friendly interaction with a high degree of confidence and trust.

The fifth organizational variable stresses the character of decision-making process and at what level in the organization decisions are formally made. In Systems I, the bulk of
the decisions are made at the top of the organization, while in System II, policy is established at the top, with many decisions within prescribed framework made at lower levels. In System III, broad policy and general decisions are made at the top, with more specific decisions made at lower levels. In System IV decision-making is widely done throughout the organization, although well-integrated through linking process provided by overlapping groups.

The sixth organizational variable converges on the character of goal-setting or ordering, and the manner in which it is usually done. In System I orders are issued, while in System II, orders are issued with opportunity to comment may or may not exist. In System III, goals are set or orders issued after discussion with subordinate(s) of problems and planned action. System IV provides that, except in emergencies, goals are usually established by means of group participation.

The seventh organizational variable focuses on the character of control processes to the extent to which the review and control functions are concentrated. In System I, these functions are highly concentrated in top management, while in System II, the functions are relatively highly concentrated with some delegated control to middle and lower levels. In System III there is a moderate downward delegation of review and control processes; lower as well as higher levels
feel responsible. In System IV, there is quite widespread responsibility for review and control, with lower units at times imposing more rigorous reviews and tighter controls than top management. Researchers point out that low-producing units consistently fall under System I and II, while high-producing units fall under System III and IV.

A descriptive view of the four Management Systems places the Systems I, II, and III under the authoritative attitude, while System IV is considered to be a participative attitude. Further, in analyzing operating characteristics, System I is categorized as exploitive authoritative, while System II is categorized as benevolent authoritative. System III is consultative, and System IV is categorized as participative group nature. Some of the operating characteristics and the performance of the different management systems to those operating characteristics will be comparatively analyzed below.

In the operating characteristic of motivational forces - underlying motives tapped

System I performance is based on physical security, economic security, and some use of the desire for status. System II performance is economic and occasionally ego motives with the desire for status. In System III, the performance is economic, ego, and other major motives such as the desire for new experience. System IV performance provides full use of economic, ego, and other major motives, as for example, motivational forces arising from group process.
In the operating characteristic communication process - the amount of interaction and communication aimed at achieving organization's objectives

System I performance is very little, while System II is little; System III performance is quite a bit, while System IV performance utilizes much with both individuals and groups.

In the operational characteristic of interaction influence process - amount and character of interaction

System I provides little interaction and always with fear and distrust. System II provides little interaction and usually with some condescension by superiors; fear and caution by subordinates, while in System III there is a moderate interaction, often with fair amount of confidence and trust. In System IV, there is an extensive, friendly interaction with high degree of confidence and trust.

In the operational characteristic of decision-making process - At what level in an organization are decisions formally made?

In System I the bulk of the decisions are made at the top of the organization. In System II, policy is established at the top of the organization, with many decisions within the prescribed framework made at lower levels. System III provides for broad policy and general decisions at the top of the organization, and more specific decisions made at the lower levels. In System IV, decision-making is widely done throughout the organization, although well integrated through linking process provided by overlapping groups.
The operational characteristic of goal-setting or ordering - manner in which usually done

In System I, orders are issued, while in System II, orders are issued, and the opportunity to comment may or may not exist. In System III, goals are set or orders issued after discussion with subordinate(s) of problems and planned action. System IV provides that, except in emergencies, goals are usually established by means of group participation.

In the operational characterization of control processes - At which hierarchical levels in organization does major or primary concern exist with regard to the performance of the control function?

In System I, it is at the very top only, while in System II it is primarily or largely at the top. In System III, it is primarily at the top but some shared feeling of responsibility felt at the middle and to a lesser extent at lower levels. In System IV, concern for performance of control function is likely to be felt throughout the organization.

In the operational characterization of performance characteristics - productivity

In System I, there is mediocre productivity, while in System II, fair to good productivity. System III provides good productivity and in System IV, productivity is excellent.  

Researchers tested the usefulness of these characteristics. A frequency distribution of the responses point out,

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41 Ibid., pp. 14-24.
the responses are distributed over a wide range for each item, but the bulk of the responses fall under the "benevolent authoritative" (System II) and "participative group" (System IV). Data revealed that virtually every one of the participants (managers) "would like to have" his company use System IV.

A fundamental concept of System IV is that the results achieved by an organization are a manifestation of the effectiveness of the interaction-influence system of its human staff. In contrast to the System IV pattern, System II management focuses on procedures and outcome.

Use of Opinionnaires

A basic difference exists between System IV and System II in the way measurements of the causal and intervening variables are used. System IV uses measurements to build highly effective, highly motivated human organization to produce desired results. System II utilizes opinionnaires to check attitude favorability or unfavorability. The opinion studies collect few measurements of causal variables. The opinionnaires tend to show change but tell little of the cause.42 This "fever chart" approach was neither designed nor analyzed to reveal cause and effect relationships. Since these scores could be interpreted only in terms of trends in attitudes and motivation, a sense of frustration resulted when trends were

42 Ibid., p. 132.
not favorable. The remedy ultimately was a shift from System II to System IV with corresponding changes in the measurements obtained and the manner in which they are used. These data aid the members of the organization to accomplish both the specific goals they have set for themselves and the broad objectives they have helped to set for the organization. Measurements of all three kinds of variables, i.e., causal, intervening, end-result, are eagerly sought when they provide valuable information to help guide decisions and actions and are not used punitively. Members of the organization want the data, and clearly recognize the necessity for the measurements to be accurate.

Likert states:

There are impressive differences among the different management measurement systems in their capacity to obtain accurate and undistorted measurements of all variables. System IV, the science based management, can obtain significantly more accurate data than can the other existing systems.  

Moreover, in System IV, the high levels of confidence and trust which exist enable accurate measurements once obtained to flow to all relevant parts of the enterprise to provide correct information to all persons who have need for it. It is valuable to recognize in any diagnosis or

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43 Ibid., pp. 135-136.
44 Ibid., pp. 138.
analysis of an enterprise which variables are causal, which intervening, and which end-result. Thus, if one wishes to diagnose a problem involving end-result variables in terms of causal and intervening variables, it is obviously necessary to measure all three kinds to determine what are the key causal variables which must be changed to improve the situation. The intervening variables are divided into two broad categories:

1. the intervening attitudinal, motivational, and perceptual cluster, and
2. the intervening behavioral cluster.

These two subcategories merge into one another. There is not a sharp break as the shift is made from the motivational forces to act and some of the resulting action. This is illustrated by the shading from feeling, wanting and seeking to behaving. The need for extensive lists of end-result variables is not necessary, for these end-result variables are measured well. The concept of co-ordination can be used to describe the way the variables are classified. When an organization is seeking to make a classification shift, the efforts to change should be focused initially on the causal variables. Changes brought about in the causal variables will lead in turn to changes in the intervening and end-result variables.
Avoiding Overabundance of Data

The tremendous capacity of large computers may tempt those who are performing the assessment task to obtain measurements on a large number of items and report on them. This would bury board and departments in reports and tables. The time required for the analysis and interpretation of such a mountain of data would cause the results to be ignored due to time pressures arising from day to day operations. A marked relationship between one or two key items and a number of other items is a basis for omission of all but key items for there are relatively stable patterns of interrelations among the items.

Likert states:

These interrelationships should be checked periodically, however, by including the different items which are related to the key items on a rotating, reverse type, basis with key items in each round of measurement. This would permit a check on the stability of the item relationships.\textsuperscript{45}

Only the most important variables which have the most marked relationships and which best summarize many other variables need be reported on. Data should be reported on those dimensions which are operationally most vital, and have the greatest influence on performance.

In the process of developing measurement systems, Likert made evident the fact that the Likert-type scale can be

\textsuperscript{45} Ibid., p. 144.
used not only to discover what an individual believes are the present characteristics of his organization, but also to find out what he would like the characteristics of his organization to be.\textsuperscript{46} In Likert's attitude scale procedure, a large number of judges indicate their own attitudes by responding to carefully constructed statements thought to pertain to the attitude in question. They choose one of five possible responses to each item. These are: strongly agree, agree, undecided, disagree and strongly disagree. Weights of 1, 2, 3, 4, and 5 respectively, are assigned to the responses.\textsuperscript{47}

Likert exemplifies the procedure this way:

Strong agreement indicates the most favorable attitude and hence receives the highest weight, 5. Strong disagreement indicates the least favorable attitude and received the lowest weight, 1. Other response categories receive appropriate in-between weights. The total score for an individual is the sum of the weights for each response he makes to the statements. When an item is stated so that agreement indicates a con attitude, the weights are reversed. In other words, a prejudiced response always receives a lower weight and a pro response a higher weight.\textsuperscript{48}

Further, a weighted mean score for each statement can be computed to present a gauge of the differential attitudes

\textsuperscript{46} Ibid., p. 13.


\textsuperscript{48} Ibid., p. 103.
of each test item based upon the percent of response of the tested population to each response item of a statement. This is accomplished by multiplying each response item percentage by the weight (5-1) or (1-5) depending upon the statement being stated as pro or con. The sum total of each computed mean for each response item is the weighted mean of that test statement.\footnote{Roger H. Peck, Phd. Associate Professor, Southern Connecticut State College, 1973.}

In constructing a scale by the Likert method, a large number of items is used at first. In order to reduce the number of items so that the final form of the scale may be taken by a respondent in a brief period, an internal consistency analysis of the items is made. This is accomplished by determining the extent to which the responses of the persons in the standardization group to a particular item are consistent with their total scores. That is, the difference in responses to an item among those persons making the highest total scores and among those making the lowest total scores should be at a minimum. At the same time, the difference between the average response of the high and of the low group should be a maximum.

Likert states that:

If those persons with the highest total scores all chose strongly agree for an item, and those with the lowest total scores all chose strongly disagree, persons within each group would be
perfectly consistent with each other, and that item would be an effective one in discriminating between those with high and low scores. Such consistency is rare, and in actual practice items retained for the final scale are the ones that best differentiate between persons with high and low total scores.\(^{50}\)

In the case of opinion polling, the investigator is usually interested in obtaining quantitative measures on a considerable variety of attitudes from the same respondent. Here, the investigator may use only one or a few questions to assess each attitude or opinion. In some instances a question requires the respondent to choose one of several possible answers to a question. In another type of question a scaled set of responses to obtain a crude quantitative score would be used.

Questions are raised concerning attitude scale construction such as those designed by Thurstone or Likert. Concern centers around whether or not they measure a single attitude. Likert and Thurstone techniques both begin with a large pool of items that represent several different attitudes instead of one. A selection process used for choosing the final items does not prohibit heterogeneity. The attitude object is largely based on the judgment of the investigator in his final selection from the pool of items.

Guttman describes:

An attitude scale is considered unidimensional if on every item a person with a more favorable

\(^{50}\)Secord and Backman, op. cit., pp. 103-104.
attitude gives a response more favorable than, or equally favorable to, a person with a less favorable attitude. In this case his response to every item is perfectly consistent with his overall position on the attitude dimension. The items yielding equally favorable responses for the two individuals are considered consistent because it is assumed that not all items will discriminate between these two individuals.\(^5\)

The essential characteristic of a unidimensional scale is: that the pattern of responses is reproducible from knowledge of the scale score - with the allocation of ten percent of the responses falling outside the unidimensional pattern.

Selltiz has argued:

If we wish to predict complex behavior, we need to measure a complex attitude, not a unidimensional one.\(^5\)

Contradictory to Selltiz's remark Guttman states:

If both the attitude and the behavior could be measured unidimensionally, prediction would be enhanced. Also a scale may be reproducible when taken by one group of persons and not when taken by another.\(^5\)

In general, however, these methods have appeared to become useful for certain kinds of scaling problems.

Summary - Two basic methods of assessing attitudes are the attitude scale and the free-response technique. The three most commonly used formal scales are the Thurstone, Likert and Guttman scales.

\(^{51}\text{Ibid.}, \text{p. 105.}\)

\(^{52}\text{Ibid.}, \text{p. 106.}\)

\(^{53}\text{Ibid.}, \text{p. 107.}\)
Thurstone Scale - is constructed by assigning scale values to attitude statements, indicating the extent to which the items represent a pro or con position. Scale values are assigned to each item. A final form of the scale includes statements with a wide range of scale values and elicits maximum agreement among judges. The respondent whose attitude is to be assessed selects the items with which he agrees, and his attitude score is the median scale value of items he has selected.

Likert Scale - is constructed according to judges expressing attitudes according to a five-choice response ranging from strongly agree to strongly disagree. The responses are weighted to obtain a total score with direction of attitude in mind. From this, the extent of discrimination between high and low scores are determined. Items that best discriminate are retained for the final form of the scale. A large number of attitudes can be measured with the use of only one or a few questions for each attitude. Each question has scaled choices for choosing from.

Guttman Scale - is a method for determining unidimensionality. Unidimensionality is achieved on every item a person with a more favorable attitude gives a response more favorable than, or equally favorable to that of a person with less favorable attitude.
The most representative technique in the free-response method is the open-end interview, where the subject is encouraged to talk freely about topics relevant to attitude.

The measurement and evaluation tasks are a complex assignment requiring considerable competence in specialized fields. Even when the investigator possesses the necessary tools and talent, other obstacles (attitudinal, organizational and strategic) present problems for a good evaluating assessment. A review of literature and related research will outline and discuss the problems and techniques in assessment of training.

The Assessment of Training

A review of the related research and literature on evaluation of training resulted in a response that signifies evaluation of training is mostly inadequate and that good evaluation is a difficult accomplishment, but not impossible. Belasco and Trice state that even though evaluation benefits the practitioner and academician, most training efforts are still not evaluated systematically. The main reason for the lack of effort is due to the evaluation study design. The planning and carrying through of a good evaluation is difficult to accomplish, but it is possible for the most part.  

It appears that problems involved in assessing training efforts can be categorized into two major areas: (1) The attitudinal and organizational obstacles to evaluation, and (2) the strategic problems to evaluation.

**Attitudinal and Organizational obstacles to Evaluation**

There are several identifiable attitudinal and organizational obstacles to evaluation. The first resistance occurs from the critical nature of the evaluation process and the evaluator himself. Evaluation itself assumes that the change effort can be improved and threatens, "Why couldn't it have been better in the first place?" The evaluator's role is to be a corrective agent; from results, he will assist the practitioner in improving the practice. Thus the role of the evaluator energizes his chances of a direct conflict with the practitioner. This conflict is present even when a single person assumes both roles, that of the evaluator and practitioner.

Another form of resistance develops from the training specialists. The training specialists and therapists emphatically point out that evaluation is essentially unfair to them. The changes they seek to induce are subject to undermining from many other sources which are independent of their control. The training or therapy may accomplish significant

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changes in attitude, knowledge, and behavior, only to have these changes eliminated when the individual returns to normal patterns of working and living.\textsuperscript{56}

Another serious objection to any form of evaluation stems from a concern for the privacy of individuals. Testing, psychological screening devices, and attitude questionnaires in general are under attack as invasions of individual privacy, especially when the evaluation service is conducted by individuals from inside the organization.\textsuperscript{57}

The attitudinal and organizational obstacles summarized above have been intensified to the point that a serious negative attitude toward future attempts to evaluate the change process exists.\textsuperscript{58} Added to these obstacles are the strategic problems to evaluation, which are briefly described in the following section.

Strategic Problems to Evaluation

To understand the strategic problems to evaluation, a discussion should reveal the two basic approaches which have been used in assessing training efforts. These are the subjective and the objective approaches.

\textsuperscript{56} Ibid., p. 10.
\textsuperscript{57} Ibid., p. 11.
\textsuperscript{58} Ibid., p. 9.
The subjective approach attempts to discover how the trainee feels about training by questions. Usually there is no special design utilized and involves less time, cost, and other resources than the objective approach. In most cases the number of respondents needed are less. A major disadvantage is that change is evident only in the participants' feeling about the training and not in the participants' responses. The questions asked are designed to find out how much the participant liked the training program, how he believes the program could be improved, and how it helped him. The questions are not involved as a precise design such as "before-after" measure, and are administered only once.

The objective approach, rather than seek the participants' feelings and reactions, attempts to identify the amount and specific kind of change that occurred and can be attributed to the training. Questions which the respondent completes involve subjects external to him. Differences in responses to questions before and after training facilitate the measure of kind and amount of change. This approach, then, usually involves some design, which seeks to identify the effects of the change agent with considerably more precision and rigor. While the objective approach to assess training change requires greater investment in time, money, personnel and skill,

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it is a more exact method to study change because it can both identify and explain it more easily.\textsuperscript{60}

The inherent difficulties in studying change, using either the subjective or the objective approach, fall into four problem areas. These are the problems of criterion, control, contamination, and detective work.\textsuperscript{61} These problem areas are the ones that plague most efforts to assess change.

**Criterion Problem**

A good criterion must have a measurable statement of objectives and a measuring instrument to determine whether the objectives have been fulfilled. Four difficulties become identifiable in criteria development. One of the difficulties is that training objectives are vague, which means that unless the expected results are known, it becomes impossible to use evaluation methods that are appropriate for a training program. In addition, it is difficult to find the specific change for which the training is designed.

The next difficulty in criterion development is whether the objective of training is individual or organizational change.

\textsuperscript{60} Ibid., p. 15.

\textsuperscript{61} Ibid., p. 16.
Much of the time, training programs are concentrated on describing training objectives in terms of individual change rather than organizational change mainly due to difficulty in measuring organizational effectiveness.

The third difficulty in the development of criterion focuses on the issue of length of time necessary for training objective achievement. Kirkpatrick states in his book, *American Society of Training Directors* that: Increased knowledge can be an immediate objective. Changes in job behavior an intermediate objective, changes in production turnover, absenteeism, and morale an ultimate objective. 62

Fleishman in his study indicated that:

Evaluation should take place immediately after the training experience in order to indicate a positive change in the direction desired by the trainer. Identical evaluation taken at a later date show that much of the change had been eliminated. Some supervisors had even become more negative concerning the subject matter of the training. 63

The effectiveness of a training program pertaining to change and the evaluation is questioned by some people. It has been argued that a training program can add very little to the stock of ideas, skills, and capacities accumulated over a person’s lifetime. Is it possible to evaluate change at

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The reaction by Belasco and Trice brings out a very pertinent point in that:

Education is a lifetime process. Even though the change experience itself may add few original thoughts, it may provide a stimulus to the re-thinking of previously held and now ignored ideas. Thus exposure to a change experience may precipitate in some participants but not in others. It is possible, therefore, to state the expected outcome of the change experience and then to evaluate the degree to which the experience contributed to the precipitation of these outcomes.  

Problems of Control and Contamination

A review of the problems of control and contamination are outlined as follows:

Control is necessary in order to eliminate the possibility that factors other than the change experience produce the results recorded by the criterion yardstick. The essence of effective control lies in the comparison between exposed and unexposed groups. In order to ensure the legitimacy of the comparison - that is, that the two groups are truly comparable except for the change experience - some form of measurement of both groups must be made usually before the change experience takes place. This measurement which is essential to establish comparability, introduces many additional factors to further contaminate the result. Thus, control being unyielding, brings with it contamination.  

Three major sources of possible contamination have been identified. The first is that which arises from obtaining a measure of the criterion before the onset of the change experience.

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64 Ibid., p. 21.
This measure of the criterion may sensitize the participants so that the change results are affected. The contamination exists whether the yardstick is objective or subjective in nature. Richard Solomon describes it in this manner:

We feel that the pretest operates directly upon the effectiveness of the training or interacts with the training process. That is, there is a great possibility that merely taking a pretest changes the subjects' attitude toward the training procedure. Also, it may conceivably change the set or attentional factors important to the effectiveness of training. Finally, it may actually change the manner in which the subjects perceive the training material.66

The indication here is that the completion of questionnaires or an interview before training, requiring an individual to think about a certain subject may predispose that individual to be more aware of that subject when it is referred to during the change experience.

Another source of contamination is time passage and uncontrolled events which occur.

The third identified source of contamination arises from the sources of the data and the manner in which the data is collected. There are indications that at least six different sources of data collection techniques were utilized. Lundberg cites the following sources used in the collection of data:67

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1. data from subordinates or superiors
2. data from observers about the effectiveness of change occurring in trainees
3. trainer's opinion of attitude and progress of trainees
4. opinions of trainees about the values or acceptance of a particular change agent
5. the measurements of relevant attitude feelings and beliefs of trainees, and
6. company personnel and/or productivity records.

It should be noted that each of these data sources have their own peculiar contamination problems.

These three contamination problems - the criterion yardstick, the passage of time, and the collection of data - are all prevalent in evaluation efforts.

Solomon's Four-Way Design process is recommended to control possible contamination. The process for implementing this design is shown in the following figure:

<table>
<thead>
<tr>
<th>EXPERIMENTAL GROUP</th>
<th>CONTROL GROUPS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Before Measure</td>
<td>YES</td>
</tr>
<tr>
<td>Training</td>
<td>YES</td>
</tr>
<tr>
<td>After Measure</td>
<td>YES</td>
</tr>
</tbody>
</table>

Fig. 1: Solomon's Four-Way Design Process

A purer change-agent effect can take place by comparing the post-test means for groups B and D which are not

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<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before Measure</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
</tr>
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<td>Training</td>
<td>YES</td>
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A purer change-agent effect can take place by comparing the post-test means for groups B and D which are not

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contaminated by a pre-test.69

There are a number of advantages and disadvantages to the four-way design.70 Many of the disadvantages are due to the operational problems of the design, such as the necessity of 4-10 hours to administer.

Belasco and Trice describe the following on the four-way design:

Upon reflection, it seems that the Solomon design arose in response to the instrument contamination problems associated with the traditional evaluation design. Rather than dealing with the overt symptoms of the problem, however, it might be more profitable to examine its root course and question the utility and necessity of the pretest itself. If the pre-test could be eliminated, it would obviate the basic need for the four-way design.

Presumably, the pre-test is necessary in order to establish a starting point from which to compute change. The assumption is that individuals will vary in their initial attitudes, knowledge, and behavior. In comparing the results of two groups, one trained and one untrained control, if the researcher does not know the starting points on his criteria for both groups, any differences after the training may be attributable to different starting points. Yet this information is secured at a high price.71

Canter et. al.72 reviewed several studies and found that criterion considerations were similar for the two groups

69 Belasco and Trice, op. cit., p. 31.
70 Ibid., pp. 31-32, and pp. 154-156.
71 Ibid., p. 154
on the pre-test. This is an indication that the pre-test may not be needed.

Because of this indication, Belasco and Trice presented the following:

In reviewing there is at least one alternative to the pre-test. With large numbers of 200 or more, through random division into two unpre-tested groups consisting of one training group and one untrained control group, in all probability the sampling process will yield groups with comparable starting positions on the criteria and eliminate the need for a pre-test. The probability of drawing comparable groups increases greatly if the sample is stratified on those variables which probably lead to differential evaluation study; for instance, stratification on the basis of sex, division employed in, and type of work supervised, minimized the possibility of drawing groups which would have been significantly different from each other. Stratification on certain personality traits would even further remove the possibility of drawing groups with different starting points.  

The Problem of Detective Work

This problem related to such aspects as, (1) contacting the persons to complete the evaluation measures; (2) getting the participants to fully complete the measures and returning them; (3) locating a valid control group; and (4) maintaining the original design of the study. These problems often become major inhibiting factors in attempting to assess a training approach. Many of the problems associated with the

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detective work relate to the gathering of evaluation information.

There appears to be two techniques that can be used for the gathering of detective work; the written questionnaire and personal interviewing. One problem that exists in the preparation of effective questions is whether to use open or closed questions. Open questions ask the participant to answer in his own words but within the broad limits of a topic. Closed questions force the participant to select an answer from presented alternatives. There are advantages and disadvantages to both types of questions; for example, an important advantage of the open question is that the participant is able to communicate more information, and with greater variety. Therefore, more facts can be learned from fewer questions. On the other hand, one disadvantage is that the responses are so diversified that it requires much work to sort out the data, and oftentimes it is impossible to compare the results on an individual or group basis. Also, individuals are not always motivated to present their own ideas on the topic, and often repress their feelings and withhold information for fear of appearing foolish, ignorant, or pessimistic.  

There are also a number of advantages and disadvantages to the closed question. First, the responses to the closed

74 Belasco and Trice, op. cit., p. 159.
questions eliminated diversity and ensures the same stimuli for responses from every participant, making it easy to quantify. If well prepared, the closed question permits comparability between individual and group responses. The closed question also, by providing specific choices and the actual words, reduces barriers to response. A forced response to a closed question reduces the validity of the responses because the participant may be forced to take a position or, the choices do not describe true feelings and no provision is present to express it better.

Belasco and Trice list five implications for practical application from their studies. A summary of three of the five recommendations which are pertinent to the present study are being accomplished by this investigator.

**Summary** - Presented below are three summarized recommendations that are applicable to this study.

First and foremost, in training we urge a functional role for the questionnaire as a change agent, either independent of, or in concert with training. Completing of the questionnaires before the training can add to the training effect by sensitizing the trainee to seek more information. Questionnaires may be useful not only where training deals with new information, but also where it reviews information presumably already possessed by the trainee.

Second, the ceremonial aspects of training should be deliberately planned for and fostered. Training might be used to reduce tensions arising out of major organizational and technological change. It could improve morale and increase identification with the organization.
Third, the use of an unpre-tested two-group design is the most valid for evaluation. The comparison of after-training scores of one group which has been trained with those of another group which have not been trained avoids all the contaminants introduced by the pretraining questionnaire administering.\textsuperscript{75}

\textsuperscript{75} Belasco and Trice, \textit{op. cit.}, pp. 156-157.
CHAPTER III

A DESCRIPTION OF THE BACKGROUND, DEVELOPMENT, AND IMPLEMENTATION OF THE PERFORMANCE OBJECTIVE PROGRAM

In the previous chapter an examination was made of the systems approach to education; the use of objectives in education generally and in curriculum development specifically; attitudes and perceptions in management; and a description of measurement utilizing attitude scale and opinionnaires in assessment of training. It is the purpose of the present chapter to describe the factors influencing the initiation and development of the Performance Objective Program; and to provide a chronological description of the procedures and incidents that occurred, which eventually led to the outgrowth of this assessment.

Background - Development

The Amherst-Pelham Regional School Committee in 1962 established its support of the concept of curriculum development by allocating funds for teachers' salaries during the summer recess for research and development work. The original intention was intensified with the hiring in 1963 of the present superintendent of schools, who had placed greater
emphasis on the preparation of curriculum and instructional materials. It was made clear by the then new superintendent that all staff members would participate in carefully analyzing and defining specific educational objectives, and that the implementation of any change in the system would be to improve progress toward stated objectives.

In 1964, new policies on marking were established, and included in the policy statement was the requirement that course objectives be specific and adjusted to suit different ability levels within the class. Later in the year the school committee voted favorably on a proposal to implement an ungraded program in the high school and the junior high school effective September, 1965. Provision for individualizing the instructional process was emphasized, along with varying the time a student might spend on some activity. Evaluation of the program was to determine if measurable and significant improvement occurred in student achievement or attitude due to the changes. This was an implementation of a mutual agreement between the superintendent, school committee, and the Teachers' Association, that all departments, curriculum committees, and individual teachers produce courses of study for all aspects of the instructional program, and that these programs include specific objectives, course activities, reference materials, and audio-visual materials.
It was mandated that detailed prior planning of instructional presentations by teachers was necessary, and that cultural alternatives and value judgments must be selected. It was requested that all curriculum groups prepare courses of study which define the objectives toward which each instructional program is directed and to provide detailed plans for reaching these objectives.

E.S.E.A. Title III funds were sought to support this project and in fact received in the sum of a $200,000 grant, over a three year period. This permitted employment of one-third of the teaching staff for work-study co-ordination and curriculum development during the summers of 1967, 1968, and 1969. Construction of objectives was a major task at the summer projects.

In the Fall of 1966, the teaching staff as well as the administration had concluded that different programs were needed for students in different phase levels, and even within the same phase level. It was decided that to be useful, these courses of study must establish objectives that are truly appropriate for the different levels, and that they could be measured in terms of pupil performance, behavior or attitude. It was recognized that the establishment of a flexible or continuous progress curriculum is quite difficult but it offers the best opportunity to work toward positive self-image and maximum utilization of potential.
Detailed evaluation reports on the ungraded program was prepared by an outside consultant team. It was noted that little use of independent study, and high level of student competition were present, performance and ability tests were not used enough and motivational issues were still present. It was determined that a greater variety of teaching methods were seen as necessary to attend to individualized learning. The value of student and parent input to the curriculum was identified, and it was suggested to be increased. It was suggested that departments develop a bank of evaluation techniques, and that the school's data processing center be used to assist in organizing this material.

At approximately the same time, the school system had adopted a resource center concept for the organization of many of its learning materials. The introduction of these centers clearly facilitated the independent study program and increased student option.

In May, 1968, a proposal was adopted by the local school committee, the Teachers' Association and the State Board of Education, whereby the superintendent of schools introduced differentiated staffing into the school system. The superintendent pointed out that the traditional staffing design was inefficient and that a differentiation of the tasks would facilitate the individualizing of instruction. The first approved design for a differentiated arrangement was for the
High School Social Studies Department. In 1969, this Social Studies plan was praised and supported, and the Junior High School Social Studies Department also received approval of a differentiated staff design. It was explicit in the provision for individualization that opportunity for pupils to learn various things in various ways be available. It was also made clear that an ungraded or continuous progress curriculum could only be attained through the establishment of measurable or observable performance objectives for students. Performance objectives would help teachers to: (1) maintain a valid record-keeping system, recording student attainment, (2) base guidance recommendations on data gathered from tests, (3) permit a variation in the material to be studied by different students, (4) utilize learning experiences which occur outside of the school, (5) vary the time each pupil may spend on an activity. The approach being advocated was designed to tailor the instructional experiences to the needs of the individual child.

In March of 1969, the High School Student Council formed a Curriculum Committee to help provide teachers with student reactions to high school programs. The school administration offered to publish the students' comments each month.

During the month of April of 1969, a summary of the final evaluation of the ungraded program revealed that:
1. A lack of relationship between teaching methods and objectives existed, and instruction was by group and not sufficiently individualized.

2. The courses appeared to have been developed in isolation from each other.

3. Students were not given choices.

4. There were no viable alternative textbooks or references.

5. Tests were not relative to objectives.

6. Relationships between objectives, phases, and methods were not sufficiently spelled out.

7. No provision was made for self-appraisal.

8. Learners were too often passive in a teacher-oriented class.¹

In the summer of 1969, a memorandum stating the role of the classroom teacher, and the curriculum building tasks for the 1969-1970 school year was disseminated. The memorandum stated a philosophy of participatory government within the school system with a long-term goal of team management by teachers. It was proposed that opportunities be increased for local citizens and pupils to review and influence stated objectives and that curriculum guides be made available to all so that knowledge of the work done could be easily reached. The memorandum also made clear that all teachers should work toward designing more than one path to

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each student performance objective, and that standardized tests or locally designed tests be used to measure the results of these programs.

In August of 1970, administrators received a memorandum suggesting certain bibliographies concerned with preparation and use of performance objectives be purchased for professional libraries. Also during August of 1970, during teacher negotiations, the Superintendent sought to have every teacher become a member on some curriculum committee. Congruously, each department would be responsible for the submission of an annual report to include the degree to which students were achieving previously defined instructional objectives. Several guide sheets were produced to guide teachers in implementing the individualized program. Affective objectives were emphasized, and the development of files of objectives and alternative resources for accomplishing those objectives were seen as basic to a process of individualized instruction. Other procedures for individualized instruction were suggested also.

A philosophical rationale for the individualized instruction approach was given, and it was clearly described to teachers that they must define exact performance objectives so that different ways might be designed to reach the same goal and also that objective measurement of student performance might be made and recorded.
In a published document by the Massachusetts Board of Education, the Board's main concerns were identified as equal educational opportunity, curriculum development establishment of minimum standards, student involvement, occupational and special education, teacher certification, expansion of Regional Education Centers, and regulations for the operation of public schools.

To address these issues, and to introduce necessary change, the Board of Education mandated a results oriented approach to education. The concept of management by results is essential, and the results to be achieved are the emphasis of the effective manager. The state Board of Education stated further that, the top priority must be to define the educational results to be sought, and provision for the measuring of the accomplishments of schools in terms of student outputs in all dimensions of educational quality. Ultimately, the Commissioner of Education distributed a document encouraging all school committees to establish their own list of educational imperatives and to request programs and progress from their superintendents.

The Amherst Superintendent, viewing the similarity of the state mandate and the Amherst program then set out to seek Title III funding for curriculum development. The Superintendent incorporated many ideas and suggestions of his teachers and administrators into the design of a program, which was later submitted in the name of "A System Approach
to Individualizing Instructional Programs," as a program proposal. The objective of this program was to tailor instruction to the needs of individual children through a systems approach, consisting of an accountability program and a planning-programming-budgeting system.

The defining of performance objectives, the designing of learning activities and the development of test items—projects pursued by the teachers for several years—were now to be expanded to include parents, local employers and students. Curriculum was also to be developed with accent on self-awareness, self-confidence, and human interaction skills. The cost estimate request was for $81,000.

Questionnaires were distributed to parents of students in grades K-12 on January 6, 1971, to document the interest of local parents to help teachers design curriculum objectives. Parent advisory councils of each of the schools in the district were included in the planning of the programs working directly with their building principals, curriculum committees, and with individual teachers. These sub-groups decided what to teach, how to evaluate and report on the degree to which defined objectives were accomplished.

On February 10, 1971, the Operational Proposal Application was submitted to the Department of Education. The general purpose of the project was to utilize performance objectives, an accountability program and program budgeting to
create a curriculum building process that would offer maximum support to relevancy of instruction for individual students, community involvement, efficient use of resources and adoptability of school operations to a changing environment.

At the request of the Title III Staff the funding agency preferred a project staff with a personnel structure consisting of a full-time administrator as Project Director. A 4/5 time evaluation intern, two secretaries, and four local parents on an evaluation council composed the rest of the project staff. In general, the project was designed to teach every secondary student, every staff member and every interested parent to write acceptable learning objectives. Further, this project was designed to develop input opportunities for students and parents to all curriculum programs and to develop budgeting and reporting procedures directly related to defined learning objectives. The budget for this proposal was for $75,618, with the local districts contributing $26,103 to related research and development activities. After deletions in the local program staffing, the final funding of the project was for $48,102.00.

