To the Graduate Council:

I am submitting herewith a dissertation written by R. Clarke Shultes entitled "A Descriptive Study of the Implementation of the Synergetic Supervision Process in Selected School Districts." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Curriculum and Instruction.

Jerry J. Bellon, Major Professor

We have read this dissertation
and recommend its acceptance:

Accepted for the Council:

Vice Chancellor
Graduate Studies and Research

Thesis
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# A DESCRIPTIVE STUDY OF THE IMPLEMENTATION OF THE SYNERGETIC SUPERVISION PROCESS IN SELECTED SCHOOL DISTRICTS

A Dissertation

Presented for the

Doctor of Education

Degree

The University of Tennessee, Knoxville

R. Clarke Shultes

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ABSTRACT

The purpose of this descriptive research was to determine how the synergetic supervision process was being operationalized in several school districts. As intended by the developers of the synergetic supervision process, synergism refers to a system which functions such that the effects or actions by the whole transcend those of the individual components. Synergy in supervision emphasizes the position that the combined efforts of teachers and supervisor will improve the total educational program more than the efforts of either group working alone. The process emphasizes preobservation and postobservation conferences and also includes explicit attention to staff development, self-renewal and other related processes.

Data concerning the perceptions of supervisors and teachers from five states were collected and analyzed. The majority of the data were collected via questionnaire. Additional data were collected through interviews. The questionnaire consisted of approximately forty objective survey items plus five open-ended subjective items. Interviews were structured with each respondent answering the same ten items. The review of related literature provided many useful ideas used in constructing both the questionnaire and interview items. The literature also revealed that little research of this type had been done.

The following research questions directed the study:

1. Determine the extent to which the assumptions underlying the synergetic process are being acted upon.

2. Determine how effectively the procedures of the synergetic supervision process are being implemented.
3. Determine the nature of any differences in perceptions and understandings of teachers and supervisors regarding the synergetic process.
4. Identify the instructional and supervisory implications of the synergetic supervisory process.

Analysis of the data was done based upon individual research question. Data relating to each research question were analyzed according to the same format: (1) mean analysis; (2) analysis by relative frequency percentages; (3) open-ended question analysis; (4) analysis by school organization; (5) analysis according to years in current position; and (6) analysis by school district.

An analysis of the returned questionnaires and interview data provided the basis for the following conclusions:

1. The underlying assumptions of the synergetic supervision process were being acted upon in a great majority of cases.
2. In most cases the procedures of the synergetic supervision process were being effectively implemented.
3. Several minor and a few major specific incongruencies existed between supervisors and teachers regarding their differences in perceptions and understandings of the synergetic supervision process.
4. As it applied to a high majority of those schools involved in this study, the synergetic supervision process had improved

instruction by improving the overall supervision of instruction process.

The following recommendations were arrived at, based on the findings obtained from the study:

1. Prior to the adoption of the synergetic supervision process by a school or school system, staff development workshops and training in the synergetic process are encouraged and the synergetic process should be thoroughly understood by teachers, supervisors, and all administrators.
2. Since establishing trust is an important factor to consider in the synergetic supervision process, beginning a program with a small number of teachers with whom trust is already established, then spreading the program throughout the district, is one recommended approach.
3. Additional studies following a format similar to that used in this research should be undertaken to identify and evaluate the underlying assumptions of other contemporary supervision of instruction processes.
4. This research should be replicated with the purposes of validating the original findings while at the same time attempting to gather data which might answer pertinent questions identified in this initial study.

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# CHAPTER I

# THE PROBLEM

## I. INTRODUCTION TO THE PROBLEM

Instructional supervision is currently the subject of considerable interest by educational theorists and practitioners. Many different approaches to instructional supervision have been proposed, reflecting diverse philosophical orientations. A number of these proposed approaches have been implemented in varied educational settings. It is important that a continuing effort be made to subject different instructional supervision approaches to careful study and analysis. Such research is needed to strengthen the processes themselves and to facilitate decision making regarding instructional supervision alternatives.

The present study was designed to examine in detail one of the newer supervisory approaches, the synergetic supervisory process. This process is an outgrowth of the clinical supervision model developed in the Harvard Summer Program (Cogan, 1973). The program includes a laboratory school operated for two decades by Harvard's Master of Arts in Teaching Program and the Newton, Massachusetts, Public School System.

Clinical supervision is a very clearly delineated instructional supervision system. Eight specific steps (Cogan, 1973, p. 10) are followed by the supervisor as he/she works with individual teachers in

the classroom to improve instruction. In clinical supervision the teacher assumes the position of an active partner, a partner whose commitment and participation is essential to the success of the supervisory process. Cogan felt that teachers withdraw from the self. analysis process when excessive supervisor involvement was perceived. Therefore he recommended that supervisors minimize their dialogue and attempt to guide teachers toward recognizing patterns and corrective measures in the recorded data.

Several current developments have major implications for instructional supervision. Declining educational enrollments continue to influence the trend toward stability of faculties. Fewer new teachers are being hired as districts adapt to changing enrollment patterns. Staff development programs and supervision processes with a focus on the improvement of existing personnel are needed more than ever. Declining enrollments may become a factor leading to the more creative use of teaching and supervisory staffs. Many schools now have enough teachers to permit smaller class sizes. A supervisory process which focuses on instructional improvement will be important to school districts seeking to capitalize on the diverse opportunities created by these changing student-teacher ratios.

A closely related issue involves widespread declines in the resources available for education. Efficient utilization of personnel, facilities, media, and materials must be a high priority. The instructional supervision process should help to ensure that personnel and programs are functioning as effectively as possible. It should also

provide assistance in making needed improvements to increase levels of effectiveness.

The movement toward accountability and the acceptance of responsibility for attainment of agreed upon goals and objectives is another trend of the late seventies. Supervisors are increasingly being required to demonstrate instructional leadership. Teachers are being held accountable to a greater degree for instructional outcomes. Supervisory processes which serve to monitor and improve instruction will help teachers respond to the accountability issue.

## The Synergetic Supervisory Process: An Overview

As intended by the developers of the synergetic supervision process, synergism refers to a system which functions such that the effects or actions of the whole transcend those of the individual components. Synergy in supervision emphasizes the position that the combined efforts of teachers and supervisor will improve the total educational program more than the efforts of either group working alone. The process emphasizes preobservation and postobservation conferences and also includes explicit attention to staff development, self-renewal and other related processes.

The synergetic supervision process is based upon four key assumptions (Bellon, 1976, pp. 20, 21): (1) teaching is a set of identifiable patterns of behavior; (2) when selected patterns of teaching behavior are changed, improvement of instruction can be achieved; (3) the supervisor-teacher relationship must be built on mutual

trust if change is to take place; and (4) the improvement of instruction is the primary goal of supervision.

The roots of the synergetic supervision process have come from many areas and many people. Perhaps the taproot would lead back to the early sixties when two of the authors of the process were influenced by the concepts Morris Cogan (1973) and his associates were advancing regarding clinical supervision. In brief, they were saying that instruction needed to be improved. They felt that there was a practical, positive way to analyze and improve instruction through the supervisory process.

The work of Douglas McGregor (1960) concerning the assumptions held by people in management positions about those in the organization being managed had a strong influence on the development of the synergetic process. McGregor's theory Y assumptions are interwoven into most of the author's writing on synergetic supervision. Yet another influence in the development of the process was John Gardner's (1965) concept of self-renewal. Gardner emphasized the need for people to continue learning and re-examining their knowledge base throughout their lives. This philosophy is reflected in the synergetic process in its ongoing (open system) nature.

The combination of the preceding influences plus several others lead to the following quote by Bellon and associates (1976, p. viii):

> The processes and procedures used in the supervision evaluation program must provide opportunities for cooperative, non-hierarchical working relationships. Power and influence need to be shared by teachers and administrators if development and renewal activities are to succeed.

In this introductory statement the basic framework of the synergetic supervision process was presented. Several areas of philosophical thought which influenced its development were given. These brief discussions of the process and its assumptions are supplemented in Chapter II of this study.

## II. STATEMENT OF THE PROBLEM

In recent years a new supervisory process based upon the clinical supervision model has been adopted by numerous school districts throughout the southern and eastern United States. This synergetic supervisory process has as its primary focus the improvement of instruction. The process utilizes pre- and postobservation conferences as components of a systematic, ongoing approach to instructional improvement. Cooperative, trusting relationships between supervisors and teachers are emphasized, and the collection and analysis of objective classroom data are essential.

The synergetic supervisory process has been in operation for a sufficient number of years to make a follow-up study worthwhile at this time. While many school districts are just initiating the process, a considerable number have been using it for several years and are continually refining their techniques and expanding its impact. It is important that strengths and weaknesses in the process be identified, so that appropriate developmental activities can be initiated.

This follow-up study has provided information regarding the implementation of the synergetic supervisory process. The congruence

between the perceptions and understandings of teachers and principals using the process has been investigated. Instructional and supervisory implications of the process have been identified.

The questionnaire and follow-up interviews were designed to gather information in areas where it was felt that feedback was important. Of major consequence in the study was the examination of the four assumptions upon which synergetic supervision is based.

This investigation was designed to serve the important functions of providing feedback to those both directly (teachers and supervisors) and indirectly (consultants, theoreticians) involved with the process. For example, when distinct differences exist between the perceptions of supervisors and teachers, both parties need to know this so that greater congruence can be attained. Those working to improve the process also need to have this information so that they might develop strategies for avoiding such discrepancies. Pertinent and timely feedback is essential for systematic change in a supervisory process which is focused on gradual, cooperative improvement.

## III. PURPOSE OF THE STUDY

This study was conducted to determine how the synergetic supervisory progress was being implemented in several schools and districts. It was a descriptive study designed to provide feedback data to practitioners and theoreticians regarding four major research questions.

Specifically the study was conducted to:

1. Determine the extent to which the assumptions underlying the synergetic supervision process are being acted upon.
2. Determine how effectively the procedures of the synergetic supervision process are being implemented.
3. Determine the nature of any differences in perceptions and understandings of teachers and supervisors regarding the synergetic process.
4. Identify the instructional and supervisory implications of the synergetic supervisory process.

## IV. SIGNIFICANCE OF THE STUDY

No follow-up or status study of this type had been done for either the synergetic supervision process or any other supervision process related to clinical supervision. Two different ERIC searches plus an extensive review of related literature identified a very minimal amount of research of this nature. Reavis (1978, p. 580) in reviewing pertinent clinical supervision research to date located only five studies related to clinical supervision. None of these studies attempted to examine the overall supervision of instruction process.

Also, as previously indicated, those who are presently using the synergetic supervision process as well as those theoreticians doing ongoing development activities regarding the process need the feedback which the study can provide. Information of this type is also needed by those school systems considering the adoption of a new form of

instructional supervision. This type of information is also needed to stimulate school leaders on the whole into reversing the nature of supervision as described by Saxe (1972, p. 652) "for most part, there is practically no supervision of teaching and when supervision does occur it is often so innocuous as to make no difference in the quality of the teaching that is being supervised.

Yet another testimony to the general need, or continuing search for means of instructional improvement was found in the following statement regarding the Coleman Report (1966). The Coleman Report and the U.S. Riot Commission Report (1967) both testified that education was a backward industry, not spending enough on research, evaluation was lacking, standards of performance were inadequate, and innovation to improve the educational establishment was minimal.

The preceding position coupled with that of Flanders (1970, p. 17) lent considerable support for the need of research in this area. Flanders, in discussing those items which we do know about helping teachers change their teaching behavior, stated that when teaching behavior is actually practiced and analyzed, that the probabilities that a change will occur are increased.

More recent research by Bloom (1978) had identified specific instructional practices which had had direct results in increased learning. Bloom stated: "As I see it, the solution lies in our views about students and their learning. These views have grown out of our practices and they will not be changed until we alter these practices."

In short, the timing was appropriate, and a potential to begin meeting obvious education needs was more than adequate to merit the implementation of this follow-up study on the existing use of the synergetic supervision process.

## V. ASSUMPTIONS

The following assumptions were made in this study:

All those answering the questionnaire and interview questions responded honestly and accurately.

All those answering the questionnaire and interview questions had sufficient experience with the supervisory process being studied to respond meaningfully.

## VI. DELIMITATIONS

This study was delimited to those supervisory activities related to classroom instruction. It was also delimited to selected districts having used the synergetic supervisory process at least one full year.

## VII. PROCEDURES

### Selection of the Population

The population for this study consisted of selected schools using the synergistic instructional supervision process at the time the survey was taken.

## Selection of the Sample

The sample population consisted of supervisors (area supervisors, principals, department chairpersons) and teachers in the selected school systems.

## Construction of the Questionnaire

The questionnaire was developed by the researcher in order to provide as much information regarding the questions guiding this study as possible, given the time limits to the number of questions one can ask and still hope for a high percentage of returns. Many of the questions were generated by the varied readings in preparing the review of literature.

Two separate questionnaires were prepared: one for respondents who were teachers and one for those who were instructional supervisors. Only a few of the questions on each instrument differed. The variations almost always involved re-wording to reflect the role of the respondent.

## Means of Analysis

Comparisons and judgment were used to derive differences of responses about synergetic supervision between and among all groups surveyed. The structured answer data collected by questionnaire were analyzed by determining and comparing grand means. The open ended questions in the questionnaire and the interview data were analyzed using content analysis procedures.

## VIII. DEFINITION OF TERMS

Synergism. The simultaneous action of separate components which, together, have greater total effect than the sum of their individual effects.

Synergetic supervision. A systematic improvement process including preobservation, observation, and postobservation based on the concept of synergism.

Teaching patterns. Physical or verbal actions of the teacher or the student which can be observed, categorized, and analyzed.

Observation report. A written document reporting what happened in a specific cycle of synergetic supervision.

Supervisor. When the term supervisor is used regarding those supervising in the schools polled in this research, it refers only to the principal or other individual doing the instructional supervision.

Preobservation conference. A conference between the supervisor and the teacher held prior to classroom observation.

Classroom observation. A phase of clinical supervision in which the classroom behavior of the teacher and the students are observed and recorded.

Postobservation conference. A step in the clinical process in which the recorded data on the teaching act are systematically analyzed.

## IX. ORGANIZATION OF THE STUDY

Chapter I contains the introduction to the problem, the statement of the problem, the purpose and significance of the study, the procedures relative to collection and analysis of data, the assumptions, the delimitations, and the definition of terms.

Chapter II contains a review of related research and literature pertaining to supervisory practice.

Chapter III presents the methodology and procedures used in relation to this study.

Chapter IV consists of a presentation and analysis of the data.

Chapter V contains findings, conclusions, and recommendations.

# CHAPTER II

## REVIEW OF RELATED LITERATURE AND RESEARCH

### I. INTRODUCTION

#### Foundations of Contemporary Supervision of Instruction

In order to view the synergetic supervision process in a broader perspective a brief review of the foundations of instructional supervision is needed.

Supervision has passed through four general phases of development in the United States. The earliest phase of instructional supervision persisted for over one hundred and fifty years, until the middle of the 19th century. The following quote by Bartky (1953, p. 5) describes supervision by inspection as it existed over two hundred years ago.

> In the early years of American education the word "inspection" was employed as being synonymous with supervision. School committees, and later superintendents, "inspected" their schools. In early Massachusetts the law required school committees to visit all district schools at opening and closing and all public schools once a month without giving prior notice, "for the purpose of making a careful examination thereof and of ascertaining that the schools are properly provided with books and of inquiring into the regulation and discipline of the school and the habits and proficiency of the schools therein."

It would seem worth reiterating that the earliest inspection was done by committees of lay citizens, then, later by superintendents. Barr (1945, p. 6) also noted that these duties were not allocated to principals until comparatively recent times.

Despite the fact that more popular approaches to educational supervision have replaced supervision by inspection over the past century, it is not difficult to recognize its influences upon present day supervision.

Professional supervision, the second phase, began to emerge during the mid-19th century when the Office of the County Superintendent was first established. Over the next seventy-five years a sequence of events revolving around the inception and development of the so-called "special subjects" and the ensuing supervision of such did much to bring about the supervisory position as we currently view it today.

The third phase of development was that of scientific observation. As Lucio and McNeil (1969, p. 7) pointed out, education and supervision began to change quite drastically in the early 1900's. Much of the change was credited to a management process that first began to operate in business and industry. This was the movement of scientific management. Mosher and Purpel (1972, p. 14) credited scientific supervision as having spawned vast numbers of empirical questionnaires which led supervisors to see their jobs as producers and interpreters of such data in schools so as to help teachers improve. Supervisors were to identify laws and direct teachers in using these laws.

After years as "the" ideal form of supervision, it became increasingly apparent that scientific supervision did have several limitations. Similar limitations were also identified in industry. These limitations ushered in the fourth phase of supervision, the democratic or human relations phase. But the era of scientific

supervision did not pass without leaving a very pronounced mark on the future, i.e., hierarchial line—staff organizational structure and job descriptions. As a result of scientific supervision, supervisors knew more specifically what was expected of them as well as their position in the hierarchy of the organization. The introduction of the scientific process to educational supervision in place of experience alone in education is yet another carryover, one which has proven to be very positive.

Mosher and Purpel (1972, p. 16) stated that democratic supervision had its roots in progressive education and emphasized the dignity of the individual. Lucio and McNeil (1969, p. 11) went on to say that instead of the emphasis upon leader and led, supervision became associated with human personality and encouraged wide participation in formulation of policy. Teachers, supervisors, administrators and pupils were to work together toward the solution of problems and toward their own personal growth. The more one reads about these four phases of development in educational supervision, the more apparent their influence upon today's supervision becomes.

## II. REVIEW OF RECENT INSTRUCTIONAL SUPERVISION

### Items which Describe Existing Supervision of Instruction

Several authors described a somewhat less than positive picture of supervision today. Doyle (1974, p. 52) felt that efforts to improve supervision of instruction consumed large amounts of human and material resources and with few exceptions these efforts resulted in little, if

any, real change in the teaching-learning environment. Blumberg (1976, p. 2) went so far as to state that much supervision was considered a waste of time by teachers and that the character of the relationships between supervisors and teachers could be described as cold war. Bellon (1976, p. 5) stated that although supervision had become nonthreatening to teachers, it had also become nonfunctional in many educational programs.

Saxe (1972, p. 653) in an article pertaining to elementary supervision, reported that most teachers and principals he questioned felt there was little, if any, supervision of instruction in their schools. He felt it had failed because it had been feared by teachers and misunderstood by supervisors.

Eash (1968, p. 73) went so far as to state that the supervisors of instruction were in fact becoming a vanishing breed due to two new trends in the educational scene: teacher organizations' negotiations and the commercial production of packaged curriculum.

Morley (1970, pp. 792-795) did not see the commercial curriculum package as leading to the demise of supervisors. Instead, he saw the supervisor as being in the ideal position to improve curriculum change by isolating what he called pivotal problems of implementation.

Markowitz (1976, pp. 371-372) in his writings concerning the dilemma of authority added another factor, the supervisor's position in the authority structure, to the growing list of factors working against better supervision of instruction in school systems. He felt that some system of authority was a necessary requirement for organizational

survival and that developing ways in which those who assume authority could promote self-actualization as opposed to submission and alienation would help improve the supervisory process. Lucio and McNeil (1969, p. 24) lent support to Markowitz's thoughts describing the typical supervisor of instruction as a status leader who can't, but must, improve instruction given his present standing.

Munnelley (1970, pp. 673-674) cited another underlying factor seen to have been causing unrest in much recent instructional supervision, that of teacher-supervisor conflicts related to academic freedom. He went on to state that many supervisors singularly attempted to revise and develop curriculum, develop and circulate media and materials for instructing, plan in-service activities, etc., thus raising many questions pertaining to the teachers' academic freedom. Munnelley also cited several arbitration rulings regarding academic freedom.

In their discussion regarding supervision in today's labor-management crisis, Klotz and Semmann (1974, pp. 20-22), saw the widespread use of old models of evaluation, such as the triangular model (observe, rate, confer), as causing much of today's instructional supervision to be unacceptable. In brief, they felt the assumptions upon which such models were based were not sound.

Goldhammer (Abrell, 1974, p. 212), in describing contemporary supervision of instruction, stated that because it generally counts for so much, supervision often counts for nothing.

Blumberg (1976, pp. 360-362) in a survey attempting to identify teacher views of existing supervision of instruction found that they

felt (1) supervisors were out of touch with the classroom, (2) there was too much procedural trivia, (3) supervisors avoid teachers, (4) supervisors did not seem to like people, and (5) supervisors played a democratic game, but did not really mean it.

In their survey, Young and Heichberger (1975, p. 14) found that 70 percent of teachers saw the supervisor as potentially dangerous. The teachers they surveyed identified lack of supervisor interest in supervision and an undemocratic system for designing supervisory processes as the major causes for these fears.

When it comes to finding articles which describe recent supervision of instruction in a more positive light, almost all of these writings describe the results of a particular supervision model as it has applied to a specific "small" population. Several examples are as follows: Abrell (1974, p. 79) quoted NEA Research Report R-20 which stated that the function of supervision had wide acceptance, and that there was a demand for and steadily increasing employment of supervisory personnel. Whether or not this would still be true today is debatable.

Fischler (1971, pp. 184-185) felt that in areas where clinical supervision was being used correctly, it was working well. One positive spinoff of this in Fischler's opinion was the fact that clinical supervision was in many instances providing a vehicle for the principal to re-enter into a dialogue with his teachers in relation to the instructional program.

But, one baffling or difficult point exists when it comes to reading feedback or follow-up information regarding clinical supervision. The

process has been in use for twenty years, but the only specific follow-up information in print usually comes from the Harvard-Newton project. One would hope for a broader base.

Lucio and Smithman (1974, pp. 343-344) cited research findings pertaining to a small population which concluded that pupils whose teachers were evaluated by objectives were in fact doing a better job than those being guided by older methods. Nowhere in their article, nor in any other literature found to date, did they state how many teachers (percent) were presently under this type of system.

Meyers' (1975, pp. 81-87) research refuted Lucio and Smithson's findings. Her research indicated that the improvement was due more to attitudes about one's self and not the use of evaluation by objectives.

Lucio and McNeil (1969, pp. 51-52) reported the findings of the National Education Association Research Division regarding selection of supervisory personnel to be primarily dealing with level of degree earned (B.S., M.S.), age limitations, general exams in some cases, and elaborate promotional procedures. As a rule, minimal attention, if any, was given to specific supervisory related competencies.

Steel (1976, p. 10) in a study conducted to determine the extensiveness and form of credentialing for those persons engaged in staff development, lent support to what Lucio and McNeil reported. Among other things, she found that fourty-four states reported no formal credentialing for persons involved in supervision of student teachers.

The following provide a summary of the broader view of supervision of instruction. Popham (1974, p. 141) indicated that a perusal of current educational research revealed a growing number of approaches dealing with teacher effectiveness. He went on to outline the many directions suggested and the possible pitfalls of each. In doing so, he paints a rather splintered nondirectional picture of instructional supervision in the United States.

A recent ERIC search (1977) intended to identify recent supervisory research identified many articles concerning supervision of student teachers and very few which dealt directly with instructional supervision of experienced teachers. Krajewski (1976, p. 373) addressed this same lack of research in his article entitled "Putting the 'S' Back in ASCD" where he illustrated the small percentage of supervision related material to appear over the past decade in ASCD publications compared to other areas such as curriculum development.

## Recent Supervisory Packaged Programs Intended to Improve Instruction

In reviewing the literature, there are many who have presented varied systems or specific points aimed at improving the overall picture of instructional supervision. Some who have proposed rather in-depth relatively self-inclusive systems are Bellon, Cogan, and Goldhammer.

Bellon's (1976, pp. 21-25) approach is centered around four basic assumptions: (1) Teaching is a set of identifiable patterns of behavior; (2) When these patterns are changed, instruction improves;

(3) Success of the process is very much dependent upon mutual trust between the teachers and supervisors involved, and (4) The main purpose of the process (supervision) is improving instruction. Bellon's facilitating framework for supervision is divided into three phases: a preobservation conference, observation, and a postobservation conference. In his book, Classroom Supervision and Instructional Improvement: A Synergetic Process (1976), he has given many specific guidelines for operationalizing what he calls the synergetic supervisory process. Bellon, Bellon and Handler (1977, pp. 1-215) have also attempted to assist those practicing the synergetic supervisory process with an in-depth analysis of instruction. In this publication, the authors give suggestions for the supervisor in areas such as motivation, staff development, media and verbal interaction.