During the summer of 1971 the project staff was hired after a screening of applicants took place by the hiring committee. The hiring committee composed of five administrators, and one school committeeman, interviewed and hired the Project Administrator and the Evaluation Council members -
previously selected by the Superintendent - interviewed applicants and selected the Evaluation Intern. The secretaries were selected from a list of applicants to the school district. Officially, the project staff started employment September 1, 1971, with the Project Administrator planning activities throughout the summer of 1971.

Implementation

The remainder of Chapter III elicits a chronological description of the implementation of the Performance Objective Program. It is the intention of the investigator to identify the major actors and incidents during the study period which were so very necessary for the interpretation of the data gathered, and for the assessment of various aspects of the program.

In September of 1971, the beginning tasks of the program were seen as the designing and instituting of training sessions in which teachers, students and non-staff adults were taught to write curriculum in the form of performance objectives. The foremost task was the instruction of teachers, since their attitudes toward the project, their knowledge and skill in preparing instruction, and their experience with this methodology was vital. Small group sessions (approximately twenty teachers) were used to introduce the
Performance Objective Program (POP) and to plan further sessions to answer the needs of the staff members. Introductory sessions were designed so that all secondary teachers attended, by department, for curriculum day, and all elementary teachers attended, by school.

The first session was focused on developing staff ability to differentiate between properly and improperly defined objectives, and the writing of properly constructed objectives. Each group was encouraged to utilize resources and services available through the POP Center, and to state its plans relative to the program. Assumptions were that veteran teachers would be able to write acceptable objectives, but that new teachers might not. To the contrary, analysis of the teachers' approaches pointed out that numerous veteran teachers needed further instruction on the technical aspects of writing a performance objective as well as new teachers.

Teachers were told that an evaluation would be administered to see if all teachers could write performance objectives properly. Analysis of teacher questions, comments, and reactions proved a new perspective on the task ahead, for much apprehension became apparent on the teachers' part. A conscious effort was made to guarantee that the project staff be seen as non-threatening, supportive, and a resource available to teachers upon request. Emphasis of teacher
requests were for the following:

1. Meetings with departments to help evaluate existing objectives
2. An annotated bibliography
3. Help in developing skills to work with affective objectives
4. Suggestions for methods to be used to instruct students to write performance objectives
5. Instruction in writing performance objectives.

Upon analysis of objectives written by teachers, the most common weaknesses were the use of vague verbs, and the use of a learning activity as an objective. Specificity of objectives were considered and it was pointed out that content specificity should be quite clear.

Senior High School administrators brought out a problem that had developed with the student training plan. Many teachers immediately began to try to teach the students to write objectives, and the students felt they were pressured in all of their classes, with instruction on how to write objectives. To ameliorate the problem the English teachers were designated to be the only staff members to have the responsibility of teaching students to write objectives.

Many staff members expressed a feeling of threat concerning the pre-assessment in the following month. In all
sessions, teachers brought objectives they had written, and these were discussed. A brief presentation on how to write proper performance objectives was given. The Crocker Farm Elementary School teacher session was devoted primarily to writing Social Studies objectives.

The Pelham Elementary School staff of six needed help in analyzing of objectives and the rewording of them to make them behavioral in nature. Much help and encouragement was necessary on the part of this staff due to the nebulous thinking toward the philosophical and curriculum directions the system had adopted.

Many of the Wildwood Elementary School staff were using objectives in one way or another in their classes. Some teachers expressed fear of being forced to alter successful teaching techniques. The Wildwood staff displayed several creative ways to handle the use of objectives in instruction.

Sessions in September were requested by elementary librarians and counselors and by the Senior High School Guidance Department to discuss the writing of service objectives. During these sessions a conceptual framework was designed in which services could be categorized as to whom was being served, and whether the objective was continual with the job, part of a one-year plan, or provisional dependent upon requested assistance.

Later in September at the weekly meeting of the Central
Curriculum Council, the Superintendent stated his intention to visit all schools on a monthly schedule to witness an example of POP in use. The Superintendent's main interest was in seeing progress in the use of performance objectives. Subsequently, evaluation in Amherst was to be in relation to their use of performance objectives in instruction. A strategy to evaluate the teachers' ability to write performance objectives was to allow the principals of each school to test their staff members in whatever way they saw fit, and to report their findings to the project staff. These administrators decided that collecting three objectives from each teacher would serve the purpose of determining if their teachers could write acceptable objectives, while reducing the anxiety of a threatening test. These objectives were collected in all schools at the beginning of October and evaluation of them showed that 84 percent of the staff could write technically correct performance objectives. The remaining 16 percent was further instructed by their principals. The figure of 84 percent represented only the technical competence in writing objectives, and did not state the value of those objectives, the level of learning implied, or the activities or instruction planned to reach them.

During the second month, October, of the project, parent involvement was initiated, with 187 signifying their
willingness to "spend some time defining or evaluating learning goals of school programs." The first group, although seriously questioning the performance objective approach, was willing to take part and provide a voice in the curriculum design. The second group of parents invited, appeared rather, to oppose defining student goals. After philosophizing on the role of parents and the discipline areas which would best lend themselves to this approach, a presentation on the writing of performance objectives was given. Parents asked for another session in a month, giving them a chance to write objectives which could be evaluated at that time.

Meanwhile, intelligent issues raised by students needed further explanation. It was realized that by having different English teachers training the students, different groups were getting different messages. The next Central Curriculum Council meeting included a student training program.

Throughout October, teachers continually called upon the POP Center. Some elementary teachers expressed their feeling of unsureness as to the area in which they should work, if they were not placed in a specific subject area curriculum committee. It was communicated to them that those not specifically assigned to a committee were to confine their efforts to Social Studies. The majority of elementary
staff members, then, were writing Social Studies objectives.

In mid-October, the Media Processing Staff met with librarians and counselors. A review of sample objectives was made, and a discussion of the level of specificity took place along with the identifying of the components of an acceptable objective. Individual teachers attended this meeting to discuss the level of objectives they were writing. It was the teachers' opinion that they would rather have poorly worded objectives aimed at the higher levels of work such as critical thinking, than the easier writing of low level objectives. This was warmly accepted by the Media Processing Staff, and they encouraged striving for high level goals first, and perfect wording of objectives secondly.

Late in October, the POP group met with the elementary curriculum committee chairmen to design an input channel for non-staff contributions to the program. A plan was designed with the following avenues:

1. Objectives that apply to a single child, could be sent to the child's teacher.
2. System-wide objective suggestions could be sent to a curriculum committee chairman.
3. Non-staff adult participation desirability could be attained by submitting his name to the chairman of the particular committee or department.
In any case, a prompt consideration and response would be assured. This plan was described to all staff members, and sent to the community in the form of a Mini-paper.

During November, the Superintendent, the POP Administrator, and the secondary administrators scheduled meetings with each secondary department. In these scheduled meetings, the staff was asked to submit the department's goals in a framework design, relating them to the Massachusetts Department of Education's published list of ten broad educational goals that applied to all schools in the commonwealth. This framework was to cover both Junior and Senior High School, grades seven through twelve, with the hope that the secondary and elementary personnel would together produce a K-12 framework during future Curriculum Days.

Student training sessions were provided with a different component in terms of sessions being held at the Junior and Senior High Schools for a group therapy presentation followed by a thirty-minute period open to questions. In both cases mixed reactions were noted, but in general it seemed to assure many that the program really held some advantages for them. It was emphasized that student input to the curriculum in the form of objectives was really wanted, and that students could negotiate goals with their teachers.
It was explained that provisions were made to make it possible to instruct parents and students such that they could write objectives whenever a need was felt. Student support was solicited by reminding them that unless they attempted to affect their curriculum, reluctant teachers would completely control what would be taught. Many students acknowledged administrative support to the point of open negotiation with their teachers.

Non-staff adults were writing some excellent educational goals, especially in that they saw discipline areas from a perspective not represented among teachers, and suggested activities quite different from those presently utilized.

The Amherst Human Relations Council advised the POP Administrator that they had very specific objectives for themselves involving the preparation of curriculum concerning attitudes toward minority groups. A workshop was scheduled to teach specifically the writing of affective objectives, and also to explain POP and how it fits into the Amherst program.

The Mathematics Curriculum Committee planned to formulate a framework of general goals and to organize all existing objectives within the structure. The elementary Mathematics program was defined in terms of performance objectives and organized into a usable form by June, 1972.
Periodically, secondary departments met with the Superintendent, the POP Administrator, and the secondary administrators to discuss their implementation of POP and development of a framework of goals. The Foreign Language Department expressed a desire to alter their staffing pattern utilizing more aids and interns, and to move toward continuous progress education with no designated content limits. The English Department was dealing with the student instructional program, and the Activity subjects dealt with scheduling issues. The Physical Education Department was grappling with value questions resulting from the program submitted by a POP-trained parent.

At a meeting of the secondary administrators, it was the consensus of opinion that the staff was not ready to utilize parent input to its best advantage. It was suggested that teachers needed two months more to organize themselves such that they could deal with outside assistance. It was also suggested that new non-staff adults should not be permitted to join curriculum committees until further staff preparation took place; but permit those currently enrolled to continue. Teachers were given more time to organize their programs and to prepare means of best employing outside assistance.

Another issue relating to POP came to light in the November meeting. The term "behavioral" in "behavioral
objectives" caused parents to associate the program with Skinnerian Behaviorism. Elimination of this term, relying on "performance objectives" solved the problem.

Principals suggested, and the POP administrator decided to develop a comprehensive in-service program through POP for the second semester, hopefully including graduate credit through the University of Massachusetts.

In December, public meetings were held in an attempt to clear up some of the misconceptions concerning POP and to expand the list of parents who would later take the non-staff training program. Panel members consisting of elementary and secondary administrators, central office administrators and POP staff, responded to questions from the audience. Numerous parents volunteered to take an active part in the project.

The service areas, the Librarians, Guidance Department and Instructional Materials Program personnel proceeded to create banks of service objectives describing the objectives of their positions. It was decided to conceptualize the objectives as service to (1) students, (2) teachers, (3) administrators, and (4) parents. Each of these categories would be subdivided into "continuous objectives" - those considered as the continuing aspects of the job; "this year's objectives" - to initiate within a given school year; and "provisional objectives" - desirable to incorporate but which require
material assistance.

Throughout December, and after numerous meetings were held, the staff decided to make a single list of general learning goals per subject area to represent K-12 goals. This technique facilitated a great increase of communication and co-ordination among the staff.

On December 13th, the Art Department was the first to present its framework of general learning goals to the school committee. The presentation was on a K-12 basis and was highly regarded. It was noticeably evident that this task, while making clearer the goals of the Art program, further co-ordinated and unified the group, giving elementary and secondary teachers clearer perceptions of what each other was doing.

Later in December, the POP Administrator was requested by the principal of Pelham Elementary School to assist staff members there on an individual basis as a result of a variety of problems dealing with wording of specific objectives, and difficulties of implementing continuous progress education in their classes.

Toward the end of December, an increase of letters of inquiry, visits and requests of the Superintendent, Assistant Superintendent and POP Administrator to give presentations explaining the project, made apparent the fact that outside interest was evidently increasing.
On January 5, 1972, the Mathematics department heads of all grade levels met with the Assistant Superintendent and the POP Administrator. The general goals of the Senior, Junior High Schools were discussed congruently with the goals of the elementary level. As a result of the meeting, the three general goals proposed by the three levels were combined into one document producing one K through 12 goal statement, which was later presented to the Regional School Committee.

On January 7th, the Central Curriculum Council convened to discuss the formation of the committee to screen and fund Research and Development proposals for the summer. Discussion also centered around development of a revised system-wide testing program.

At a meeting of the elementary principals on January 14th, the in-service program was discussed and an attempt was made to identify the specific issues which should be covered. Some of the administrators did not feel enthusiastic about personally teaching a class, with expressions of "a good administrator is not necessarily a good teacher of teachers," and that "they have been out of the classroom for several years."

Another issue discussed was the elementary report card, and the writing of a research proposal to revise it. Unanimous feelings were that revision was absolutely necessary and the elementary principals agreed to support such an R &
D proposal.

On Curriculum Day, January 24th, the Amherst Teachers Association held an open meeting for the purpose of discussing POP. The general feeling of the professional employees was one of a vague discontent, but was not a general dislike of POP. Teachers felt a pressure due to POP. They felt that too much was coming from the administration and that they did not have enough control over what occurred in the system. A need for more in-service assistance to help them implement this program was stated. Teachers were seeking more of a leadership role in the introduction of POP.

On January 28th, the Central Curriculum Council met to discuss the in-service program for the coming semester. District administrators were asked to choose topics to teach. Fifteen sessions were scheduled, with administrators and teachers sharing the instructional duties.

Information relating to requirements for progress toward a results oriented system of education was received from the Massachusetts Department of Education. They clearly mandated that school systems define their goals, more specifically define their objectives, and relate these to Massachusetts' ten common goals for all schools. In addition, the State Board stated that these objectives be written in measurable performance terms, that the cost per pupil for all programs be determined, and that the degree of
success in attaining these objectives be determined and reported. Seen as totally unrealistic by the Connecticut Valley Superintendents Service Center, and by unanimous vote, they supported a position statement that more time be allowed for re-organization, and that programs be formed under existing titles - Language Arts, Mathematics, etc., - rather than under the ten common goals. Obviously, there was general agreement expressed toward the performance objective approach to education, but again, the implementation of such a program caused much dissatisfaction.

On the seventh of February, the Language Arts Program was presented to the Regional School Committee for consideration. During the presentation, questions by the committee-men indicated that they were curious as to the teacher's perceptions of POP and the value of this work. The Language Arts staff responded enthusiastically positive about the program and their use of it.

The elementary principals during the February meetings dealt with several issues related to POP. One of the main thrusts was the development of a new general testing program for the school district. The Language Arts Director and the school psychometrist made frequent inputs concerning this subject, and recommendations were developed, with the Psychometrist responsible for submitting this proposal to the
Superintendent.

During the curriculum days in February, teachers of all levels met by discipline area to co-ordinate their programs. This exercise was most enthusiastically engaged in by the staff, with highly positive feelings expressed. Most groups were pleased, too, with the resulting framework of goals. Teachers believed that use of such a framework would give a co-ordination and unity to the objectives, avoiding a "piece-meal curriculum." An interaction was established between the elementary Health Curriculum Committee, and representatives of the secondary Science, Social Studies, Home Economics, Industrial Arts, and Physical Education Departments. It was determined that a plan had to be devised to inform the secondary people of what the elementary committee had prepared, and to inform the elementary group of what the secondary programs already covered. Ultimately, work began on a plan that would ensure a continuous Health program K through 12.

Due to discussions during the curriculum days in which teachers expressed a need for in-service help, the Superintendent decided that the POP in-service program should be mandatory for all professional personnel. Consequently, sent along with the schedule of sessions was a letter to the faculty announcing that the program would be offered during the spring and fall of 1972, with each semester consisting of fifteen sessions.
Many teachers opposed this new policy and felt that this was changing the working conditions and, therefore, a breach of their contract. The Teacher's Association reacted strongly to this notice through a letter to the Superintendent questioning the validity of this new policy. The situation was further polarized when the Amherst Teachers' Association letter was distributed to all teachers. The Superintendent agreed to meet with the Representative Council of the Amherst Teachers' Association, and at the meeting the Superintendent pointed out that the release of the letter by the Teachers' Association was a breach of all rules of such bargaining, since positions were now entrenched and face-saving became an issue. The Teachers' Association stated that they were not opposing the Performance Objective Program, and that they agreed with the philosophy and methodology of the Program, but they challenged the manner in which it was being introduced. Further, it was felt that the teachers should have a greater say in the planning and that the in-service program should have had more teacher input. Ultimately, the biggest complaint was that attendance at in-service sessions would be mandatory. After much discussion and negotiations, the following points were decided:

1. Two in-service sessions would be offered for staff attendance (spring and fall).
2. Objectives of the sessions would be defined, but allowing teachers freedom to pursue such through other methods of independent study.

3. Teacher attendance was not mandated, but the knowledge would be, and that after January, 1973, teacher evaluation would be based on the successful implementation of the performance objective approach, rather than on progress in trying this approach.

Later in the same meeting, the POP Administration brought out the point that there were some factions in the community with mixed understandings and interpretations of POP which resulted in parents' negativness. Some parents stated that they felt the teachers disliked the POP approach and did not think it helped the learning of their children. The public release of the Amherst Teachers' Association letter to the Superintendent provided evidence that, in fact, these factions might be correct. With this in mind, the Amherst Teachers' Association publicly stated that they supported the philosophy of the Performance Objective Program, and that the professional staff are committed to the POP philosophy and its goals.

The final results of this issue and its discussions proved to be a valuable asset to all involved. A sense of unity and satisfaction were expressed by the teacher group,
and the administration was pleased with the professional approach to the in-service program, and to teacher leadership role in the planning and implementation of the program.

During the middle of March, the K-12 Social Studies curriculum goals were presented to the Regional School Committee. Through a grown experience from four previous presentations, questions from the committeemen were to the point, and the discussion truly dealt with curriculum issued. Administrators that were present stated that this was the most sophisticated discussion of educational issues between a group of teachers and a group of laymen ever witnessed by them. The committeemen exposed their understanding of the curriculum building process through their understanding of the meanings and implications of the issues being discussed.

On March 27th, the Pupil Personnel Services and the Physical Education Department presented their goals to the Regional School Committee. A discussion took place centered on goals and philosophies and the staffing necessary to accomplish the stated goals. Relevance between goals, personnel, and budget were emphasized. Committeemen questioned the level of individualized instruction sought and also inquired about knowing if students were being offered choices and if the girls' program offered the same options as the boys' program. The School Committee's main concern was
assurance that alternatives were offered to students as much as possible and a continued effort be made to assure such alternatives.

Non-staff in-service continued with one group of parents continuing to meet to learn how to write objectives, while other parents expressed a desire to learn more about the program. Fifty-three people including the principal of the school, two school committee members and three teachers attended a Parent Council meeting of one of the elementary schools. The POP Administrator was asked to discuss the entire POP project. Provision was made for the majority of time to be spent on questions after the presentation. A lengthy discussion ensued with various concerns being touched upon. It was explained that teachers would plan instruction, but in terms of performance objectives to be sought and learning activities to reach them. Also, it was emphasized that children would be encouraged to contribute to that planning by submitting suggested objectives or activities, with the final decision on instruction up to the teacher. Parents, too, were encouraged to help in the preparation of curriculum, and to analyze that which was being offered.

In response to statements that use of performance objectives implied defined end products, it was explained that creativity and critical thinking skills can be encouraged in this manner, and give purpose to that discussion. At
the conclusion of the meeting, the general feeling of teachers, the principal and the POP Administrator was that the session appeared to have gained some support, allayed many fears and misconceptions, and disappointed several who had planned to discredit the POP program. The two school committee members were split on their feelings of supporting the project.

To provide a better understanding of POP throughout the community, the publication of a small pamphlet entitled "Questions and Answers on POP - A Basic Primer" was distributed through all school children. This pamphlet was prepared by the Superintendent of Schools. It stated and answered the most frequently asked questions concerning the program.

Throughout the month of March, the Research and Development Funding Committee continued to evaluate all R & D proposals. The proposals for new programs or projects were submitted in a PPBS format, and were analyzed by the committee on the basis of choosing from among suggested alternatives, and determining which projects would be of the greatest value to the school system. Once a final decision was reached, it was presented to the Regional School Committee for approval, and R & D awards were announced.

Toward the end of March, communication from the Department of Education was received. The department continued to
require a results-oriented performance objective approach to instruction and management. Various communities continued to contact the Amherst project staff for information concerning the implementation of such a program. A representative of the Department of Education visited Amherst to observe the program, and discussed ways of introducing programs like the Amherst one throughout Massachusetts. The State Department official stated that the development of a state-wide master bank of objectives was being considered. Further, it was mentioned that because of the experience gained through POP, it was said that the Amherst School System would be an excellent site for that master bank. The possibility of developing a computerized access system of objectives available to all teachers in Massachusetts was proposed.

In April, conferences with individual teachers, visits from other school systems, and formal requests to explain POP to teaching staffs of other districts were frequent. The In-service Staff Development Program continued, with excellent evaluations. Presentations of general goals to the Regional School Committee continued, with Science on April 10th, and Foreign Language and Business on April 24th.

The Amherst Teachers' Association petitioned to the School Committee for five days to be used for curriculum
work. The Central Curriculum Council supported and received three such days, with the following events discussed. Time was set aside for K-12 co-ordination, student involvement in curriculum planning and evaluating, analysis of relation of POP to state goals, and provisions for teachers to work on the planning of the curriculum work for the coming year.

The Superintendent and POP Administrator met on April 11th, to determine the teachers' involvement in the second year of the Performance Objective Program. There was an expressed desire by the POP Administrator to: (1) include teachers in the planning of the program's second year, and in the writing of the continuation proposal; (2) form a panel of teachers who would take a leadership role in the program; (3) redesign the evaluation component for the second year; (4) encourage the development of a Teacher Advisory Council through the Amherst Teachers' Association.

On April 24th, the POP Administrator met with the Representative Council of the Amherst Teachers' Association to discuss options available to them for project proposal involvement. The Council saw the formation of the Teachers' Advisory Council to POP as a viable way to gain a degree of control over planning of curriculum development projects in the district. The Representative Council welcomed the opportunity to assist in the design of the second year of the
program, and assumed this as their top priority.

Subsequently, at a meeting of the Amherst Teachers' Association, the teachers (1) supported formation of a Teacher Advisory Council, (2) identified the need for released time for Advisory Council members, (3) stated that released time could be in the form of more curriculum days, (4) supported use of substitutes for teachers or more teacher aides, preferably the latter, (5) identified a need for in-service help specifically in demonstrating classroom procedures in the use of continuous progress individualized instruction.

Late in April, the POP Administrator met with the chairman of the Evaluation Council to discuss the evaluation design for the second year. The council chairman stated that the present council made up of four parents and one intern, was too expensive and inefficient. Further, it was mentioned that all members of the council, including the chairman, intended to resign due to the excessive amount of time required by the tasks. It was concluded that the redesign of the evaluation component would begin by identifying the evaluation tasks, and then considering staffing needs.

In May, during the three curriculum days, some sessions were devoted specifically to designing means of utilizing parent assistance in curriculum development. An outside consultant directed the Human Relations Sessions which were
considered highly effective. In groups of twenty, the entire staff explored activities which dealt with "how I affect different others," and demonstrated convincingly the need for efforts in developing the affective curriculum. A widespread recognition of the need to emphasize humanistic education as a segment of the Performance Objective Program appeared.

A non-staff meeting on May 10, revealed four parents had submitted objectives as evidence of their ability to prepare curriculum materials. Each objective had a valuable perspective, clearly distinct from that shown by the existing curriculum teams. These objectives were technically acceptable, and in general, were high level taxonomically and extremely valuable for the children for whom they were intended. This supportive evidence proved the value of encouraging parent participation in the preparation of curriculum materials.

Meantime, numerous meetings of teachers throughout the district were being conducted by the Representative Council of the Teachers' Association. The Council prepared a "needs analysis" outlining the desires of the teachers for the second year project proposal. The POP Administrator assimilated all recommendations and presented a statement of proposed general goals to the Regional School Committee as follows:
1. Project emphasis will be on quality of operation in our instructional program.

2. Support for teachers will be provided in the form of (a) in-service staff development programs, (b) teacher assistance teams.

3. Planning time for teachers will be sought in the form of additional bought time.

4. Efforts to increase the level of parent and student involvement in the preparation and evaluation of curricular materials will continue.

5. Funds will be sought to design and implement a data retrieval mechanism in which objective and activity banks may be processed.

6. Efforts will be made to analyze and further develop the Affective Education in the Amherst-Pelham Schools.

A group of thirty-two local parents attended the same school committee meeting with a petition requesting that the Performance Objective Program be modified or discontinued. The petition further stated that open discussion be permitted prior to final decisions regarding submission of a continuation proposal.

On May 15th, an open hearing was held by the School Committee to permit discussion of the Performance Objective Program and its continuation. Seven hundred fifty people
were present for this hearing. District administrators by mutual agreement refrained from commenting, so as to encourage teachers to speak. The teachers' response was not only strongly supportive, but further demonstrated an understanding of and commitment to the Performance Objective Program. On conclusion, the School Committee agreed to continue a close monitoring of the project and to be sensitive to parental criticism, but directed the continued development of the funding proposal.

On May 22nd the POP Administrator presented to the School Committee the following objectives which were extracted from the general goals exhibited early in May:

Objective 1: Given the present ability of district personnel (staff and students) to formulate technically correct student performance objectives, local teachers will increase their use of higher order objectives - those that deal with critical thinking and creativity as opposed to simple recall and recognition.

Objective 2: Given the present ability of district personnel (staff and students) to formulate technically correct student performance objectives, local teachers will increase their use of affective objectives - those that deal with student attitudes and values.

Objective 3: Given the present ability of local students to formulate goals and objectives, local teachers will increase the number of opportunities for students to select and/or to propose objectives and/or learning activities of their own choosing.

Objective 4: By January of 1973, district administrators will begin utilizing and expanded teacher evaluation format that emphasizes basic principles expounded in the POP in-service training program.
Objective 5: Given the parts of the curriculum presently defined in terms of goals and performance objectives and alternative learning activities, staff members will measure and record student achievement.

Objective 6: Given the plans developed by each department for involving persons from the community in the curriculum building process, each curriculum committee will implement these plans and increase the level of parent, employer, and/or student involvement in the planning of curriculum.

Objective 7: Given the experience, information and materials both gathered and developed in this Title III project and given the State Board of Education's mandate that all districts throughout Massachusetts will develop a results-oriented approach to education, the staff of the project schools will provide assistance to other school districts designing or implementing a results-oriented approach.

Objective 8: Given the present levels of understanding and misunderstanding about the Performance Objective Program among district citizens, the level of public understanding will be raised, and the level of misunderstanding will be lowered.

Objective 9: Perceived time pressures on teachers caused by the comprehensiveness of this project and the usual initial stresses associated with changing operating procedures will be decreased by providing teachers with additional time for planning and implementation of new procedures.

Objective 10: A process will be designed and introduced by which performance objectives and alternative learning activities will be placed on data processing materials such that objectives may be retrieved as organized under general learning goals, and learning activities may be organized under the code number of any given objective.

Following clarifying questions and discussion, the School Committee voted that the proposal be completed and submitted.
to Title III.

In June, a decision was made to collect a master bank of objectives and alternative learning activities and to store them in the POP Center. This effort was seen as providing a means of easy access, organization and duplication of these materials for project evaluators. The eventual storage of the data was facilitated by secretaries transcribing the material onto cards.

Work on the preparation of the Continuation Grant Proposal proceeded throughout June, with the completed product submitted to the funding agency on June 27, 1972. Some of the requirements necessary for the Grant Proposal included detailed reporting of the previous year's activities, extensive definition of proposed objectives, activities, budget and demographic data on the population to be served.

Throughout the months of July, August, and September, Research and Development projects which had been funded through district accounts, were involved with curriculum development tasks. One of these projects, whose goal was the development of a new elementary report card, was directly addressing an objective of this project.

In mid-July, communications were received from Title III requiring additions to the submitted proposal. A
negotiation session consisting of Title III representatives, the POP Administrator, and the Superintendent of Schools was held, and at that time, one objective, the development of data processing capabilities for the POP materials, was removed from the proposal. Subsequently, budgetary requests were reduced, but a workable agreement for the second year was reached, and refunding was set for September 1, 1972, through August 31, 1973.

During October, 1972, major activities centered around the POP Advisory Board, the Helper Team, In-service Programming, and Program Dissemination. The POP Advisory Board met with the Project Evaluation Team, and together produced a plan for assessment of the 1972-1973 project. It was decided that the instruments to be administered to teachers, students and parents would be presented to the POP Board for their recommendation before being administered. The issue of parent involvement was discussed and then tabled for a decision to be made at the next meeting, when concentration would be on parent involvement plans.

Various inquiries were made to the POP board concerning their role in the distribution of the Research and Development money provided for the staff through Title III funding. The POP Board decided that this should be handled by the regular Research and Development screening committee.
The POP Helper Team was made available to the staff during October. Departments as a whole as well as individuals sought and received various modes of assistance. After meeting with several people, it was ascertained by the Helper Team that resources throughout the district should be determined such that the team could better serve as a referral service when necessary. Materials were prepared to clarify the role of the Helper Team and to survey staff members such that a personnel resource bank might be developed.

In-service programs continued throughout October with each session repeated three times. Additionally, various committees were meeting and planning in-service sessions for staff members during the second half of the year. The Ethnic Education Committee, cooperating with the Department of Education and the Performance Objective Program, planned a comprehensive program designed to involve all staff members as well as others in issues related to minority group problems.

Performance Objective Program dissemination during the month of October, was in the form of providing assistance to other districts. Numerous requests for materials and visits were received, and materials mailed. Groups from educational projects of various school systems visited the local school system to observe and discuss the
Performance Objective Program, and some instructional sessions were provided to them. In addition, requests for in-service programs in other school districts increased, with local staff members speaking to numerous groups concerning POP. Much interest appears to be generated from superintendents throughout the state of Massachusetts, as well as from other areas.

During November, particular attention was focused on Research and Development funding, Parent Involvement, Project Assessment Questionnaires, and the designing of the In-service program for the second half of the school year. A committee was named to evaluate Research and Development proposals for work to be done on vacation time during the school year. Informational notices were conveyed to staff members eliciting such proposals.

Teachers on the POP Advisory Board surveyed their respective schools to determine needs and desires for parent involvement as it presently exists, parents and teachers were to make recommendations for additional development of this aspect of the program.

The project Evaluation Team extensively analyzed data from the previous year program operation and elicited baseline information, designed an assessment program, and began development of survey instruments. Items were prepared and distributed to Advisory Board members for revision, and
final selection of items was made. Also, analyses of objectives and activities material presently available in the POP master bank were begun.

The POP Advisory Board decided to introduce a more flexible in-service program for the second half of the year, possibly offering more alternative sessions with the opportunity for groups to concentrate on a topic for two or three sessions when this seemed desirable.

To provide the opportunity for teachers to affect the components of the in-service program, surveys were taken in all schools to determine the wishes of the staff. Lists composed from results of the surveys were used in designing the core of the session schedule.

Late in November, work was begun on the development of a handbook for teachers on the use of performance objectives. Individual Learning Packets covering the material dealt with in the in-service programs have been compiled from inputs from numerous sources.

Initial plans were made for Curriculum Days in January. One day was set aside for Ethnic Education, and was offered in conjunction with the Department of Education. Also sensitivity to cultural diversity was dealt with by non-professional staff with activities planned by the project consultant in affective education.
During the month of December, studies and discussions concerning the in-service program and parent involvement in the schools took place both at the POP Advisory Board meeting and at the Central Administration Council. In-service was totally revised to offer greater choice to teachers including the option of a totally individualized program. Data have been gathered concerning parent involvement, and project dissemination resulted from these data.

Extensive meetings between the POP Administrator and the Assessment Team resulted in an assessment calendar and a staff questionnaire which meet the needs of the project decision-makers. Plans for distribution of the instruments were developed with the intent of maximizing the percent of return. Questionnaire items were carefully designed to permit a three-year long assessment of project progress.

The Helper Team, in addition to meeting with individual teachers on request, has met with several curriculum committees. It was realized that this greatly facilitates the co-ordination of efforts between the various content or department endeavors.

In January, 1973, the second semester in-service program began with sessions scheduled through March 15th. Ideas for all sessions came from a teacher-questionnaire, classes were defined and work proceeded to find people - teachers when possible - to teach these classes. Many groups of
teachers have been actively planning in-service programs, and various curriculum committees have asked to be included in offering an alternative session.

The deadline for "School-year Research and Development Proposals" arrived and five proposals were received. The Research and Development Screening committee consisted of School Committee members, secondary administrators, elementary administrators, secondary and elementary teachers and the POP Administrator. This screening committee held several meetings and decided to fund three of the five proposals.

One of the funded proposals dealt with a staff development program in Ethnic Education (Cultural Diversity) and was to be jointly sponsored by the Massachusetts Teachers' Association. This program was offered on January 18th, a Curriculum Day, and all the staff members as well as several parents participated.

During the month of February, Title III Representatives carried out an On-Site Evaluation with evaluators afforded an open and honest look at the Performance Objective Program and the district. The positive approach of the On-Site Evaluation team made all concerned feel that these people had arrived with an attitude conducive to fair evaluation. After considerable discussion between the POP Advisory Board and the On-Site Team which included an exchange of
perceptions, recommendations of the On-Site Team for further Board activities were immediately implemented. A future meeting was planned by the Advisory Board for March 7, 1973, with a representative of the local newspaper and all School Committee members invited. Plans were made to discuss the strengths and weaknesses of POP, as seen by those attending. It was communicated to those invited that the POP Advisory Board members felt they had not been heard and wished to express their observations and opinions.

Prior to this meeting, the Assessment Team distributed a summary of their Interim Report to Advisory Board members and to the press. These data were not to be the focal point for the meeting, but might be used where needed.

During the month of March the Performance Objective Program Advisory Board met and discussed the strengths and weaknesses of the program in the Amherst and Pelham schools. The nature of the discussion evolved around the following weaknesses:

1. Citizens are not up to date on what teachers are doing.
2. Record-keeping is too time consuming.
4. Individualizing instruction is very exhausting.
5. We should identify ways, different from POP, as alternative means of dealing with children.
6. Some still confuse Individualized Instruction with Independent Study.
7. Teachers need more time to write objectives.
8. Class time should not be spent specifically on POP.
10. We should avoid closed-ended objectives.
11. Many elementary students see only minute objectives and not the larger ones.
12. Enough materials are not available in some schools.
13. Perhaps the children's interest is not taken into enough consideration.

The following strengths were mentioned:
1. POP permits Individualized Instruction.
2. Small groups can more easily be pulled together since objectives and activities have been clarified.
3. Teachers and students have a clearer picture of goals.
4. Long range views are more readily shared.
5. Elementary Health is widely appreciated.
6. Classes are better organized.
7. Learning Centers can be utilized.
8. Teachers can direct more people more efficiently.
9. It forces teachers to gather resources.
10. Games and alternative activities are associated with objectives.
11. The Language Arts Developmental Skills List.
12. Better understanding and implementation of individualized instruction.
13. Teacher enthusiasm over individualizing instruction.
14. Open-ended objectives are valuable.
15. Performance Objective Program identifies what is really happening in a classroom.
16. Teachers are more aware of the level of questions asked.
17. Higher order and affective objectives are more evident.
18. Pretests are more valid.
19. Skills and concepts sought are more clearly defined.