Cogan (1973) in his book, Clinical Supervision, has probably presented the most in-depth systematic approach to supervision. He has not based his process on any specific stated set of assumptions, but there are assumptions which are inherent in his work. Cogan's system of instructional supervision is somewhat more involved than most other supervision approaches. His eight phases evolve around the preobservation conference, in-class observation, and the post observation conference. The eight phases are:

1. Establishment of the teacher-supervisor relationship.
2. Supervisor and teacher plan actual lesson(s) together.
3. Plan the strategy of observation.
4. Carry out actual observation of instruction.
5. Analyzing the teaching-learning process.
6. Plan the strategy of the postobservation conference.
7. Carry out postobservation conference.
8. Renew planning in preparation for ongoing process.

Perhaps Cogan's greatest contribution to the supervisory process, aside from his overall attempt to observe and improve instruction, is his in-depth discussion concerning possible problems of implementation (regarding all eight phases) and his proposed preventive solutions to each.

Doyle (1974, pp. 54-55) stated that clinical supervision provided a comprehensive framework for individualizing observation and feedback activities and for fostering improved teacher decision making concerning classroom practices. He went on to say that the clinical supervision model can also be extended to encompass the skill training dimension.

Reavis (1976, p. 360) described Cogan's process of clinical supervision as a procedure for observation in the clinic of the classroom which rested upon the conviction that instruction could only be improved by direct feedback to teachers on aspects of instruction they were interested in.

Goldhammer (1969, pp. 70-73) has taken Cogan's framework and modified it in application. He ended up with five stages which were a slightly condensed version of Cogan's system. The only major difference was that he added the analysis of supervisor behavior found in Stage 5.

Goldhammer's proposed sequence of supervision is as follows:

> Stage 1: Preobservation conference. Communication between teacher and supervisor was established; plans for teaching were drawn up; and plans for observation were set (pp. 57-60).
>
> Stage 2: Observation. The supervisor observed and recorded classroom events (p. 61).
>
> Stage 3: Analysis and strategy. The observation data were analyzed and the management of the conference planned (p. 63).

> Stage 4: Supervision conference. This stage was the most essential; supervisor and teacher reviewed the observation data, discussed analysis of the data, identified patterns and planned modifications (p. 67).
>
> Stage 5: Postconference analysis. In this stage, the behavior of the supervisor throughout the procedure was analyzed (pp. 70-73).

Several other modifications of Cogan's clinical process can be found. Robert Anderson in his work at Texas Tech presents a modified form or use of clinical supervision as has Reichard (1974, p. 364). In the case of the latter, Reichard had advocated the widespread employment of clinical supervisors. His proposal is tied in with providing a means to operating competency-based teacher certification programs. These clinical supervisors would be master teachers teaching part-time and supervising part-time, using the clinical supervision model.

## Less Self-Contained Processes Advocated to Improve Instruction

Once one leaves the area of the so-called packaged programs intended for those practicing instructional supervision, there are many theoreticians who have presented a variety of thinking concerning various aspects of supervision.

Harris (1963, p. 87) is one such theoretician. One idea which he proposed was that of self-supervision. He felt that teachers with a willingness to actively seek help from books, from college classes and other staff members was beneficial to the beholder, to his co-workers, and the students. Harris (1976, pp. 333-335) has also advocated that supervisors need to exercise the following three leadership roles:

(1) helping teachers develop specific instructional competencies; (2) developing a positive relationship with teachers in order to do this; and (3) becoming very much involved in sound, systematic teacher evaluation. Harris does not state specifically how to accomplish these tasks.

Wiles and Lovell (1975) and Lovell and Phelps (1976) also theorized possible formats for supervision of instruction. Wiles and Lovell (1975, pp. 6-11) felt that supervision revolved around seven major functions: goal development, program development, control and coordination, motivation, problem solving, professional development, and the evaluation of educational outcomes. They call their proposed process collaborative supervision. In collaborative supervision, teachers would observe and assist and confer with each other, with principals, supervisors, and students participating if needed (pp. 294-296).

Lovell and Phelps (1976, pp. 38-39) recommended that principals, teachers, and supervisors in cooperation develop a process for observations and conferences designed to improve instruction, including preconference scheduling, length of observation, postobservation, and reporting.

Eash (1969, p. 489) has proposed that supervisors become knowledgeable in the technical skills of systems analysis. He felt supervisors so equipped would not be required to struggle for role definition; a functional role awaits each of them in every school system.

Abrell (1974, pp. 215-216) theorized that the ideal series of steps which the humanistic supervisor must take to achieve instructional improvement and fulfillment on the part of those with whom he/she cooperates are as follows: (1) Establishing an open, trusting, and collegial relationship; (2) Identifying needs, aspirations, talents and goals of both persons and institutions in which the supervisory trusteeship is to take place; (3) Planning what is to be done, how it is to take place and when it is to occur; (4) Observing the performance "by taking the role" of the performer, the learner and the supervisor; and (5) Analyzing the performance, holding conferences and sharing appraisal feedback.

Reavis (1976) described what Hans Anderson felt the supervisor's role should be. Anderson (1972, p. 363) saw the supervisor as a facilitator of self-evaluation by the teacher with a teacher-supervisor relationship being one of mutual respect.

Harris (1963, p. 87) believed that a teacher geared towards self-supervision developed an attitude beneficial to the beholder and his co-workers, plus an attitude of awareness and searching.

Sergiovani (1976, pp. 9-20) drew upon the thoughts of McGregor, Miles, and Herzberg in putting together his human resources supervision. His two major contributing thoughts revolved around the assumptions that supervisors had about teachers and how these assumptions related to teacher motivation. He defined and spoke of theory X set which was often used when people (supervisors and/or administrators) thought, or acted as if, they were operating from a theory Y set of assumptions, but

in fact were really using theory X assumptions. Sergiovani has concentrated more upon addressing the leadership aspects of supervision than specific steps a practitioner might use to begin a fresh supervisory system within a school system.

Lucio and McNeil (1969, p. 3) advocated an approach in supervision that would recognize the contributions of both the traditional plus the democratic approaches, yet would stress cognition.

Klotz and Semmann (1974, pp. 20-24) advocate a similar approach to that taken recently by the Menommonee Falls (Wisconsin) Public Schools. Management theory, especially from McGregor (1960), was utilized as a basis for the assessment program, where open communications and teacher participation were intended to develop trust. Other items stressed were defined job responsibilities, individual job targets, objective input, and teacher participation.

Lucio and McNeil (1969, p. 249) felt teachers should be evaluated upon the extent of which they achieved clearly established objectives. Supervision would be responsible for helping to define appropriate measurable objectives, making resources readily available, and initiating the necessary processes and procedures. Their emphasis on objectives was intended to place the means of schooling (methods, strategies, testing, etc.) secondary to the learning outcomes and thus to concentrate attention on the ends rather than the means of schooling (pp. 103, 128-130, 146).

Authors other than those mentioned in this section have presented additional ideas as to how supervision should be carried out. Since

there is often some overlap, it is believed that a representative variety of approaches as well as all those major schools of thought presently receiving the most attention (and being practiced) are covered in this segment of the literature review.

## III. OBSERVATION SYSTEMS

### Introduction

Historically, observation systems designed to improve instruction, via systematic observation in the classroom, began early this century. In 1914, Horn reported a method of recording circles and squares on seating charts so that an observer could determine the distribution of pupil participation over the ensuing years. Others [Pucket (1928), Barr (1929), Wrightstone (1934), and Medley and Mitzel (1948)] continued to develop and report upon new observational techniques. Today, over one hundred different observational systems exist. In one anthology alone, "Mirrors for Behavior," Simon and Boyer (1974), ninety-nine different observational systems are reviewed.

In their study of observation systems, Rosenshine and Furst (1973, p. 131) described the number available as a proliferation of instruments for quantifying events observed during classroom instruction.

It is important that this section focused upon observational systems be included in a review of literature relating to the synergetic supervisory process. Much of the underpinning support for the assumptions stated by Bellon (1976, pp. 20-21) is partially rooted within the rationale and explanations for using systematic observation.

Ober, Bentley and Miller (1971, p. 16) defined systematic observation as an accepted method of organizing observed teaching acts in a manner which allows any trained person who follows stated procedures to observe, record and analyze interactions with the assurance that others viewing the same situation would agree, to a great extent, with his recorded sequence of behaviors. The authors recognized that in education, unlike the carefully systematized and controlled laboratory approaches in science, the classroom teacher had largely depended on emotional reactions to independent, isolated incidents rather than substantial, systematically collected samples of participation and performance (p. 15).

Before entering into a review of those observation systems considered to be among the most prominent today, there is need for further clarification as to how and why systematic observation systems are used. Ober (1971, p. 16) saw the basic purpose of systematic observation as helping to operationalize teaching objectives in teaching strategies. Birch (1970, p. 18) in finding that as teaching behaviors were reviewed, varying degrees of discrepancy between what was planned for and what actually happened, actually occurred, lent considerable support for using such observational systems. Ober (1971, p. 16) felt that perhaps the key to using systematic observation procedures was that through the assaying process—identifying and classifying—inconsistencies in behavior and perceptions could be alleviated, unsuccessful approaches abandoned, and new approaches identified.

However, Ober (1971, p. 15), in discussing observation systems, emphasized that the various systems should not, however, produce evaluative judgments, but rather, should serve as tools for obtaining data that can be used to compare actions with intents. But, as Cogan (1973, pp. 134-136) has pointed out, all too often systematic observation has suffered from the notion of observation as a part of a punitive scheme of things.

It is also important to note that no one observation system is capable of classifying or presenting the total comprehensive picture found in any classroom. This is due to the specificity of each different observation system. It is also important to mention here that no observational system is entirely distortion free. But if properly used, distortion can be kept to a minimum.

## Classifications within Observational Systems

The following is a final point prior to discussing individual systems, which should help the reader achieve a better overview of the different systems. Ober and Associates (1971, p. 19), whose book focuses primarily on systems which observe verbal interactions, divided observation systems into two basic types: "sign" and "category." A "sign" system is composed of a list of behaviors. During a given period of time, the observer checks or marks in some manner each behavior that occurs. Regardless of the frequency of occurrence, the behavior is checked only once during the observation period.

The "category" system provides classification of behaviors that the observer learns. At regular intervals within the observation session,

the observer determines in what category the observed behavior falls and records that category number or code.

Rosenshine and Furst (1973, pp. 132-134) in their discussion regarding the various types of observational instruments also use the division of systems into category systems and sign systems. But, all through their discussion there is mention of how the categorization of these various systems is becoming less and less clear due to recent additions which fall into no existing divisional framework. For their discussion of over seventy different systems they used differences in recording procedures, differences in items, and differences in format as their three elements to distinguish between different observational systems.

## Specific Observational Systems

Probably the observational system which is most familiar to educators is Flanders' Interactional Analysis. Flanders (1970) and his associates spent many years developing this system which is built around ten categories. Interaction analysis is specifically directed at the verbal aspects of classroom behavior. Categories 1-7 pertain to teacher talk; categories 8 and 9 refer to student talk; and category 10 indicates silence or confusion. The greatest drawback to the system is that it devotes little attention to student talk and focuses a great deal of attention on the direct/indirect nature of the teacher's performance.

Yet another system which has been used for many years and whose name is recognizable to many educators is Withall's observational

system. Withall's system focuses on teacher behaviors in the social-emotional climate. It consists of seven teacher categories on a continuum ranging from teacher centeredness to learner centeredness. Ober (1971, p. 20) feels this category system, the forerunner of several popular systems, ignores pupil behavior and concentrates on teacher actions which are then placed in one of these seven categories. But, given the importance of the social-emotional tenor in the classroom, Withall's process must be considered.

The Teacher's Practices Observational Record (TPOR) developed by Brown (1968) is another observational system well known in certain regions. Ober (1971, pp. 21-23) points out that the theoretical base or instructional theory on which the various systems are constructed determines to a great degree the applicability of the instruments to certain objectives. Brown's system, for example, is based on the teachings of Dewey and is pragmatic in content. The use of this instrument allows one to see the kinds of practices the teacher brings to the classroom. Individualization of instruction would be one example. Yet another category system which Ober (1971) felt was among the exemplary systems of recent times was the category approach developed by Hughes (1959). Hughes suggested optimal percentages of time to be spent in various functions, i.e., controlling, moralizing, generalizing and supporting. Medley and Mitzel (1963) felt a major drawback of Hughes's approach was that the identified functions did not discriminate between judged "good" and "representative" teachers in his study.

Ober (1971, p. 25) felt that Smith's (1962) category system (though it looked at teacher behavior in percentages and though not directly concerned with subject matter) did come closer than most in dealing with content. Four examples of the thirteen categories used by Smith were defining, stating, coaluating and explaining.

If verbal interaction is the focus of the observation, Ober (1971, p. 26) feels the Gallagher-Aschner System best approaches the verbal dimension of classroom activities by examining questions in five categories: cognitive memory, convergent thinking, divergent thinking, evaluative thinking, and routine.

Bellack (1966) in an extensive study of classroom language, analyzed the pedagogical moves of teachers and classified them in terms of pedagogical functions. The five functions Bellack isolated were the same as those used in the Gallagher-Aschner System.

Ober (1971) felt that while the Bellack study did develop the functional categories from the process of analyzing extensive recordings of classroom interaction, it could be considered a post-facto observational system. The Bellack study also revealed four types of moving in student/teacher discourse:

1. Structuring—the context.
2. Soliciting—questions, commands, requests.
3. Responding—answers to questions, moves related to soliciting.
4. Reacting—reactions that modify by clarifying, synthesizing, or expanding; reactions that rate prior behaviors either positively or negatively.

This concludes the discussion regarding specific observation systems. This brief discussion was not intended to cover all

observational systems, but, instead to simply give the reader a view of a few existing systems which have and continue to be used, including some of the respective peculiarities of each.

Books which List and Classify Observational Approaches

The remainder of the discussion regarding observational systems is directed towards reviewing two publications. Both of these writings would be very helpful to anyone faced with the task of having to decide which available observation system(s) to use given a specific case or need concerning supervision of instruction.

Rosenshine and Furst (1973, p. 138) in addition to their more academic breakdown previously mentioned, have also provided additional information regarding seventy-three observational systems. In this practical breakdown of this group of major existing observational systems they chose to treat each according to the following variables: (1) instruments with explicit theoretical or empirical base, (2) instruments with implicit theoretical or empirical base, (3) modifications or syntheses of existing category systems, and (4) author originated category systems. This is particularly helpful to the reader who finds himself facing all the various authors and variety of systems and has no idea where to begin. Their one chart alone illustrating which systems have been expanded and by whom, could save someone not widely familiar with observational systems considerable time and effort (p. 143).

Fortunately, most of their work (Rosenshine and Furst) can be tied directly (via "Mirrors Number") to a second similar publication "Mirrors for Behavior" by Simon and Boyer (1974). In this publication, Simon and

Boyer give a brief synposis of ninety-nine different observational systems. The authors systematically list information from eight specific areas (plus a few other items) for each respective observation system. The specific items discussed for each system are: subject of observation, number of subjects used, collection methods reported, category dimensions of the system, setting in which used, coding units, collection and coding personnel needed, and uses reported by author. An in-depth explanation of Simon and Boyer's work is found in Rosenshine and Furst's (1973, pp. 137-138) book in which they explain, in chronological order, how all seventeen volumes of "Mirrors" has developed and for what purpose.

In summary, Rosenshine and Furst (1973, p. 122) stated that there seemed to be no simple route through the chaos which has developed in the growth of observational systems.

Simply stated, there has been no comprehensive plan of development, but rather more of an at random splintered approach to overall development. This may have much to do with Roney's (1976, p. 34) statement, that despite the availability of many observation systems, supervisors seldom used systematic observation.

## Means of Observation: Highly Developed Existing System or Individually Developed System

Possibly the books of Simon and Boyer and Rosenshine and Furst coupled with the newer forms of supervision (based upon more positive assumptions regarding people) which call for systematic observation of instruction will cause an increase in understanding, examination, and usage of existing observation systems.

Bellon (1976, pp. 40-41) has proposed a somewhat different approach. He recommends that each person given the task of observing instruction work out their own charting and recording system(s), although he would not be against looking at many different sources for ideas from which to build an individualized system.

Bellon (1976, pp. 47-48) also expressed the importance of not trying to observe too many elements during observation. Instead, the observer should establish a specific focus, i.e., student nonverbal behavior, and make every effort to come away from the observation session with an accurate, complete, nonjudgmental set of data reflecting what transpired regarding that one focus point.

Mode Used to Collect Observational Data

Little has been said about the specific means of collecting the observational data or about what effect(s) they might have upon any of the instructional elements per se. As regards the first topic, there does not appear to be any conclusive research indicating that one means of observation, i.e., video recordings, is any better than any other means, i.e., personal notes taken by the supervisor or audio recording.

Weller (1971) in his research regarding the use of video tape found no significant proof that video taping was any better than other means of collecting data.

Bellon (1976, p. 41) felt the supervisor would get the best results if he/she actually visited the class and took very complete notes regarding some specific aspect(s) of what instructionally took place.

He also went on to say (p. 48) that by regularly doing this the supervisor could significantly improve his or her ability to compile such a written log.

## IV. SUMMARY

This chapter was designed to acquaint the reader with contemporary supervision of instruction as well as the historical development leading up to that which exists today. The review of literature was also designed to familarize the reader with certain elements of supervision, i.e., observational systems, which related directly to the synergetic supervision process.

There were several unanticipated by-products of this compilation of related literature and research. The most significant by-product of the review was the obvious lack of research pertaining directly to specific processes of supervision of instruction. Chapter III describes the design of the study.

# CHAPTER III

# METHODOLOGY AND PROCEDURES

## I. OVERVIEW

### Purpose of the Study

The purpose of the study was to determine how the synergetic supervisory process was being operationalized in several schools and districts. It was a descriptive study designed to provide feedback to practitioners and theoreticians regarding several major research questions.

### Questions

The following questions directed the study:

1. Determine the extent to which the assumptions underlying the synergetic process are being acted upon.
2. Determine how effectively the procedures of the synergetic process are being implemented.
3. Determine the nature of any differences in perceptions and understandings of teachers and supervisors regarding the synergetic process.
4. Identify the instructional and supervisory implications of the synergetic supervisory process.

## Design

This study was descriptive in purpose and methodology. As a descriptive research study, it attempted to thoroughly examine the operational status of the synergetic supervision process. Specifically this descriptive research study was designed to follow up the synergetic supervision process in selected districts which have been utilizing it for at least a year. An examination of their current status with respect to the four major research questions was made.

## Conduct

The majority of the data were collected via questionnaires. Questionnaire development began in August of 1977 and continued through April of 1978. The instruments were mailed out in early May 1978 and all returns were in by July 1, 1978.

Additional data were collected through interviews held on the University of Tennessee campus in June of 1978. The primary purpose of these interviews was to cross-check questionnaire data. Development of the interview instrument, as well as the plans to administer it, took place during May and June of 1978.

## Development Aids

The review of literature was particularly important in the overall design of this research. It provided considerable information regarding similar previous research. The literature search also provided direction for the development of the research questions and for the subsequent preparation of the study instruments. Review of related dissertations also provided an overview of research design.

Faculty members in the Department of Curriculum and Instruction, University of Tennessee, Knoxville, provided many ideas used in the development of the research design. These same persons also provided assistance in other aspects of the research.

## II. RATIONALE FOR DESCRIPTIVE APPROACH

### Introduction

Early in the development of this research project descriptive research was chosen as the research methodology. Descriptive research provided the ideal means of treating the major research questions. The information in the following sections is designed to give a brief overview of the descriptive research process and how it was of value in answering the study questions.

### Aspects of Descriptive Research

C. V. Good (p. 208, 1972) has stated that the major purposes of descriptive-survey investigations might be summarized as follows:

1. To secure evidence concerning an existing situation or current condition.
2. To identify standards or norms with which to compare present conditions in order to plan the next step.
3. To determine how to make the next step (having determined where we are and where we wish to go).

Descriptive-survey research, as used here, has been used in a number of social fields.

Relevance of Descriptive Approach to Problem

Two of the major intents of descriptive research are justifying current conditions and practices and enabling people to make more intelligent plans to improve those which already exist. Several factors indicated the need to examine the synergetic supervision process in relation to both of these research intents.

Many schools varying widely in size and geographical location had been using the synergetic supervision process. Several school districts had been using the process for approximately one year, while others had used the process for as many as five years. Personnel in those districts needed an overall examination of the process to determine the effectiveness of their supervisory programs and instructional improvement efforts. They needed to know what modifications or changes might be suggested by an analysis of feedback from participants in the process. Theoreticians involved with ongoing planning and development also needed the information to improve implementation and the follow-up process.

## III. APPLICATION OF DESCRIPTIVE RESEARCH TOOLS TO PROBLEM

Questionnaires

This particular research called for a means of gathering a broad range of comparative data from several hundred respondents over a wide geographical area. The main body of the questionnaire, the structured response items, represented the most effective way to fill this need. Data processing of these replies could be useful in the analysis of the returns.

The research also dictated a need to gather a limited amount of data which allowed the respondents to communicate answers of a longer written nature. A means was also needed for each respondent to share any thoughts he/she might have developed while filling out the main body of the instrument. The open-ended questions at the end of the questionnaire provided this opportunity.

### Interviews

Late in March 1978 a decision was made, based upon analysis of the problem statements, to conduct face-to-face interviews with a limited number of respondents. The interviews provided an opportunity to collect more in-depth answers as well as opinions and attitudes regarding the synergetic supervision process. They also provided a means of cross-checking between different data collecting devices. This process provided a validity check for the collected data.

### Combination of Tools

The combined use of the questionnaire and interview enabled the researcher to cross-check items as well as gather a greater variety of data. As it applied to this particular research, the combination provided a more complete picture of the status of the synergetic supervisory process.

## IV. DEVELOPMENT OF QUESTIONNAIRE

### Preparation of the Structured Response Questions

Development of the questionnaire for this study began simultaneously with work on Chapters I and II in the fall of 1977. Each potential

question was written on a 3 x 5 card and filed according to the major research question to which it pertained. Two major resource areas were used in the process of generating the initial 180 questions. Many valuable ideas were developed from the review of literature. The questions which were based on a close analysis of the synergetic supervision process were also helpful.

This initial group of questions was then divided into seven areas of categories which related very closely to the problem statement and the four questions to be addressed by the study (Chapter I). This was done in order to provide additional specificity to the questioning areas. The seven divisions used were questions concerning: (1) areas of instruction improved, (2) how well was the process working, (3) the preobservation conference, (4) the observation, (5) the postobservation conference, (6) the effective aspects of the process, and (7) those questions designed to elicit suggestions from participants in the process. As guidelines during this process, every effort was made to develop questions which did not introduce any biases and which would be easily understood by the respective teachers and supervisors who would be reading them.

A closed system of responding was decided upon to force each respondent into making a definite choice. It was felt that all respondents were capable of giving usable feedback. This measure was taken in order to try and get them to make a judgment instead of opting to make no judgment at all.

The next step involved deciding which items would best serve the purpose of the study. It was realized that the number of survey items had to be reduced to a workable number. Questions in each area were screened for clarity, importance, and relevance to the purposes of the research. Three levels of priority were used and the screening process was repeated several times. Priority was based upon the judged overall value of each respective item. This initial examination led to a reduction in the number of questions to 148. The questions were then examined by a principal and a teacher for additional information concerning their clarity and readability. One hundred and nine questions representing a fairly even distribution over the seven areas remained at the completion of this step.

In the final screening using the four major research questions as a framework, the number of items was reduced to thirty-eight for supervisors and forty-two for teachers. There were approximately ten items representing each major research question. Instruments for the teachers and supervisors had nearly the same items. It was necessary to change the wording on several questions to reflect differences in their roles. Two questions which elicited important teacher feedback were not appropriate for those in supervisory positions.