Recommendations made by the POP Advisory Board included the following:

1. A newsletter be established to answer questions submitted by teachers.
2. The Helper Team be heard from more often.
3. Teachers be made more aware that they can deviate from the performance objective approach when necessary.
4. Elementary students be made aware of the major objectives.

5. Teachers identify the major objectives of a class and then further define the specific objectives.

6. Work be done to deal with motivation.

7. Objectives be defined that can be directly used by children.

Following this discussion the chairman of the Performance Objective Program Advisory Board distributed a letter suggesting an alteration in the activities of the Citizen's Advisory Team. After consideration, the POP Advisory Board agreed that he, as chairman, would schedule meetings with the various Parent Councils to provide channels for parent reaction to POP.

A summary of the Interim Assessment Report was presented by the third party Assessment Team. The Assessment Team explained that the Interim Report was constructed and written with the following purposes in mind:

1. To set forth the final design for assessing the Performance Objective Program for the 1972-73 project period;

2. To provide up-to-date information to assist the Advisory Board in determining the relative degree of effectiveness of the various elements of the program;

3. To provide baseline information for establishing
a rationale foundation for determining the success of the project as a whole;

4. To provide information in the report that will be used to generate a dialogue, through which strengths and weaknesses can be established.

By building on the strengths, and making an effort to correct the weaknesses, the students in the school district will benefit from the tremendous amount of energy which has been expended in the development, implementation and assessment of this program.

On April 11th, a detailed account of the Interim Report was given by members of the Assessment Team. The general nature of the presentation included the following:

1. The percent of response of parent, staff, and students to questionnaires.

2. A general consensus of the pattern of the responses of each of the population assessed.

3. A concise explanation of the results of staff responses to questions dealing with higher-order thinking and critical issues.

4. A comparison of staff's reactions to questions dealing in critical issues with responses of students and parents to the same questions.
Other assessment data discussed involved:

a. The quantity and quality (amount and type) of performance objectives written by teachers.

b. The skills possessed by the teachers for constructing technically correct performance objectives.

c. The quantity of student-selected and student-proposed performance objectives and learning experiences that have been pursued by the students.

d. The perceptions of the students concerning the opportunities that are available to them for pursuing alternative performance objectives and alternative learning experiences.

e. The perceptions of the parents and other members of the community concerning the activities of POP in the schools.

f. The perception of the teachers and school administrators concerning various elements of the activities of POP in which they are involved.

A question was directed to the Assessment Team by the Administrators representative on the POP Advisory Board concerning that team's recommendations for POP. An assessment team member replied that it was not the Assessment Team's endeavor to recommend, interpret, or develop conclusions, but to provide accurate and detailed data to the POP Advisory Board so that they could accomplish these processes. Upon
conclusion of the Assessment Team Presentation it was emphasized by a team member that in viewing the data it must be assumed that the parents' relationship with the district is influenced by their attitudes toward whether the district should pursue a goal related to the various concepts advocated by the Performance Objective Program, and whether such a goal can be achieved through the performance objective approach. With these thoughts in mind, it is apparent that rational dialogue between the teachers and the parents based on the information in the Interim Report cannot progress too far until these "fuzzy concepts" have been clarified for all the concerned parties.

A report was given by the chairman of the Citizen's Advisory Team stating that the three members would like to begin working with parents through Parent Council Meetings. For the past six months the Advisory Team has been visiting the classrooms of the schools observing POP. The chairman stated that with a formal evaluation underway and the thinking that our observations for the next few months would not be as valuable as providing formal channels for parent reaction, concern or praise in relation to the POP program, a proposal was made to change the Citizen's Advisory Team's activities from those previously outlined in the grant proposal. As has been the case thus far, members of the Citizen's Team are free to speak for or against the POP
program or not at all. As has been the case, members of the Citizen's Team have spoken only from personal impressions, reactions and thinking about POP. The Team now feels it can perform a more useful service by providing avenues and channels for parent reaction to the POP program.

The POP Administrator and the Superintendent discussed procedures for the upcoming task of designing a refunding proposal for the 1973-74 school year. It was decided to elicit teacher input for the new proposal drafting. Also, discussion developed around the need to review the parents' role in the POP program for the coming year proposal.

In May, the Superintendent publicized an upcoming open meeting focused on soliciting the ideas and feelings of parents and people of the community, and determine their attitude toward becoming involved in school activities in the future. Until now, it had been acknowledged that there was great potential and valuable resources available within the people of the community, but no formal opportunity was ever provided for parents to air feelings and willingness to contribute to the community's educational process. The open meeting was held at the Junior High School Auditorium. Provisions were made to have electronic wiring throughout the auditorium providing for audio and video communication. An electronic hook-up was made via cable television so that
viewers at home having cable television could observe the activities at the hearing and could even participate by phoning in their questions or concerns. A series of telephones with televised numbers and an answering service were provided to get the phoned-in concerns onto the floor for discussion, while the tele-viewers observed at home.

About 90 interested people, of a good cross-section ethnically, participated in the discussion. The Superintendent comment on his goals and concerns for development of a Community Resource Plan.

The following procedural plan was presented by the Superintendent to the people, and they were invited to attend another meeting in a month to reply to, and to vote for their choice.

The plan presented included the following programs with community participation invited:

1. An alternative learning Program in which high school students arrange learning activities outside the high school campus.

2. A Work-Study Program in which secondary students may attend school and be gainfully employed, each on a half-time basis.

3. A Career Education Program consisting of a volunteer committee working on ways to help all staff members in the elementary and secondary schools to promote awareness and knowledge of career opportunities in students.

4. Nature Study utilizing the Long Plain Nature Center and other natural areas
hopefully (along with social studies promoting the concepts of land management that are becoming more and more critical in most communities).

5. Mini-Courses that often introduce students to the outstanding curriculum enrichment available from many citizens who are not official teachers or school employees.

6. Adult or Continuing Education that utilizes the expertise of many citizens beyond those on the regular school staff.

Each of these programs has one common element - dependency on the total community as a source for important learning activities.

At the following meeting the people voted to approve the plan. Data and a record of the vote on the proposed plan was presented to the school committee. They immediately accepted the plan in total and also approved the idea of creating the position of Community Resource Co-ordinator. In supporting the plan the Committee Chairman stated that, "perhaps by looking concurrently at all of the ways that the community can serve schools, a unification and strengthening of the educational management through the process of matching community resources to learning interests and needs of both young students and adult students, it can strengthen the career orientation of the total school curriculum."

Looking ahead - with strong School Committee approval to strengthening the career orientation of the total school
curriculum, including vocational training programs, it becomes less nebulous that it is time to improve the current situation. With this in mind, the superintendent of schools made the following proposals to the staff and Community Resource Committee:

1. Staff preparation of a brief review of needs served by present programs, important needs not served by current programs, and an alternative management scheme calculated to improve the current situation.

2. Presentation of this review to a carefully selected and broadly representative Community Resource Committee of thirty or more members.

3. Reaction to the review by members of the Community Resource Committee in thirty days, with information at that time that might or might not lead to a complete reshaping of any new management scheme offered as a first target.

4. Staff reshaping of a management scheme according to suggestions made by the members of the Community Resource Committee.

5. Another meeting of the Community Resource Committee to review final recommendations as they might be presented to the local school committee.

Subsequently, the Superintendent charged the committee to address itself to the task, with a look at some current program realities.

Some of the findings reported by the Community Resource Committee within the Amherst-Pelham School District were:
1. A number of students potentially able to profit from career education and vocational training programs.

2. Extension of the school curriculum and programs into the community offers opportunities for which the school system could not be expected to unilaterally provide resources.

3. Consideration might be given to an extended school day to accommodate more students in the skill-building courses.

4. A large majority of area business and offices contacted indicated a willingness to have students observe their operation and a willingness to go to the schools to talk to prospective employees.

5. Finally, there are now more students interested in taking business and vocational courses than in the past years.

With the establishment and hiring of the Community Resource Specialist (effective July 1, 1973) and with the research being conducted and data presently being gathered by the Community Resource Committee, the school district hopes to develop career education and heavily utilize the resources that are available from the University of Massachusetts, Amherst, and other area colleges.

In June, the POP Advisory Board met for the final meeting of the 1972-1973 school year. Plans for the POP Advisory Board were discussed, and by a unanimous vote, it was decided that the POP Board should increase its membership according to the following formula: that there will be one parent from each school, totalling eight, plus one additional taxpaying
adult, and one teacher from each school, totalling eight, plus one administrator. The remaining portion of the POP Advisory Board will include two secondary students, the Community Resource Specialist, the Project Evaluators, the Project Director, and the Helping Service Co-ordinator. It was also decided that the parent and teacher members receive the same remuneration for their efforts. The decision to increase the parent membership on the POP Advisory Board was based on the desire to develop a good relation with parents in the community by providing more channels of communication.

The POP Advisory Board also determined that in the coming year, less time should be spent on evaluations, and to place greater effort on making decisions and recommendations.

In deciding the issue of parent selection for the POP Advisory Board, it was concluded that the selection process be left to the joint responsibility of the principal and parent.

Teacher representation on the POP Board was discussed and it was determined by a unanimous vote that the teacher election process would not involve any administrators insofar as suggestions or choice of candidates, but be left to the staff to decide.

In reviewing the past year's activities, the Board's consensus was that the year had been productive and harmonious, with parents' and board members' contributions highly
complementative. The POP Advisory Board gave their approval to having more open meetings in the coming year.

The Project Director listed the tasks he would be incorporating into the next year's proposal. Priority was given to the following items:

1. To improve communications about POP and its implementation to other school districts.

2. To foster the development of leadership of POP activities through the processes of:
   a) Continuation
   b) Diffusion

3. To assist other school districts interested in achieving POP implementation by obtaining Title III funding to finance local teachers to go to other school districts and provide in-service and other expertise necessary in developing POP in those districts which request it.

Conclusion

Throughout the coming months of July and August, Research and Development proposals will be reviewed by the Project Director for the 1973-1974 school year. They will be judged according to:

1. General needs.
2. Objectives to be reached.
3. Alternate approaches to be considered.
4. Finance
   a) Procedure
   b) Personnel
   c) Schedule
   d) Materials
The Performance Objective Program Director in conjunction with the Human Resource Specialist, and the Human Resource Committee, will concentrate on curriculum development focused on Vocational and Career Education Programming in the secondary schools.

A review of the new report card in the elementary level will be evaluated along with an assessment of the grading techniques presently used in the secondary level.

Negotiations will be held with Title III officials concerning changes and additions to be incorporated in the 1973-1974 third year proposal. It was agreed that a negotiation session will be held in July between the POP Director, Human Resource Specialist, Superintendent of the Amherst-Pelham Regional School District and his assistant, and the Title III officials to discuss the final year proposal.
CHAPTER IV

A DESCRIPTION OF THE METHODOLOGY EMPLOYED TO ANALYZE
THE PERCEPTIONS OF THE STAFF AS THEY RELATE TO
THE PERFORMANCE OBJECTIVE PROGRAM

The previous chapter described the background, development and implementation of the Performance Objective Program. The purpose of this chapter is to provide (1) a description of the study population, and (2) to report and explicate the assessment procedures utilized in attempting to determine the relative degree of effectiveness of the various elements of the Performance Objective Program as they relate to staff members of the Amherst-Pelham School District.

Study Population

In this study the population was comprised of elementary and secondary full time professional staff members employed by the Amherst-Pelham School District. The test population consisted of 107 secondary and 103 elementary staff personnel. Factors such as age, sex, subject matter taught, number of years teaching experience, the setting of the school in which the teacher was employed, and the highest academic degree held by a staff member were not considered in the present study.
Study Design

Seven issues provide the base for assessing the perceptions and attitudes of the staff members concerning various aspects of the Performance Objective Program. The issues were developed from the following factors:

1. A comprehensive survey of needs among teachers, a survey conducted by the Amherst-Pelham Teachers Association.

2. The suggestions of the state Department of Education's on-site evaluation team.

3. Suggestions from elected school committee members of the Amherst-Pelham district.

4. Information obtained by this investigator from interviews with members of the administration and staff of the Amherst-Pelham school district.

5. Interviews with eight staff members and five administrators and an additional seven teachers on the Performance Objective Program Advisory Board.

6. Interviews with parents individually, and in some cases meeting with groups of parents of students attending the Amherst-Pelham public schools.

7. Information gathered from surveying perceptions of students of the Amherst-Pelham schools relative to
the systems approach generally, and to the performance objective program specifically.

The final selection of the seven issues which were obtained from the informational inputs of the above sources appeared to this investigator to be the most appropriate. The seven issues which were selected are:

1. Critical issues related to the use of Performance Objectives.

2. General concerns resulting from the implementation of the performance objective approach in the classroom.

3. Issues surrounding the implementation of the Performance Objective Program in the school district.

4. Concerns related to the teacher evaluation system used in the school district.

5. Concerns related to the in-service program being conducted by the school district.

6. Concerns related to parent involvement in the activities of the school district.

7. The concern related to the student reporting system used by the school.

The study was designed specifically to carry out two measurements. The purpose of the first measurement was to carry out a comparative analysis of the reactions of the
elementary staff members to reactions of the secondary staff members as they reacted to the issues focused on various aspects of the Performance Objective Program. The first measurement was obtained by administering a questionnaire to all staff members in January, 1973. The administering of a revised questionnaire in May, 1973, was the measurement to make a comparative analysis study of first round reactions to the second round reactions of staff members.

Development of Instrument Utilized

The first staff questionnaire was constructed by developing attitudinal statements gleaned from the information obtained in the interviews with members of the administration and staff of the Amherst-Pelham School District. This investigator working through the teacher members of the Performance Objective Program Advisory Board recruited teachers from the elementary, junior high and senior high schools. In addition administrators from the elementary, junior high and senior high school units were also interviewed by this investigator. A total of eight staff members and five administrators in addition to the seven teachers on the Performance Objective Program Advisory Board were interviewed.

Each interview was conducted in basically the same manner. The interviews were unstructured with the interviewer
asking no predetermined questions. At points, however, it did become necessary for the interviewer to ask some definite questions. These directed questions of the interviewer were designed to either clear the perceptions of the interviewee in the mind of the interviewer or to obtain a further elaboration of the interviewee's verbalized perceptions.

At the beginning of each interview, the interviewer explained to the interviewee that the interview was to be an unstructured exchange for the purpose of receiving some of the interviewee's concerns, opinions and perceptions about the Performance Objective Program for possible statement generation for inclusion on the staff questionnaire. On an average the interviews lasted twenty to thirty minutes with the interviewer taking notes.

Following the interviews, the interviewer proceeded to write statements from the data gained in each interview. This potential item generation was accomplished by reviewing the notes taken of the interviewee's comment during the interview. A total of some one hundred thirty-two statements were developed.

Later this investigator reviewed the items and analyzed each item as to appropriateness and merit for possible inclusion in the staff questionnaire. In addition to the items generated from the interviews, this investigator developed items that related to certain specific mental constructs
intrinsically related to the seven issues of the Performance Objective Program.

After intensive review and discussion this investigator prepared a preliminary questionnaire for the Performance Objective Program Advisory Board. This questionnaire included items that the Advisory Board had indicated their desire to include on the January staff questionnaire, along with items prepared by this investigator from the inputs obtained from the interviews with the staff and administrators of the school district and items generated from the seven issues themselves.

Receiving the inputs of the Performance Objective Program Advisory Board, this investigator prepared the items for final item selection for the first staff questionnaire.

Two forms were developed. These were designated Form A and Form B. Each form consisted of forty-seven items. The purpose of the two forms was to increase the scope of item variation on the questionnaires while maintaining questionnaire brevity. Both questionnaires used the same response pattern and some items were included on both Form A and Form B. The questionnaires differed in the respect that each form of the questionnaire emphasized some different aspects of the Performance Objective Program.

The determination as to who would receive Form A or Form B of the questionnaire was accomplished by dividing the staffs of each school in half. This was achieved by taking
the faculty listings in the district personnel booklet and assigning the even-numbered positions to receive one form of the questionnaire and the odd-numbered positions to receive the other form of the questionnaire.

The final determination as to what form each staff member was to receive was left to the Performance Objective Program Advisory Board members in the respective schools they represented in the school district. In addition a series of numbers were assigned to each building for the Performance Objective Program Advisory Board member to assign to staff or faculty members for the sole purpose of record-keeping and questionnaire return monitoring.

The second staff questionnaire was similar in form to the first questionnaire in that many identical questions were asked along with the addition of new items. The use of identical items in the second questionnaire was to assess change or progress pertaining to the seven issues used as a base for the first questionnaire. The new items were developed to cover an even broader scope of staff and program related issues that were generated from staff's reactions to the first questionnaire items.

As in the first questionnaire analysis, the identical issues provided the base for assessing the perceptions and attitudes of the staff members concerning certain aspects of the Performance Objective Program. In addition, this
investigator analyzed and reviewed the items as to appropriateness and merit for possible inclusion in the second staff questionnaire, a preliminary questionnaire was developed and presented to the Performance Objective Program Advisory Board for any additional inputs. After receiving and implementing the inputs from the Advisory Board, this investigator prepared the items for the second staff questionnaire.

Once again two forms were developed. Form A consisted of 45 items while Form B contained 51 items. The first twenty-four items in Form A and B were identical, with the remaining items designed to elicit a deeper perspective as to what the staff perceived to be viable alternatives toward accomplishing the goals of the Performance Objective Program. Both forms used the same response pattern.

The dissemination of the second questionnaire was the responsibility of the Performance Objective Program Advisory Board representative at each school. This investigator directed that each staff member receive the same form in the second round as was received in the first round, and that each staff member use the same number designated in the first questionnaire administering for record-keeping and questionnaire return monitoring.

The design of the questionnaires for round one and round
two were identical in that questions were "closed" type and utilized the Likert-type five scale response categories consisting of specific statements to which reactions might be "strongly favorable," "favorable," "undecided," "unfavorable" or "strongly unfavorable." For clarity of analysis and presentation, the results were tabulated with some items reworded such that all statements were positive toward Performance Objective Program goals. This was accomplished by changing negative statements to positive statements whenever needed and responses were correspondingly reversed.

Methods of Gathering and Processing the Data

The first questionnaire was given out on January 12, 1973, to staff representatives on the Performance Objective Advisory Board. They in turn distributed them to all faculty members in the Amherst-Pelham School System. The questionnaires were answered anonymously and returned in sealed envelopes on January 26, 1973. Of this number, the total number of usable teacher mark sense answer sheets returned was one hundred sixty-three or 78%. Of the total returned, eighty-five represented secondary staff while seventy-eight were elementary responses.

The second questionnaire was given to members of the Performance Objective Program Advisory Board who held staff positions on May 9, 1973. They in turn distributed them to
The two hundred ten staff members in the school district. The questionnaires were answered anonymously and returned on May 25th to this investigator in sealed envelopes. One hundred nineteen usable mark sense answer sheets were returned with sixty representing elementary staff members and fifty-nine secondary.

The mark sense answer sheets were scanned at the Optical Scanning Center at the Guidance Department, Whitmore Building, University of Massachusetts at Amherst. The scanning process punched the responses from the mark sense answer sheets onto data processing cards. The punched data processing cards were sorted, checked and prepared for computer analysis at the University's Graduate Research Computer Science Department. This investigator, working in conjunction with a computer programmer wrote a computer program that would do a statistical analysis of the data obtained from the questionnaires. Utilizing the computer print out which designates the percent responding to each response category, and a weighted mean for each statement, this data was then analyzed according to the pre-stated seven issues.

Those issues and the number of questionnaire items placed in each are illustrated on the following page in Figure 2.
1. Critical issues related to the use of Performance Objectives
   2  2
2. General concerns resulting from the implementation of the Performance Objective Approach in the classroom
   6  7
3. Issues surrounding the implementation of the Performance Objective Program in the School District
   5  6
4. Concerns related to the teacher evaluation system used in the school district
   3  3
5. Concerns related to the in-service program being conducted by the school district
   3  3
6. Concerns related to parent involvement in the activities of the school district
   2  2
7. The concern related to the student reporting system used by the school
   1  1

   22  24

Fig. 2--Issues and the Number of Questionnaire Items Utilized

Below are listed the categorization of the attitudinal items as tabulated in Chapter V, by issues, with item numbers as they appeared on the survey questionnaires. The original wording may be seen in Appendices A and B.
Critical Issues Related to the Use of Performance Objectives

Item

Jan-B13, May-AB5
The performance objective approach provides an effective tool for managing the continuous progress of students.

Jan-A23, May-AB3
The use of Performance Objectives does not dehumanize the learning experience for teachers and students.

General Concerns Resulting from the Implementation of the Performance Objective Approach in the Classroom

Item

Jan-B40, May-AB22
I feel free to deviate from the performance objective approach if I believe it is inappropriate for my students.

Jan-B16, May-AB1
The performance objective approach should be maintained in the school district.

Jan-B35, May-AB15
I feel successful and competent in implementing the performance objective approach.

Jan-AB11, May-AB13
Most teachers agree that the use of performance objectives is a good idea.

Jan-B33, May-AB21
The time that a teacher must invest in implementing the performance objective approach is worthwhile.

Jan-A27, May-AB24
Performance objectives have improved my students' school performance.

Issues Surrounding the Implementation of the Performance Objective Program in the School District

Item

Jan-A32, May-AB8
I do not feel undue pressure from the administration in relation to the implementation of POP.
Item
Jan-A26, May-AB9  Teachers are not expected to do an unreasonable amount of record-keeping and clerical work in relation to POP.

Jan-A42, May-AB20 I understand the personnel make-up and function of the POP Advisory Board.

Jan-B36, May-AB4  The time a teacher must spend on POP-related activities is reasonable.

Concerns Related to the Teacher Evaluation System used in the School District

Item
Jan-AB44, May-AB2  I like the MBO approach to teacher evaluation.

Jan-A34, May-AB6  I am satisfied with the teacher evaluation format being used by my school administrator.

Jan-A48, B47 May-AB11  The MBO approach accurately assesses a teacher's performance.

Concerns Related to the In-Service Program Being Conducted by the School District

Item
Jan-A29, May-AB14  I am satisfied with the approach the school district is taking in providing in-service training.

Jan-A41, May-AB12  I have an influence in setting the direction for the in-service programs.

Jan-A46, B45 May-AB10  Teachers do not feel undue pressure to attend the in-service sessions.

Concerns Related to Parent Involvement in the Activities of the School District

Item
Jan-A17, May-AB18  There is sufficient opportunity for parent involvement in this school district.
**Item**

Jan-A14, May-AB16  I prefer to have parents on curriculum committees.

**The Concern Related to the Student Reporting System used by the School**

**Item**

Jan-A33, May-AB7  I am satisfied with the student reporting system used by my school.

Within each issue statements were ordered from most favorably rated to least favorably rated. Percent responses of each of the five possible reactions were recorded, and these were further grouped to demonstrate positive, neutral and negative responses. A weighted mean was computed for the test population of each question. The values assigned to the response categories of a positive statement are as follows: "strongly favorable" = 5, "favorable" = 4, "undecided" = 3, "unfavorable" = 2, or "strongly unfavorable" = 1. When a negative statement was utilized the values were reversed; i.e., "strongly favorable" = 1..."strongly unfavorable" = 5. The statement was reworded to become positive for clarity of analysis and presentation. For this study, the use of the weighted means for the statements was mainly for the purpose of determining the differential attitudes that might exist toward the issues.
Treatment of the Data

The data will be presented in Chapter V in tabular, graphic, and narrative form, with numbers of responses, percentages, and the results of analysis to determine the level of significance between percents of responses. Significant difference was determined in comparing results which indicate change due to time and differences between secondary and elementary teacher's reactions in items administered in January and again in May to the same population.

In order to determine the level of significance, the following formula was used:

\[ t = \frac{p_1 - p_2}{\sqrt{\frac{p_1 q_1}{N_1} + \frac{p_2 q_2}{N_2}}} \]

- \( p_1 \) = Percent of group one that possess same trait.
- \( q_1 \) = Percent of group one that does not possess the trait.
- \( p_2 \) = Percent of group two that possess same trait.
- \( q_2 \) = Percent of group two that does not possess the trait.
- \( N_1 \) = Number of participants in group one.
- \( N_2 \) = Number of participants in group two.
Any "t" score that had a level of significance above the .05 level was so signified.

In Chapter V the data which were gathered as assessment of the seven pre-stated issues and of the attitudes and perceptions of staff members toward certain aspects of the Performance Objective Program will be presented and analyzed.
CHAPTER V

PRESENTATION AND ANALYSIS OF THE FINDINGS

In the previous chapter a description of the study population and the methods for gathering and analyzing the data were presented. In this chapter are presented the analysis of the data in determining the attitude of the professional staff in the Amherst-Pelham Regional School District concerning various aspects of the Performance Objective Program, and to determine the differentiation of attitudes concerning the program among the elementary teachers and secondary teachers.

The present chapter includes seven issues: (1) the professional staff's attitude toward critical issues related to the use of performance objectives; (2) the staff's concerns resulting from the implementation of the performance objective approach in the classroom; (3) issues surrounding the implementation of the Performance Objective Program in the school district; (4) concerns related to the teacher evaluation system used in the school district; (5) concerns related to the in-service programs being conducted by the school district; (6) concern related to parent involvement in the activities of the school district; and (7) concern related to the student reporting system used by the school.
Presentation and Analysis of the Findings Related to the Seven Issues

In this section is presented an analysis of the data that was collected for the purpose of determining teachers' attitudes, and to determine the differentiation of attitudes among secondary and elementary staff. A separate presentation and analysis of the data related to each of the issues is provided in the following sections.

Presentation and Analysis of the Findings Related to Issue Number One

The first selected issue was focused specifically on "critical issues related to the use of performance objectives in the Amherst-Pelham Regional School District." In order to assess the issues, all professional teachers were given questionnaires in January and May to determine their attitude to various aspects related to certain specific mental constructs intrinsically related to the seven issues and to make a comparative analysis of January and May responses as well as a comparative analysis of the reactions of elementary and secondary teachers. Percent of response and weighted mean are indicated for each item.

In Table 1 are presented a summary of the data of the questionnaire items, with mean scores, positive,
negative and neutral responses to each statement relating to various aspects of the Performance Objective Program.

The data in Table 1 indicate that for fifty-four percent of the items (13 items), fifty percent or greater of the teachers provided positive responses to the statements concerning the Performance Objective Program. Twenty-five percent of the items (6 items) elicited positive response from forty percent or greater of the teachers.

Eight percent of the statements (2 items) elicited negative response to certain aspects of the program from forty percent or greater of the teachers. On sixteen percent of the items (4 items), one-third or greater of the teachers provided responses which are unfavorable to certain aspects of the program.

The highest percent of positive response to any one statement was seventy-five percent, while the highest percent of negative response to any one statement was forty-three percent. For twenty percent of the items (5 items), thirty percent or more of the teachers were undecided about the statement (indicating neutral response). Seventy-five percent of the statements (18 items) elicited neutral response from twenty percent or greater of the teachers.

In summary, these results appear to indicate teachers
<table>
<thead>
<tr>
<th>Ranking</th>
<th>Focus of the Statement (Summarized)</th>
<th>Item</th>
<th>Positive Response</th>
<th>Neutral Response</th>
<th>Negative Response</th>
<th>Weight Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I feel free to deviate from the performance objective approach if I believe it is inappropriate for my students.</td>
<td></td>
<td>(22) 75</td>
<td>12</td>
<td>13</td>
<td>3.66</td>
</tr>
<tr>
<td>2</td>
<td>The performance objective approach should be maintained in the school district.</td>
<td></td>
<td>(1) 70</td>
<td>20</td>
<td>10</td>
<td>3.78</td>
</tr>
<tr>
<td>3</td>
<td>There is sufficient opportunity for parent involvement in this school district.</td>
<td></td>
<td>(18) 68</td>
<td>18</td>
<td>14</td>
<td>3.76</td>
</tr>
<tr>
<td>4</td>
<td>The performance objective approach is effective for managing the continuous progress of students.</td>
<td></td>
<td>(5) 69</td>
<td>20</td>
<td>11</td>
<td>3.73</td>
</tr>
<tr>
<td>5</td>
<td>I would continue to use the performance objective approach even if I were not encouraged to do so by the administration.</td>
<td></td>
<td>(17) 70</td>
<td>20</td>
<td>10</td>
<td>3.70</td>
</tr>
<tr>
<td>6</td>
<td>I feel successful and competent in implementing the performance objective approach.</td>
<td></td>
<td>(15) 65</td>
<td>26</td>
<td>9</td>
<td>3.64</td>
</tr>
<tr>
<td>7</td>
<td>Performance objectives do not dehumanize the learning experience.</td>
<td></td>
<td>(3) 64</td>
<td>18</td>
<td>18</td>
<td>3.59</td>
</tr>
<tr>
<td>8</td>
<td>I am satisfied with the approach the school district is taking in providing in-service training.</td>
<td></td>
<td>(14) 60</td>
<td>24</td>
<td>16</td>
<td>3.47</td>
</tr>
<tr>
<td>9</td>
<td>Most teachers agree that the use of performance objectives is a good idea.</td>
<td></td>
<td>(13) 57</td>
<td>29</td>
<td>14</td>
<td>3.65</td>
</tr>
<tr>
<td>10</td>
<td>I like the MBO approach to teacher evaluation.</td>
<td></td>
<td>(2) 69</td>
<td>32</td>
<td>19</td>
<td>3.41</td>
</tr>
<tr>
<td>11</td>
<td>I have an influence in setting the direction for the in-service program.</td>
<td></td>
<td>(12) 58</td>
<td>19</td>
<td>23</td>
<td>3.37</td>
</tr>
<tr>
<td>12</td>
<td>The time that a teacher must invest in implementing the performance objective approach is worthwhile.</td>
<td></td>
<td>(21) 68</td>
<td>37</td>
<td>15</td>
<td>3.34</td>
</tr>
<tr>
<td>13</td>
<td>I prefer to have parents on curriculum committees.</td>
<td></td>
<td>(16) 51</td>
<td>24</td>
<td>25</td>
<td>3.29</td>
</tr>
<tr>
<td>14</td>
<td>The POP Advisory Board provides teachers an opportunity to influence the direction of POP.</td>
<td></td>
<td>(23) 39</td>
<td>16</td>
<td>15</td>
<td>3.23</td>
</tr>
<tr>
<td>15</td>
<td>I do not feel undue pressure from the administration in relation to the implementation of POP.</td>
<td></td>
<td>(8) 54</td>
<td>15</td>
<td>31</td>
<td>3.22</td>
</tr>
<tr>
<td>16</td>
<td>I am satisfied with the teacher evaluation format being used by my school administrator.</td>
<td></td>
<td>(6) 51</td>
<td>22</td>
<td>27</td>
<td>3.21</td>
</tr>
<tr>
<td>17</td>
<td>Teachers are not expected to do an unreasonable amount of record-keeping in relation to POP.</td>
<td></td>
<td>(9) 45</td>
<td>21</td>
<td>34</td>
<td>3.06</td>
</tr>
<tr>
<td>18</td>
<td>Performance objectives have improved my students' school performance.</td>
<td></td>
<td>(24) 27</td>
<td>46</td>
<td>27</td>
<td>3.02</td>
</tr>
<tr>
<td>19</td>
<td>I understand the personnel makeup and function of the POP Advisory Board.</td>
<td></td>
<td>(20) 40</td>
<td>24</td>
<td>36</td>
<td>3.00</td>
</tr>
<tr>
<td>20</td>
<td>Teachers do not feel undue pressure to attend the in-service sessions.</td>
<td></td>
<td>(10) 40</td>
<td>25</td>
<td>35</td>
<td>2.98</td>
</tr>
<tr>
<td>21</td>
<td>The MBO approach accurately assesses a teacher's performance.</td>
<td></td>
<td>(11) 23</td>
<td>51</td>
<td>26</td>
<td>2.94</td>
</tr>
<tr>
<td>22</td>
<td>I am satisfied with the student reporting system used by my school.</td>
<td></td>
<td>(7) 41</td>
<td>19</td>
<td>40</td>
<td>2.94</td>
</tr>
<tr>
<td>23</td>
<td>The rate of implementing POP is not too fast.</td>
<td></td>
<td>(19) 37</td>
<td>26</td>
<td>37</td>
<td>2.92</td>
</tr>
<tr>
<td>24</td>
<td>The time a teacher must spend on POP related activities is reasonable.</td>
<td></td>
<td>(4) 33</td>
<td>24</td>
<td>43</td>
<td>2.78</td>
</tr>
</tbody>
</table>
have expressed some very definite opinions, either positive or negative, to particular statements to which they reacted. In other statements, the results appear to indicate teachers have not expressed definite opinions as supported by the fact that data indicate a relatively high percent of neutral response to these particular items. The data also appear to indicate teachers are somewhat balanced between the percent of neutral response and the negative responses made to these statements.

The statements illustrated in Table 1 can be clustered into seven specific issues. These issues are: (1) statements focused specifically on critical issues related to the use of performance objectives; (2) statements focused specifically on general concerns resulting from the implementation of the Performance Objective Approach in the classroom; (3) statements focused specifically on issues surrounding the implementation of the Performance Objective Program in the school district; (4) statements focused on concerns related to the teacher evaluation system used in the school district; (5) statements focused on concerns related to the in-service program being conducted by the school district; (6) statements focused on concerns related to parent involvement in the activities of the school district; and (7) statements focused on the concern related to the student reporting system used by
the school.

In the following sections are presented the data relating to the teachers' reactions to the statements as they are focused on the specific issues.

The results of the teachers' reactions in May, 1973, to statements focused specifically on critical issues related to the use of performance objectives

In Table 2 are presented the results of teacher responses to the issues related to the use of Performance Objectives. These data indicate that 69% of the teachers perceive the performance objective approach provides an effective tool for managing the continuous progress of the students; while eleven percent of the teachers feel this approach is not worthwhile. Twenty percent of the teachers are undecided on this issue.