Care was taken to place the process questions before those questions which might be perceived as being more emotion laden. Question 1 in the supervisors questionnaire (Appendix B) regarding a set preobservation step is an example of a process question. Question 28 in the same instrument regarding personal feelings towards supervision was viewed

as a more emotion-laden question. Steps were also taken to randomly distribute questions pertaining to various research questions within the instrument. These steps were taken to eliminate as much instrument bias as possible. In the final review efforts were made to ensure a logical sounding sequence of questions as well as to make sure that all questions were stated in a positive manner.

Table I shows which structured response survey items were developed to gather data pertaining to each major research question. A division in the table was necessary because teachers and supervisors received slightly different questionnaires.

TABLE I

CATEGORIZATION OF QUESTIONNAIRE ITEMS TO RESPECTIVE RESEARCH QUESTIONS

| | Teacher Questionnaire | Supervisor Questionnaire |
|---|---|---|
| Items relating to research question 1 | 3,6,9,14,15,18,24, 30,38 | 3,5,8,13,16,21,26,34 |
| Items relating to research question 2 | 1,7,10,13,19,22,25, 29,31,33 | 1,6,9,12,17,19,22,25,27, 29,31 |
| Items relating to research question 3 | 2,5,11,16,20,24,26,32, 39,42 | 2,10,14,21,28,35,38 |
| Items relating to research question 4 | 4,8,12,17,21,23,27, 28,34,36,37,40 | 4,7,11,15,18,20,23,24, 30,32,33,36 |

## Rationale for and Development of Open-Ended Questions

During March of 1978 work began on developing potential open-ended questions. In addition to the structured response questions, five

open-ended questions were developed. The purpose of these questions was to give the respondents an opportunity to present any additional ideas they might have regarding the synergetic supervisory process. Allowing respondents this opportunity was viewed as a way to generate increased motivation to complete the questionnaire. At the same time the questions provided information which the structured questions of the main body might not generate.

Questionnaire Cover Letters

There were two different types of cover letters developed. One (Appendix B) was sent to key people in various school districts who would be distributing the survey instruments to respective staff in their districts. This cover letter, developed in April 1978, was designed to explain briefly what the questionnaire entailed. It also gave specific instructions regarding the characteristics of those who should receive a questionnaire. One of these cover letters along with the requested number of survey instruments was sent to each key person in the participating districts.

The second cover letter was a part of the questionnaire (Appendix B). This cover letter was designed to give operational instructions, to assure people that the findings of the study would be made available upon request, and to explain mailing instructions. The same letter was printed on both the teacher and supervisors instruments.

Final Critique

After all preliminary materials were prepared, they were critiqued by selected members of the College of Education, University of Tennessee, Knoxville. Following alterations from this final review process, the materials were distributed.

## V. QUESTIONNAIRE SAMPLE SELECTION AND ADMINISTRATION

Late in 1977 a tentative list of school districts from which the study population would be drawn was developed. This list included school districts located in Georgia, Kentucky, New York, North Carolina, Ohio, and Virginia.

A major criterion for selection was that some or all of the staff in the district had to have used the synergetic supervisory process for at least one year. The next step in the sample selection process entailed contacting these various schools and seeking permission from appropriate district administrators to survey those involved in the process. It was also determined at this time that each school being considered was still using synergetic supervisory process. One factor affecting several of the districts considered for the study was the status of their teacher contract negotiations.

Using this preliminary information, a judgment was made as to which school districts would provide the desired diversity in location and size. Key persons in each of the selected districts were then contacted and asked to estimate the number of teachers and supervisors who would be available for inclusion in the study.

Upon receiving these estimates, packets of questionnaires containing the requested number of instruments were prepared and mailed to the selected districts. These packets were accompanied by a cover letter explaining distribution and return procedures.

A monitoring procedure was used to determine the number of questionnaires being returned from each district. After two weeks those districts which had a low percentage of returns received a follow-up phone call. This contact was made with those persons responsible for distributing the questionnaires in their districts. They were brought up to date regarding the number of returns from their district, thanked once again for their efforts, and asked to remind their personnel to return the questionnaires.

Due to the process used in distributing the questionnaires it is not known exactly how many teachers and supervisors actually received survey instruments. Of the questionnaires sent out, approximately 50 percent of those intended for teachers were returned. Just over 50 percent of those designed for supervisors were returned.

## VI. QUESTIONNAIRE DATA COLLECTION AND ANALYSIS

### Data Collection

Teacher and supervisor questionnaires were separated for analysis. Each group was then subdivided according to school district. This provided the information needed to decide whether or not follow-up phone calls were necessary.

The information in the main body of the questionnaire was then compiled. The thirty-eight structured response questions for supervisors and forty-two such questions for teachers were coded (Appendix C) and placed on sheets for data processing purposes. The demographic data collected at the end of each questionnaire were also coded and recorded.

The recording of responses to the open-ended items in the questionnaire was completed subsequently. All questionnaires were first separated and filed according to individual school districts. Answers to each of the four different questions were then compiled. Each written answer was transcribed onto an appropriate summary sheet. In cases where two or more answers conveyed the same meaning this was noted next to the original statement instead of recording the repetitive statement. Attention was also given to the number of persons who failed to answer any question.

## Questionnaire Data Analysis

Questionnaire data were presented and analyzed according to major research question areas. Data pertaining to each research question were analyzed according to a similar procedure. In each case data were described and analyzed by mean analysis, relative frequency percentage analysis, and open-end question analysis as well as the effects of school organization, years in current position, and respective school district upon respondent responses.

# VII. INTERVIEW DEVELOPMENT AND ADMINISTRATION

## Development of Instrument

Preliminary thoughts regarding a potential interview instrument began in January of 1978. In May a tentative list of interview questions was developed. Considerable research regarding interview techniques was also undertaken.

The final interview instrument consisting of ten semistructured questions was completed in June 1978. Each question was closely related to at least one of the four major research questions. These relationships are shown in Table II.

TABLE II

RELATIONSHIP OF INTERVIEW QUESTIONS TO MAJOR QUESTIONS OF THE STUDY

| | Items |
|---|---|
| Interview items relating to research question 1 | 1, 2, 7 |
| Interview items relating to research question 2 | 3, 4 |
| Interview items relating to research question 3 | 3, 4, 9 |
| Interview items relating to research question 4 | 5, 6, 7, 8, 10 |

The most appropriate means of collecting the data was determined to be a semistructured format. If the answers of all respondents were to be comparable and classifiable, then each respondent needed to be

interviewed using the same techniques. A conscious effort was made to phrase each question so it would have the same meaning to all interviewees. Every attempt was made to ensure a high quality of response in terms of validity, relevance, specificity, clarity and coverage.

Upon completion of the interview instrument it was critiqued for content by two staff members from the College of Education, University of Tennessee, Knoxville. Following minor changes the instrument was completed and ready for use in June 1978.

## Selection of Sample Population

It was decided that those chosen to be interviewed would come from within the population of those attending an educational leadership conference to be held at the University of Tennessee during June 1978. Selection criteria included the stipulation that each interviewee must have had experience either administering or participating in the synergetic supervisory process. In addition geographical distribution of the final sample was taken into consideration, as well as the number of years experience in the synergetic supervision process each potential respondent possessed. This was done to make the cross-checking of questions at a later date both easier and more pertinent.

Using these criteria ten persons were selected for the interviews. Four supervisors from Ohio and two supervisors each from Georgia, New York, and South Carolina were interviewed. Because there were no teachers available (in attendance at the conference) no teachers were interviewed. Five respondents had approximately one year of experience

with the process. Three reported between three and five years of experience in synergetic supervision.

### Administration and Data Recording

All interviews were conducted by the researcher. Each interview involved only the researcher and the interviewee and lasted approximately twenty-two minutes. Every effort was made to see that each interview was conducted in a similar manner and the same setting.

Data collected during the interview sessions were recorded on audio tape. Three major reasons led to the use of audio tape as a data recording aid. First, it eliminated a major source of interviewer bias in terms of selectivity of the material recorded. Second, it enabled the interviewer to speak with more people in a given period. Finally, it permitted the interviewer to devote full attention to conducting the interviews.

## VIII. INTERVIEW DATA TABULATION AND ANALYSIS

### Transcription of Data

Upon completion of the interviews all data collected on the audio tapes were transcribed into written form. Data from each interview referring to each respective question were clustered. The demographic information gathered at the beginning of each interview was also summarized.

### Interview Data Analysis

Each of the respondent replies clusted under each interview question were screened and separated into groups of similar answers. This was

done by picking out and recording the key element or indicator in each statement. As the process continued, if an element similar to a previously recorded element appeared it was grouped with that indicator. After completing this process for all responses to a given interview question, these data were reviewed. A final set of summary statements was developed for each of the ten interview questions. Due to the varying nature of each interview question several different formats were used to summarize the data.

## IX. SUMMARY

This chapter presented a description of the procedures used in this study. The procedures included: (1) the construction of the questionnaire and interview instruments, (2) the sample selection of both the survey instrument and interview schedule, (3) the collection of the data, and (4) an outline of the treatment of the data. Several sections of this chapter were also devoted to defining descriptive research and relating it to this particular study.

Chapter IV contains a description and an analysis of the data collected. It also contains a summary report of the findings and results as they relate to the questions which the study was designed to answer.

# CHAPTER IV

# ANALYSIS OF DATA

## I. INTRODUCTION

This chapter contains a presentation and discussion of the data collected to answer the following research questions.

1. Determine the extent to which the assumptions underlying the synergetic supervision process were being acted upon.
2. Determine how effectively the procedures of the synergetic supervision process are being implemented.
3. Determine the nature of any differences in perceptions and understandings of teachers and supervisors regarding the synergetic process.
4. Identify the instructional and supervisory implications of the synergetic supervision process.

Data in this chapter were derived from structured and open-ended questionnaire items as well as ten interviews with supervisors.

Questionnaire data are presented in relation to the major research questions. A complete presentation of the questionnaire data is followed by a presentation and analysis of the interview data.

### Use of Clustered Questionnaire Items in Presentation and Analysis of Data

In developing the structured response items for the questionnaire approximately ten corresponding questions were used for each of the four

research questions directing the study. These four clusters of corresponding questions provided a framework for presenting and analyzing the questionnaire data. Data pertaining to each of these clusters were descriptively analyzed. Item and grand means and relative frequency percentages were calculated. Two means, $M_1$ and $M_2$, were calculated whenever a cluster contained one or more questions which did not have a corresponding question in the other respondent group. $M_1$ represented the cumulative grand mean for all items of a given respondent group. $M_2$ represented a grand mean of only those items which had corresponding items in the other respondent group.

The clustered items data were also analyzed in relation to the open-ended survey items. In addition, each cluster of items was examined for relationships with the respondents' school organization patterns, years in current positions, and school districts.

In order to simplify and clarify discussions concerning the paired structured response questionnaire items, the following system has been adopted: S5/T6 represents supervisor structured response item number 5, which corresponds to teacher structured response item number 6. The use of only one letter signifies that no corresponding question exists. For example, S9 represents supervisor item 9 which has no corresponding teacher item.

## Description of Structured Response Answering Options

Each structured response item had four possible choices. These four choices were coded as follows: strongly agree (4), agree (3),

disagree (2), strongly disagree (1). Table III indicates the values which were assigned to the individual means for the purpose of analysis in this study.

TABLE III

VALUES ASSIGNED TO INDIVIDUAL ITEM MEAN RESPONSES

| Item Mean and/or Grand Mean | | | | | |
|---|---|---|---|---|---|
| 1.0 to 1.49 | 1.5 to 1.99 | 2.0 to 2.49 | 2.5 to 2.99 | 3.0 to 3.49 | 3.5 to 4.0 |
| Very Negative | Negative | Somewhat Negative | Somewhat Positive | Positive | Very Positive |

Table IV was used when comparing supervisor and teacher means for the purpose of establishing degree of congruence. These values were assigned in order to provide greater uniformity in the narrative descriptions of these differences.