Concerning the issue of whether the use of performance objectives does not dehumanize the learning experience for teachers and students, sixty-four percent of the teachers perceive the use of performance objectives not dehumanizing; while eighteen percent of the teachers feel that performance objectives dehumanize the learning experience. Eighteen percent of the teachers are undecided concerning this issue.
### TABLE 2

THE RESULTS OF THE TEACHERS' REACTIONS IN MAY, 1973, TO STATEMENTS FOCUSED SPECIFICALLY ON CRITICAL ISSUES RELATED TO THE USE OF PERFORMANCE OBJECTIVES.

<table>
<thead>
<tr>
<th>Rank-</th>
<th>Revised Statement (N)</th>
<th>POSITIVE</th>
<th>NEUTRAL</th>
<th>NEGATIVE</th>
<th>Wtd. Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>ing</td>
<td>(Item #)</td>
<td>S.F. %</td>
<td>F. %</td>
<td>(Total % Pos.)</td>
<td>UF. %</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(N = 117)</td>
<td>20</td>
<td>49</td>
<td>69</td>
</tr>
<tr>
<td>1.</td>
<td>(AB5) The performance objective approach provides an effective tool for managing the continuous progress of the students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(N = 117)</td>
<td>20</td>
<td>49</td>
<td>(69)</td>
<td>9</td>
</tr>
<tr>
<td>2.</td>
<td>(AB3) The use of performance objectives does not dehumanize the learning experience for teachers and students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(N = 117)</td>
<td>20</td>
<td>64</td>
<td>(64)</td>
<td>12</td>
</tr>
</tbody>
</table>

* Key to the Response Pattern: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; UF. = Unfavorable; and S.UF. = Strongly Unfavorable.
A comparison of the teachers' reactions in January, 1973, with their reactions in May, 1973, to the statements focused on critical issues related to the use of performance objectives.

In Table 3 are presented data indicating the teachers' reactions in January and May to the statement, "The POP approach provides an effective tool for managing progress of students." These data indicate that 74% of the teachers in January and sixty-nine percent of the teachers in May perceive the approach as worthwhile; while 10% of the teachers in January and eleven percent of the teachers in May feel this approach is not worthwhile. Sixteen percent of the teachers in January and 20% of the teachers in May provided an undecided response to this statement.

**TABLE 3**

A COMPARISON OF THE TEACHERS' REACTIONS IN JANUARY, 1973, WITH THEIR REACTIONS IN MAY, 1973, TO THE STATEMENTS FOCUSED ON CRITICAL ISSUES RELATED TO THE USE OF PERFORMANCE OBJECTIVES.

<table>
<thead>
<tr>
<th>Focus of Statement</th>
<th>Type of Response</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>(JAN-B13)</td>
<td>S.F. F.</td>
<td>15% 74%</td>
<td>20% 69%</td>
<td>-5%</td>
</tr>
<tr>
<td>(MAY-AB5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=70)</td>
<td>U.D.</td>
<td>16% (3.79)</td>
<td>20% (3.73)</td>
<td>-0.06%</td>
</tr>
<tr>
<td>(MAY-N=117)</td>
<td>UF. S.UF.</td>
<td>10% 0%</td>
<td>9% 11%</td>
<td>+1%</td>
</tr>
<tr>
<td>(JAN-A23)</td>
<td>S.F. F.</td>
<td>11% 47%</td>
<td>20% 64%</td>
<td>+17% a</td>
</tr>
<tr>
<td>(MAY-AB3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=92)</td>
<td>U.D.</td>
<td>31% (3.11)</td>
<td>18% (3.59)</td>
<td>+.28%</td>
</tr>
<tr>
<td>(MAY-N=117)</td>
<td>UF. S.UF.</td>
<td>17% 22%</td>
<td>12% 18%</td>
<td>-4%</td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Unfavorable; U.D. = Undecided; U.F. = Unfavorable; and S.UF. = Strongly Unfavorable.
  
a. P > .02 < .01 (t = 2.50)
Concerning the statement of whether the use of performance objectives does not dehumanize the learning experience for students and teachers, 47% of the teachers in January and sixty-four percent of the teachers in May perceive POP not dehumanizing the learning experience; while 22% of the teachers in January and 18% of the teachers in May feel POP dehumanizes the learning experience for teachers and students. Thirty-one percent of the teachers in January and 18% of the teachers in May indicate neutral feeling to this statement. The positive difference between teachers in January and May concerned with the issue POP does not dehumanize, reached the .02 \((t=2.50)\) level of statistical significance.

A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "The use of performance objectives does not dehumanize the learning experience for teachers and students."

In Table 4 forty-four percent of the secondary teachers in January and 62% of the secondary teachers in May perceive POP not dehumanizing the learning experience. This positive response difference reached the .1 \((t=1.84)\) level of statistical significance which is not significant for this study. Twenty-three percent of the secondary teachers in January and 21% of the secondary teachers in May perceive POP dehumanizing the learning
experience. Thirty-three percent of the secondary teachers in January and 17% of the secondary teachers in May provided undecided responses to this statement.

**TABLE 4**


<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>January, 1973 Item #82</th>
<th>May, 1973 Item #83</th>
<th>Difference %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Wtd. Mean)</td>
<td>(Wtd. Mean)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Teachers (JAN-N=13) (MAY-N=58)</td>
<td>S.F. 14</td>
<td>22</td>
<td>+18 a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F. 30</td>
<td>62</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D. 33</td>
<td>17</td>
<td>(+.28)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>UF. 16</td>
<td>14</td>
<td>-2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S.UF. 7</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary Teachers (JAN-N=19) (MAY-N=59)</td>
<td>S.F. 6</td>
<td>17</td>
<td>+15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F. 45</td>
<td>66</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D. 31</td>
<td>19</td>
<td>(+.25)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>UF. 16</td>
<td>10</td>
<td>-3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S.UF. 2</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Difference**

<table>
<thead>
<tr>
<th>Type of Response</th>
<th>(Wtd. Mean)</th>
<th>(Wtd. Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>(.09)</td>
<td>(.06)</td>
</tr>
<tr>
<td>Negative</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U.F. = Unfavorable; and S.UF. = Strongly Unfavorable.

a. P > .1 < .05 (t = 1.84) Not significant

Fifty-one percent of the elementary teachers in January and 66% of the elementary teachers in May perceive
POP not dehumanizing the learning experience for teachers and students. On the other hand, 18% of the elementary teachers in January and fifteen percent of the elementary teachers in May indicate POP dehumanizes the learning experience for teachers and students. Thirty-one percent of the elementary teachers in January and 19% of the elementary teachers in May provided undecided responses to this statement.

In comparing secondary and elementary teachers' reactions in January, elementary teachers were more positive (7%) in their reactions to the statement and less negative (by five percent). In May, elementary teachers again indicated more positivity (4%) that the POP approach does not dehumanize the learning experience, while secondary teachers were more negative by 6% in May.

A comparison of the reactions in January and May, 1973, of the secondary teachers with elementary teachers to the statement: "The performance objective approach provides an effective tool for managing the continuous progress of students."

In Table 5 seventy percent of the secondary teachers in January perceive the performance objective approach providing an effective tool for managing continuous progress of students, while 59% of the secondary teachers perceive this to be the case in May. Fourteen percent of the secondary teachers in January and May do not feel
the POP approach provides an effective tool for managing. On the other hand, 16% of the secondary teachers in January and twenty-seven percent of the secondary teachers in May are undecided concerning this statement.

Seventy-eight percent of the elementary teachers in

| TABLE 5 |

| A COMPARISON OF THE REACTIONS IN JANUARY AND MAY, 1973, OF THE SECONDARY TEACHERS WITH THE ELEMENTARY TEACHERS TO THE STATEMENT: "THE PERFORMANCE OBJECTIVE APPROACH PROVIDES AN EFFECTIVE TOOL FOR MANAGING THE CONTINUOUS PROGRESS OF STUDENTS." |

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=13) (MAY-N=58)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=27) (MAY-N=59)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>8</td>
<td>19</td>
<td>a</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>(.15)</td>
<td>(.22)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>10</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U F. = Unfavorable; and S.UF. = Strongly Unfavorable.

a. P > .05 < .02 (t = 2.26)
January and seventy-eight percent of the elementary teachers in May perceive the POP approach as an effective tool for managing the continuous progress of students, while 4% of the elementary teachers in January and ten percent of the elementary teachers in May do not perceive this to be the case. On the other hand, 18% of the elementary teachers in January and twelve percent of the elementary teachers in May are undecided as to whether the use of performance objectives provides an effective tool for managing continuous progress of students.

In comparing secondary with elementary teacher reactions in January, these data indicate elementary teachers to be slightly more positive (8%) in reacting; and slightly less negative (ten percent) than secondary teachers. In comparing the data for secondary and elementary teacher reactions in May, a (19%) positive difference is indicated, illustrating secondary teachers became less positive in reacting to the statement and more undecided to the item. Elementary teachers indicate a lower percent of negative reactions in May. The difference in positive reaction in May, with elementary teachers compared with secondary teachers reached the .05 (t=2.26) level of statistical significance.
Summary of the results of the staff's reactions to statements in Issue One

In summary these data appear to indicate that from January to May, the teachers in general became less positive and more neutral in perceiving POP as an effective tool for managing. On the other hand, staff members in general indicate more positive and less negative and neutral reactions to the statement, POP does not dehumanize. Data from the table indicate the statement, "effective tool for managing" elicited greater positive difference in reaction in May in comparing secondary and elementary reactions, while in January the positive reactions for secondary and elementary teachers were relatively the same. Data from the table indicate elementary teachers maintained comparable positive attitude in January and May, while secondary teachers responded less positive and more neutral in May to the statement, "effective tool for managing." In comparing secondary teachers' reactions with elementary teachers' reactions in May, alluding to the statement, "effective tool for managing" the .05 (t=2.26) level of statistical significance has been reached.

Presentation and Analysis of the Findings Related to Issue Number Two

The results of the teachers' reactions in May, 1973, to statements focused specifically on general concerns resulting from the implementation of the performance objective approach in the classroom
The second selected issue was focused specifically on general concerns resulting from the implementation of the performance objective approach in the classroom. In Table 6 are presented data related to the teachers' reactions to feeling free to deviate from the POP approach if I feel it is inappropriate for my students. The data indicate that 75% of the teachers perceive they feel free to deviate from POP; while thirteen percent perceive they do not feel free to deviate. Twelve percent are undecided concerning this statement.

The data also indicate that 70% of the teachers feel the performance objective approach should be maintained in the school district after federal funding has ended; while ten percent feel that the program should not be maintained after federal funding ends. On the other hand, 20% are undecided concerning this statement.

Data from the table indicate almost three-fourths of the teachers (70%) feel they would continue to use the performance objective approach in their classroom even if they were not actively encouraged to do so by their administrator; while ten percent of the teachers would not continue to use the POP approach. Twenty percent of the teachers are undecided concerning this statement.
TABLE 6

THE RESULTS OF THE TEACHERS' REACTIONS IN MAY, 1973, TO STATEMENTS FOCUSED SPECIFICALLY ON GENERAL CONCERNS RESULTING FROM THE IMPLEMENTATION OF THE PERFORMANCE OBJECTIVE APPROACH IN THE CLASSROOM.

<table>
<thead>
<tr>
<th>Rank-</th>
<th>Revised Statement (N)</th>
<th>Type of Response*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>(AB22) A teacher like myself feels free to deviate from the performance objective approach if he/she believes it is inappropriate for his/her students. (N=116)</td>
<td>POSITIVE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S.F. %</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEUTRAL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEGATIVE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wtd. Mean Score</td>
</tr>
<tr>
<td>2.</td>
<td>(AB1) The performance objective approach should be maintained in the school district, after the federal funding has ended. (N=115)</td>
<td>POSITIVE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S.F. %</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEUTRAL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEGATIVE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wtd. Mean Score</td>
</tr>
<tr>
<td>3.</td>
<td>(AB17) I would continue to use the performance objective approach in my classroom, even if I were not actively encouraged to do so by the administration. (N=117)</td>
<td>POSITIVE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S.F. %</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEUTRAL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEGATIVE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wtd. Mean Score</td>
</tr>
<tr>
<td>4.</td>
<td>(AB15) I feel successful and competent in implementing the performance objective approach in my classroom. (N=116)</td>
<td>POSITIVE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S.F. %</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEUTRAL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEGATIVE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wtd. Mean Score</td>
</tr>
<tr>
<td>5.</td>
<td>(AB13) Most teachers agree that the use of performance objectives is a good idea. (N=116)</td>
<td>POSITIVE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S.F. %</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEUTRAL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEGATIVE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wtd. Mean Score</td>
</tr>
<tr>
<td>6.</td>
<td>(AB21) The time that a teacher must invest in implementing the performance objective approach is worthwhile, in view of the return from that time investment. (N=115)</td>
<td>POSITIVE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S.F. %</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEUTRAL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEGATIVE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wtd. Mean Score</td>
</tr>
<tr>
<td>7.</td>
<td>(AB2h) The use of performance objectives has improved my students' performance. (N=116)</td>
<td>POSITIVE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S.F. %</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEUTRAL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEGATIVE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wtd. Mean Score</td>
</tr>
</tbody>
</table>

* Key to the Response Pattern:  S.F. = Strongly Favorable;  F. = Favorable;  U.D. = Undecided;  
UF. = Unfavorable;  and S.UF. = Strongly Unfavorable.
Sixty-five percent of the teachers feel successful and competent in implementing the performance objective approach in their classroom; while 9% feel they are not successful and competent in implementing the approach in their classroom. Twenty-six percent of the teachers are undecided concerning this statement.

Fifty-seven percent of the teachers agree that the use of performance objectives is a good idea; while 14% feel performance objectives is not a good idea. Twenty-nine percent of the teachers are undecided concerning this idea.

The data in the table indicate that almost fifty percent (48%) of the teachers feel that the time that a teacher must invest in implementing the performance objective approach is worthwhile in view of the return from that time investment; while 15% of the teachers feel the performance objective approach is not worthwhile. On the other hand, many teachers appear to be undecided as to whether the performance objective approach is worthwhile. This is indicated by the fact that 37% of the teachers provided an undecided response to the statement focused on the issue.

Twenty-seven percent of the teachers feel that the use of performance objectives has improved their students' performance; while an equal percent (27%) feel performance
objectives has not improved their students' performance. Almost half the teachers (46%) are undecided as to whether the use of performance objectives has improved their students' performance.

A comparison of the teachers' reactions in January, 1973, with their reactions in May, 1973, to statements focused specifically on general concerns resulting from the implementation of the performance objective approach in the classroom.

In Table 7 are presented data indicating the teachers' reactions to the statement, "feeling free to deviate from the performance objective approach if it is inappropriate for my students." These data indicate that seventy-six percent of the teachers in January feel free to deviate from the performance objective approach, and seventy-five percent of the teachers in May feel the same; while 10% of the teachers in January and thirteen percent of the teachers in May do not feel free to deviate from the performance objective approach. Fourteen percent of the teachers in January and 12% of the teachers in May indicated that they are undecided concerning this statement.

The data in this table indicate that over half of the teachers (55%) in January and seventy percent of the teachers in May feel that the performance objective approach should be maintained in the school district. The positive reaction change reached the .05 (t=2.05)
level of statistical significance. Seventeen percent of
the teachers in January and ten percent of the teachers
in May feel that the performance objective approach should
be ended. Twenty-eight percent of the teachers in January
and 20% of the teachers in May are undecided concerning
this statement.

Fifty-five percent of the teachers in January and
65% of the teachers in May feel that it is important to
them to be successful and competent in implementing
the performance objective approach; while 15% of the teach-
ers in January and nine percent of the teachers in May feel
this is not important to them. Thirty percent of the teach-
ers in January and 26% of the teachers in May indicate
neutral feeling on this statement.

In Table 7 are presented data related to the issue
focused on whether teachers agree that the use of perform-
ance objectives is a good idea. The data indicate that
43% of the teachers in January and fifty-seven percent
of the teachers in May perceive that the use of perform-
ance objectives is a good idea. The positive reaction
change reached the .02 \((t=2.33)\) level of statistical sig-
nificance. Twenty-five percent of the teachers in January
and fourteen percent of the teachers in May feel that
the use of performance objectives is not a good idea.
TABLE 7


<table>
<thead>
<tr>
<th>Focus of Statement</th>
<th>Type of Response</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>% (Wtd. Mean)</td>
<td>% (Wtd. Mean)</td>
<td>%</td>
</tr>
<tr>
<td>(B60) (AB22)</td>
<td>S.F.</td>
<td>28/76</td>
<td>27/75</td>
<td>-1</td>
</tr>
<tr>
<td>I feel free to deviate from the performance objective approach if I believe it is inappropriate for my students.</td>
<td>F.</td>
<td>7/45</td>
<td>7/45</td>
<td>0</td>
</tr>
<tr>
<td>(JAN-N=70) (MAY-N=116)</td>
<td>U.D.</td>
<td>14/10</td>
<td>12/13</td>
<td>+3</td>
</tr>
<tr>
<td>(B16) (AB1)</td>
<td>S.F.</td>
<td>11/55</td>
<td>20/70</td>
<td>+15 a</td>
</tr>
<tr>
<td>The performance objective approach should be maintained in the school district.</td>
<td>F.</td>
<td>7/55</td>
<td>50/70</td>
<td>+15 a</td>
</tr>
<tr>
<td>(JAN-N=70) (MAY-N=116)</td>
<td>U.D.</td>
<td>28/10</td>
<td>20/10</td>
<td>+10</td>
</tr>
<tr>
<td>(B35) (AB15)</td>
<td>S.F.</td>
<td>8/55</td>
<td>12/65</td>
<td>+10</td>
</tr>
<tr>
<td>I feel successful and competent in implementing the performance objective approach.</td>
<td>F.</td>
<td>7/55</td>
<td>50/65</td>
<td>+10</td>
</tr>
<tr>
<td>(JAN-N=69) (MAY-N=116)</td>
<td>U.D.</td>
<td>30/20</td>
<td>26/36</td>
<td>+10</td>
</tr>
<tr>
<td>(AB11) (AB13)</td>
<td>S.F.</td>
<td>2/43</td>
<td>3/57</td>
<td>+14 b</td>
</tr>
<tr>
<td>Most teachers agree that the use of performance objectives is a good idea.</td>
<td>F.</td>
<td>1/43</td>
<td>7/57</td>
<td>+14 b</td>
</tr>
<tr>
<td>(JAN-N=161) (MAY-N=116)</td>
<td>U.D.</td>
<td>32/29</td>
<td>29/39</td>
<td>+10</td>
</tr>
<tr>
<td>(AB11) (AB13)</td>
<td>S.F.</td>
<td>2/43</td>
<td>3/57</td>
<td>+14 b</td>
</tr>
<tr>
<td>Most teachers agree that the use of performance objectives is a good idea.</td>
<td>F.</td>
<td>1/43</td>
<td>7/57</td>
<td>+14 b</td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Unfavorable; U.D. = Undecided; U.F. = Unfavorable; and S.U.F. = Strongly Unfavorable.

a. P > .05 < .02 (t = 2.05)  b. P > .02 < .01 (t = 2.33)
Almost a third of the teachers in January (32%) and twenty-nine percent of the teachers in May provided an undecided response concerning this statement.

Thirty-nine percent of the teachers in January and almost half of the teachers (48%) in May perceive that the time that a teacher must invest in implementing the performance objective approach is worthwhile; while 25% of the teachers in January and fifteen percent of the teachers in May perceive that the time invested in implementing the
performance objective program is a waste of time. On the other hand, 36% of the teachers in January and thirty-seven percent of the teachers in May provided an undecided response to this statement.

The staff responded essentially the same in January and May to the statement, "performance objectives have improved my students' school performance." Data indicate 25% of the teachers in January and twenty-seven percent of the teachers in May perceive performance objectives as having improved their students' school performance; while 22% of the teachers in January and twenty-seven percent of the teachers in May feel that performance objectives had no effect on their students' school performance. On the other hand, 53% of the teachers in January and forty-six percent of the teachers in May indicate neutral feeling as to whether the use of performance objectives has improved their students' school performance.

A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "A teacher like myself feels free to deviate from the performance objective approach if he/she believes it is inappropriate for his/her students."

In Table 8 sixty-nine percent of the secondary teachers in January and May feel free to deviate from the performance objective approach if it is inappropriate for their students; while 12% of the secondary
teachers in January and ten percent of the secondary teachers in May do not feel free to deviate from the POP approach. Nineteen percent of the secondary teachers in January and 21% of the secondary teachers in May provided

**TABLE 8**

A COMPARISON OF THE REACTIONS IN JANUARY AND MAY, 1973, OF THE SECONDARY WITH THE ELEMENTARY TEACHERS TO THE STATEMENT: "A TEACHER LIKE MYSELF FEELS FREE TO DEVIATE FROM THE PERFORMANCE OBJECTIVE APPROACH IF HE/SHE BELIEVES IT IS INAPPROPRIATE FOR HIS/HER STUDENTS."

<table>
<thead>
<tr>
<th>Respondents (n)</th>
<th>Type of Responses</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Wtd. Mean)</td>
<td>(Wtd. Mean)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Teachers</td>
<td></td>
<td>(%)</td>
<td>(%)</td>
<td>(%)</td>
</tr>
<tr>
<td>(JAN-N=43) (MAY-N=58)</td>
<td>S.F.</td>
<td>16 (69</td>
<td>24 (69</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>53</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>5</td>
<td>21</td>
<td>(0.13)</td>
</tr>
<tr>
<td></td>
<td>U.F.</td>
<td>7</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>5</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td>S.F.</td>
<td>52</td>
<td>29</td>
<td>-16 a</td>
</tr>
<tr>
<td>(JAN-N=27) (MAY-N=58)</td>
<td>F.</td>
<td>45</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>0</td>
<td>4</td>
<td>(-0.55)</td>
</tr>
<tr>
<td></td>
<td>U.F.</td>
<td>3</td>
<td>12</td>
<td>+12</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Positive 28 b 12

Negative 9 5

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U.F. = Unfavorable; and S.UF. = Strongly Unfavorable.

a. P > .01 < .001 (t = 2.67)
b. P = .001 (t = 3.64)
an undecided response to this statement.

Almost one hundred percent (97%) of the elementary teachers in January and eighty-one percent of the elementary teachers in May perceive feeling free to deviate from the POP approach. This positive reaction change reaches the .01 (t=2.67) level of statistical significance. Three percent of the elementary teachers in January and 15% of the elementary teachers in May do not feel free to deviate. There were no undecided responses for elementary teachers in January, and a relatively low percent (4%) of the elementary teachers in May provided undecided responses concerning this statement.

A comparison was made between the reactions of the elementary teachers and the reactions of the secondary teachers to this statement. The data indicate that this statement elicited substantially more positive reaction from the elementary teachers than from the secondary teachers in January and in May. In January the positive reaction difference (28%) reached the .001 (t=3.64) level of statistical significance. In May the positive reaction difference is 12%. In January elementary teachers provided (9%) fewer negative reactions and in May elementary teacher negative reactions were fewer by 5%.
A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "The performance objective approach should be maintained in the school district, after the federal funding has ended."

In Table 9 fifty-three percent of the secondary teachers in January and 66% of the secondary teachers in May feel that the performance objective approach should continue in the school district, after the federal funding has ended; while 10% of the secondary teachers in January and eleven percent of the secondary teachers in May provided responses indicating that POP should end when the federal funding ends. Thirty-seven percent of the secondary teachers in January and 23% of the secondary teachers in May provided response indicating that they are undecided concerning this statement.

Sixty-seven percent of the elementary teachers in January and 74% of the elementary teachers in May perceive that the POP approach should be maintained in the school district after the federal funding has ended; while 11% of the elementary teachers in January and nine percent of the elementary teachers in May provide response indicating that POP should end when the federal funding ends. Twenty-two percent of the elementary teachers in January and 17% of the elementary teachers in May indicate neutral feeling concerning this statement.
### TABLE 9


<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>Percent of Response</th>
<th>Weighted Mean</th>
<th>Percent of Response</th>
<th>Weighted Mean</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Teachers (JAN-N=13) (MAY-N=56)</td>
<td>S.F.</td>
<td>7</td>
<td>53</td>
<td>25</td>
<td>66</td>
<td>+13</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>46</td>
<td></td>
<td>41</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>37</td>
<td>(3.45)</td>
<td>23</td>
<td>(3.80)</td>
<td>(+.35)</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>5</td>
<td>10</td>
<td>11</td>
<td>0</td>
<td>+1</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>5</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary Teachers (JAN-N=27) (MAY-N=59)</td>
<td>S.F.</td>
<td>15</td>
<td>67</td>
<td>15</td>
<td>74</td>
<td>+7</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>52</td>
<td></td>
<td>59</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>22</td>
<td>(3.67)</td>
<td>17</td>
<td>(3.76)</td>
<td>(+.09)</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>7</td>
<td>11</td>
<td>4</td>
<td>9</td>
<td>-2</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>4</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Positive**

<table>
<thead>
<tr>
<th>Percent</th>
<th>(Wtd. Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January, 1973</td>
<td>.22</td>
</tr>
<tr>
<td>May, 1973</td>
<td>.04</td>
</tr>
</tbody>
</table>

**Difference**

<table>
<thead>
<tr>
<th>Percent</th>
<th>(Wtd. Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January, 1973</td>
<td>1</td>
</tr>
<tr>
<td>May, 1973</td>
<td>2</td>
</tr>
</tbody>
</table>

*Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; UF. = Unfavorable; and S.UF. = Strongly Unfavorable.*

A comparison of the elementary teacher reactions with secondary teacher reactions in January indicate that elementary teachers provide substantially more positive reactions (14%) than secondary teachers; while in May, elementary teachers provided more positive reactions (8%).
than secondary teachers. A comparison of the secondary teachers' reactions with elementary teacher reactions indicate a one percent difference in negative reaction in January and two percent difference in negative reactions in May.

A comparison of the reactions in May, 1973, of the secondary with the elementary teachers to the statement: "I would continue to use the performance objective approach in my classroom even if I were not actively encouraged to do so by the Administration."

The data in Table 10 indicate that 69% of the secondary teachers and seventy percent of the elementary teachers in May perceive that they would continue to use the performance objective approach in their classroom, even if they were not actively encouraged to do so; while 14% of the secondary teachers and seven percent of the elementary teachers feel that they would not continue using the performance objective approach if it were up to themselves. Seventeen percent of the secondary teachers and 23% of the elementary teachers provided response indicating they were undecided about this statement.

In comparing reactions of the secondary teachers with elementary teachers on this statement, the data indicate the positive reactions are basically similar; while secondary teachers indicated more negative reactions by 7%.
A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "I feel successful and competent in implementing the performance objective approach in my classroom." Sixty-two percent of the secondary teachers in January and sixty percent of the secondary teachers in May feel that it is important to them to be successful and competent in implementing the performance objective approach; while data

### TABLE 10

A comparison of the reactions in May, 1973, of the secondary with the elementary teachers to the statement: "I would continue to use the performance objective approach in my classroom even if I were not actively encouraged to do so by the administration."

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>Percent of Response and Weighted Mean Score</th>
<th>May, 1973</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Teachers</td>
<td>S.F.</td>
<td>17</td>
<td>(Wtd. Mean)</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>52</td>
<td>69</td>
</tr>
<tr>
<td>(MAY-N=58)</td>
<td>U.D.</td>
<td>17</td>
<td>(3.96)</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td>S.F.</td>
<td>10</td>
<td>(Wtd. Mean)</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>(MAY-N=58)</td>
<td>U.D.</td>
<td>23</td>
<td>(3.72)</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Positive Difference</td>
<td>(Wtd. Mean)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Negative Difference</td>
<td>(Wtd. Mean)</td>
<td>.2</td>
<td></td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U.F. = Unfavorable; and S.UF. = Strongly Unfavorable.
from Table 11 indicate fourteen percent of the secondary teachers in January and 16% of the secondary teachers in May feel this is not important to them. Twenty-four percent of the secondary teachers in January and May are undecided concerning this statement.

**TABLE 11**

A COMPARISON OF THE REACTIONS IN JANUARY AND MAY, 1973, OF THE SECONDARY WITH THE ELEMENTARY TEACHERS TO THE STATEMENT: "I FEEL SUCCESSFUL AND COMPETENT IN IMPLEMENTING THE PERFORMANCE OBJECTIVE APPROACH IN MY CLASSROOM."

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>Percent of Response</th>
<th>Weighted Mean</th>
<th>Weighted Mean</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S.F.</td>
<td>111/57</td>
<td>121/58</td>
<td>141/62</td>
<td>+2</td>
</tr>
<tr>
<td>Secondary</td>
<td>F.</td>
<td>33/33</td>
<td>44/44</td>
<td>64/64</td>
<td>+25 a</td>
</tr>
<tr>
<td>Teachers</td>
<td>U.D.</td>
<td>24</td>
<td>(3.51)</td>
<td>24</td>
<td>(3.53)</td>
</tr>
<tr>
<td>(JAN-N=42)</td>
<td>U.F.</td>
<td>12</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(MAY-N=58)</td>
<td>S.UF.</td>
<td>2</td>
<td>48</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S.F.</td>
<td>11</td>
<td>64</td>
<td>69</td>
<td>+25 a</td>
</tr>
<tr>
<td>Elementary</td>
<td>F.</td>
<td>17</td>
<td>44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>U.D.</td>
<td>27</td>
<td>(3.39)</td>
<td>27</td>
<td>(3.75)</td>
</tr>
<tr>
<td>(JAN-N=27)</td>
<td>U.F.</td>
<td>6</td>
<td>12</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>(MAY-N=58)</td>
<td>S.UF.</td>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Difference</td>
<td>(Wtd. Mean)</td>
<td>18</td>
<td>(3.51)</td>
<td>24</td>
<td>(3.53)</td>
</tr>
<tr>
<td>Negative Difference</td>
<td>(Wtd. Mean)</td>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U F. = Unfavorable; and S.UF. = Strongly Unfavorable.

a. \( P > 0.05 < 0.02 \) (\( t = 2.23 \))
Data from the table indicate 44% of the elementary teachers in January and sixty-nine percent of the elementary teachers in May feel successful and competent in implementing the performance objective approach in their classroom; while 12% of the elementary teachers in January and only 4% of the elementary teachers in May do not feel successful and competent. The positive change indicated for elementary teachers from January to May reached the .05 (t=2.23) level of statistical significance. Forty-four percent of the elementary teachers in May provided neutral response to this statement.

A comparison was made between the reactions of the secondary teachers, and the reactions of the elementary teachers to the statement focused on this issue. The data indicate secondary teachers in January reacted more positive (18%) to the statement; while in May, elementary teachers reacted more positive (9%) to the same issue. Data from the table also indicate secondary teachers reacted more negative in January (2%), increasing substantially to twelve percent more negative reaction than elementary teachers in May.

A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "Most teachers agree that the use of performance objectives is a good idea."

In Table 12 are presented data providing the results of the teachers' reactions to the statement focused on,
"the use of performance objectives is a good idea." The data in this table indicate 51% of the secondary teachers in January, and sixty percent of the secondary teachers in May feel that the use of performance objectives is a good idea; while 22% of the secondary teachers in January and 19% of the secondary teachers in May do not agree with the statement. Twenty-seven percent of the secondary teachers in January, and 21% of the secondary teachers in May provided neutral responses to the statement.

Almost a third of the elementary teachers in January, and over half of the elementary teachers in May agree that the use of performance objectives is a good idea. This positive reaction change reached the .01 (t=2.89) level of statistical significance. Meanwhile, thirty-two percent of the elementary teachers in January and only 9% of the elementary teachers in May feel that the use of performance objectives is not a good idea. Slightly more than a third of the elementary teachers in January and again in May, provided an undecided response to the statement.

In making a comparison of the reactions between secondary and elementary teachers, data from the table indicate secondary teachers in January provided more positive reactions (19%) than elementary teachers. This positive change reached the .02 (t=2.50) level of statistical
A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "Most teachers agree that the use of performance objectives is a good idea."

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Item #AB11</td>
<td>Item #AB13</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Wtd. Mean)</td>
<td>(Wtd. Mean)</td>
<td></td>
</tr>
<tr>
<td>Secondary Teachers</td>
<td>S.F.</td>
<td>51</td>
<td>60</td>
<td>+9</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>49</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>27 (3.51)</td>
<td>21 (3.45)</td>
<td>(-.06)</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>20</td>
<td>17</td>
<td>-3</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>22</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td>S.F.</td>
<td>32 (3.00)</td>
<td>56</td>
<td>+24</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>32</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>36</td>
<td>35</td>
<td>(+.45)</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>32</td>
<td>9</td>
<td>-23</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Positive: 19\(^b\) 4

Negative: 10 10

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U.F. = Unfavorable; and S.UF. = Strongly Unfavorable.

a. P > .01 < .001 (t = 2.89)
b. P > .02 < .01 (t = 2.50)

Data indicate secondary teachers provided slightly more positive reaction in May (4%) than their elementary teacher counterparts. A negative reaction difference of 10% for January and May indicates elementary teachers' reactions are more negative by that percent in
January, while in May, secondary teacher reactions are greater by the same amount.

A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "The time that a teacher must invest in implementing the performance objective approach is worthwhile, in view of the return from that time investment."

Data from Table 13 indicate that 35% of the secondary teachers in January and thirty-nine percent of the secondary teachers in May feel that the time invested in implementing the POP approach is worthwhile; while almost twenty-five percent of the secondary teachers in January and 17% of the secondary teachers in May feel that the time invested in the implementation of the POP approach is a waste of time. On the other hand, 42% of the secondary teachers in January and forty-four percent of the secondary teachers in May do not see either response to be the case.