TABLE IV

ASSIGNED VALUES TO DIFFERENCES IN MEAN AND/OR GRAND MEAN

| Difference between Supervisor/Teacher Item Mean or Grand Mean | Verbal Description | Degree of S/T Congruence |
|---|---|---|
| 0.00 to 0.149 | unimportant difference | considered congruent |
| 0.150 to 0.299 | of minor importance | slightly incongruent |
| 0.30 to 0.399 | of moderate importance | moderately incongruent |
| 0.40 or greater | of major importance | very incongruent |

## II. DESCRIPTION OF PARTICIPANTS

The numbers of supervisor respondents ranged from two in Georgia to eighteen in Ohio. Teacher responses ranged from a low of 17 in Georgia to a high of 159 in Ohio. All participating districts had similar return percentages.

Of those responding, approximately 60 percent either taught or supervised in the primary grades whereas approximately 40 percent were involved in junior high and high school teaching and/or supervision. Table XXXXII in Appendix A presents a total description of the above two areas (breakdowns by state returns and school organization) as well as participant descriptions by years in current position, educational background, and sex. The total number of supervisor respondents was forty. The total teacher respondents numbered 278. This ratio of approximately seven teacher respondents per supervisor respondent was considered appropriate for the purposes of this study.

## III. QUESTIONNAIRE ANALYSIS RESEARCH QUESTION 1

Research question 1 provided information regarding the use by supervisors and teachers of the underlying assumptions of the synergetic supervision process. The four basic assumptions of the synergetic supervision process as stated by Bellon (1976, pp. 20, 21) are:

1. Teaching is a set of identifiable patterns of behavior,
2. When selected patterns of teaching behavior are changed, improvement of instruction can be achieved.
3. The supervisor-teacher relationship must be built on mutual trust if change is to take place.
4. The improvement of instruction is the primary goal of supervision.

Mean Analysis

Table V depicts the questionnaire data from structured items pertaining to the first research question. The supervisor grand mean was 3.54 compared to a 3.22 grand mean for teachers.

TABLE V

COMPARATIVE QUESTIONNAIRE ITEMS WITH RESPECTIVE MEANS
(RESEARCH QUESTION 1)
(The Extent to which the Assumptions Underlying the Synergetic Process were Being Acted Upon)

| Supervisor | | Teacher | |
|---|---|---|---|
| Question | Mean | Mean | Question |
| 3 | 3.55 | 3.26 | 3 |
| 5 | 3.77 | 3.48 | 6 |
| 8 | 3.13 | 2.82 | 9 |
| * | -- | 3.19 | 14 |
| 13 | 3.85 | 3.56 | 15 |
| 16 | 3.88 | 3.72 | 18 |
| 21 | 3.28 | 2.97 | 24 |
| 26 | 3.45 | 2.03 | 30 |
| 34 | 3.40 | 2.94 | 38 |
| $M_1$ | -- | 3.22 | |
| $M_2$ | 3.54 | 3.22 | |

*A * in the question column indicates that there is no corresponding item in that respondent group's (teacher or supervisor) questionnaire.

Three supervisor/teacher pairs of items produced means which were well above the grand means for the entire cluster for research question 1: item S5/T5, item S13/T15, and S16/T18. Item S5/T5 referred indirectly to all four assumptions in the process as did item S13/T15. Item S16/T18

pertained directly to assumption 3 of the supervision process, pertaining to the supervisor-teacher relationship and the need for mutual trust.

Two pairs of items, S3/T3 and S26/T30 had means very similar to the grand mean. Item S3/T3 related directly to assumption 4 of the supervision process. Item S26/T30 related directly to assumption number 2 of the process regarding instructional improvement resulting from change in teaching patterns.

Two items, S8/T8 and S21/T24, were well below the grand mean for the total cluster. The differences between S8/T8 and S21/T24 and the cluster grand means for supervisors and teachers were .31/.34 and .26/.25, respectively. Item S8/T8 related indirectly to all four synergetic supervision assumptions. Item S21/T24 tied in directly with assumption 3 in the process, pertaining to the importance of mutual trust and cooperation.

Analysis by Relative Frequency Percentages

A complete presentation of all relative frequency percentage data relating to research question 1 is located in Table VI. Examination of these data showed that the supervisor grand mean for the "strongly agree" responses was approximately 20 percent greater than that of the teachers. The reverse occurred with the "agree" responses in column 2 of the table. The teacher grand mean was approximately 10 percent greater than the supervisor grand mean.

An important difference occurred in the negative responses as well. The teacher grand mean for "disagree" responses was approximately

10 percent greater than the supervisor grand mean. The item providing the greatest influence upon this disparity was S8/T9, which reflected the influence of schoolwide goals upon the supervision process. A 17.4 relative frequency percent difference was present between teacher and supervisor respondents for this item.

TABLE VI

COMPARATIVE ITEMS WITH RESPECTIVE RELATIVE FREQUENCY PERCENTAGES (RESEARCH QUESTION 1)

| Supervisor Item | Teacher Item | Strongly Agree | Agree | Disagree | Strongly Disagree | Response Not Present or Not Usable |
|---|---|---|---|---|---|---|
| 3 | 3 | 57.5-37.4 | 40.0-52.5 | 2.5- 7.2 | 0.0-2.2 | 0.0-0.7 |
| 5 | 6 | 77.5-51.4 | 22.5-44.6 | 0.0- 2.2 | 0.0-0.7 | 0.0-1.1 |
| 8 | 9 | 25.5-12.9 | 62.5-57.9 | 7.5-24.9 | 2.5-2.9 | 0.0-1.8 |
| * | 14 | -- 32.7 | -- 55.4 | -- 7.9 | -- 2.9 | -- 1.1 |
| 13 | 15 | 82.5-60.4 | 15.0-36.3 | 0.0- 2.2 | 0.0-1.1 | 2.5-0.0 |
| 16 | 18 | 87.5-74.1 | 12.5-24.5 | 0.0- 0.7 | 0.0-0.7 | 0.0-0.0 |
| 21 | 24 | 32.5-18.3 | 60.0-57.9 | 5.0-17.6 | 0.0-1.8 | 2.5-4.3 |
| 26 | 30 | 42.5-18.3 | 52.5-63.7 | 0.0-14.4 | 0.0-0.7 | 5.0-2.9 |
| 34 | 38 | 37.5-12.9 | 57.5-66.5 | 0.0-16.2 | 0.0-1.1 | 5.0-3.2 |
| | $M_1$ | -- 36.3 | -- 51.0 | -- 10.4 | -- 1.4 | -- 1.7 |
| | $M_2$ | 55.4-36.7 | 40.3-50.5 | 1.9-10.7 | -1.3 | 1.9-1.2 |

Open-Ended Item Analysis

Analysis of the open-ended questions indicated that a large majority of respondents to these items were both aware of and practicing the underlying assumptions of the synergetic supervision process. One such open-ended statement, an example relating indirectly to several of the assumptions of the synergetic supervision process,

appeared thirteen times as a response to the open-ended item pertaining to teacher/administrator interaction patterns: "The new process fosters an entirely new kind of positive interaction pattern." A complete presentation of these statements as well as a summary of each group of responses is located in Appendix C.

Analysis by School Organization

Examination of supervisor and teacher grand means in Table VII did not indicate any major differences in grouped supervisor/teacher responses between the four school organization groups. Elementary, junior high, and high school supervisor grand means were quite similar: 3.53, 3.50, and 3.53, respectively. A minor difference existed between these supervisor grand means and that of the middle school supervisor group which was 3.33. Teacher grand means went slowly down from elementary 3.36, to middle school 3.28, to junior high school 3.21, to high school 3.16. These differences, representing 0.2 in total range, were considered to comprise a minor trend (Table IV).

Analysis According to Years in Current Position

Table VIII depicted the data showing the relationship between number of years in current position and the resultant mean analysis of research question 1. One notable difference was evident in this analysis. A review of supervisor grand means showed a moderate drop in the grand mean to 3.31 for supervisors with thirteen or more years in their current position. The three preceding divisions (one to three years, four to seven years, and eight to twelve years) had respective grand means of 3.57, 3.60, and 3.5.

TABLE VII

EFFECT OF RESPONDENTS' RESPECTIVE SCHOOL ORGANIZATIONS UPON QUESTIONNAIRE ITEMS RELATING TO RESEARCH QUESTION 1

| Questionnaire Item | | Elementary | | Middle School | | Junior High School | | High School | |
|---|---|---|---|---|---|---|---|---|---|
| S | T | S | T | S | T | S | T | S | T |
| 3 | 3 | 3.57 | 3.24 | 3.33 | 3.33 | 3.50 | 3.23 | 3.44 | 3.21 |
| 5 | 6 | 3.52 | 3.52 | 4.00 | 3.43 | 3.50 | 3.56 | 3.67 | 3.41 |
| 8 | 9 | 3.24 | 2.88 | 2.66 | 2.85 | 3.00 | 2.53 | 3.13 | 2.78 |
| * | 14 | * | 3.11 | * | 3.48 | * | 3.24 | * | 3.13 |
| 13 | 15 | 3.81 | 2.54 | 3.50 | 3.62 | 4.00 | 3.65 | 3.89 | 3.56 |
| 16 | 18 | 3.86 | 3.73 | 3.67 | 3.86 | 4.00 | 3.71 | 4.00 | 3.69 |
| 21 | 24 | 3.35 | 3.04 | 3.00 | 3.15 | 3.25 | 2.88 | 3.33 | 2.83 |
| 26 | 30 | 3.40 | 3.07 | 3.50 | 3.05 | 3.50 | 3.00 | 3.44 | 2.96 |
| 34 | 33 | 3.50 | 3.00 | 3.00 | 2.95 | 3.25 | 3.12 | 3.33 | 2.83 |
| | $M_1$ | -- | 3.25 | -- | 3.30 | -- | 3.21 | -- | 3.16 |
| | $M_2$ | 3.53 | 3.36 | 3.33 | 3.28 | 3.50 | 3.21 | 3.53 | 3.16 |

TABLE VIII

EFFECT OF RESPONDENTS' YEARS IN CURRENT POSITIONS UPON QUESTIONNAIRE ITEMS RELATING TO RESEARCH QUESTION 1

| Questionnaire Item | | 1-3 Years | | 4-7 Years | | 8-12 Years | | 13 or More Years | |
|---|---|---|---|---|---|---|---|---|---|
| S | T | S | T | S | T | S | T | S | T |
| 3 | 3 | 3.57 | 3.21 | 3.80 | 3.21 | 3.41 | 3.36 | 3.00 | 3.38 |
| 5 | 6 | 3.71 | 3.49 | 3.90 | 3.49 | 3.75 | 3.46 | 3.67 | 3.46 |
| 8 | 9 | 3.23 | 3.00 | 3.10 | 3.77 | 3.17 | 2.72 | 2.67 | 3.00 |
| * | 14 | * | 3.24 | * | 3.19 | * | 3.24 | * | 3.03 |
| 13 | 15 | 3.86 | 3.57 | 3.90 | 3.52 | 3.91 | 3.61 | 3.33 | 3.56 |
| 16 | 18 | 3.93 | 3.71 | 3.80 | 3.76 | 3.83 | 3.66 | 4.00 | 3.81 |
| 21 | 24 | 3.50 | 3.06 | 3.10 | 2.86 | 3.17 | 2.93 | 3.50 | 2.95 |
| 26 | 30 | 3.43 | 3.09 | 3.50 | 3.08 | 3.40 | 2.91 | 3.33 | 2.95 |
| 34 | 38 | 3.29 | 3.03 | 3.70 | 2.95 | 3.36 | 2.86 | 3.00 | 2.85 |
| | $M_1$ | -- | 3.27 | -- | 3.31 | -- | 3.19 | -- | 3.22 |
| | $M_2$ | 3.57 | 3.27 | 3.6 | 3.33 | 3.5 | 3.19 | 3.31 | 3.25 |

The combined supervisor and teacher group possessing the highest total grand means was the group reporting four to seven years in their current positions. The combined group having had thirteen or more years in their current positions possessed the lowest grand mean total. Grouping in this manner was intended to give a more general comparison of the overall relationship between years in current position and responses to this group of items. Supervisor and teacher samples were not equal in size.