Data from the table indicate 41% of the elementary teachers in January, and over half of the elementary teachers in May agree with the statement; while slightly over twenty-five percent of the elementary teachers in January and fourteen percent of the elementary teachers in May disagree with the statement. Thirty-three percent of the elementary teachers in January, and twenty-nine percent of the elementary teachers in May provided undecided response to the statement.
TABLE 13


<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Response</th>
<th>Percent of Response</th>
<th>Weighted Mean Score</th>
<th>Percent of Response</th>
<th>Weighted Mean Score</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>January, 1973</td>
<td>May, 1973</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Item #833</td>
<td>Item #AB21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=43) (MAY-N=57)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.F. F.</td>
<td>2/ 35</td>
<td>5/ 39</td>
<td></td>
<td></td>
<td></td>
<td>+4</td>
</tr>
<tr>
<td>U.D.</td>
<td>U.D. 42</td>
<td>(3.05)</td>
<td>4/ 34</td>
<td>(3.21)</td>
<td>(+.16)</td>
<td></td>
</tr>
<tr>
<td>UF. S.UF.</td>
<td>1/ 23</td>
<td>2/ 17</td>
<td></td>
<td></td>
<td></td>
<td>-6</td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=27) (MAY-N=58)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.F. F.</td>
<td>15/ 41</td>
<td>9/ 57</td>
<td></td>
<td></td>
<td></td>
<td>+16</td>
</tr>
<tr>
<td>U.D.</td>
<td>U.D. 33</td>
<td>(3.26)</td>
<td>29</td>
<td>(3.48)</td>
<td>(+.22)</td>
<td></td>
</tr>
<tr>
<td>UF. S.UF.</td>
<td>22/ 26</td>
<td>10/ 14</td>
<td></td>
<td></td>
<td></td>
<td>-12</td>
</tr>
<tr>
<td>Positive</td>
<td>6/ 18 a</td>
<td>(Wtd. Mean) (.21)</td>
<td>(Wtd. Mean) (.27)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U F. = Unfavorable; and S.UF. = Strongly Unfavorable.

a. P = .05 (t = 1.96)

A comparison was made between the reactions of the elementary teachers and the reactions of the secondary teachers to the statement focused on this issue. The data indicate that the statement focused on the issue, "time invested in implementing the POP approach is worthwhile,"
elicited slightly more positive reaction from elementary teachers in January; while in May a substantially higher percent (18%) of positive reaction was elicited from the elementary teachers. This positive difference reached the .05 (t=1.98) level of statistical significance.

A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "The use of performance objectives has improved my students' school performance."

Data in Table 14 show 21% of the secondary teachers in January and 19% of the secondary teachers in May feel performance objectives has improved their students' school performance, while 30% of the secondary teachers in January and over one-third of the teachers in May do not feel this is the case. Slightly less than half of the secondary teachers in January and in May indicated they are undecided concerning this issue.

Twenty-four percent of the elementary teachers in January, and thirty-six percent of the elementary teachers in May, provided response indicating performance objectives has improved their students' school performance; while 21% of the elementary teachers in January and nineteen percent of the elementary teachers in May feel performance objectives had no effect on their students' school performance. Slightly more than half (55%) of the elementary teachers in January,
and slightly less than half (45%) of the elementary teachers in May provided neutral response to this statement.

**TABLE 14**

A COMPARISON OF THE REACTIONS IN JANUARY AND MAY, 1973, OF THE SECONDARY WITH THE ELEMENTARY TEACHERS TO THE STATEMENT: "THE USE OF PERFORMANCE OBJECTIVES HAS IMPROVED MY STUDENTS' SCHOOL PERFORMANCE."

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Item # A27</td>
<td>Item # A521</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Wtd. Mean)</td>
<td>(Wtd. Mean)</td>
<td></td>
</tr>
<tr>
<td>Secondary Teachers</td>
<td>S.F.</td>
<td>16/1</td>
<td>21</td>
<td>5/1</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>5/1</td>
<td>19</td>
<td>14/1</td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>14/1</td>
<td>21</td>
<td>14/1</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>14/1</td>
<td>21</td>
<td>14/1</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>14/1</td>
<td>21</td>
<td>14/1</td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td>S.F.</td>
<td>14/1</td>
<td>21</td>
<td>14/1</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>14/1</td>
<td>21</td>
<td>14/1</td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>14/1</td>
<td>21</td>
<td>14/1</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>14/1</td>
<td>21</td>
<td>14/1</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>14/1</td>
<td>21</td>
<td>14/1</td>
</tr>
<tr>
<td>Positive</td>
<td>3</td>
<td>17 a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>9</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference (Wtd. Mean)</td>
<td>(.20)</td>
<td>(.43)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U F. = Unfavorable; and S.UF. = Strongly Unfavorable.

a. P > .05 < .02 (t = 2.13)

In comparing secondary teacher's reactions with elementary teachers' reactions to the statement focused on
this issue, the data indicate elementary teachers reacted slightly more positive (3%) and substantially less negative (9%) in January, while in May, elementary teachers reacted positive almost twice as much (17%) as secondary teachers. This positive difference reached the .05 (t=2.13) level of statistical significance. Data from the table indicate elementary teachers in May reacted negative substantially less than secondary teachers for the same issue.

Summary of the results of the staff's reactions to statements in Issue Two

These data appear to indicate that from January to May the teachers in general indicated favorable attitude concerning the ability to deviate from the performance objective approach at their discretion. In January, the elementary teachers reacted more positive than secondary teachers, but in May elementary teachers showed a decrease in the positive reaction to this issue.

Teachers in general reacted more positive and less negative in May to the issue, "performance objectives should be maintained in the school district." Elementary teachers reacted more positive more consistently than secondary teachers.

Data from the table indicate the staff in general reacted slightly more positive in May than in January to the statement, "feeling competent and successful in
implementing the performance objective approach."

The teachers in general reacted more positive in May than in January to the statement, "performance objectives is a good idea." The positive reaction difference reached the .01 level of statistical difference.

The staff in general appears to be somewhat balanced in January relative to the issue, "time investment in POP is worthwhile in view of the return"; while secondary teachers provided data indicating that they reacted slightly more positive in May on this issue.

The results of teachers' reaction to the issue, "performance objectives have improved my students' school performance" indicate similarity of the teachers' reactions of January with May, with a substantially high percent of neutral reaction for January and May also. Data shows secondary teachers reacted slightly less positive in May, while elementary teachers reacted more positive in May to this issue. In comparing positive reaction of secondary teachers with positive reaction of elementary teachers, data indicate the positive reaction difference reached the .05 (t=2.13) level of statistical significance.

Presentation and Analysis of the Findings Related to Issue Number Three

The results of the teachers' reactions in May, 1973, to statements focused specifically on issues surrounding the implementation of the Performance Objective Program in the school district
The third selected issue was focused specifically on issues surrounding the implementation of the POP program in the school district. In Table 15 are presented data indicating that thirty-nine percent of the teachers reacted positive to the statement, "the POP Advisory Board provides teachers an opportunity to influence POP direction"; while fifteen percent of the teachers do not perceive this to be the case. On the other hand, almost half of the general staff indicated neutral feeling concerning this statement.

Fifty-four percent of the teachers provided positive reactions perceiving no undue pressure from the administration to implement POP; while 31% of the teachers do not feel this is the case. Fifteen percent of the teachers indicated that they are not sure how they feel on this issue.

Almost half of the teachers feel that POP does not cause teachers to do an unreasonable amount of record-keeping and clerical work; while over a third of the teaching staff indicated feelings contrary to the case. On the other hand, 21% of the teachers provided an undecided response to this statement.

The data in this table indicate that 40% of the teachers perceive that they understand the make-up and function of the POP Advisory Board; while thirty-six percent of the teachers feel that the POP Board serves no
<table>
<thead>
<tr>
<th>Rank-</th>
<th>(Item #)</th>
<th>Revised Statement</th>
<th>Type of Response*</th>
<th></th>
<th></th>
<th></th>
<th>Wtd. Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>ing</td>
<td>(N)</td>
<td></td>
<td>POSITIVE</td>
<td>NEUTRAL</td>
<td>NEGATIVE</td>
<td>POS. (%)</td>
<td>U.D. (%)</td>
</tr>
<tr>
<td>1.</td>
<td>(AB23)</td>
<td>The Performance Objective Program Advisory Board provides teachers an opportunity to influence the direction of the Performance Objective Program. (N=116)</td>
<td>5</td>
<td>34</td>
<td>46</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>2.</td>
<td>(AB8)</td>
<td>I do not feel undue pressure from the administration in relation to the implementation of the Performance Objective Program. (N=117)</td>
<td>8</td>
<td>46</td>
<td>54</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>3.</td>
<td>(AB9)</td>
<td>Because of the Performance Objective Program, teachers in this school are not expected to do an unreasonable amount of record-keeping and clerical work. (N=117)</td>
<td>6</td>
<td>39</td>
<td>45</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>4.</td>
<td>(AB20)</td>
<td>I understand the personnel makeup and function of the Performance Objective Program Advisory Board. (N=117)</td>
<td>3</td>
<td>37</td>
<td>40</td>
<td>24</td>
<td>29</td>
</tr>
<tr>
<td>5.</td>
<td>(AB19)</td>
<td>The rate of implementing the Performance Objective Program is not too fast. (N=116)</td>
<td>3</td>
<td>34</td>
<td>37</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>6.</td>
<td>(AB14)</td>
<td>The number of hours a teacher must work on the activities related to the Performance Objective Program is reasonable. (N=117)</td>
<td>2</td>
<td>31</td>
<td>33</td>
<td>24</td>
<td>29</td>
</tr>
</tbody>
</table>

* Key to the Response Pattern: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; UF. = Unfavorable; and S.UF. = Strongly Unfavorable.
purposeful function. Twenty-four percent of the teachers provided an undecided response to this statement.

Thirty-seven percent of the teachers provided response indicating that the rate of implementing the POP program is not too fast; while an equal number of teachers reacted contrary to the statement. Over one-fourth of the teaching staff provided an undecided response to this statement.

A third of the teaching staff feel that the number of hours a teacher must work on the activities related to the Performance Objective Program is reasonable; while forty-three percent of the teachers feel that the time they have to spend on POP related activities is unreasonable. Twenty-four percent of the teachers appear to be undecided as to whether the time they spend on POP-related activities is reasonable or unreasonable.

A comparison of the teachers' reactions in January, 1973, with their reactions in May, 1973, to the statements focused on issues surrounding the implementation of the Performance Objective Program in the school district.

In Table 16 are presented data indicating forty-one percent of the teachers in January and fifty-four percent of the teachers in May perceive no undue pressure from the administration in relation to the implementation of POP. While thirty-eight percent of the teachers in January, and thirty-one percent of the teachers in May provide response indicating that they feel undue pressure from the administra-
tion. Twenty-one percent of the teachers in January and 15% of the teachers in May provided undecided response to the statement focused on this issue. While the positive reactions change somewhat from January (41%) to May (54%), the .1 (t=1.88) level was reached, which is not significant for this study.

Twenty-six percent of the teachers in January, and 45% of the teachers in May perceive that they are not expected to do an unreasonable amount of record-keeping in relation to POP: while 46% of the teachers in May feel that this is not the case with them. Twenty-eight percent of the teachers in January and 21% of the teachers in May, provide reactions indicating that they are undecided concerning this statement. In comparing positive reactions of January with positive reactions in May, the .01 (t=2.92) level of statistical significance has been reached.

The data from the table indicate that 45% of the teachers in January and forty percent of the teachers in May, perceive that they understand the personnel make-up and function of the POP Advisory Board; while 31% of the teachers in January and thirty-six percent of the teachers in May feel that understanding the personnel make-up and function of the POP Advisory Board is not important

<table>
<thead>
<tr>
<th>Focus of Statement</th>
<th>Type of Response</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEM NUMBER and (N)</td>
<td>(Wtd. Mean)</td>
<td>(Wtd. Mean)</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>(JAN-A32)</td>
<td>(MAY-AB9)</td>
<td>S.F.</td>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td>I do not feel undue pressure F. from the administration in relation to the implementation of POP.</td>
<td>(JAN-N=90)</td>
<td>(MAY-N=117)</td>
<td>U.D.</td>
<td>19</td>
</tr>
<tr>
<td>Teachers are not expected to do an unreasonable amount of record-keeping in relation to POP.</td>
<td>(JAN-N=89)</td>
<td>(MAY-N=117)</td>
<td>U.F.</td>
<td>28</td>
</tr>
<tr>
<td>I understand the personnel makeup and function of the POP Advisory Board.</td>
<td>(JAN-N=92)</td>
<td>(MAY-N=117)</td>
<td>U.D.</td>
<td>24</td>
</tr>
<tr>
<td>The rate of implementing POP is not too fast.</td>
<td>(JAN-N=91)</td>
<td>(MAY-N=116)</td>
<td>U.F.</td>
<td>20</td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Unfavorable; U.D. = Undecided; U.F. = Unfavorable; and S.UF. = Strongly Unfavorable.

a. P > .1 < .05 (t = 1.88)  b. P > .01 < .001 (t = 2.92)  c. P > .01 < .001 (t = 2.79)
### TABLE 16 (Continued)

<table>
<thead>
<tr>
<th>Focus of Statement</th>
<th>Type of Responses</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>(JAN-N=70) (MAY-N=117)</td>
<td>S.F.</td>
<td>81</td>
<td>36</td>
<td>28</td>
</tr>
<tr>
<td>(MAY-ABU)</td>
<td>F.</td>
<td>28</td>
<td>31</td>
<td>33</td>
</tr>
<tr>
<td>The time a teacher must spend on POP-related activities is reasonable.</td>
<td>U.D.</td>
<td>33</td>
<td>(3.02)</td>
<td>24</td>
</tr>
<tr>
<td>(JAN-B36) (MAY-ABU)</td>
<td>U.F.</td>
<td>20</td>
<td>31</td>
<td>29</td>
</tr>
<tr>
<td>(MAY-ABU)</td>
<td>S.U.F.</td>
<td>11</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Unfavorable; U.D. = Undecided; U.F. = Unfavorable; and S.U.F. = Strongly Unfavorable.

To them. On the other hand, twenty-four percent of the teachers in January, and 24% of the teachers in May provided reactions which indicate that they are not sure whether they understand the make-up and function of the POP Advisory Board or not.

Twenty percent of the teachers in January, and 37% of the teachers in May feel that the rate of implementing POP is not too fast; while almost two-thirds of the teachers in January and over one-third of the teachers in May perceive that the rate of implementing POP is too fast. Twenty percent of the teachers in January and 26% of the teachers in May are undecided concerning this issue. The difference in positive reactions between January and May reached the .01 (t=2.79) level of statistical significance.
Data from the table indicate 36% of the teachers in January and one-third of the teachers in May feel that the time a teacher must spend on POP-related activities is reasonable, while thirty-one percent of the teachers in January and 43% of the teachers in May provide response indicating that the time a teacher must spend on POP-related activities is unreasonable. One-third of the teachers in January and twenty-four percent of the teachers in May indicated that they are not sure whether the time they spend on POP-related activities is reasonable or unreasonable.

A comparison of the reactions in May, 1973, of the secondary with the elementary teachers to the statement: "The POP Advisory Board provides teachers an opportunity to influence the direction of the Performance Objective Program."

Forty percent of the secondary teachers in May perceive the POP Advisory Board as an opportunity for teachers to influence direction of the POP program; while data from Table 17 indicate that 15% of the secondary teachers do not feel this is the case. Forty-five percent of the secondary teachers provided an undecided response to this issue. Data from the table indicate that the elementary teachers in May responded comparably the same as the secondary teachers. Data indicate 38% of the elementary teachers agree that the POP Advisory Board provides teachers an opportunity to influence the direction of POP.

<table>
<thead>
<tr>
<th>Table 17</th>
<th>Percent of Response and Weighted Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Respondents (N)</strong></td>
<td><strong>Type of Response</strong></td>
</tr>
<tr>
<td><strong>Secondary Teachers</strong></td>
<td><strong>(MAY-N=58)</strong></td>
</tr>
<tr>
<td>S.F.</td>
<td>71</td>
</tr>
<tr>
<td>F.</td>
<td>33</td>
</tr>
<tr>
<td>U.D.</td>
<td>14</td>
</tr>
<tr>
<td>U.F.</td>
<td>8</td>
</tr>
<tr>
<td>S.U.F.</td>
<td>7</td>
</tr>
<tr>
<td><strong>Elementary Teachers</strong></td>
<td><strong>(MAY-N=58)</strong></td>
</tr>
<tr>
<td>S.F.</td>
<td>3</td>
</tr>
<tr>
<td>F.</td>
<td>35</td>
</tr>
<tr>
<td>U.D.</td>
<td>47</td>
</tr>
<tr>
<td>U.F.</td>
<td>12</td>
</tr>
<tr>
<td>S.U.F.</td>
<td>3</td>
</tr>
<tr>
<td><strong>Positive Difference</strong></td>
<td><strong>(Wtd. Mean)</strong></td>
</tr>
<tr>
<td><strong>Negative</strong></td>
<td></td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U.F. = Unfavorable; and S.U.F. = Strongly Unfavorable.

while fifteen percent of the elementary teachers do not feel this way. On the other hand, almost half of the elementary teachers provided a neutral response to this issue.

In making a comparison of secondary teachers' reactions, with elementary teachers' reactions, data indicate secondary teachers reacted slightly more positive (2%) than elementary teachers to the statement focused on this issue.
A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "I do not feel an undue amount of pressure from the Administration in relation to the implementation of the Performance Objective Program."

In Table 18 are presented data indicating that 45% of the secondary teachers in January and fifty-three percent of the secondary teachers in May do not feel undue pressure in relation to the implementation of POP; while one-third of the secondary teachers in January and thirty-three percent of the secondary teachers in May provide response that indicates that they do feel undue pressure from the Administration in relation to implementation of POP. Twenty-two percent of the secondary teachers in January and 14% of the secondary teachers in May reacted neutral to this statement.

Thirty-nine percent of the elementary teachers in January and 54% of the elementary teachers in May perceive no undue amount of administration pressure to implement POP. While this positive reaction appears great, it does not reach the .05 level of statistical significance. Almost one-half of the elementary teachers in January and twenty-nine percent of the elementary teachers in May provided reactions indicating that they do feel pressure from the Administration concerning the implementation of POP. Fourteen percent of the elementary teachers in January, and seventeen percent of the elementary teachers
in May, provide reaction which indicates that they are undecided concerning this issue.

**TABLE 18**

**A COMPARISON OF THE REACTIONS IN JANUARY AND MAY, 1973, OF THE SECONDARY WITH THE ELEMENTARY TEACHERS TO THE STATEMENT: "I DO NOT FEEL AN UNDUE AMOUNT OF PRESSURE FROM THE ADMINISTRATION IN RELATION TO THE IMPLEMENTATION OF THE PERFORMANCE OBJECTIVE PROGRAM."**

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Item #A32</td>
<td>Item #A18</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percent of Response</td>
<td>(Wtd. Mean)</td>
<td>(Wtd. Mean)</td>
<td>%</td>
</tr>
<tr>
<td>Secondary Teachers</td>
<td>S.F.</td>
<td>51</td>
<td>41</td>
<td>12</td>
</tr>
<tr>
<td>(JAN-N=11)</td>
<td>F.</td>
<td>45</td>
<td>34</td>
<td>53</td>
</tr>
<tr>
<td>(MAY-N=58)</td>
<td>U.D.</td>
<td>22</td>
<td>(2.91)</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>7</td>
<td>26</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>26</td>
<td>33</td>
<td>7</td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td>S.F.</td>
<td>61</td>
<td>33</td>
<td>3</td>
</tr>
<tr>
<td>(JAN-N=19)</td>
<td>F.</td>
<td>39</td>
<td>33</td>
<td>3</td>
</tr>
<tr>
<td>(MAY-N=59)</td>
<td>U.D.</td>
<td>14</td>
<td>(2.90)</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>39</td>
<td>24</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>8</td>
<td>47</td>
<td>10</td>
</tr>
<tr>
<td>Positive</td>
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<td>6</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Difference</td>
<td>(Wtd. Mean)</td>
<td>(.01)</td>
<td>(.07)</td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td></td>
<td>14</td>
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<td>4</td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U F. = Unfavorable; and S.UF. = Strongly Unfavorable.

A comparison was made between the reactions of the secondary teachers and the reactions of the elementary teachers to the statement focused on this issue. The data indicated that the statement focused on "not feeling undue
amount of administration pressure to implement POP" elic-
ted slightly greater positive reaction (6%) from secondary
teachers in January, while in May positive reactions by
secondary and elementary teachers were essentially equal.

A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers
to the statement: "Because of POP, teachers in this
school are not expected to do an unreasonable
amount of record-keeping and clerical work."

In Table 19 are presented data providing the results
of teachers' reactions to the statement focused on teachers
not being expected to do an unreasonable amount of work in
relation to POP. The data indicate that 22% of the second-
ary teachers in January and thirty-nine percent of the
secondary teachers in May feel that they are not expected
to do an unreasonable amount of work; while over one-half
of the secondary teachers in January and 40% of the secondary
teachers in May feel that this is not the case. Twenty-seven
percent of the secondary teachers in January, and twenty-one
percent of the secondary teachers in May provided response
that indicates that they are undecided on this issue. In
comparing the reactions of secondary teachers in May, data
indicate that the positive difference reaches the .1 (t=1.87)
level of change, which is not significant for this study.

Twenty-nine percent of the elementary teachers in
January and over one-half of the elementary teachers in
May, provided reactions indicating that they are not expected to do an unreasonable amount of POP-related work; while 46% of the elementary teachers in January and twenty-seven percent of the elementary teachers in

**TABLE 19**

A COMPARISON OF THE REACTIONS IN JANUARY AND MAY, 1973, OF THE SECONDARY WITH THE ELEMENTARY TEACHERS TO THE STATEMENT: "BECAUSE OF POP, TEACHERS IN THIS SCHOOL ARE NOT EXPECTED TO DO AN UNREASONABLE AMOUNT OF RECORD-KEEPING AND CLERICAL WORK."

<table>
<thead>
<tr>
<th>Respondents (II)</th>
<th>Type of Response</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(Wtd. Mean)</td>
<td>(Wtd. Mean)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td><strong>Secondary Teachers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=41)</td>
<td>S.F.</td>
<td>51 22</td>
<td>8 39</td>
<td>+17 a</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>17 22</td>
<td>8 39</td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>27 (2.57)</td>
<td>21 (2.89)</td>
<td>(+.32)</td>
</tr>
<tr>
<td></td>
<td>U.F.</td>
<td>32 51</td>
<td>21 40</td>
<td>-11</td>
</tr>
<tr>
<td></td>
<td>S.U.F.</td>
<td>19 51</td>
<td>19 40</td>
<td></td>
</tr>
<tr>
<td><strong>Elementary Teachers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=48)</td>
<td>S.F.</td>
<td>21 29</td>
<td>3 51</td>
<td>+22 b</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>27 29</td>
<td>3 51</td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>25 (2.64)</td>
<td>22 (3.18)</td>
<td>(+.54)</td>
</tr>
<tr>
<td></td>
<td>U.F.</td>
<td>25 46</td>
<td>19 27</td>
<td>-19</td>
</tr>
<tr>
<td></td>
<td>S.U.F.</td>
<td>21 46</td>
<td>19 27</td>
<td></td>
</tr>
<tr>
<td><strong>Difference</strong></td>
<td>Positive</td>
<td>7 12</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>5 13</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

Positive (Wtd. Mean): .07
Negative (Wtd. Mean): .29

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U.F. = Unfavorable; and S.U.F. = Strongly Unfavorable.

a. P > .1 < .05 (t = 1.87) Not significant
b. P > .02 < .01 (t = 2.39)
May perceive that they do feel undue pressure. On the other hand, 25% of the elementary teachers in January, and twenty-two percent of the elementary teachers in May reacted neutral to this statement.

Data indicate the positive reaction by elementary teachers in January, when compared with the positive reaction by elementary teachers in May, reached the .02 (t=2.39) level of statistical significance.

A comparison was made between the reactions of the secondary teachers and the reactions of the elementary teachers to the statement focused on this issue. The data indicate that the statement focused on teachers not doing an unreasonable amount of work related to POP, elicited more positive reaction from elementary teachers (7%) in January, while the same statement elicited substantially more positive reaction (12%) from elementary teachers in May.

A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "I understand the personnel make-up and function of the POP Advisory Board."

The data in Table 20 indicate 37% of the secondary teachers in January and thirty-five percent of the secondary teachers in May feel that they understand the personnel make-up and function of the POP Advisory Board; while 40% of the
secondary teachers in January, and thirty-six percent of the secondary teachers in May feel that they do not understand the make-up and function of the POP Advisory Board. Twenty-three percent of the secondary teachers in January and almost thirty percent of the secondary teachers in May were undecided concerning this statement.

### TABLE 20

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>January, 1973 (Wtd. Mean)</th>
<th>May, 1973 (Wtd. Mean)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Teachers</td>
<td>S.F.</td>
<td>37</td>
<td>35</td>
<td>-2</td>
</tr>
<tr>
<td>(JAN-N=43) (MAY-N=58)</td>
<td>F.</td>
<td>35</td>
<td>33</td>
<td>-2</td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>23 (2.87)</td>
<td>29 (2.91)</td>
<td>(+.04)</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>28</td>
<td>28</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>40</td>
<td>36</td>
<td>-4</td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td>S.F.</td>
<td>51</td>
<td>46</td>
<td>-5</td>
</tr>
<tr>
<td>(JAN-N=47) (MAY-N=59)</td>
<td>F.</td>
<td>41</td>
<td>41</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>18 (3.24)</td>
<td>19 (3.10)</td>
<td>(-.14)</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>31</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>31</td>
<td>35</td>
<td>+4</td>
</tr>
</tbody>
</table>

*Positive Difference (Wtd. Mean) 14 (1.37) 11 (1.19)*

* Negative Difference 9 1

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U.F. = Unfavorable; and S.U.F. = Strongly Unfavorable.
Over one-half of the elementary teachers in January and forty-six percent of the elementary teachers in May feel that they understand the make-up and function of the POP Advisory Board; while almost one-third of the elementary teachers in January and 35% of the elementary teachers in May do not understand the make-up and function of the POP Advisory Board. On the other hand, 18% of the elementary teachers in January and nineteen percent of the elementary teachers in May provided neutral response to this statement.

A comparison was made of the secondary teachers' reactions with the elementary teachers' reactions to the statement focused on understanding the make-up and function of the POP Advisory Board. Data indicate that in January the elementary teachers provided more positive reactions (14%) to the statement than secondary teachers. In May elementary teachers provided more positive reactions (11%) than secondary teachers to the same statement.

A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "The rate of implementing the Performance Objective Program is not too fast."

In Table 21, data indicate that 19% of the secondary teachers in January and twenty-six percent of the secondary teachers in May feel that the rate of implementing POP is
not too fast; while almost two-thirds of the secondary teachers in January and 45% of the secondary teachers in May perceive that the rate of implementing POP is too fast. Seventeen percent of the secondary teachers in January and 29% of the secondary teachers in May are undecided about this statement.

Eighteen percent of the elementary teachers in January and 48% of the elementary teachers in May feel that the rate of implementing POP is not too fast. A comparison of the positive reactions of elementary teachers in January with the positive reactions of elementary teachers in May indicates that the .001 (t=3.53) level of statistical significance has been reached. On the other hand, fifty-seven percent of the elementary teachers in January and 29% of the elementary teachers in May perceive that POP implementation is too fast. Twenty-five percent of the elementary teachers in January and 23% of the elementary teachers in May indicate neutral response to this statement.

A comparison was made between the reactions of the secondary teachers and the reactions of the elementary teachers to the statement, "the implementation of POP is not too fast." The data indicate that this statement elicited approximately the same positive reaction from the secondary teachers, and from the elementary teachers in

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>Percent of Response and Weighted Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>January, 1973 Item # A20</td>
</tr>
<tr>
<td>Secondary Teachers</td>
<td>S.F. 17</td>
<td>(2) 19</td>
</tr>
<tr>
<td></td>
<td>F. 19</td>
<td></td>
</tr>
<tr>
<td>(JAN-N=42) (MAY-N=58)</td>
<td>U.D. 17</td>
<td>(2.33)</td>
</tr>
<tr>
<td></td>
<td>UF. 40</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>S.UF. 24</td>
<td>6</td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td>S.F. 14</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>F. 18</td>
<td></td>
</tr>
<tr>
<td>(JAN-N=49) (MAY-N=58)</td>
<td>U.D. 25</td>
<td>(2.15)</td>
</tr>
<tr>
<td></td>
<td>UF. 37</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>S.UF. 20</td>
<td>57</td>
</tr>
</tbody>
</table>

Positive 1 22 b

Difference (Wtd. Mean) (.12) (.51)

Negative 7 16

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U F. = Unfavorable; and S.UF. = Strongly Unfavorable.

a. P = .001 (t = 3.53)
b. P > .02 < .01 (t = 2.53)

January. On the other hand, the same statement elicited substantially more positive reaction (22%) from the elementary teachers than from the secondary teachers in May. Data from the table indicate that the positive reaction
difference in May between secondary teachers' reactions and the elementary teachers' reactions reached the .02 (t=2.53) level of statistical significance.

A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "The number of hours a teacher must work on the activities related to the Performance Objective Program is reasonable."

Table 22 provides data indicating that thirty percent of the secondary teachers in January and thirty-one percent of the secondary teachers in May feel that the number of hours a teacher spends on POP-related activities is reasonable; while 38% of the secondary teachers in January and almost one-half of the secondary teachers in May feel that the number of hours a teacher spends on POP-related activities is unreal. On the other hand, almost one-third of the secondary teachers in January and 22% of the secondary teachers in May provided neutral response concerning this statement.

Thirty-nine percent of the elementary teachers in January and 36% of the elementary teachers in May feel that the time they spend on POP-related activities is reasonable. Almost one-half of the elementary teachers in January and 39% of the elementary teachers in May feel that activities related to POP demand too much of the teacher's time. Fourteen percent of the elementary teachers in January and 25% of the elementary teachers in May provided undecided
responses to this statement.

**TABLE 22**

A COMPARISON OF THE REACTIONS IN JANUARY AND MAY, 1973, OF THE SECONDARY WITH THE ELEMENTARY TEACHERS TO THE STATEMENT: "THE NUMBER OF HOURS A TEACHER MUST WORK ON THE ACTIVITIES RELATED TO THE PERFORMANCE OBJECTIVE PROGRAM IS REASONABLE."

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Response</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(Wtd. Mean)</td>
<td>(Wtd. Mean)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td><strong>Secondary Teachers</strong></td>
<td>S.F.</td>
<td>30</td>
<td>31</td>
<td>+1</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>29</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>(JAN-N=143)</td>
<td>U.D.</td>
<td>22</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>(MAY-N=58)</td>
<td>UF.</td>
<td>26</td>
<td>21</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>39</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td><strong>Elementary Teachers</strong></td>
<td>S.F.</td>
<td>39</td>
<td>36</td>
<td>-3</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>33</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>(JAN-N=27)</td>
<td>U.D.</td>
<td>25</td>
<td>21</td>
<td>4</td>
</tr>
<tr>
<td>(MAY-N=59)</td>
<td>UF.</td>
<td>39</td>
<td>32</td>
<td>-8</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>8</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td><strong>Positive</strong></td>
<td></td>
<td>9</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Negative</strong></td>
<td></td>
<td>9</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>Difference</strong></td>
<td>(Wtd. Mean)</td>
<td>(.10)</td>
<td>(.26)</td>
<td></td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U F. = Unfavorable; and S.UF. = Strongly Unfavorable.

In comparing the positive reactions of secondary teachers with the positive reactions of elementary teachers, data from the table indicate that in January elementary teachers provided more positive reactions (9%) than secondary
teachers, and in May the gap was somewhat decreased with elementary teachers providing more positive reactions (5%) than the secondary teachers.

**Summary of the results of the staff's reactions to statements in Issue Three**

These data appear to indicate that from January to May, the teachers in general became more positive in three of the five statements and only slightly less positive in two other statements. The data indicate that in January elementary teachers provided more positive reactions than the secondary teachers in three of the five statements, while secondary teachers provided more positive reactions than the elementary teachers in the remaining two statements.

In May data indicate elementary reactions are more positive in five of six statements than secondary teachers' reactions. On the other hand, although the percentage of elementary teachers' reactions in May are greater than the secondary teachers' reactions in five of the six statement, the secondary teachers' attitudes became more positive from January to May in four of the six statements.
Presentation and Analysis of the Findings Related to Issue Number Four

The results of the teachers' reactions in May, 1973, to statements focused on concerns related to the teacher evaluation system used in the school district.

The data in Table 23 indicate that forty-nine percent of the teachers like the Management by Objectives (MBO) approach to teacher evaluation; while 19% of the teachers provided negative reactions to this statement. On the other hand, almost one-third of the teachers gave reactions indicating that they are undecided concerning this statement.

Over one-half of the teachers feel satisfied with the teacher evaluation format currently being used by their school administrators; while 27% of the teachers do not feel satisfied with the current teacher evaluation format being used. Twenty-two percent of the teachers are undecided about this statement.

The statement, "Management by Objectives (MBO) approach to teacher evaluation accurately assesses a teacher's performance," elicited positive reaction from 23% of the teachers; while twenty-six percent of the teachers reacted negative to the statement. On the other hand, over one-half of the teachers are undecided concerning this statement.
## Table 23

The results of the teachers' reactions in May, 1973, to statements focused on concerns related to the teacher evaluation system used in the school district.

<table>
<thead>
<tr>
<th>Ranking (Item #)</th>
<th>Revised Statement (N)</th>
<th>Type of Response*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>POSITIVE</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>S.F. %</strong></td>
</tr>
<tr>
<td>1. (AB2)</td>
<td>I like the Management by Objectives (MBO) approach to teacher evaluation. (N=117)</td>
<td>17</td>
</tr>
<tr>
<td>2. (AB6)</td>
<td>I am satisfied with the teacher evaluation format currently being used by the administrator of my school. (N=117)</td>
<td>9</td>
</tr>
<tr>
<td>3. (AB11)</td>
<td>The Management by Objectives (MBO) approach to teacher evaluation accurately assesses a teacher's performance. (N=117)</td>
<td>3</td>
</tr>
</tbody>
</table>

* Key to the Response Pattern: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; UF. = Unfavorable; and S.UF. = Strongly Unfavorable.
A comparison of the teachers' reactions in January, 1973, with their reactions in May, 1973, to the statements focused on concerns related to the teacher evaluation system used by the school district.

Data from Table 24 indicate that 42% of the teachers in January and almost one-half of the teachers in May provided reactions indicating that they like the MBO approach to teacher evaluation; while sixteen percent of the teachers in January and 19% of the teachers in May do not like the MBO approach to teacher evaluation. Forty-two percent of the teachers in January and almost one-third of the teachers in May are undecided concerning this statement.