Analysis by School District

The next two tables provide summaries of mean and relative frequency percentage data recorded in Tables XLIII-XLIX and LXXI-LXXVII in Appendix A. School districts on both tables have been located in a similar manner. A double line separates the top three districts from the bottom four. This was done to identify any overall differences between those schools having had the process for only a short time—two years or less—and those having used the process for four or more years.

Analysis of data on Table IX identified no important differences between supervisors' and teachers' average grand means in the two time divisions. The average grand means for the supervisors and teachers in the first division (those districts having used the process for two years or less) were 3.60 and 3.29, respectively. The respective supervisor/teacher average grand means for the second division (those having used the process for four years or more) were 3.48 and 3.20. The respective supervisor/teacher differences between

the average grand means were .12 and .09. These differences were considered to be of negligible importance. It was determined based upon these data that the number of years a school district had used the supervisory process had little effect upon how respondents answered the items related to research question 1. District A from New York state was responsible for the majority of the small difference which did exist between the average grand means of the two divisions.

TABLE IX

COMPARATIVE SUPERVISOR/TEACHER GRAND MEANS BASED UPON NUMBER OF YEARS THEIR RESPECTIVE SCHOOL DISTRICTS HAD USED THE SYNERGETIC SUPERVISION PROCESS (RESEARCH QUESTION 1)

| | | S | T |
|---|---|---|---|
| Two Years or Less | | | |
| District A, North Carolina | $M_2$ | 3.55 | 3.09 |
| District A, Kentucky | $M_2$ | 3.71 | 3.32 |
| District A, Georgia | $M_2$ | 3.55 | 3.45 |
| Average of grand means | | 3.60 | 3.29 |
| Four Years or More | | | |
| District A, Ohio | $M_2$ | No data | 3.16 |
| District B, Ohio | $M_2$ | 3.49 | 3.25 |
| District C, Ohio | $M_2$ | 3.63 | 3.31 |
| District A, New York | $M_2$ | 3.31 | 3.06 |
| Average of grand means | | 3.48 | 3.20 |

Analysis of data on Table X identified no major overall effects in relative frequency percentages resulting from the number of years school districts had used the synergetic supervision process. One moderate set of differences was identified between supervisors of the respective

TABLE X

COMPARATIVE SUPERVISOR/TEACHER RELATIVE FREQUENCY PERCENTAGES BASED UPON NUMBER OF YEARS THEIR RESPECTIVE SCHOOL DISTRICTS HAD USED THE SYNERGETIC SUPERVISION PROCESS (RESEARCH QUESTION 1)

| Years in Process | | Strongly Agree S | Strongly Agree T | Agree S | Agree T | Disagree S | Disagree T | Strongly Disagree S | Strongly Disagree T | Response Not Present Or Usable S | Response Not Present Or Usable T |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Two Years or Less | | | | | | | | | | | |
| District A, North Carolina | $M_2$ | 53.1 | 30.5 | 43.8 | 48.4 | 0.0 | 11.1 | 0.0 | 5.5 | 3.1 | 4.4 |
| District A, Kentucky | $M_2$ | 70.8 | 37.1 | 29.2 | 56.4 | 0.0 | 5.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| District A, Georgia | $M_2$ | 57.5 | 52.2 | 40.0 | 40.4 | 0.0 | 7.4 | 1.1 | 0.7 | 1.1 | 0.0 |
| Average of Above District Grand Means | | 60.5 | 39.9 | 37.6 | 48.4 | 0.0 | 8.1 | 0.4 | 2.1 | 1.4 | 1.5 |
| Four Years or More | | | | | | | | | | | |
| District A, Ohio | $M_2$ | * | 34.7 | * | 54.3 | * | 9.8 | * | 0.5 | * | 0.6 |
| District B, Ohio | $M_2$ | 50.9 | 38.3 | 43.8 | 50.6 | 3.6 | 9.2 | 0.0 | 1.3 | 0.9 | 1.2 |
| District C, Ohio | $M_2$ | 61.0 | 44.2 | 36.0 | 50.5 | 13.7 | 5.4 | 0.8 | 0.8 | 1.2 | 2.4 |
| District A, New York | $M_2$ | 31.3 | 28.3 | 43.8 | 48.9 | 6.25 | 16.9 | 0.0 | 2.6 | 18.8 | 3.3 |
| Average of Above District Grand Means | | 47.7 | 36.4 | 41.2 | 51.1 | 7.9 | 10.3 | 0.2 | 1.3 | 7.0 | 1.9 |

*There were no supervisor respondents for Ohio District A.

Note: S/T sample sizes vary.

groups. The grand mean for supervisors in districts having used the process for two years or less was 12.8 percent greater in column 1 (strongly agree) than the comparable grand mean for group two (four or more years in the process). The strongest single offsetting counterpart to these grand means was found in column 3 (disagree). Group two (four years or more) had a grand mean of 7.9 who disagreed compared to a grand mean of 0.0 for the less experienced group.

Corresponding teacher grand means were very similar. In no instance did the difference in grand means between groups one and two exceed 3.5. The respective group one (two years or less) and group two (four years or more) grand means were: strongly agree 39.9/36.4; agree 48.4/51.1; disagree 8.1/10.3; strongly disagree 2.1/1.3. In analyzing the data presented in Table X, the diversity of sample sizes among school districts and the variation in supervisor/teacher ratios within those samples was considered to be of importance.

## IV. QUESTIONNAIRE ANALYSIS RESEARCH QUESTION 2

Research question 2 provided information regarding how effectively the procedures of the synergetic supervision process were being implemented.

### Mean Analysis

Table XI depicts the questionnaire data from the structured items pertaining to the second research question. The grand mean for supervisor responses was 3.55 compared to 3.26 for teacher respondents.

The incongruence between these two means was considered of minor importance (Table IV, page 55). Two items, S27/T31 and S29/T33, contributed greatly to this incongruence, displaying differences of .51 and .53, respectively. Item S27/T31 pertained to whether or not the supervisor used a map or diagram to gather data about teacher or student physical patterns. Item S29/T33 concerned the relative emphasis of the supervisory process on instructional improvement versus evaluation.

TABLE XI

COMPARATIVE QUESTIONNAIRE ITEMS WITH RESPECTIVE MEANS
(RESEARCH QUESTION 2)
(How Effectively the Procedures of the Synergetic Process were Being Implemented)

| Supervisor | | Teacher | |
|---|---|---|---|
| Question | Mean | Mean | Question |
| 1 | 3.68 | 3.44 | 1 |
| 6 | 3.38 | 3.40 | 7 |
| 9 | 3.70 | 3.41 | 10 |
| 12 | 3.58 | 3.27 | 13 |
| 17 | 3.65 | 3.36 | 19 |
| 19 | 3.54 | 3.15 | 22 |
| 22 | 3.51 | 3.165 | 25 |
| 25 | 3.43 | 3.140 | 29 |
| 27 | 3.68 | 3.17 | 31 |
| 29 | 3.56 | 3.03 | 33 |
| 31 | 3.30 | * | * |
| $M_1$ | -- | 3.238 | |
| $M_2$ | 3.55 | 3.26 | |

*An * in the question column indicates that there is no corresponding item in that respondent group's (supervisor or teacher) questionnaire.

Two supervisor/teacher pairs of items, S1/T1 and S9/T10, produced means which were somewhat above the grand means for the entire cluster for research question 1. Item S1/T1, which yielded respective supervisor

and teacher means of 3.68 and 3.44, pertained to whether supervisors understood the teachers' objectives prior to each supervisory observation. Item S9/T10, with respective means of 3.70 and 3.41, had to do with whether postobservation conferences were held within one day of classroom observations.

Items S12/T13, S17/T19, S19/T22, S22/T25, and S29/T33 had means similar to the grand means for the entire cluster. Item S25/T29 exhibited the lowest pair of grand means, 3.43 and 3.14, respectively. This item stated that together supervisors and teachers had generally been able to assess identified patterns during the postobservation conference.

Item S6/T7, with respective means of 3.38 and 3.40, was the only item to exhibit a reverse relationship with the grand means for the cluster of questions. Item S6/T7 stated that supervisors used a running log during observations to gather information on teacher or student verbal patterns.

## Analysis of Relative Frequency Percentages

A complete description of all relative frequency percentage data pertinent to the second research question is located in Table XII. Examination of these data show that the supervisors' grand mean (51.3) for the strongly agree responses was approximately 15 percent greater than that of the teachers (36.9). In column 2, the agree responses, the reverse occurred with the teacher grand mean (50.3) being approximately 10 percent greater than the supervisor grand mean of 40.5.

A small number of negative responses by teachers to items S27/T31 and S29/T33 as compared to almost no negative responses by supervisors

provided the greatest single influence upon the overall differences in relative frequency percentages between the two groups. Item S27/T31 dealt with the supervisors using a map or diagram to collect data pertaining to student physical patterns during observations. In item S29/T33 respondents indicated if the process was more oriented to evaluation or improvement of instruction.

TABLE XII

COMPARATIVE ITEMS WITH RESPECTIVE RELATIVE FREQUENCY PERCENTAGES (RESEARCH QUESTION 2)

| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present Or Not Usable | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| S | T | S | T | S | T | S | T | S | T | S | T |
| 1 | 1 | 67.5 | 50.4 | 32.5 | 42.4 | 0.0 | 4.7 | 0.0 | 1.1 | 0.0 | 0.0 |
| 6 | 7 | 40.0 | 49.3 | 57.5 | 40.6 | 2.5 | 7.6 | 0.0 | 1.1 | 0.0 | 0.0 |
| 9 | 10 | 80.0 | 53.2 | 12.5 | 36.3 | 5.0 | 7.9 | 2.5 | 2.2 | 0.0 | 0.4 |
| 12 | 13 | 57.5 | 35.3 | 42.5 | 56.1 | 0.0 | 4.3 | 0.0 | 2.2 | 0.0 | 2.2 |
| 17 | 19 | 65.0 | 41.7 | 35.0 | 49.6 | 0.0 | 4.3 | 0.0 | 1.1 | 0.0 | 3.2 |
| 19 | 22 | 43.0 | 25.9 | 54.5 | 61.5 | 0.0 | 10.1 | 0.0 | 0.4 | 2.5 | 2.2 |
| 22 | 25 | 55.0 | 26.6 | 45.0 | 61.9 | 0.0 | 8.3 | 0.0 | 1.1 | 0.0 | 2.2 |
| 25 | 29 | 40.0 | 23.7 | 55.0 | 64.7 | 2.5 | 8.6 | 0.0 | 0.7 | 2.5 | 2.2 |
| 27 | 31 | 70.0 | 37.1 | 27.5 | 41.7 | 2.5 | 14.4 | 0.0 | 3.2 | 0.0 | 3.6 |
| 29 | 33 | 55.0 | 25.9 | 42.5 | 50.4 | 0.0 | 15.8 | 0.0 | 3.6 | 2.5 | 4.3 |
| 31 | * | 32.5 | -- | 65.0 | -- | 2.5 | -- | 0.0 | -- | 0.0 | -- |
| | $M_1$ | 55.0 | -- | 42.7 | -- | 1.4 | -- | 2.3 | -- | 0.7 | -- |
| | $M_2$ | 57.3 | 36.9 | 40.5 | 50.3 | 1.3 | 8.6 | 0.2 | 1.7 | 0.8 | 2.4 |

Open-Ended Question Analysis

Several of the high frequency open-ended responses relating to the item on teacher/administrator interaction patterns were related to research question 2. One response, given nine times, listed several of the designated steps of the postobservation conference as having occurred

and having been very positive (item 10B, Table CI, Appendix C). Another response, given ten times, stated that teachers had a good feeling about being observed in a positive noncritical way (item 4, Table CI, Appendix C). Twenty-five respondents observed that the process helped to open positive two-way communication between teachers and supervisors. Several in this group felt this was due to the continuous interaction brought about by following the process as it was intended. These statements represent outcomes of the synergetic supervision process expected to accompany correct implementation.