Thirty-nine percent of the teachers in January and over one-half of the teachers in May feel satisfied with the teacher evaluation format currently being used by their school administrator; while almost one-third of the teachers in January and 27% of the teachers in May feel dissatisfied with the current teacher evaluation format being used. On the other hand, 29% of the teachers in January and twenty-two percent of the teachers in May provided response indicating indifference to the statement.

The statement, "the MBO approach accurately assesses a teacher's performance," elicited positive response from 22% of the teachers in January and twenty-three percent of the teachers in May; while twenty-two percent of the
**TABLE 24.**

A COMPARISON OF THE TEACHERS' REACTIONS IN JANUARY, 1973, WITH THEIR REACTIONS IN MAY, 1973, TO THE STATEMENTS FOCUSED ON CONCERNS RELATED TO THE TEACHER EVALUATION SYSTEM USED IN THE SCHOOL DISTRICT.

<table>
<thead>
<tr>
<th>Focus of Statement</th>
<th>Type of Response</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEM NUMBER and (N)</td>
<td></td>
<td>% (Wtd. Mean)</td>
<td>% (Wtd. Mean)</td>
<td>%</td>
</tr>
<tr>
<td>(JAN-AB41) (MAY-AB2)</td>
<td>S.F.</td>
<td>15(\frac{1}{2}) 42</td>
<td>17(\frac{1}{2}) 49</td>
<td>+7</td>
</tr>
<tr>
<td>I like the MBO approach to teacher evaluation. (JAN-N=162) (MAY-N=117)</td>
<td>F.</td>
<td>27(\frac{1}{2})</td>
<td>32(\frac{1}{2})</td>
<td>+5</td>
</tr>
<tr>
<td>U.D.</td>
<td>12</td>
<td>(3.36)</td>
<td>32</td>
<td>(3.41)</td>
</tr>
<tr>
<td>UF.</td>
<td>11(\frac{1}{2}) 16</td>
<td>13(\frac{1}{2}) 19</td>
<td>+3</td>
<td></td>
</tr>
<tr>
<td>S.UF.</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-AB31) (MAY-AB6)</td>
<td>S.F.</td>
<td>1(\frac{1}{2}) 39</td>
<td>9(\frac{1}{2}) 51</td>
<td>+12</td>
</tr>
<tr>
<td>I am satisfied with the teacher evaluation format being used by my school administrator. (JAN-N=72) (MAY-N=117)</td>
<td>F.</td>
<td>38(\frac{1}{2})</td>
<td>42(\frac{1}{2})</td>
<td>+4</td>
</tr>
<tr>
<td>U.D.</td>
<td>29</td>
<td>(2.94)</td>
<td>22</td>
<td>(3.21)</td>
</tr>
<tr>
<td>UF.</td>
<td>18(\frac{1}{2}) 32</td>
<td>17(\frac{1}{2}) 27</td>
<td>-5</td>
<td></td>
</tr>
<tr>
<td>S.UF.</td>
<td>14(\frac{1}{2})</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-AB8,AB11) (MAY-AB11)</td>
<td>S.F.</td>
<td>2(\frac{1}{2}) 22</td>
<td>3(\frac{1}{2}) 23</td>
<td>+1</td>
</tr>
<tr>
<td>The MBO approach accurately assesses a teacher's performance. (JAN-N=162) (MAY-N=117)</td>
<td>F.</td>
<td>20(\frac{1}{2})</td>
<td>20(\frac{1}{2})</td>
<td>+1</td>
</tr>
<tr>
<td>U.D.</td>
<td>56</td>
<td>(2.91)</td>
<td>51</td>
<td>(2.94)</td>
</tr>
<tr>
<td>UF.</td>
<td>11(\frac{1}{2}) 22</td>
<td>20(\frac{1}{2}) 26</td>
<td>+4</td>
<td></td>
</tr>
<tr>
<td>S.UF.</td>
<td>11(\frac{1}{2})</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Unfavorable; U.D. = Undecided; U F. = Unfavorable; and S.UF. = Strongly Unfavorable.

Teachers in January and over one-fourth of the teachers in May indicate negative feeling toward this statement. The statement also elicited neutral responses from over one-half of the teachers in January, and again in May.
A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "I like the Management by Objectives (MBO) approach to teacher evaluation."

The data in Table 25 indicate that forty-two percent of the secondary teachers in January and 43% of the secondary teachers in May provided response indicating

| TABLE 25

A COMPARISON OF THE REACTIONS IN JANUARY AND MAY, 1973, OF THE SECONDARY WITH THE ELEMENTARY TEACHERS TO THE STATEMENT: "I LIKE THE MANAGEMENT BY OBJECTIVES (MBO) APPROACH TO TEACHER EVALUATION.”

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Response</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Wtd. Mean) (%)</td>
<td>(Wtd. Mean) (%)</td>
<td></td>
<td>(%)</td>
</tr>
<tr>
<td>S.F. 15/27</td>
<td>42 (3.33)</td>
<td>12/31 (3.25)</td>
<td>+1</td>
<td></td>
</tr>
<tr>
<td>F. 27/42</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.D. 10/40</td>
<td>(3.33)</td>
<td>35 (3.25)</td>
<td>(-.08)</td>
<td></td>
</tr>
<tr>
<td>UF. 12/60</td>
<td>18</td>
<td>15/7 (22)</td>
<td>+4</td>
<td></td>
</tr>
<tr>
<td>S.UF. 32/64</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.F. 14/30</td>
<td>44 (3.40)</td>
<td>22/32 (3.55)</td>
<td>(+.15)</td>
<td></td>
</tr>
<tr>
<td>F. 30/44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.D. 14/54</td>
<td>(3.40)</td>
<td>31 (3.55)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UF. 6/12</td>
<td>15</td>
<td>10/5 (15)</td>
<td>+2</td>
<td></td>
</tr>
<tr>
<td>S.UF. 6/12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>2</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference (Wtd. Mean)</td>
<td>(.07)</td>
<td>(.30)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U. F. = Unfavorable; and S.UF. = Strongly Unfavorable.
that they like the Management by Objectives approach to teacher evaluation; while eighteen percent of the secondary teachers in January and slightly more than twenty percent of the secondary teachers in May do not like this approach to teacher evaluation. Data from the table indicate that 40% of the teachers in January, and slightly more than one-third of the teachers in May are not sure if they like this evaluation approach or not.

A comparison between the reactions of the elementary teachers with the reactions of the secondary teachers for January and May show that elementary teachers in January indicate more positive reactions (2%) than secondary teachers; and in May elementary teachers indicate substantially more positive reactions (11%) than their secondary counterparts.

A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "I am satisfied with the teacher evaluation format currently being used by the administrator of my school."

Data from Table 26 indicate that forty-five percent of the secondary teachers in January and 40% of the secondary teachers in May feel they are satisfied with the teacher evaluation format currently used by their school administrator; while over one-third of the secondary teachers in January and twenty-nine percent of the secondary teachers in May do not feel satisfied with the present teacher
evaluation format being used. Eighteen percent of the secondary teachers in January and 31% of the secondary teachers in May are undecided on this issue.

Data indicate that 45% of the elementary teachers in January and sixty-one percent of the elementary teachers in May feel they are satisfied with the teacher evaluation format currently being used by their school administrator. The difference in positive reaction by elementary teachers for January and May reached the .1 (t=1.68) level of change which is not significant for this study. Eighteen percent of the elementary teachers in January and twenty-five percent of the elementary teachers in May indicate that they are not satisfied with the present teacher evaluation format being used by their school administrator. Over one-third of the elementary teachers in January and fourteen percent of the elementary teachers in May are not sure if they are satisfied with the teacher evaluation currently being used.

A comparison was made between the reactions of the secondary teachers and the reactions of the elementary teachers focused on the statement, "evaluation format being used." Data from the table indicate no difference in positive reaction existed in January between secondary and elementary teachers. In May, however, data from the table indicate substantially more positive reactions from the
A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "I am satisfied with the teacher evaluation format currently being used by the administrator of my school."

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Item / A3l</td>
<td></td>
<td>Item / PAY6</td>
<td></td>
</tr>
<tr>
<td>Secondary Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=43) (MAY-N=58)</td>
<td>S.F.</td>
<td>5) 45</td>
<td>12) 40</td>
<td>-5</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>40) 50</td>
<td>28) 50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>18) 28</td>
<td>31) 33</td>
<td>+19</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>18) 28</td>
<td>21) 27</td>
<td>-1</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>19) 37</td>
<td>8) 29</td>
<td>-9</td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=49) (MAY-N=59)</td>
<td>S.F.</td>
<td>6) 45</td>
<td>5) 61</td>
<td>+16</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>39) 45</td>
<td>56) 61</td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>37) 27</td>
<td>14) 27</td>
<td>+0</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>12) 22</td>
<td>13) 23</td>
<td>+1</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>6) 18</td>
<td>12) 25</td>
<td>+7</td>
</tr>
<tr>
<td>Positive Difference</td>
<td>Item / AA3l (Wtd. Mean)</td>
<td>0</td>
<td>21 b</td>
<td></td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; UF. = Unfavorable; and S.UF. = Strongly Unfavorable.

a. P > .1 < .05 (t = 1.68) Not significant
b. P > .05 < .02 (t = 2.33)

elementary teachers (21%) than from secondary teachers.

This positive reaction change reached the .05 (t = 2.33) level of statistical significance.

A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "The Management by Objectives (MBO) approach to teacher evaluation accurately assesses a teacher's performance."
The data in Table 27 indicate twenty-four percent of the secondary teachers in January and twenty-two percent of the teachers in May feel that the MBO approach to teacher evaluation accurately assesses a teacher's performance; while twenty-three percent of the secondary teachers in

| TABLE 27 |
| A COMPARISON OF THE REACTIONS IN JANUARY AND MAY, 1973, OF THE SECONDARY WITH THE ELEMENTARY TEACHERS TO THE STATEMENT: "THE MANAGEMENT BY OBJECTIVES (MBO) APPROACH TO TEACHER EVALUATION ACCURATELY ASSESSES A TEACHER'S PERFORMANCE." |

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>%</th>
<th>Mean</th>
<th>%</th>
<th>Mean</th>
<th>Difference %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Teachers</td>
<td>S.F.</td>
<td>1) 24</td>
<td></td>
<td>3) 22</td>
<td></td>
<td>-2</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>23</td>
<td></td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=86) (MAY-N=58)</td>
<td>U.D.</td>
<td>53</td>
<td>(3.32)</td>
<td>48</td>
<td>(2.87)</td>
<td>(-.45)</td>
</tr>
<tr>
<td></td>
<td>U.F.</td>
<td>8</td>
<td>23</td>
<td>21</td>
<td>30</td>
<td>+7</td>
</tr>
<tr>
<td></td>
<td>S.U.F.</td>
<td>15</td>
<td></td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td>S.F.</td>
<td>3) 20</td>
<td></td>
<td>3) 23</td>
<td></td>
<td>+3</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>17</td>
<td></td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=76) (MAY-N=59)</td>
<td>U.D.</td>
<td>57</td>
<td>(2.92)</td>
<td>54</td>
<td>(3.01)</td>
<td>(+.09)</td>
</tr>
<tr>
<td></td>
<td>U.F.</td>
<td>15</td>
<td>23</td>
<td>19</td>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>S.U.F.</td>
<td>8</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Difference</th>
<th>Positive (Wtd. Mean)</th>
<th>4</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative (Wtd. Mean)</td>
<td>(.40)</td>
<td>(.14)</td>
<td></td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U.F. = Unfavorable; and S.U.F. = Strongly Unfavorable.
January and almost one-third of the teachers in May are not satisfied with this approach. Over one-half of the secondary teachers in January and 48% of the secondary teachers in May provided undecided response to this statement.

Twenty percent of the elementary teachers in January and 23% of the elementary teachers in May perceive that the MBO approach to teacher evaluation is an accurate assessment of teacher performance; while 23% of the elementary teachers in January and twenty-three percent of the elementary teachers in May disagree with the statement. Fifty-seven percent of the elementary teachers in January and 54% of the elementary teachers in May are undecided about the merit of the MBO approach to teacher evaluation.

The data from the table indicate that the statement focused on MBO approach to teacher evaluation elicited essentially the same positive reactions from secondary teachers and elementary teachers in January and again in May.

Summary of the results of staff's reactions to statements in Issue Four

These data appear to indicate that the teachers in general provided greater positive reactions in May on all three statements pertaining to teacher evaluation. Data
from Table 24 indicate over one-half of the teachers are undecided on whether the MBO approach accurately assesses a teacher's performance. Secondary teachers' and elementary teachers' reactions in January to the statement, "I like the MBO approach to teacher evaluation," appear to be quite similar; while in May elementary teachers provided substantially more positive reactions than the secondary teachers.

The statement, "feeling satisfied with the present teacher evaluation format," elicited exactly the same positive reaction from secondary and elementary teachers in January; while in May elementary teachers provided substantially more (twenty-one percent) positive reaction to this statement.

No extraordinary differences of elementary teachers' positive reactions or secondary teachers' positive reactions to the statement, "MBO accurately assesses a teacher's performance" is indicated from data in Table 27. Approximately one-half of the secondary teachers in January and in May indicated undecided feeling concerning this statement; while considerably more than one-half of the elementary teachers in January and in May provided neutral response to this statement.
Presentation and Analysis of the Findings
Related to Issue Number Five

The results of the teachers' reactions in May, 1973, to statements focused on concerns related to the in-service program being conducted by the school district

The data from Table 28 indicate that sixty percent of the teachers in general feel satisfied with the approach the school district is taking in providing in-service training for the professional staff; while 16% of the teachers are not satisfied with this approach. Almost one-fourth of the teachers are undecided as to whether this approach serves the intended purpose.

Fifty-eight percent of the teachers agree that they have an influence in setting the direction for the in-service programs provided by the school district; while 23% of the teachers feel they have no influence whatsoever over in-service direction. On the other hand, almost one-fifth of the teachers provided response indicating that they are undecided concerning this issue.

The data from Table 28 also indicate that forty percent of the teachers do not feel undue pressure to attend in-service sessions conducted by the school district; while over one-third of the teachers provided responses indicating that they do feel a compelling pressure to attend in-service sessions. Twenty-five percent
### TABLE 28

THE RESULTS OF THE TEACHERS' REACTIONS IN MAY, 1973, TO STATEMENTS FOCUSED ON CONCERNS RELATED TO THE IN-SERVICE PROGRAM BEING CONDUCTED BY THE SCHOOL DISTRICT.

<table>
<thead>
<tr>
<th>Type of Response*</th>
<th>POSITIVE</th>
<th>NEUTRAL</th>
<th>NEGATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S.F. %</td>
<td>F. %</td>
<td>(Total)</td>
</tr>
<tr>
<td></td>
<td>(Pos.) (%)</td>
<td>(U.D.) (%)</td>
<td>UF. %</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S.UF. %</td>
<td>(Total)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>% (Neg.)</td>
<td>Mean</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Score</td>
</tr>
<tr>
<td>1. (AB14) I am satisfied with the approach the school district is taking in providing in-service training for the professional staff. (N=117)</td>
<td>8 52 (60)</td>
<td>(24)</td>
<td>13 3 (16)</td>
</tr>
<tr>
<td>2. (AB12) A teacher like myself has an influence in setting the direction for the in-service programs being provided by the school district. (N=117)</td>
<td>7 51 (58)</td>
<td>(19)</td>
<td>19 4 (23)</td>
</tr>
<tr>
<td>3. (AB10) Teachers do not feel an undue pressure to attend the in-service sessions being conducted by the school district. (N=117)</td>
<td>4 36 (40)</td>
<td>(25)</td>
<td>24 11 (35)</td>
</tr>
</tbody>
</table>

* Key to the Response Pattern: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; UF. = Unfavorable; and S.UF. = Strongly Unfavorable.
of the teachers are undecided concerning this statement.

A comparison of the teachers' reactions in January, 1973, with their reactions in May, 1973, to the statements focused on concerns related to the in-service program being conducted by the school district

In Table 29 are presented data indicating that forty-eight percent of the teachers in January and 60% of the teachers in May feel satisfied with the approach the school district is taking in providing in-service training. While the positive reactions in May appear substantially greater than the positive reactions in January, the .05 level of statistical significance had not been reached. Over one-third of the teachers in January and 16% of the teachers in May feel that they are not satisfied with the approach the school district is taking in providing in-service training. Eighteen percent of the teachers in January and almost one-fourth of the teachers in May are undecided concerning this statement.

Over one-half of the teachers in January and 58% of the teachers in May feel that they have an influence in setting the direction for the in-service programs; while 28% of the teachers in January and twenty-three percent of the teachers in May do not feel they have this influence. Twenty-one percent of the teachers in January and 19% of the teachers in May indicate neutral feeling concerning this issue.
A COMPARISON OF THE TEACHERS' REACTIONS IN JANUARY, 1973, WITH THEIR REACTIONS IN MAY, 1973, TO THE STATEMENTS FOCUSED ON CONCERNS RELATED TO THE IN-SERVICE PROGRAM BEING CONDUCTED BY THE SCHOOL DISTRICT.

<table>
<thead>
<tr>
<th>Focus of Statement</th>
<th>Type of Responses</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(Wtd. Mean) %</td>
<td>(Wtd. Mean) %</td>
<td></td>
</tr>
<tr>
<td>(JAN-29) (MAY-AB14) S.F. I am satisfied with the approach to providing in-service training.</td>
<td>F.</td>
<td>5</td>
<td>8</td>
<td>12 a</td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>18</td>
<td>(3.07)</td>
<td>24</td>
</tr>
<tr>
<td>(JAN-N=92) (MAY-N=117) UF.</td>
<td>S.UF.</td>
<td>24</td>
<td>13</td>
<td>-18</td>
</tr>
<tr>
<td>(JAN-11) (MAY-AB12) S.F. I have an influence in setting the direction for the in-service programs.</td>
<td>F.</td>
<td>11</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>21</td>
<td>(3.24)</td>
<td>19</td>
</tr>
<tr>
<td>(JAN-N=92) (MAY-N=117) UF.</td>
<td>S.UF.</td>
<td>18</td>
<td>19</td>
<td>-5</td>
</tr>
<tr>
<td>(JAN-46,545) (MAY-AB10) S.F. Teachers do not feel undue pressure to attend the in-service sessions.</td>
<td>F.</td>
<td>2</td>
<td>4</td>
<td>21 b</td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>19</td>
<td>(2.34)</td>
<td>25</td>
</tr>
<tr>
<td>(JAN-N=162) (MAY-N=117) UF.</td>
<td>S.UF.</td>
<td>37</td>
<td>25</td>
<td>-27</td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Unfavorable; U.D. = Undecided; U.F. = Unfavorable; and S.UF. = Strongly Unfavorable.

a. P > .1 < .05 (t = 1.7) Not Significant b. P = .001 (t = 3.89)

Nineteen percent of the teachers in January and 40% of the teachers in May do not feel undue pressure to attend the in-service sessions. The difference in positive reactions between January results and the results in May reached the .001 (t = 3.89) level of statistical significance. Sixty-two percent of the teachers in
January and thirty-five percent of the teachers in May feel undue pressure to attend the in-service sessions. On the other hand, 19% of the teachers in January and one-fourth of the teachers in May are undecided concerning this issue.

A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "I am satisfied with the approach the school district is taking in providing in-service training for the professional staff."

In Table 30 data indicate 44% of the secondary teachers in January and almost two-thirds of the secondary teachers in May are satisfied with the approach the school system is taking in providing in-service training. The positive change indicated between secondary teachers' reactions in January and secondary teachers' reactions in May reached the .05 (t=2.04) level of statistical significance. On the other hand, over one-third of the secondary teachers in January and 17% of the secondary teachers in May are not satisfied with the school district's approach for providing in-service training. Twenty-three percent of the secondary teachers in January and 19% of the secondary teachers in May provide response indicating that they are neutral concerning this issue.

Over one-half of the elementary teachers in January and 56% of the elementary teachers in May feel satisfied with the in-service training program; while 35% of the
of the elementary teachers in January and fifteen percent of the elementary teachers in May are not satisfied with the approach the school district is taking. On the other hand, fourteen percent of the elementary teachers in January and 29% of the elementary teachers in May are not satisfied with the approach the school district is taking.

TABLE 30

A COMPARISON OF THE REACTIONS IN JANUARY AND MAY, 1973, OF THE SECONDARY WITH THE ELEMENTARY TEACHERS TO THE STATEMENT: "I AM SATISFIED WITH THE APPROACH THE SCHOOL DISTRICT IS TAKING IN PROVIDING IN-SERVICE TRAINING FOR THE PROFESSIONAL STAFF."

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>January, 1973 (Wtd. Mean)</th>
<th>May, 1973 (Wtd. Mean)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Item #A29</td>
<td>Item #A31h</td>
<td></td>
</tr>
<tr>
<td>Secondary Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=43)</td>
<td>S.F.</td>
<td>51</td>
<td>64</td>
<td>+20 a</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>39</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>23</td>
<td>19</td>
<td>(+.52)</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>21</td>
<td>14</td>
<td>-16</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>12</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=49)</td>
<td>S.F.</td>
<td>8</td>
<td>2</td>
<td>+5</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>43</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>14</td>
<td>29</td>
<td>(+.21)</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>29</td>
<td>12</td>
<td>-20</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>Positive</td>
<td>7</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Wtd. Mean)</td>
<td>(.14)</td>
<td>(.17)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U F. = Unfavorable; and S.UF. = Strongly Unfavorable.

a. P > .05 < .02 (t = 2.04)
undecided concerning this statement.

A comparison was made between the reactions of the secondary teachers and the reactions of the elementary teachers to the statement concerned with being satisfied with the in-service approach. The data indicate that this statement elicited greater positive reaction from the elementary teachers in January (7%); while in May greater positive reaction was elicited from the secondary teachers (8%).

A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "A teacher like myself has an influence in setting the direction for the in-service programs being provided by the school district."

Data from Table 31 show 51% of the secondary teachers in January and sixty-two percent of the secondary teachers in May perceive that they have an influence in setting direction for in-service programs in the school district; while almost one-fourth of the secondary teachers in January and 15% of the secondary teachers in May do not perceive this to be the case. On the other hand, twenty-five percent of the secondary teachers in January and 23% of the secondary teachers in May are undecided concerning this issue.

Forty-three percent of the elementary teachers in January and over one-half of the elementary teachers in May feel that they have an influence in setting the direction
A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "A teacher like myself has an influence in setting the direction for the in-service programs being provided by the school district."

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>% (Wtd. Mean)</td>
<td>% (Wtd. Mean)</td>
<td>%</td>
</tr>
<tr>
<td>Secondary Teachers</td>
<td>S.F. 16</td>
<td>51</td>
<td>10</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>F. 35</td>
<td></td>
<td>52</td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D. 25</td>
<td>(3.31)</td>
<td>23</td>
<td>(3.53)</td>
</tr>
<tr>
<td>(JAN-N=43) (MAY-N=58)</td>
<td>UF. 12</td>
<td>24</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>S.UF. 12</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td>S.F. 8</td>
<td>43</td>
<td>3</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>F. 35</td>
<td></td>
<td>51</td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D. 20</td>
<td>(3.06)</td>
<td>16</td>
<td>(3.22)</td>
</tr>
<tr>
<td>(JAN-N=49) (MAY-N=59)</td>
<td>UF. 29</td>
<td>37</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>S.UF. 8</td>
<td></td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Positive: 8
Negative: 13

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U.F. = Unfavorable; and S.U.F. = Strongly Unfavorable.

for in-service programs in the school district; while over one-third of the elementary teachers in January, and thirty percent of the elementary teachers in May do not feel that they have influence in setting the direction for in-service programs. Twenty percent of the elementary teachers in May provided neutral reaction to this statement.

In comparing the reactions of the elementary teachers
and the reactions of the secondary teachers in January and in May to the statement focused on this issue, data from Table 31 indicate that the secondary teachers in January and in May provided more positive reactions (eight percent in January and 8% in May).

A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "Teachers do not feel an undue pressure to attend the in-service sessions being conducted by the school district."

In Table 32 are presented data indicating that twenty-one percent of the secondary teachers in January and one-third of the secondary teachers in May do not feel an undue amount of pressure to attend in-service sessions. This positive change reached the .1 (t=1.71) level of change which is not significant in this study. Almost two-thirds of the secondary teachers in January and 39% of the secondary teachers in May perceive that they feel undue pressure to attend in-service sessions. On the other hand, sixteen percent of the secondary teachers in January and 28% of the secondary teachers in May are undecided about this statement.

Twenty-two percent of the elementary teachers in January and 47% of the elementary teachers in May perceive that there is no undue pressure to attend in-service sessions. The change in positive reactions from January to May by elementary teachers reached the .01 (t=3.13) level of
statistical significance. Over one-half of the elementary teachers in January and almost one-third of the elementary teachers in May feel an undue amount of pressure to attend

**TABLE 32**

A COMPARISON OF THE REACTIONS IN JANUARY AND MAY, 1973, OF THE SECONDARY WITH THE ELEMENTARY TEACHERS TO THE STATEMENT: "TEACHERS DO NOT FEEL AN UNDUE PRESSURE TO ATTEND THE IN-SERVICE SESSIONS BEING CONDUCTED BY THE SCHOOL DISTRICT."

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>Percent of Response and Weighted Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>January, 1973 Item #116, % (Wtd. Mean)</td>
</tr>
<tr>
<td>Secondary Teachers</td>
<td>S.F. F.</td>
<td>5) 21</td>
</tr>
<tr>
<td>(JAN-N=86) (MAY-N=58)</td>
<td>U.D.</td>
<td>16 (2.38)</td>
</tr>
<tr>
<td></td>
<td>UF. S.UF.</td>
<td>38 (63)</td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td>S.F. F.</td>
<td>1) 22</td>
</tr>
<tr>
<td>(JAN-N=76) (MAY-N=59)</td>
<td>U.D.</td>
<td>20 (2.43)</td>
</tr>
<tr>
<td></td>
<td>UF. S.UF.</td>
<td>36 (58)</td>
</tr>
<tr>
<td>Positive Difference</td>
<td>(Wtd. Mean)</td>
<td>(1)</td>
</tr>
<tr>
<td>Negative Difference</td>
<td>(Wtd. Mean)</td>
<td>(.05)</td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U.F. = Unfavorable; and S.UF. = Strongly Unfavorable.
  
  a. P > .1 < .05 (t = 1.71) Not significant
  b. P > .01 < .001 (t = 3.13)

in-service sessions. Twenty percent of the elementary teachers in January and 22% of the elementary teachers in
May are undecided concerning this issue.

A comparison was made between the reactions of the secondary teachers and the reactions of the elementary teachers to the statement focused on this issue. The data indicate that the statement focused on this issue elicited approximately the same positive reactions from secondary teachers and from elementary teachers in January; while in May the same statement elicited substantially more positive reactions from elementary teachers (14%) than from the secondary teachers.

**Summary of the results of the staff's reactions to statements in Issue Five**

These data appear to indicate that the teachers provided greater positive reaction in May on all three statements pertaining to in-service. In two of the three statements in Table 29 substantially more positive reaction is indicated in May.

In Table 30 data indicate secondary teachers and elementary teachers provided greater positive reactions in May to the statement, "satisfied with the in-service approach," while secondary teachers' positive reaction difference from January to May reached the .05 level of statistical significance.

In Table 31 positive reaction increased for secondary and elementary teachers in May. The change as illustrated
indicate similar positive reaction increase for secondary and elementary teachers alike. Secondary teachers reacted more positive than elementary teachers in January and again in May to the statement, "influencing the direction of in-service programs."

In Table 32 secondary and elementary teachers reacted more positive in May to the statement, "undue pressure to attend in-service sessions." Data indicate elementary teachers reacted substantially more positive in May to this statement, reaching the .01 level of statistical significance.

Presentation and Analysis of the Findings Related to Issue Number Six

The results of the teachers' reactions in May, 1973, to statements focused on concerns related to parent involvement in the activities of the school district

Data from Table 33 indicate sixty-eight percent of the teachers feel that there is sufficient opportunity for parent involvement in the school district; while fourteen percent of the teachers feel more opportunity for parent involvement should be provided. Eighteen percent of the teachers feel they are undecided on this statement.

Slightly over one-half of the teachers would prefer to have parents on curriculum committees; while one-fourth of the teachers prefer not to have parents on curriculum committees. Twenty-four percent of the teachers provided neutral response to this statement.
THE RESULTS OF THE TEACHERS' REACTIONS IN MAY, 1973, TO STATEMENTS FOCUSED ON CONCERNS RELATED TO PARENT INVOLVEMENT IN THE ACTIVITIES OF THE SCHOOL DISTRICT.

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Revised Statement (N)</th>
<th>Type of Response*</th>
<th>Positive (%)</th>
<th>Neutral (%)</th>
<th>Negative (%)</th>
<th>Wtd. Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>(A318) There is sufficient opportunity for parent involvement in this school district. (N=116)</td>
<td>POSITIVE</td>
<td>27</td>
<td>41</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEUTRAL</td>
<td>(68)</td>
<td>(18)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>(A316) For practical reasons, I would prefer to have parents on curriculum committees. (N=116)</td>
<td>NEGATIVE</td>
<td></td>
<td></td>
<td>UF.</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S.UF.</td>
<td>(Total)</td>
<td>(Total)</td>
<td>(%)</td>
<td>(%)</td>
</tr>
</tbody>
</table>

* Key to the Response Pattern: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; UF. = Unfavorable; and S.UF. = Strongly Unfavorable.
A comparison of the teachers' reactions in January, 1973, with their reactions in May, 1973, to the statements focused on concerns related to parent involvement in the activities of the school district.

Data from Table 34 indicate that 89% of the teachers in January and sixty-eight percent of the teachers in May feel there is sufficient opportunity for parent involvement in the school district. The change in positive reaction by teachers from January to May reached the .001 (t=3.75) level.

**Table 34**


<table>
<thead>
<tr>
<th>Focus of Statement</th>
<th>Type of Response</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEM NUMBER and (N)</td>
<td></td>
<td>% (Wtd. Mean)</td>
<td>% (Wtd. Mean)</td>
<td>%</td>
</tr>
<tr>
<td>(JAN-A17) (MAY-AB18) S.F.</td>
<td>24</td>
<td>89</td>
<td>27</td>
<td>68</td>
</tr>
<tr>
<td>There is sufficient opportunity for parent involvement in this school district. (JAN-N=72) (MAY-N=116) U.D.</td>
<td>5</td>
<td>(4.05)</td>
<td>18</td>
<td>(3.76)</td>
</tr>
<tr>
<td>UF.</td>
<td>1</td>
<td>6</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>S.UF.</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>(JAN-A14) (MAY-AB16) S.F.</td>
<td>17</td>
<td>70</td>
<td>16</td>
<td>51</td>
</tr>
<tr>
<td>I prefer to have parents on curriculum committees. (JAN-N=92) (MAY-N=116) U.D.</td>
<td>22</td>
<td>(3.79)</td>
<td>24</td>
<td>(3.29)</td>
</tr>
<tr>
<td>UF.</td>
<td>8</td>
<td>8</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>S.UF.</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Unfavorable; U.D. = Undecided; U.F. = Unfavorable; and S.U.F. = Strongly Unfavorable.

a. $P = .001$ (t = 3.75)  b. $P > .01 < .001$ (t = 2.88)
of statistical significance. Six percent of the teachers in January and fourteen percent of the teachers in May perceive more opportunity for parent involvement should be made. On the other hand, 5% of the teachers in January and eighteen percent of the teachers in May are undecided about this issue.

Seventy percent of the teachers in January and over one-half of the teachers in May prefer to have parents on curriculum committees. The change in positive reactions by teachers from January to May reached the .01 (t=2.88) level of statistical significance. Eight percent of the teachers in January and 25% of the teachers in May perceive curriculum committees are not the place for parents. On the other hand, 22% of the teachers in January and twenty-four percent of the teachers in May provided neutral response to this statement.

A comparison of the reactions in January and in May, 1973, of the secondary with the elementary teachers to the statement: "There is sufficient opportunity for parent involvement in the school district."

In Table 35 ninety-one percent of the secondary teachers in January and 61% of the secondary teachers in May perceive that there is sufficient opportunity for parent involvement in the school district. This change in positive reactions by secondary teachers from January to May reached the .001 (t=3.90) level of statistical significance. Five percent of the secondary teachers in May perceive that more opportunity for parent involvement in the school district
should be made. Four percent of the secondary teachers in January and over one-fourth of the teachers in May are undecided concerning this statement.

**TABLE 35**
A COMPARISON OF THE REACTIONS IN JANUARY AND IN MAY, 1973, OF THE SECONDARY WITH THE ELEMENTARY TEACHERS TO THE STATEMENT: "THERE IS SUFFICIENT OPPORTUNITY FOR PARENT INVOLVEMENT IN THIS SCHOOL DISTRICT."

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>Percent of Response and Weighted Mean Score</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=43) (MAY-N=58)</td>
<td>S.F.</td>
<td>21) 91</td>
<td>23) 61</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>70)</td>
<td>38)</td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>4</td>
<td>(4.07)</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>5) 5</td>
<td>10) 13</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>0)</td>
<td></td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=49) (MAY-N=58)</td>
<td>S.F.</td>
<td>22) 81</td>
<td>31) 74</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>59)</td>
<td>43)</td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>10</td>
<td>(3.92)</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>7) 9</td>
<td>11) 16</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>2)</td>
<td></td>
</tr>
</tbody>
</table>

Negative 4 3

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U.F. = Unfavorable; and S.UF. = Strongly Unfavorable.

a. P = .001 (t = 3.90)

Eighty-one percent of the elementary teachers in January and almost three-fourths of the elementary teachers in May perceive there is sufficient parent involvement in the school district; while 9% of the elementary teachers
in January and sixteen percent of the elementary teachers in May feel there is insufficient opportunity for parent involvement. Ten percent of the elementary teachers in January and 10% of the elementary teachers in May responded neutral to this statement.

In comparing the reactions of the secondary teachers with the reactions of the elementary teachers to the statement focused on this issue, data indicate that secondary teachers provided more positive reactions (10%) than elementary teachers did in January; while in May, data indicate that elementary teachers provided more positive reactions (13%) than secondary teachers.

A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "For practical reasons, I would prefer to have parents on curriculum committees."

In Table 36 seventy percent of the secondary teachers in January and almost one-half of the secondary teachers in May perceive their preference on having parents on curriculum committees. The change in positive reactions by secondary teachers from January to May reached the .05 (t=2.32) level of statistical significance. Seven percent of the secondary teachers in January and 23% of the secondary teachers in May do not perceive having parents on curriculum committees. Twenty-three percent of the secondary teachers in January and 29% of the secondary teachers in May are
undecided concerning this issue.

Seventy-one percent of the elementary teachers in January and over one-half of the elementary teachers in May perceive having parents on curriculum committees. The

TABLE 36
A COMPARISON OF THE REACTIONS IN JANUARY AND MAY, 1973, OF THE SECONDARY WITH THE ELEMENTARY TEACHERS TO THE STATEMENT: "FOR PRACTICAL REASONS, I WOULD PREFER TO HAVE PARENTS ON CURRICULUM COMMITTEES."

<table>
<thead>
<tr>
<th>Respondents (n)</th>
<th>Type of Responses</th>
<th>Percent of Response</th>
<th>Weighted Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>January, 1973</td>
<td>May, 1973</td>
<td>Difference</td>
</tr>
<tr>
<td></td>
<td>Item #41h</td>
<td>Item #4516</td>
<td></td>
</tr>
<tr>
<td>Secondary Teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=13) (MAY-N=58)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.F.</td>
<td>16) 70</td>
<td>17) 48</td>
<td>-22 a</td>
</tr>
<tr>
<td>F.</td>
<td>54)</td>
<td>31) 48</td>
<td></td>
</tr>
<tr>
<td>U.D.</td>
<td>23 (3.80)</td>
<td>29 (3.36)</td>
<td>(-.44)</td>
</tr>
<tr>
<td>U.F.</td>
<td>7) 7</td>
<td>16) 23</td>
<td>+16</td>
</tr>
<tr>
<td>S.U.F.</td>
<td>0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=19) (MAY-N=58)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.F.</td>
<td>22) 71</td>
<td>14) 52</td>
<td>-19 b</td>
</tr>
<tr>
<td>F.</td>
<td>49)</td>
<td>38) 52</td>
<td></td>
</tr>
<tr>
<td>U.D.</td>
<td>20 (3.81)</td>
<td>19 (3.22)</td>
<td>(-.62)</td>
</tr>
<tr>
<td>U.F.</td>
<td>9) 9</td>
<td>15) 29</td>
<td>+20</td>
</tr>
<tr>
<td>S.U.F.</td>
<td>0)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Difference: Positive 1 4

Negative 2 6

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U.F. = Unfavorable; and S.U.F. = Strongly Unfavorable.

a. P > .05 < .02 (t = 2.32)
b. P > .05 < .02 (t = 2.07)
Change in reaction from January to May for elementary teachers reached the .05 (t=2.07) level of statistical significance. Nine percent of the elementary teachers in January and 29% of the elementary teachers in May feel they would prefer not having parents on curriculum committees. Twenty percent of the elementary teachers in January and 19% of the elementary teachers in May provided an undecided response to the statement focused on this issue.

A comparison was made between the reactions of the secondary teachers and the reactions of the elementary teachers to the statement focused on this issue. The data indicate comparable positive reactions from secondary and elementary teachers in January; while in May elementary teachers provided more positive reactions (4%) than secondary teachers.

**Summary of the results of the staff's reactions to statements in Issue Six**

In summary, these data appear to indicate that teachers provided less positive and more negative reactions to the two statements in this issue in May. Data also indicate teachers provided more neutral reactions in May to the two statements.

Secondary teachers and elementary teachers responding to the statement, "sufficient opportunity for parent
involvement," indicated less positive reaction in May to this statement; while negative reaction increased. The difference in secondary and elementary teacher's positive reactions to the statement in January and in May was approximately 10%.

In Table 34 the statement, "prefer to have parents on curriculum committees," elicited substantially less positive reaction from secondary and elementary teachers in May, reaching the .05 level of statistical significance in each case.

Presentation and Analysis of the Findings Related to Issue Number Seven

The results of the teachers' reactions in May, 1973, to the statement focused on the concern related to the student reporting system used by the school.

In Table 37, data indicate forty-one percent of the teachers perceive they are satisfied with the reporting system used by the school to inform parents of student progress; while 40% of the teachers feel they are not satisfied with this system. Nineteen percent of the teachers provided an undecided response to this statement.
### Table 37

The results of the teachers' reactions in May, 1973, to the statement focused on the concern related to the student reporting system used by the school.

<table>
<thead>
<tr>
<th>Ranking (Item #)</th>
<th>Revised Statement (N)</th>
<th>POSITIVE (Total)</th>
<th>NEUTRAL (Total)</th>
<th>NEGATIVE (Total)</th>
<th>Wtd. Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>S.F. %</td>
<td>F. %</td>
<td>Pos. %</td>
<td>U.D. %</td>
</tr>
<tr>
<td>(AB7) I am satisfied with the reporting system used by the school to inform parents of student progress. (N=116)</td>
<td></td>
<td>6</td>
<td>35</td>
<td>(41)</td>
<td>(19)</td>
</tr>
</tbody>
</table>

* Key to the Response Pattern: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; UF. = Unfavorable; and S.UF. = Strongly Unfavorable.
A comparison of the teachers' reactions in January, 1973, with their reactions in May, 1973, to the statement focused on the concern related to the student reporting system used by the district

In Table 38, thirty-eight percent of the teachers in January and 41% of the teachers in May feel satisfied with the student reporting system being used; while 45% of the teachers in January and forty percent of the teachers in May perceive they are not satisfied with the student reporting system presently being used. Seventeen percent of the teachers in January and 19% of the teachers in May provided neutral reaction to this statement.

### TABLE 38

A comparison of the teachers' reactions in January, 1973, with their reactions in May, 1973, to the statement focused on the concern related to the student reporting system used by the school district.

<table>
<thead>
<tr>
<th>Focus of Statement</th>
<th>Type of Response</th>
<th>January, 1973</th>
<th>May, 1973</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>(JAN-A33) (MAY-AB7)</td>
<td>S.F.</td>
<td>35</td>
<td>35</td>
<td>+3</td>
</tr>
<tr>
<td>I am satisfied with the student reporting system used by my school</td>
<td>P.</td>
<td>38</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>(JAN-N=97) (MAY-N=116)</td>
<td>U.D.</td>
<td>17</td>
<td>19</td>
<td>(+.13)</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>15</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>S.UF.</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Key to the Response Patterns: S.F. = Strongly Favorable; P. = Unfavorable; U.D. = Undecided; U.F. = Unfavorable; and S.UF. = Strongly Unfavorable.
A comparison of the reactions in January and May, 1973, of the secondary with the elementary teachers to the statement: "I am satisfied with the reporting used by the school to inform parents of student progress."

Data from Table 39 indicate forty-one percent of the secondary teachers in January and over one-half of the secondary teachers in May feel satisfied with the reporting system used by the school; while 40% of the secondary teachers in January and one-third of the secondary teachers in May perceive they are not satisfied with the reporting system used to inform parents of students' progress. Nineteen percent of the secondary teachers in January and 12% of the secondary teachers in May are undecided concerning this statement.

Forty-one percent of the elementary teachers in January and 29% of the elementary teachers in May perceive they are satisfied with the present reporting system; while 42% of the elementary teachers in January and almost one-half of the elementary teachers in May provided negative reaction to the present reporting system. Seventeen percent of the elementary teachers in January and one-fourth of the elementary teachers in May provided undecided response to this statement.

A comparison was made between the reactions of the secondary teachers and the reactions of the elementary teachers to the statement, "satisfied with the reporting
A COMPARISON OF THE REACTIONS IN JANUARY AND MAY, 1973, OF THE SECONDARY WITH THE ELEMENTARY TEACHERS TO THE STATEMENT: "I AM SATISFIED WITH THE REPORTING SYSTEM USED BY THE SCHOOL TO INFORM PARENTS OF STUDENT PROGRESS."

<table>
<thead>
<tr>
<th>Respondents (N)</th>
<th>Type of Responses</th>
<th>January, 1973 Item #A33</th>
<th>May, 1973 Item #AB7</th>
<th>Difference %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% (Wtd. Mean)</td>
<td>% (Wtd. Mean)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=49) (MAY-N=57)</td>
<td>S.F.</td>
<td>2) 41</td>
<td>7) 55</td>
<td>+14</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>19 (2.91)</td>
<td>12 (3.15)</td>
<td>(+.24)</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>28) 40</td>
<td>21) 33</td>
<td>-7</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>12) 40</td>
<td>12) 33</td>
<td></td>
</tr>
<tr>
<td>Elementary Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(JAN-N=48) (MAY-N=59)</td>
<td>S.F.</td>
<td>6) 41</td>
<td>5) 29</td>
<td>-12</td>
</tr>
<tr>
<td></td>
<td>F.</td>
<td>35) 41</td>
<td>24) 29</td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.D.</td>
<td>17 (2.90)</td>
<td>25 (2.72)</td>
<td>(-.18)</td>
</tr>
<tr>
<td></td>
<td>UF.</td>
<td>27) 42</td>
<td>31) 46</td>
<td>+4</td>
</tr>
<tr>
<td></td>
<td>S.UF.</td>
<td>15) 42</td>
<td>15) 46</td>
<td></td>
</tr>
</tbody>
</table>

Positive Difference (Wtd. Mean) (.01) (.03)
Negative 2 13

* Key to the Response Patterns: S.F. = Strongly Favorable; F. = Favorable; U.D. = Undecided; U F. = Unfavorable; and S.UF. = Strongly Unfavorable.

a. P > .01 < .001 (t = 2.95)

Data indicate that the statement elicited identical positive reactions from secondary and elementary teachers in January; while in May this statement elicited a substantially higher positive reaction from secondary teachers (26%) than from the elementary teachers. This change in positive reactions between secondary teachers and elementary teachers in May reached the .01 level of significance.
(t=2.95) level of statistical significance.

**Summary of the results of staff's reactions to statements in Issue Number Seven**

In summary, these data appear to indicate teachers in general reacted more positive in May to the statement, "being satisfied with the student reporting system." Data from Table 38 indicate teachers were slightly more neutral to the issue and appreciably less negative in May. Data from Table 39 indicate secondary and elementary teachers in January were very nearly in total agreement on the issue, "being satisfied with the reporting system." In May, a substantial difference in positive reaction to this issue shows secondary teachers providing the higher positive reaction to the issue. This change in positive reaction between secondary and elementary teachers reached the .01 level of statistical significance.
CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purposes of this study were: (1) to determine the attitudes of the professional staff in the Amherst-Pelham Regional School District concerning various aspects of the Performance Objective Program during the 1972-73 school year; and (2) to determine the differentiation of attitudes concerning the Performance Objective Program among the elementary and secondary teachers. In the previous chapter the findings were presented and analyzed. In the present chapter the methodology used in the study will be reviewed briefly, and a summary of the findings will be presented. This will be followed by the conclusions reached from these findings. The recommendations based upon the findings and conclusions of this study will then be set forth.

The Method

In order to determine the attitude of the professional staff in the Amherst-Pelham Regional School District concerning various aspects of the Performance Objective Program, and to determine the differentiation of attitudes concerning the program among the elementary and secondary teachers,
two hundred ten classroom teachers were asked to participate in the study. These participants included elementary and secondary teachers and teachers of special education. One hundred three elementary and one hundred seven secondary teachers participated in each round of the study. Usable data from one hundred sixty-three or 78% of the professional staff were obtained and utilized in the first questionnaire. Of the total returned, eighty-five represented secondary staff, while seventy-eight were elementary teachers.

In the second questionnaire response, one hundred nineteen usable mark sense answer sheets were returned with sixty representing elementary staff members and fifty-nine secondary. Attached to the "closed-end" questionnaire in May were twenty-one specific categories provided for teacher voluntary comments.

The study focused on seven specific issues related to various aspects of the Performance Objective Program. The study incorporated three different types of assessment procedures to determine the attitudes of the professional staff in the Amherst-Pelham Regional School District, and to determine the differentiation of attitudes concerning the Program among the elementary teachers and secondary teachers. These methods were (1) a determination of the teachers' attitudes toward their experience with the POP program through the use of "closed" questions on a
questionnaire; (2) a determination of the teachers' attitudes toward their experience with the POP program through the use of "open-ended" questions on a questionnaire; and (3) the perceptions of the investigator based on his observation of the teachers as they participated in unstructured informal interviews.

The teachers' attitude toward the Performance Objective Program; the "closed" question technique:

Each of the teachers were asked to respond to a number of "closed" questions on a written questionnaire. These questions related to the teachers' attitude toward their experience with POP. These questions focused on areas such as: use of performance objectives; implementation of the performance objective approach; teacher evaluation; in-service training; parent involvement; and student reporting system. The number and percent of responses made for each response category and weighted mean for each questionnaire item was determined, and each question was analyzed separately including the determination of the significance factor related to change.

The teachers' attitude toward the Performance Objective Program; the "open-ended" question technique:

Upon completion of the "closed" questionnaire, each of the teachers were asked to respond to a number of "open-ended" questions. These questions focused on voluntary comments from the teachers toward their experience with the POP
program. The "open-ended" questions were dispersed along with the "closed" questionnaire, and they were used to supplement the information gained from the "closed" questions. The results from these questions were analyzed and summarized according to the pre-stated issues, and were considered in making the final conclusions for the study.

The teachers' attitude toward the Performance Objective Program; the unstructured interview technique:

The investigator in April conducted unstructured interviews with a sampling of elementary and secondary teachers using the same criteria as was used in the "open-ended" and "closed" staff questionnaires.

The investigator made notes from his observations of the interviews with the teachers. The data from these notes were analyzed and these findings were considered in making the final conclusions for the study.

The findings from the above-mentioned procedures were presented and analyzed. The summary and conclusions made for the study were developed through an effort to synthesize the findings from these separate approaches and to look for evidence of patterns that may exist which would offer support for some degree of generalizations to be made.

Summary

The following are the summaries of the findings as they relate to the assessment approaches used in the study.
The teachers' attitudes toward critical issues related to the use of performance objectives: Results summarized

The data appear to indicate that from January to May, the teachers in general became less positive, and more neutral in perceiving POP as an effective tool for managing the continuous progress of students. On the "closed" questions, no less than two-thirds of the teachers gave responses in the positive direction to this item. At the same time a small minority of the teachers gave responses in the negative direction on the item. No less than one half of the secondary teachers in January or May gave positive response to this item, while a comparatively small amount of secondary teachers responded negative to this item. Elementary teachers indicated a higher consensus of favor to this item in May than the secondary staff.

At the same time more teachers feel more positive and less negative in May than in January concerning performance objectives not dehumanizing. A general consensus of the elementary and secondary teachers in May feel that performance objectives do not dehumanize, while approximately half of the secondary and half of the elementary teachers in May perceived this to be the case. These results appear to indicate that the teachers found their experience with use of performance objectives as an effective tool for managing the continuous progress of students to be of value, and an
experience that they would like to repeat. The data also indicate that the consensus of teachers indicate POP does not dehumanize the learning experience for teachers and students.

General concerns resulting from the implementation of the performance objective approach in the classroom: Results summarized

Seven statements were given response in this issue, with two-thirds or more of the teachers responding positive to four of the seven items. The data appear to indicate that in all but one item, teacher responses were more positive in responding in May, than in January. At the same time negative feeling decreased in four of the statements in May.

A large consensus of teachers indicate that they feel free to deviate from the performance objective approach at their own discretion, while a small number of teachers perceive that they do not feel this way. Responses to this statement in January and May indicate majority of teachers feel comfortable when it comes to deviating from POP. In January, approximately one-half of the teachers perceived that the POP approach should be maintained in the school district after federal funding ends; while in May, more than two-thirds of the teachers indicated that POP should be continued. Substantially, fewer teachers responded negative to this statement in May than in January. To the statement
concerned with feeling successful and competent in implementing the POP approach, data indicate teachers became more positive and less negative in May toward this item. Most teachers in May agree that the use of performance objectives is a good idea, while in January, less than half of the teachers felt this way. Approximately a third of the teachers indicate undecided feeling to this item in January and May. Slightly more than a third of the teachers in January indicated the time they spend on implementing the POP approach is worthwhile; while almost one-half of the teachers in May feel this way. Over one-third of the teachers in January and May indicate neutral feeling concerning this issue, while negative response declined in May. Reactions to the item, "performance objectives have improved my students' school performance," elicited a comparable teacher response in January and May.

Secondary teachers responded essentially the same in January and May to the statement "feeling free to deviate"; while elementary teachers provided greater positive reaction in January than in May to this item. The difference in positive reaction in January between secondary and elementary teachers reached the level of significance.

Over one-half of the secondary teachers in January and over two-thirds of the elementary teachers in January provided positive reaction to the item "maintaining POP in the
district after federal funding ends." While the negative
reaction for both teacher groups is minute, neutral reaction
varies between one-quarter of the elementary teachers and
one-third of the secondary teachers. Meaningful change is
indicated from January to May for secondary and elementary
teachers. Two-thirds of the secondary teachers provided
positive reactions in May; while three-fourths of the ele-
mentary teachers indicate positive reaction in May toward the
statement. While the negative reactions did not vary to any
extent, a lower neutral response is indicated for secondary
and elementary teachers in May.

Comparable positive reactions are indicated for second-
arly and elementary teachers in May concerned with continuing
to use the POP approach even if not actively encouraged to
do so. A large consensus of responses indicate favorable
feeling to this item.

Comparable secondary teacher positive reaction in Janu-
ary and May indicate that the teachers feel successful and
competent in implementing the POP approach in their class-
room. Elementary teachers provided responses in January in-
dicating a mild feeling of competency and success in imple-
menting POP in their classroom; while in May, nearly three-
fourths of the elementary teachers indicated feeling success-
ful and competent.

A wide variation of positive reactions is indicated
between secondary and elementary teachers in January concerning the statement "most teachers agree that the use of performance objectives is a good idea." Barely one-third of the elementary teachers reacted positive to the statement; while over one-half of the secondary teachers provided positive response to the statement. In May, positive reactions appear comparable for elementary and secondary teachers; while slightly more than one-third of the elementary teachers in January and May provide neutral reactions to the statement.

Comparable positive reactions are indicated by secondary and elementary teachers in January concerning the statement, "time invested in implementing POP is worthwhile," while over one-half of the elementary teachers provided positive reactions in May, and slightly more than a third of the secondary teachers provided positive reactions in May.

Less than one-fourth of the elementary and secondary teachers in January provided positive reactions to the item concerned with POP improving students' performance. One half of the elementary and secondary teachers provided neutral response to this item. In May, secondary teachers provided responses indicating less positive, less neutral, and more negative feeling; while elementary teachers provided slightly more positive reactions. A significant difference level is attained between elementary and secondary teachers'
reactions in May.

These results appear to indicate that the teachers found their experience with the use of performance objectives and the performance objective approach to be of value, use, worthwhile for the time spent on them, and an experience they would like to repeat on four of the six statements in May. This, according to data, indicates an improvement in staff attitude over these issues since January. Of the remaining issues, much less than half of the teachers provided positive reactions to these statements in January and in May. The secondary teachers' positive reactions appeared to be the lowest of the two, concerning time invested for implementing POP, and performance objectives have improved my student's performance.

Issues surrounding the implementation of the Performance Objective Program in the school district: Results summarized

Six statements were responded to in this issue with only one item eliciting positive reactions from at least one-half of the teachers. Negative reaction was indicated by one-third or more of the teachers in five of the six statements. In January, fifty percent of the teachers provided the highest positive reactions to any one of the statements; while two-thirds of the teachers provided the highest negative reaction in January. At least one-fifth of the teachers provided neutral response in every statement.
An increase in positive reactions on three of the statements in May is indicated, with the highest positive reaction in May, slightly over one-half of the responses. A decrease in negative reactions in May is indicated in three of the items, with an increase in negative reactions in the remaining items. No greater than one-fourth of the teachers in May provided neutral reactions to any of the items.

Approximately one-half of the elementary and secondary teachers in May provided neutral reactions concerning the POP Advisory Board providing teachers the opportunity to influence POP. Substantially less than one-half of the teachers reacted positive to this item.

Approximately one-half of the secondary teachers in January and again in May provided positive reaction to "not feeling undue pressure to implement POP"; while one-third of the secondary teachers responded negative to this item in January and May. On the other hand, over one-third of the elementary teachers in January and a majority of the elementary teachers in May provided positive reactions. Almost one-half of the elementary teachers in January, and slightly less than one-third of the elementary teachers in May provided negative response to the same item. A considerable gain is indicated by data of elementary positive reaction from January to May concerning this issue.
One-half of the secondary and elementary teachers in January responding to the statement, "because of POP teachers are not expected to do an unreasonable amount of extra work," indicate this is not the case. On the other hand, in May, over one-third of the secondary teachers and a majority of the elementary teachers reacted positive to this item. Slightly less than one-half of the secondary teachers still feel negative toward the statement.

The data appear to indicate a wide variation of positive reaction to the statement "understanding the personnel make-up and function of the POP Advisory Board." In January, over one-third of the secondary and a majority of the elementary teachers provided positive response to the statement; while over one-third of the elementary and secondary teachers in January indicate to the contrary. In May data appear to indicate comparable responses to this statement.

In January approximately two-thirds of the elementary and secondary teachers provided negative reaction to the issue "the rate of implementing POP is not too fast"; while in May, slightly less than a majority of the secondary teachers felt the same way and elementary teachers provided almost a majority positive reaction. This substantial change reached the level of significance.

The data appear to indicate similarity in responses in
January with approximately one-third of the secondary and elementary teachers providing positive reaction to the statement, "teacher time spent on activities related to POP is reasonable." Slightly more than one-third of the secondary teachers and almost a majority of the elementary teachers provided negative feeling to this statement. In May, approximately one-third of the secondary and elementary teachers reacted positive to this statement; while a greater consensus of elementary and secondary teachers in May provided negative feeling.

These results appear to indicate that the teachers found little opportunity to influence POP; feel undue pressure to utilize POP; are expected to do an unreasonable amount of POP-related work; really do not understand POP; the program was implemented too fast; and the extra time a teacher must work due to POP-related activities appear to be unreasonable.

Concerns related to the teacher evaluation system used in the school district: Results summarized

The data appear to indicate that approximately one-half of the teachers reacted positive to two of the three statements related to this issue, while less than one-fourth of the teachers reacted positive to the other statement. Anywhere from one-fourth to one-half of the teachers indicated undecided feeling on the three statements. In comparing
January reactions with the reactions in May, teachers reacted more positive in May and less neutral in responding to each of the statements. A small positive reaction increase is noted in May alluding to the statement, "teachers like the MBO approach to teacher evaluation." Almost one-half of the teachers provided positive reactions in May to this statement, while slightly less than a third of the teachers are still undecided.

A majority of the teachers responded positive in May, while in January, slightly more than a third of the teachers indicated feeling satisfied with the teacher evaluation format being used by their administrator. In January approximately one-third of the teachers perceived not being satisfied while in May this feeling decreased to slightly over one-fourth of the staff. One-fifth of the teachers in January and May are undecided concerning this issue.

A majority of the teachers in January and May indicated neutral feeling toward the statement concerned with the MBO approach accurately assessing a teacher's performance. Approximately one-half of the teachers in January and May perceive that they feel either positive or negative to this statement.

Slightly less than the majority of secondary teachers in January and May, and slightly less than one-half of the elementary teachers in January feel they like the MBO
approach to teacher evaluation; while a majority of the elementary teachers in May perceive that they like the MBO teacher evaluation approach. At least one-third of the secondary and elementary teachers in January and May provided undecided response to this statement.

Slightly more than one-third of the secondary teachers in January and May and slightly more than one-third of the elementary teachers in January provided positive responses to feeling satisfied with the teacher evaluation format currently being used by their administrator. Almost two-thirds of the elementary teachers in May reacted positive to this statement. At least one-fifth of the elementary and secondary teachers provided negative reaction in January and May to the statement; while almost one-third of the elementary and secondary teachers are undecided concerning this statement in January and May.

A considerable majority of the secondary and elementary teachers in January and May provided neutral feeling to the statement concerned with the MBO approach to teacher evaluation accurately assessing a teacher's performance. Comparable elementary and secondary teacher reactions in January and May indicate that approximately one-fourth of these teachers responded positive and negative to the statement.
Concerns related to the in-service program being conducted by the school district: Results summarized

The data appear to indicate that almost two-thirds of the teachers provided positive reactions to two of the three statements concerned with this issue; while more than one-third of the teachers provided positive reactions to the remaining statement. The statement "teachers do not feel undue pressure to attend in-service sessions" elicited the highest negative response (approximately one-third of the teachers), while no more than one-fourth of the teachers responded negative to the other statements.

More teachers responded positive to all three statements in May than in January, with two of the three statements reaching the level of significance. A majority of the teachers in May indicate being satisfied with the approach the school district is taking in providing in-service training; while a majority of the teachers in May also feel satisfied with their opportunity to influence the direction for in-service programs. Slightly more than one-third of the teachers in May indicate they do not feel undue pressure to attend in-service sessions. This statement elicited the highest negative reaction from teachers in May. At least one-fifth of the teachers indicate neutral feeling to each of the statements in May.

A majority of secondary and elementary teachers in May
feel satisfied with the present approach the district is taking in providing in-service training for professional staff. Secondary teachers indicate the greatest positive reaction increase from January to May, reaching the level of significance.

Two-thirds of the secondary teachers in May and over one-half of the elementary teachers in May feel they have an influence in setting the direction for the in-service programs. In January elementary and secondary teachers responded considerably less positive to this statement.

The data for January and May appear to indicate that secondary teachers feel undue pressure to attend the in-service sessions being conducted by the school district; while almost one-half of the elementary teachers in May do not feel this is the case. Even though the positive reactions for elementary and secondary teachers increased from January to May, a considerably high percentage of teachers in May still feel either negative or neutral toward the statement dealing with attending in-service sessions without undue pressure.

Concerns related to parent involvement in the activities of the school district: Results summarized

The data appear to indicate that a majority of the teachers feel that there is sufficient opportunity for parent involvement in the school district. Slightly more than
one-half of the teachers feel that they prefer to have parents on curriculum committees. Alluding to the same statement, almost one-half of the teachers are evenly divided in reactions between neutral feeling and negative feeling to having parents on curriculum committees.

Over two-thirds of the teachers in May felt that there is sufficient opportunity for parent involvement in the school district; while in January this was the near unanimous feeling of the district's teachers. Data for May indicate teachers began to feel more neutral and negative about parent involvement.

In January, well over two-thirds of the teachers provided response indicating that they preferred to have parents on curriculum committees, while approximately one-fourth of teachers were undecided concerning this statement. In May, one-half of the teachers provided response indicating preference of parents on curriculum committees; while the remaining one-half of the teachers' response was evenly balanced between negative and neutral reactions. The decrease in positive reactions in May reached the level of statistical significance.

In January, secondary and elementary teachers were nearly unanimous in providing positive reactions to the statement concerned with "there is sufficient opportunity for parent involvement in the school district"; while in May,
secondary teachers provided response indicating considerably less positive reaction, and substantially more neutral and negative feeling to the statement. Elementary teachers provided less positive reaction and more negative feeling to the same statement in May.

The second statement in this issue concerned itself with teachers preferring to have parents on curriculum committees. Nearly three-fourths of the secondary and elementary teachers in January indicated positive feeling to having parents on curriculum committees. In May approximately one-half of the secondary and elementary teachers still felt that way, while the remaining teachers reacted negative to the statement.

The concern related to the student reporting system used by the school: Results summarized

The data appear to indicate that slightly more than one-third of the teachers feel satisfied with the reporting system used by the school to inform parents of students' progress. An equal percent of teachers provided negative feeling to this statement; while less than one-third of the teachers indicate neutral feeling concerning this statement.

Data appear to indicate teachers responded slightly more positive, and more neutral to the statement in January; while data indicate teachers provided less negative feeling to the statement in May.
Identical secondary and elementary teacher responses are indicated for January; while secondary teachers in May provided responses indicating more positive reaction to the statement, and less neutral and negative feeling. On the other hand, elementary teachers provided responses indicating less positive reactions; while increased negative and neutral reaction in May to the statement was noted.

General Summary and Conclusions

I. Critical issues related to the use of performance objectives

The results appear to indicate that the teachers' experience with the performance objective approach provides an effective tool for managing the continuous progress of students; and that performance objectives do not dehumanize the learning experience for teachers and students. It appears that this is an experience the teachers would like to repeat.

II. General concerns resulting from the implementation of the performance objective approach in the classroom

These results appear to indicate that the teachers found their experience with the use of performance objectives and the performance objective approach to be of value, use, worthwhile for the time invested, and an experience they would like to repeat on four of the six statements in May. This, according to the data indicate an improvement in staff
attitude over these issues since January. Of the remaining issues, less than one-half of the teachers provided positive reactions to these statements in January and May. The secondary teacher's positive reactions appeared to be the lowest of the two groups of teachers concerning time invested for implementing POP, and performance objectives have improved my students' school performance.

III. Issues surrounding the implementation of the Performance Objective Program in the school district

These results appear to indicate that the teachers found little opportunity to influence POP; feel undue pressure to utilize POP; are expected to do an unreasonable amount of POP-related work; really do not understand POP; the program is implemented too fast; and the extra time that a teacher must work due to POP-related activities appears to be unreasonable. It appears from that data that these issues are issues that should not be experienced again unaltered by the district.

IV. Concerns related to the teacher evaluation system used in the school district

These results appear to indicate that the teachers found their experience with the Management by Objectives (MBO) approach to teacher evaluation a bad experience, and that they feel this approach is not an accurate assessment of the teachers' performance. The majority of the teachers
feel satisfied with the teacher evaluation format currently being used by their administrator.

V. Concerns related to the in-service program being conducted by the school district

These results appear to indicate that the teachers are satisfied with the approach the school district is taking in providing in-service training. The teachers find their experience with being able to influence the direction of in-service programs of value, and worthwhile, and an experience they would like to repeat. At the same time, some teachers feel pressure to attend in-service sessions and probably would not attend if not mandated. Data indicate teachers are more receptive in May than in January to the in-service approach, their in-service influence, and the decreased feeling of pressure by teachers to attend in-service sessions.

VI. Concerns related to parent involvement in the activities of the school district

These results appear to indicate that the teachers found their experience with parents involved in the school district of value, and worthwhile, and an experience the teachers would like to repeat. On the other hand, teachers feel parents on curriculum committees can be of value to their teaching. Further, these experiences appeared to be of more value, more worthwhile, and a better experience for teachers in January than in May.
VII. The concern related to the student reporting system used by the school

These results appear to indicate that the teachers found their experience with the reporting system used by the school to inform parents of student progress is an area of concern, of no value, and of little use.
CONCLUSIONS

From an analysis and summary of the findings, the conclusions reached on the study are as follows:

**Strengths**

1. That the majority of the teachers agree that use of the Performance Objective Approach provides an effective tool for managing the continuous progress of the students and that it does not dehumanize the learning experience for teachers and students.

2. A consensus of the staff members in the school district are satisfied with the approach the school district is taking in providing in-service training, and the fact that they have an influence in setting the direction for the in-service programs. Some teachers are concerned about feeling pressure to attend these in-service sessions.

3. The majority of the teachers in the district perceive that parents of the students have sufficient opportunity to become involved in the school district's school activities, and are preferred by teachers to be on curriculum committees.

4. A majority of the teachers in the district perceive that they feel no undue pressure to implement POP and that the use of performance objectives is a good idea and should be maintained in the district.
5. Teachers in the district feel successful and competent in using the POP approach in their classroom, knowing that they are free to deviate from this approach if they feel it is inappropriate for their students.

6. A majority of the teachers in the district are satisfied with the teacher evaluation format currently being used by their school administrator.

Weaknesses

1. A majority of the teachers perceive that they have to spend too much time implementing the POP approach and on POP-related activities, and that the return from that time investment is not worthwhile according to their perceptions of whether it has improved their students' school performance.

2. Elementary teachers are not satisfied with the reporting system used by the school to inform parents of student progress.

3. The consensus of the teachers indicate that they do not like the Management by Objectives (MBO) approach to teacher evaluation because they perceive it does not accurately assess a teacher's performance, and is too time consuming.

4. Secondary teachers perceive that because of POP, they are expected to do an unreasonable amount of record-keeping and clerical work.
5. The majority of the teachers feel that the rate of implementing the POP program was too fast.

6. The consensus of teachers indicate that they do not understand the personnel make-up and function of the POP Advisory Board, and that this board does not provide teachers the opportunity to influence the direction of the Performance Objective Program.

Recommendations

The recommendations based upon the findings and conclusions of the study will be presented in three sections; namely, (1) to provide recommendations to district administrators and staff to obtain needed information concerning the perceptual frame of reference of the district personnel toward the Performance Objective Program; (2) to provide recommendations to other school districts to obtain viable information concerned with perceptual-attitudinal paradigm involved in implementing and managing an approach similar to the performance objective approach; and (3) to provide recommendations as to further research to extend knowledge gathered in this study.

Recommendations to district administrators and staff

1. Effort should be made by staff and administrators of the district toward the development of a student reporting
system compatible to the performance objective approach and compatible to the work load of the classroom teacher. (Emphasis on elementary level.)

2. The development of a teacher evaluation format that can evaluate not only specific facets of a person, but other facets as well that may be equally important in classroom teaching. MBO approach is a good concept, but the task of teachers writing their MBO contract in addition to POP-related activities seems to be too time consuming. MBO concept should be further researched to reduce the enormous task. Maybe more help by administrators for assisting teachers in developing their MBO is all that is needed.

3. The school district should concentrate on a plan that would involve utilizing more teacher aides and para-professional help in order to free up teachers so that they could place greater emphasis on skill development techniques, more time for classroom planning and the further development of learning activities. Para-professional help should be assigned the classroom teacher's clerical and record-keeping tasks. Greater emphasis should be placed on the secondary level.

4. The function of the POP Advisory Board should be broadened and its purpose should become more meaningful to the classroom teachers. This Board should increase its scope and range of responsibility in proving itself as a
stronger advocate of teacher needs and concerns when acting as an intermediary between district administrators, parent councils and teachers. If the teachers' consensus feel POP has been implemented too fast, the POP Advisory Board should assume a greater responsibility in negotiating a compromise for the benefit of teacher-administration harmony.

5. Now that POP has been established in the district, emphasis should be placed on short, high-powered impact type, in-service training by outside the district experts for teacher and program improving. The nature of the in-service should be so appetizing that teachers would attend voluntarily, and in abundance.

6. Teachers should be provided release time to visit other classrooms or other schools in the district for professional improvement or merely observationary purposes related to the POP approach.

7. Emphasis should be placed on reducing teachers' tensions due to pressures and sometimes feeling of threat, and to increase teacher opportunity to have a greater say in future decision-making in the district concerning project planning, parent involvement, and curriculum planning.

Recommendations for other districts

1. Philosophical commitment to the time a teacher must spend on Performance Objective Program-related activities appear to be of major concern.
2. Due to the nature of, and the additional work involved in individualized instruction, no more than the jointly agreed upon program change (teacher, district administrators) should be implemented at any one time. Program objectives for elementary and secondary level should be adjudicated according to the classroom teacher's task at those levels.

3. Teachers should provide most of the design of student reporting and only on a pilot study.

4. Innovations such as teacher evaluation format need not be a single format system-wide, but be established by the teachers and their building principal of their school and in accordance with their philosophy with some resemblance of consistency system-wide.

5. In-service programs should be designed to be short and dynamic with high-powered experts providing the presentation. The programs should be timed and planned so that voluntary attendance is optimum. These programs should be offered on teachers' paid time for further encouragement to attend.

6. Teachers should not be curtailed from classroom teaching with responsibilities such as clerical work and record-keeping related to the program. Provisions for employment of para-professional people should be considered for non-teaching tasks.
7. A responsible body of teachers either by volunteer or appointment or both, should be the voice of teachers in major program planning or curriculum design innovations. This Board should consist of revolving members each school year to avoid cliques or disparity of the representative body.

8. Outside consultants should be employed to evaluate the program, and to determine the effect that this program has on students' school performance, compared to a similar program in a comparatively similar school district.

Recommendations for further study

1. Instruments should be constructed, validated, and made reliable; and an appropriate research design should be identified so that these could be incorporated to determine the attitudinal and perceptual changes that take place as a result of the Performance Objective Program.

2. An approach should be identified to determine whether the participants would take time from their day-to-day duties or personal time to participate in the assessment study.

3. The Performance Objective Program should be compared with other similar programs in situations where two equivalent approaches would be tested. Both program approaches should be focused on the same objectives.

4. Studies should be conducted to determine the following:
(a) the most appropriate size for participating in the assessment
(b) the most appropriate length of time for administering an assessment instrument; the topics which are the most appropriate for the assessment; and the variety of assessment instruments which can be used and still maintain ease and convenience of those participating.

5. Due to the large amount and variety of data that is necessary to determine the attitudinal and perceptual stance of participants, more convenient ways should be identified for making a comparative analysis of the groups.

6. Studies should be conducted to determine the differences that exist among a variety of non-equivalent groups, as measured by attitudinal instruments for the different categories of certain aspects of the program.

7. Various approaches, aside from the Likert-scale, should be tried, but whatever is used, a variety of other types of questions may be one appropriate technique.
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APPENDIX A
To: The Professional Staff of Amherst-Pelham School District  
From: Roger H. Peck, James McDonnell, Joseph Cangro  
Re: Assessment of Performance Objective Program 1972-1973

As you know the Performance Objective Program is a Title III Program supported through federal funds distributed through the State Department of Education. One of the requirements of a Title III Program is a third party assessment. The assessment is concerned with the operationalizing and implementation of the particular program in question.

Contained in this packet are a series of statements that deal with some aspect of the Performance Objective Program; an answer sheet for scoring your responses and an open-ended entry blank for any additional comments you may wish to make. Also a pencil is provided to record your responses on the answer sheet. It is of extreme importance that you respond to all the items and return the entire packet completed to the Performance Objective Program Advisory Board Member in your building. Thank you for your time and cooperation in completing the questionnaire.

**Answer Sheet Directions**

Please remember to respond to the following items in the personal data section. These are: 1) Forms of this test; 2) Student Number.

### Form of this Test

- **A** 1
- **B** 2
- **C** 3
- **D** 4

(Sample)

### Semester

- **Fall**: 
- **Spring**: 

### Teacher Only: Student Absent for Part

- **I** 1
- **II** 2
- **III** 3
- **IV**

### Grade

- **1**
- **2**
- **3**
- **4**
- **5**
- **6**

### Birth Date

- **Month**
- **Day**
- **Year**

### Sex

- **M**
- **F**

### Student Number

**Directions**

1) Determine what form of the questionnaire you have and black in the appropriate box under the heading entitled: Form of this Test.

2) Your Advisory Board Member assigned you a number that ranges from 100 - 340. Please place that number in the appropriate spaces and black the boxes on the answer sheet in the section entitled: Student Number. Begin at the left-hand side.

3) Match numbered items on questionnaire with similar numbers on answer sheet.
Section I: The response pattern for this section of the questionnaire is as follows:

SA is (1) on your answer sheet meaning "Strongly Agree"
A is (2) on your answer sheet meaning "Agree"
U is (3) on your answer sheet meaning "Undecided"
D is (4) on your answer sheet meaning "Disagree"
SD is (5) on your answer sheet meaning "Strongly Disagree"
1. Performance objectives help to individualize instruction... SA A U D SD 1.
   (1) (2) (3) (4) (5)

2. Performance objectives will keep us from reaching the really important goals of education... SA A U D SD 2.
   (1) (2) (3) (4) (5)

3. Performance objectives cannot deal with values... SA A U D SD 3.
   (1) (2) (3) (4) (5)

4. Students can benefit from writing performance objectives... SA A U D SD 4.
   (1) (2) (3) (4) (5)

5. Performance objectives are too specific; they will narrow the educational process... SA A U D SD 5.
   (1) (2) (3) (4) (5)

6. It is unwise to plan in advance how the learner should behave after instruction... SA A U D SD 6.
   (1) (2) (3) (4) (5)

7. Parents should not be involved in the curriculum building process... SA A U D SD 7.
   (1) (2) (3) (4) (5)

8. The Performance Objective Program should not be continued next year... SA A U D SD 8.
   (1) (2) (3) (4) (5)

9. Most purposes of education can be expressed in terms of measurable or observable student performance or behavior... SA A U D SD 9.
   (1) (2) (3) (4) (5)

10. Where performance objectives are used, the student knows precisely what is expected of him, what he is to master, and what constitutes the minimum level of acceptable performance... SA A U D SD 10.
    (1) (2) (3) (4) (5)

11. Most teachers agree that the use of performance objectives is a good idea... SA A U D SD 11.
    (1) (2) (3) (4) (5)
12. I do not understand what the Performance Objective Program is all about. 

13. The Performance Objective Program has caused an increase in the discussion among parents and teachers about important educational matters.

14. Parents should be included on curriculum committees.

15. Students should have a say in what they learn in school.

16. The use of performance objectives will stifle spontaneity.

17. Parents should have a say in what their children learn in school.

18. The performance objective approach makes learning a more humanizing experience for teachers and students.

19. The goals the Performance Objective Program is trying to attain are worthwhile.

20. The rate of implementing the Performance Objective Program is too fast.

21. Students achieve more when they know exactly what is to be learned.

22. Students are capable of evaluating their own progress when given the criteria.

23. The use of performance objectives dehumanizes the learning experience for teachers and students.
24. The use of performance objectives helps a teacher to plan instruction that encourages critical thinking.  

SA A U D SD 24. (1) (2) (3) (4) (5)

25. I have the ability to write affective objectives for the subject(s) I teach.  

SA A U D SD 25. (1) (2) (3) (4) (5)

26. Because of the Performance Objective Program, teachers in this school are expected to do an unreasonable amount of record-keeping and clerical work.  

SA A U D SD 26. (1) (2) (3) (4) (5)

27. The use of performance objectives has improved my students' school performance.  

SA A U D SD 27. (1) (2) (3) (4) (5)

28. I have the ability to use affective objectives in the subject(s) I teach.  

SA A U D SD 28. (1) (2) (3) (4) (5)

29. I am satisfied with the approach the school district is taking in providing in-service training for the professional staff.  

SA A U D SD 29. (1) (2) (3) (4) (5)

30. My students have the ability to create their own goals and objectives for classroom utilization.  

SA A U D SD 30. (1) (2) (3) (4) (5)

31. Learning goals and objectives created by my students tend to be of little value for use in the classroom.  

SA A U D SD 31. (1) (2) (3) (4) (5)

32. I feel an undue amount of pressure from the administration in relation to the implementation of the Performance Objective Program.  

SA A U D SD 32. (1) (2) (3) (4) (5)

33. I am satisfied with the reporting system used by the school to inform parents of student progress.  

SA A U D SD 33. (1) (2) (3) (4) (5)
34. I am satisfied with the teacher evaluation format currently being utilized by the administrator of my school. SA A U D SD 34. (1) (2) (3) (4) (5)

35. In the subject(s) I teach, it is important to me to individualize instruction. SA A U D SD 35. (1) (2) (3) (4) (5)

36. Performance objectives prevent me from taking advantage of unexpected opportunities in my class. SA A U D SD 36. (1) (2) (3) (4) (5)

37. In the subject(s) I teach, it is important to me to plan instruction that encourages critical thinking on the part of my students. SA A U D SD 37. (1) (2) (3) (4) (5)

38. I am confident when explaining the Performance Objective Program to my students. SA A U D SD 38. (1) (2) (3) (4) (5)

39. In the subject(s) I teach, it is important to me to plan instruction that deals with value questions. SA A U D SD 39. (1) (2) (3) (4) (5)

40. I understand the teacher evaluation format currently being used by the administrator of my school. SA A U D SD 40. (1) (2) (3) (4) (5)

41. A teacher like myself has an influence in setting the direction for the in-service programs being provided by the school district. SA A U D SD 41. (1) (2) (3) (4) (5)

42. I understand the personnel make-up and functioning of the POP Advisory Board. SA A U D SD 42. (1) (2) (3) (4) (5)

43. The student should know precisely what is expected of him, what he is to master, and what constitutes the minimum level of acceptable performance. SA A U D SD 43. (1) (2) (3) (4) (5)
44. I like the Management by Objectives (MBO) approach to teacher evaluation. . . . . . . SA A U D SD 44. (1) (2) (3) (4) (5)

45. The training I have received from the Performance Objective Program has assisted me in implementing the program in my classes. . . . . . . . . . . . . SA A U D SD 45. (1) (2) (3) (4) (5)

46. Teachers feel an undue pressure to attend the in-service sessions being conducted by the school district. . . . . . . . . . . . . SA A U D SD 46. (1) (2) (3) (4) (5)

47. Teachers would continue to attend in-service sessions, even if they did not feel pressure to do so. . . . . . . . . . . . . SA A U D SD 47. (1) (2) (3) (4) (5)

48. The Management by Objectives (MBO) approach to teacher evaluation accurately assesses a teacher's performance. . . . . . . SA A U D SD 48. (1) (2) (3) (4) (5)
Section I: The response pattern for this section of the questionnaire is as follows:

SA is (1) on your answer sheet meaning "Strongly Agree"
A is (2) on your answer sheet meaning "Agree"
U is (3) on your answer sheet meaning "Undecided"
D is (4) on your answer sheet meaning "Disagree"
SD is (5) on your answer sheet meaning "Strongly Disagree"
Code to the Response Pattern:  
SA (1) Strongly Agree  
A (2) Agree  
U (3) Undecided  
D (4) Disagree  
SD (5) Strongly Disagree

1. Performance objectives help to individualize instruction . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ...
11. Most teachers agree that the use of performance objectives is a good idea ........................................ SA A U D SD 11. (1) (2) (3) (4) (5)

12. I do not understand what the Performance Objective Program is all about ........................................ SA A U D SD 12. (1) (2) (3) (4) (5)

13. The performance objective approach provides an effective tool for managing the continuous progress of students ........................................ SA A U D SD 13. (1) (2) (3) (4) (5)

14. Performance objectives can be constructed to a degree that creativity on the part of the student can be encouraged ........................................ SA A U D SD 14. (1) (2) (3) (4) (5)

15. Teachers who specify learning outcomes are less likely to dwell on unimportant issues ........................................ SA A U D SD 15. (1) (2) (3) (4) (5)

16. The performance objective approach should be maintained in the school district, after the federal funding for POP has ended ........................................ SA A U D SD 16. (1) (2) (3) (4) (5)

17. The use of performance objectives reduces the demands made upon the students ........................................ SA A U D SD 17. (1) (2) (3) (4) (5)

18. Through the Performance Objective Program, opportunities for parental involvement in the curriculum building process has been increased ........................................ SA A U D SD 18. (1) (2) (3) (4) (5)

19. The school district should develop instructional approaches that reduce the demands made upon the students ........................................ SA A U D SD 19. (1) (2) (3) (4) (5)

20. The school district should develop instructional approaches that properly manage the continuous progress of students ........................................ SA A U D SD 20. (1) (2) (3) (4) (5)
21. The performance objective approach is simply a "fad", that will pass by as other educational "fads" have done. SA A U D SD 21. (1) (2) (3) (4) (5)

22. The school district should develop instructional approaches that encourage creativity on the part of students. SA A U D SD 22. (1) (2) (3) (4) (5)

23. I have the ability to use higher-order cognitive objectives in the subject(s) I teach. SA A U D SD 23. (1) (2) (3) (4) (5)

24. My teaching style does not readily lend itself to the use of performance objectives. SA A U D SD 24. (1) (2) (3) (4) (5)

25. Parents do not understand the Performance Objective Program. SA A U D SD 25. (1) (2) (3) (4) (5)

26. I feel that my work in implementing the performance objective approach is judged fairly by my school administrator. SA A U D SD 26. (1) (2) (3) (4) (5)

27. Teachers should have more say in setting the direction for the Performance Objective Program. SA A U D SD 27. (1) (2) (3) (4) (5)

28. I have the ability to write higher-order cognitive objectives for the subject(s) I teach. SA A U D SD 28. (1) (2) (3) (4) (5)

29. Students create their own objectives in my classroom. SA A U D SD 29. (1) (2) (3) (4) (5)

30. There is an undue amount of griping, arguing, taking sides, and feuding among our teachers on issues related to the Performance Objective Program. SA A U D SD 30. (1) (2) (3) (4) (5)

31. Students do not have opportunity to create their own objectives in my classroom. SA A U D SD 31. (1) (2) (3) (4) (5)
32. Students understand the Performance Objective Program. . . SA A U D SD 32.
(1) (2) (3) (4) (5)
33. The time that a teacher must invest in POP is worthwhile in view of the return from that time investment. . . . . . . . . . . SA A U D SD 33.
(1) (2) (3) (4) (5)
34. I am worried about how I will be evaluated in implementing the Performance Objective Program . . . . . . . . . . SA A U D SD 34.
(1) (2) (3) (4) (5)
35. I feel successful and competent in implementing the performance objective approach in my classroom . . . . . . . . . . SA A U D SD 35.
(1) (2) (3) (4) (5)
36. The number of hours a teacher must work on the activities related to the Performance Objective Program is unreasonable. . . SA A U D SD 36.
(1) (2) (3) (4) (5)
37. The "stress and strain" caused by my involvement in the Performance Objective Program makes teaching undesirable for me . . SA A U D SD 37.
(1) (2) (3) (4) (5)
38. My school administrator understands the problems I am encountering in my attempt to implement the performance objective approach. . . . . . . . . . . SA A U D SD 38.
(1) (2) (3) (4) (5)
39. It is important to me to be successful and competent in implementing the performance objective approach in my classroom . . . . . . . . . . SA A U D SD 39.
(1) (2) (3) (4) (5)
40. A teacher like myself feels free to deviate from the performance objective approach if he/she believes it is inappropriate for the kind of student he has. . . SA A U D SD 40.
(1) (2) (3) (4) (5)
41. The performance objective approach has lessened the desirable influence that teachers have had on the values and attitudes of their students. SA A U D SD 41.

42. It is important to me to increase the opportunity for my students to select alternative learning activities of their own choosing. SA A U D SD 42.

43. In a successfully individualized instructional program, the teacher should spend little or no classroom time working with the students in small group settings (3 to 8 students). SA A U D SD 43.

44. I like the Management by Objectives (MBO) approach to teacher evaluation. SA A U D SD 44.

45. Teachers feel an undue pressure to attend the in-service training sessions being conducted by the school district. SA A U D SD 45.

46. Teachers would continue to attend in-service training sessions, even if they did not feel pressure to do so. SA A U D SD 46.

47. The Management by Objectives (MBO) approach to teacher evaluation accurately assesses a teacher's performance. SA A U D SD 47.
APPENDIX B
TO: The Professional Staff of Amherst-Pelham School District
FROM: Roger H. Peck, James McDonnell, Joseph Cangro
RE: Assessment of Performance Objective Program 1972-1973

As you know the Performance Objective Program is a Title III Program supported through federal funds distributed through the State Department of Education. One of the requirements of a Title III Program is a third party assessment. This will be the last questionnaire administered to teachers for this year's assessment.

This packet contains a questionnaire, an answer sheet, a pencil for marking your responses and an open-ended form for any additional comments you may wish to make. It is extremely important that you complete the questionnaire and return the entire packet to the POP Advisory Board Member in your building by noon Friday, April 13th.

Thank you for your time and cooperation in completing the questionnaire.

Answer Sheet Directions

1. Determine what form of the questionnaire you have and black in the appropriate box on your answer sheet under the heading, "Form of this Test".

2. Your Advisory Board Member assigned you a number that ranges from 100 - 340, please place that number in the appropriate spaces and black in the boxes on the answer sheet under the heading, "Student Number".

3. Match numbered items on questionnaire with similar numbers on answer sheet.
Form A

Code to the Response Pattern:

SA (1) Strongly Agree
A (2) Agree
U (3) Undecided
D (4) Disagree
SD (5) Strongly Disagree

1. The performance objective approach should be maintained in the school district, after the federal funding has ended . . . . . . . . . . (1) (2) (3) (4) (5)

2. I like the Management by Objectives (MBO) approach to teacher evaluation. (1) (2) (3) (4) (5)

3. The use of performance objectives dehumanizes the learning experience for teachers and students . . . . . . . (1) (2) (3) (4) (5)

4. The number of hours a teacher must work on the activities related to the Performance Objective Program is unreasonable . . . . . . . . . . (1) (2) (3) (4) (5)

5. The performance objective approach provides an effective tool for managing the continuous progress of students. . . . . . . . . . . (1) (2) (3) (4) (5)

6. I am satisfied with the teacher evaluation format currently being used by the administrator of my school . . (1) (2) (3) (4) (5)

7. I am satisfied with the reporting system used by the school to inform parents of student progress . . . . . . (1) (2) (3) (4) (5)

8. I feel an undue amount of pressure from the administration in relation to the implementation of the Performance Objective Program. . . . . . . (1) (2) (3) (4) (5)

9. Because of the Performance Objective Program, teachers in this school are expected to do an unreasonable amount of record-keeping and clerical work . (1) (2) (3) (4) (5)

10. Teachers feel an undue pressure to attend the in-service sessions being conducted by the school district. . . . (1) (2) (3) (4) (5)
11. The Management by Objectives (MBO) approach to teacher evaluation accurately assesses a teacher's performance . . . . . . . . . . (1) (2) (3) (4) (5)

12. A teacher like myself has an influence in setting the direction for the in-service programs being provided by the school district. . . . . . . . . . (1) (2) (3) (4) (5)

13. Most teachers agree that the use of performance objectives is a good idea (1) (2) (3) (4) (5)

14. I am satisfied with the approach the school district is taking in providing in-service training for the professional staff. . . . . . . . . . (1) (2) (3) (4) (5)

15. I feel successful and competent in implementing the performance objective approach in my classroom. . . . . . . . . . (1) (2) (3) (4) (5)

16. For practical reasons, I would prefer not to have parents on curriculum committees. . . . . . . . . . (1) (2) (3) (4) (5)

17. I would continue to use the performance objective approach in my classroom even if I were not actively encouraged to do so by the administration . . . . . . . . . . . . (1) (2) (3) (4) (5)

18. There is insufficient opportunity for parent involvement in this school district. . . . . . . . . . . (1) (2) (3) (4) (5)

19. The rate of implementing the Performance Objective Program is too fast. (1) (2) (3) (4) (5)

20. I understand the personnel make-up and function of the POP Advisory Board. . (1) (2) (3) (4) (5)

21. The time that a teacher must invest in implementing the performance objective approach is worthwhile, in view of the return from that time investment. . . . . . . . . . . . . (1) (2) (3) (4) (5)
22. A teacher like myself feels free to deviate from the performance objective approach if he/she believes it is inappropriate for his/her students.  

23. The POP Advisory Board provides teachers an opportunity to influence the direction of the Performance Objective Program.  

24. The use of performance objectives has improved my students' school performance.  

Parent involvement in the schools can be improved by:  

25. the Citizens Committee of the POP Advisory Board holding open discussions on POP.  

26. making available to teachers lists of persons in the community who are willing and qualified to help when called upon by teachers.  

27. limiting parent participation to the needs identified by teachers.  

28. requiring school personnel to discuss major decisions with interested parents.  

29. increasing the use of parent volunteer aides in the classroom (general assistance).  

30. increasing the use of qualified parents and citizens as resource people (specialized assistance).  

31. increasing parent participation on curriculum committees.  

32. holding more open (televised) Community Resource Committee meetings.  

33. Other (Please specify other suggestions on the first page attached to the answer sheet.)
Code to the Response Pattern:

VG (1) To a Very Great Extent
G (2) To a Great Extent
M (3) To a Moderate Extent
VS (4) To a Very Small Extent
N (5) To No Extent At All

To what extent have you received help from the following personnel in implementing the Performance Objective Program:

34. building principal or assistant principal ................. (1) (2) (3) (4) (5)
35. department head or curriculum chairman .................. (1) (2) (3) (4) (5)
36. POP staff ......................................................... (1) (2) (3) (4) (5)
37. central office administrative staff .................... (1) (2) (3) (4) (5)
38. fellow teachers .................................................. (1) (2) (3) (4) (5)
39. Other (Please specify on the second page attached to the answer sheet.)

To what extent do you think you should receive help from the following personnel in implementing the Performance Objective Program:

40. building principal or assistant principal ................. (1) (2) (3) (4) (5)
41. department head or curriculum chairman ................. (1) (2) (3) (4) (5)
42. POP staff ......................................................... (1) (2) (3) (4) (5)
43. central office administrative staff .................... (1) (2) (3) (4) (5)
44. fellow teachers .................................................. (1) (2) (3) (4) (5)
45. Other (Please specify on the second page attached to the answer sheet.)
Form B

Code to the Response Pattern:

SA (1) Strongly Agree
A (2) Agree
U (3) Undecided
D (4) Disagree
SD (5) Strongly Disagree

1. The performance objective approach should be maintained in the school district, after the federal funding has ended . . . . . . . . . . . . . . (1) (2) (3) (4) (5)

2. I like the Management by Objectives (MBO) approach to teacher evaluation. (1) (2) (3) (4) (5)

3. The use of performance objectives dehumanizes the learning experience for teachers and students . . . . . . (1) (2) (3) (4) (5)

4. The number of hours a teacher must work on the activities related to the Performance Objective Program is unreasonable . . . . . . . . . . . . (1) (2) (3) (4) (5)

5. The performance objective approach provides an effective tool for managing the continuous progress of students . . . . . . . . . . . . (1) (2) (3) (4) (5)

6. I am satisfied with the teacher evaluation format currently being used by the administrator of my school . . (1) (2) (3) (4) (5)

7. I am satisfied with the reporting system used by the school to inform parents of student progress . . . . . . (1) (2) (3) (4) (5)

8. I feel an undue amount of pressure from the administration in relation to the implementation of the Performance Objective Program. . . . . . . (1) (2) (3) (4) (5)

9. Because of the Performance Objective Program, teachers in this school are expected to do an unreasonable amount of record-keeping and clerical work . (1) (2) (3) (4) (5)
10. Teachers feel an undue pressure to attend the in-service sessions being conducted by the school district. 

11. The Management by Objectives (MBO) approach to teacher evaluation accurately assesses a teacher's performance. 

12. A teacher like myself has an influence in setting the direction for the in-service programs being provided by the school district. 

13. Most teachers agree that the use of performance objectives is a good idea. 

14. I am satisfied with the approach the school district is taking in providing in-service training for the professional staff. 

15. I feel successful and competent in implementing the performance objective approach in my classroom. 

16. For practical reasons, I would prefer not to have parents on curriculum committees. 

17. I would continue to use the performance objective approach in my classroom even if I were not actively encouraged to do so by the administration. 

18. There is insufficient opportunity for parent involvement in this school district. 

19. The rate of implementing the Performance Objective Program is too fast. 

20. I understand the personnel make-up and function of the POP Advisory Board. 

21. The time that a teacher must invest in implementing the performance objective approach is worthwhile, in view of the return from that time investment.
22. A teacher like myself feels free to deviate from the performance objective approach if he/she believes it is inappropriate for his/her students . . . . . . . . . . . . (1) (2) (3) (4) (5)

23. The POP Advisory Board provides teachers an opportunity to influence the direction of the Performance Objective Program . . . . . . . . . . . . (1) (2) (3) (4) (5)

24. The use of performance objectives has improved my student's school performance . . . . . . . . . . . . (1) (2) (3) (4) (5)

The Helper Team can serve teachers by

25. sponsoring or coordinating in-service sessions requested by teachers . . . (1) (2) (3) (4) (5)

26. providing a resource of professional materials . . . . . . . . . . . . . . . . . . . . . . . . (1) (2) (3) (4) (5)

27. working with individual teachers or teams of teachers at their request . (1) (2) (3) (4) (5)

28. encouraging and facilitating teacher visitation to other classrooms, or teacher - teacher conferences for the purpose of helping each other . . . (1) (2) (3) (4) (5)

29. providing assistance to teachers in areas assessed as weaknesses in teacher evaluation . . . . . . . . . . . . . . . . . . . . . . . . (1) (2) (3) (4) (5)

30. assisting the teacher, at his/her request, to gain the competencies necessary to achieve the objectives identified in MBO . . . . . . . . . . . . . . . . . . . . . . . . (1) (2) (3) (4) (5)

31. disseminating information and opinions about the Performance Objective Program . . . . . . . . . . . . . . . . . . . . . . . . (1) (2) (3) (4) (5)

32. working with individual teachers or teams of teachers at the request of the principal or supervisor . . . (1) (2) (3) (4) (5)

33. Other (Please specify other suggestions on the second page attached to the answer sheet.)
In the subject(s) you teach, to what extent

34. do you use affective objectives? . . (1) (2) (3) (4) (5)

35. has the performance objective approach increased your use of affective objectives?. . . . . . . . . . . . . . . . . . . . (1) (2) (3) (4) (5)

36. do the students create their own goals and objectives for classroom use?. . (1) (2) (3) (4) (5)

37. has the Helper Team been useful to you in implementing the performance objective approach?. . . . . . . . (1) (2) (3) (4) (5)

38. do you use higher-order cognitive objectives?. . . . . . . . . . . . . . . . (1) (2) (3) (4) (5)

39. are the students provided with alternative learning activities for each of the teacher-proposed objectives?. . . . . . . . (1) (2) (3) (4) (5)

40. do the students have the opportunity to select objectives of their own choosing, from a variety of teacher-prepared objectives? . . . . . . . . . . (1) (2) (3) (4) (5)

41. do you make your students aware of the alternative learning activities that are available for each objective? . . . . . . . . . . . . . . . . (1) (2) (3) (4) (5)

To what extent do you think you should

42. use affective objectives in your classroom? . . . . . . . . . . . (1) (2) (3) (4) (5)

43. use higher-order cognitive objectives in your classroom? . . . . . . . . . . . . . . . . . . . . (1) (2) (3) (4) (5)
In the subject(s) you teach, to what extent do you think your students should

44. be provided with alternative learning activities for each of the teacher-proposed objectives? . . . . . . . . (1) (2) (3) (4) (5)

45. create their own goals and objectives for classroom use? . . . . . . . . (1) (2) (3) (4) (5)

46. have the opportunity to select prepared objectives of their own choosing? . . . . . . . . . . . . . . . (1) (2) (3) (4) (5)

To what extent

47. has the in-service program of the district helped you to develop competencies in the criteria on which you are evaluated? . . . . . . . . . . . . . . (1) (2) (3) (4) (5)

48. is help available to you in achieving the objectives identified in your MBO form? . . . . . . . . . . . . . . . . . . (1) (2) (3) (4) (5)

49. do you think the Helper Team is a viable concept in staff development? (1) (2) (3) (4) (5)

50. does the teacher evaluation process assist you in becoming a better teacher? . . . . . . . . . . . . . . . (1) (2) (3) (4) (5)

51. do the persons responsible for your evaluation provide assistance to you for improving your skills in the areas of your assessed weaknesses? . (1) (2) (3) (4) (5)
These pages are provided for your voluntary comments.

A. (Response for item #33) Other ways in which parent involvement in the schools can be improved:

B. (Response for item #39) Other personnel from whom you have received help in implementing the Performance Objective Program:

C. (Response for item #45) Other personnel from whom you think you should receive help in implementing the Performance Objective Program:

D. In January, 1973, eighty-two percent (82%) of the teachers indicated that teachers should have more say in setting the direction for the Performance Objective Program. What specific suggestions do you have for teachers to become more actively involved in setting the direction for the Performance Objective Program?

E. In January, 1973, only six percent (6%) of the teachers perceived that the parents understand the Performance Objective Program. What specific suggestions do you have for providing the parents with a greater, and more accurate understanding of the Performance Objective Program?

F. How has your teaching behavior been affected by POP?

G. How has the performance objective approach affected the students in your classroom?

H. In practice, what have you found to be the major strength of the performance objective approach?

(Use the other side if necessary.)
I. In practice, what have you found to be the major weakness of the performance objective approach?

J. How could POP be improved?

K. Additional comments:

Please give your suggestions as to:

L. Problems that you feel are not covered adequately in this questionnaire.

M. Additional questions that you would like to see included.

N. Matters not included in this questionnaire that you would like to tell the POP Advisory Board.

(Use the other side if necessary.)
The following is a list of the goals of the Performance Objective Program for the 1972-73 school year. Please read each one carefully and then determine which three goals have been achieved to the greatest extent and which three goals have been achieved to the least extent.

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1. Given the present ability of district personnel (staff and students) to formulate technically correct student performance objectives, local teachers will increase their use of higher order objectives - those that deal with critical thinking and creativity as opposed to simple recall and recognition.

2. Given the present ability of district personnel to formulate technically correct student performance objectives, local teachers will increase their use of affective objectives, those that deal with student attitudes and values.

3. Given the present ability of local students to formulate goals and objectives, local teachers will increase the number of opportunities for students to select and/or to propose objectives and/or learning activities of their own choosing.

4. By January of 1973, district administrators will begin utilizing an expanded teacher evaluation format that emphasizes basic principles expounded in the POP in-service training program.

5. Given the parts of the curriculum presently defined in terms of goals and performance objectives and alternative learning activities, staff members will measure and record student achievement.
6. Given the plans developed by each department for involving persons from the community in the curriculum building process, each curriculum committee will implement these plans and increase the level of parent, employer, and/or student involvement in the planning curriculum.

7. Given the experience, information and materials both gathered and developed in this Title III project and given the State Board of Education's mandate that all districts throughout Massachusetts will develop a results-oriented approach to education, the staff of the project schools will provide assistance to other school districts designing or implementing a results-oriented approach.

8. Given the present levels of understanding and misunderstanding about the Performance Objective Program among district citizens, the level of public understanding will be raised and the level of misunderstanding will be lowered.

9. Perceived time pressures on teachers caused by the comprehensiveness of this project and the usual initial stresses associated with changing operating procedures will be decreased by providing teachers with additional time for planning and implementation of new procedures.
These pages are provided for your voluntary comments.

A. (Response for item #33) Other ways in which the Helper Team can serve teachers:

B. In January, 1973, eighty-two percent (82%) of the teachers indicated that teachers should have more say in setting the direction for the Performance Objective Program. What specific suggestions do you have for teachers to become more actively involved in setting the direction for the Performance Objective Program?

C. In January, 1973, only six percent (6%) of the teachers perceived that the parents understand the Performance Objective Program. What specific suggestions do you have for providing the parents with a greater, and more accurate understanding of the Performance Objective Program?

D. How has your teaching behavior been affected by POP?

E. How has the performance objective approach affected the students in your classroom?

F. In practice, what have you found to be the major strength of the performance objective approach?

G. In practice, what have you found to be the major weakness of the performance objective approach?

H. How could POP be improved?

(Use the other side if necessary.)
I. Additional Comments:

Please give your suggestions as to:

J. Problems that you feel are not covered adequately in this questionnaire.

K. Additional questions that you would like to see included.

L. Matters not included in this questionnaire that you would like to tell the POP Advisory Board.

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APPENDIX C
Teacher or Administrative Level  
E.  
J.H.  
S.  

Subject or Grade Taught  

I.  How are you using objectives in the classroom?  
1) sample lesson, 2) method classes are using behavioral objectives, 3) what alternatives are available to students  

II.  Specific examples of use of higher order objectives  
examples of higher order objectives  

III.  Affective objective use examples.  

IV.  Changes you have made in your classroom  
1) use of performance objectives, 2) community involvement, etc.  

V.  Reaction to MBO  

VI.  What should program goals be for next year?  
Pick three goals for next year.  

VII.  Ideas how project funds should be used.
These pages are provided for your voluntary comments.

A. (Response for item #33) Other ways in which the Helper Team can serve teachers:

B. In January, 1973, eighty-two percent (82%) of the teachers indicated that teachers should have more say in setting the direction for the Performance Objective Program. What specific suggestions do you have for teachers to become more actively involved in setting the direction for the Performance Objective Program?

C. In January, 1973, only six percent (6%) of the teachers perceived that the parents understand the Performance Objective Program. What specific suggestions do you have for providing the parents with a greater, and more accurate understanding of the Performance Objective Program?

D. How has your teaching behavior been affected by POP?

E. How has the performance objective approach affected the students in your classroom?

F. In practice, what have you found to be the major strength of the performance objective approach?

G. In practice, what have you found to be the major weakness of the performance objective approach?

H. How could POP be improved?

(Use the other side if necessary.)
I. Additional Comments:

Please give your suggestions as to:

J. Problems that you feel are not covered adequately in this questionnaire.

K. Additional questions that you would like to see included.

L. Matters not included in this questionnaire that you would like to tell the POP Advisory Board.

(Use the other side if necessary.)