Indirectly related to this analysis and relative to research question 2 are the following summaries for open-end items 3 and 4. The summary for open-ended items 3 indicated 26 supervisor and 106 teacher statements which described some form of positive improvement attributed to implementation of the synergetic supervision process. Open-ended item 3 pertained specifically to changes in teacher/supervisor interaction patterns. Only three statements were interpreted as having a neagative effect on interaction patterns. Open-ended item 4 dealt with the effect, if any, the supervisory process might have had upon each school's staff development program. In the summary of this item, twenty-one supervisor and fifty-seven teacher responses portrayed the synergetic supervision process to have a positive effect on staff development programs. One respondent statement described a deterioration in staff development as a result of the process. If the synergetic supervision process is correctly implemented improved staff development is an expected product.

Analysis by School Organization

Table XIII depicts the collected data which illustrated the effect of school organization upon the respondent grand means. The overall effect of school organization upon the grand means for each level of organization was minor. Those supervisors and teachers at the elementary level of school organization had the highest combined grand means with 3.65 and 3.34 respectively. Middle school supervisors and teachers exhibited the lowest total grand means with 3.22 and 3.09 respectively.

A comparison of all primary grades with grades above the primary level produced combined grand means which were very similar.

TABLE XIII

EFFECT OF RESPONDENTS' SCHOOL ORGANIZATION UPON QUESTIONNAIRE ITEMS RELATING TO RESEARCH QUESTION 2

| Questionnaire Item | | Elementary | | Middle School | | Junior High School | | High School | |
|---|---|---|---|---|---|---|---|---|---|
| S | T | S | T | S | T | S | T | S | T |
| 1 | 1 | 3.76 | 3.55 | 3.33 | 3.52 | 3.75 | 3.44 | 3.57 | 3.26 |
| 6 | 7 | 3.52 | 3.50 | 3.00 | 3.15 | 3.00 | 3.56 | 3.33 | 3.24 |
| 9 | 10 | 3.81 | 3.50 | 3.00 | 3.10 | 4.00 | 3.75 | 3.78 | 3.26 |
| 12 | 13 | 3.71 | 3.35 | 3.33 | 3.11 | 3.50 | 3.38 | 3.44 | 3.19 |
| 17 | 19 | 3.67 | 3.49 | 3.33 | 3.24 | 4.00 | 3.13 | 3.44 | 3.22 |
| 19 | 22 | 3.67 | 3.28 | 3.33 | 3.11 | 3.25 | 2.94 | 3.33 | 3.05 |
| 25 | 29 | 3.48 | 3.23 | 3.00 | 3.11 | 3.50 | 3.06 | 3.44 | 3.02 |
| 27 | 31 | 3.71 | 3.20 | 3.00 | 2.55 | 3.75 | 3.25 | 3.67 | 3.27 |
| 29 | 33 | 3.57 | 3.16 | 3.50 | 2.79 | 3.75 | 3.06 | 3.33 | 2.85 |
| 31 | * | 3.43 | * | 2.67 | * | 3.00 | * | 3.44 | * |
| | $M_1$ | 3.63 | -- | 3.17 | -- | 3.52 | -- | 3.50 | -- |
| | $M_2$ | 3.65 | 3.34 | 3.22 | 3.09 | 3.58 | 3.26 | 3.50 | 3.15 |

Analysis According to Years in Current Position

No major overall differences existed between combined supervisor and teacher grand means for each division by length of service. However, there was an important difference between the supervisors from the different divisions.

Respective grand means for supervisors according to years in current position were: one to three years (3.60); four to seven years (3.78); eight to twelve years (3.40); and thirteen or more years (3.20). A major difference (.58) in grand means exists between supervisors with four to seven years in their current position and those with thirteen or more years in their current position (see Table XIV).

Comparative grand means for teachers, based upon years in current position, were all within .06 of one another. The grand means of this respondent group were: one to three years (3.20); four to seven years (3.23); eight to twelve years (3.28); and thirteen or more years (3.26).

No one item greatly affected the grand means of any group or groups of respondents.

Analysis by School District

Tables XV and XVI provide summaries of mean and relative frequency percentage data recorded on Tables L-LVI and LXXVIII-LXXXIV in Appendix A.

An analysis of the data in Table XV identified only negligible differences between average grand means of supervisors and of teachers in the two major divisions by school district. A .11 difference exists between supervisor average grand means, whereas a .06 difference exists between teacher average grand means. Both of these differences were

TABLE XIV

EFFECT OF RESPONDENTS' YEARS IN CURRENT POSITION UPON QUESTIONNAIRE ITEMS RELATING TO RESEARCH QUESTION 2

| Questionnaire Item | | 1-3 Years | | 4-7 Years | | 8-12 Years | | 13 or More Years | |
|---|---|---|---|---|---|---|---|---|---|
| S | T | S | T | S | T | S | T | S | T |
| 1 | 1 | 3.64 | 3.46 | 3.90 | 3.39 | 3.58 | 3.41 | 3.33 | 3.55 |
| 6 | 7 | 3.43 | 3.41 | 3.50 | 3.39 | 3.25 | 3.64 | 3.00 | 3.42 |
| 9 | 10 | 3.93 | 3.53 | 3.60 | 3.27 | 3.50 | 3.39 | 3.67 | 3.67 |
| 12 | 13 | 3.64 | 3.33 | 3.80 | 3.29 | 3.33 | 3.24 | 3.33 | 3.25 |
| 17 | 19 | 3.64 | 3.45 | 3.90 | 3.26 | 3.58 | 3.36 | 3.00 | 3.34 |
| 19 | 22 | 3.57 | 3.25 | 3.70 | 3.11 | 3.42 | 3.18 | 3.33 | 2.93 |
| 22 | 25 | 3.43 | 3.11 | 3.60 | 3.19 | 3.42 | 3.13 | 3.00 | 3.34 |
| 25 | 29 | 3.27 | 3.17 | 4.00 | 3.19 | 3.25 | 3.13 | 3.00 | 3.00 |
| 27 | 31 | 3.88 | 3.18 | 3.90 | 3.14 | 3.33 | 3.27 | 3.33 | 3.13 |
| 29 | 33 | 3.57 | 3.04 | 3.90 | 3.05 | 3.36 | 3.09 | 3.00 | 2.92 |
| 31 | * | 3.36 | -- | 3.40 | -- | 3.25 | -- | 3.00 | -- |
| | $M_1$ | 3.58 | -- | 3.75 | -- | 3.39 | -- | 3.18 | -- |
| | $M_2$ | 3.60 | 3.29 | 3.78 | 3.23 | 3.40 | 3.28 | 3.20 | 3.26 |

TABLE XV

COMPARATIVE SUPERVISOR/TEACHER GRAND MEANS BASED UPON NUMBER OF YEARS THEIR RESPECTIVE SCHOOL DISTRICTS HAD USED THE SYNERGETIC SUPERVISION PROCESS (RESEARCH QUESTION 2)

| | | S | T |
|---|---|---|---|
| Two Years of Less | | | |
| District A, North Carolina | $M_2$ | 3.45 | 3.08 |
| District A, Kentucky | $M_2$ | 3.63 | 3.30 |
| District A, Georgia | $M_2$ | 3.58 | 3.54 |
| Average of grand means | | 3.55 | 3.31 |
| Four Years or More | | | |
| District A, Ohio | $M_2$ | No data | 3.31 |
| District B, Ohio | $M_2$ | 3.56 | 3.24 |
| District C, Ohio | $M_2$ | 3.75 | 3.47 |
| District A, New York | $M_2$ | 3.0 | 3.0 |
| Average of grand means | | 3.44 | 3.26 |

TABLE XVI

COMPARATIVE SUPERVISOR/TEACHER RELATIVE FREQUENCY PERCENTAGES BASED UPON NUMBER OF YEARS THEIR RESPECTIVE SCHOOL DISTRICTS HAD USED THE SYNERGETIC SUPERVISION PROCESS (RESEARCH QUESTION 2)

| Years in Process | | Strongly Agree S | Strongly Agree T | Agree S | Agree T | Disagree S | Disagree T | Strongly Disagree S | Strongly Disagree T | Response Not Present Or Usable S | Response Not Present Or Usable T |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Two Years or Less | | | | | | | | | | | |
| District A, North Carolina | $M_2$ | 47.5 | 24.8 | 52.5 | 56.4 | 0.0 | 9.2 | 0.0 | 4.0 | 0.0 | 5.6 |
| District A, Kentucky | $M_2$ | 71.7 | 37.7 | 28.3 | 60.0 | 0.0 | 7.3 | 0.0 | 0.0 | 0.0 | 1.0 |
| District A, Georgia | $M_2$ | 58.2 | 55.9 | 39.0 | 40.0 | 2.0 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Average of Above District Grand Means | | 59.1 | 39.5 | 39.9 | 52.1 | 0.7 | 6.9 | 0.0 | 1.3 | 0.0 | 2.2 |
| Four Years or More | | | | | | | | | | | |
| District A, Ohio | $M_2$ | No data | 37.5 | No data | 54.5 | No data | 6.4 | No data | 0.2 | No data | 1.1 |
| District B, Ohio | $M_2$ | 57.9 | 41.3 | 41.4 | 44.8 | 0.0 | 7.9 | 0.7 | 3.2 | 0.0 | 2.8 |
| District C, Ohio | $M_2$ | 85.0 | 53.3 | 10.0 | 37.1 | 0.0 | 6.2 | 5.0 | 1.4 | 0.0 | 1.4 |
| District A, New York | $M_2$ | 15.0 | 22.5 | 65.0 | 53.5 | 15.0 | 17.6 | 0.0 | 2.4 | 5.0 | 4.1 |
| Average of Above District Grand Means | | 52.6 | 38.7 | 38.8 | 47.5 | 5.0 | 9.5 | 1.9 | 1.8 | 2.7 | 2.35 |

considered to be negligible in importance. Therefore, the effect of years a school district had used the supervision process upon respondent answers to research question 2 items was considered to be negligible. District A from New York state was responsible for most of the small difference which did exist between average grand means of the two divisions.

Analysis of data in Table XVI identified no major overall differences in relative frequency percentages for research question 2 items related to the number of years school districts had used the synergetic supervision process. An overall comparison between supervisor-supervisor average grand means and teacher-teacher grand means in the two major divisions yielded no differences considered to be of importance. No differences between divisions exceeded 5 percent.

## V. QUESTIONNAIRE ANALYSIS RESEARCH QUESTION 3

Research question 3 provided information needed to determine the nature of any differences in perceptions and understanding of teachers and supervisors regarding the synergetic supervision process.

### Mean Analysis

Because one of the major purposes of research question 3 was to make specific comparison between supervisor and teacher perceptions and understanding, the following format was chosen for this segment of the report. First, a general comparison of the two grand means plus the relationship of individual items to the grand mean is discussed.

Second, the relationship between each pair of supervisor and teacher items means is presented. Table XVII depicts the data collected from this cluster of items.

TABLE XVII

COMPARATIVE QUESTIONNAIRE ITEMS WITH RESPECTIVE MEANS
(RESEARCH QUESTION 3)

| Supervisors | | Teachers | |
|---|---|---|---|
| Question | Mean | Mean | Question |
| 2 | 3.82 | 3.55 | 2 |
| * | -- | 3.42 | 5 |
| 10 | 3.74 | 3.12 | 11 |
| 14 | 3.70 | 3.40 | 16 |
| * | -- | 2.71 | 20 |
| 21 | 3.28 | 2.97 | 24 |
| * | -- | 3.03 | 26 |
| 28 | 3.75 | 3.09 | 32 |
| 35 | 3.35 | 3.05 | 39 |
| 38 | 3.59 | 3.12 | 42 |
| $M_1$ | -- | 3.15 | |
| $M_2$ | 3.61 | 3.18 | |

The supervisor and teacher grand means were 3.61 and 3.18 respectively. The incongruence in grand means of 0.43 was considered to represent an important difference. However, it should not be overlooked that both grand means were well above 3.0 which constituted the "agree" choice on the survey instrument. Supervisor and teacher responses to items S2/T2 and S14/T16 were somewhat higher than the grand means, whereas their combined mean responses to items S21/T24 and S35/T39 were somewhat lower than the grand mean. The following analysis of all cluster items provides a description of each question.

Item S2/T2, which stated each classroom observation was followed by a joint analysis of data, had respective supervisor and teacher means of 3.82 and 3.55. Both of these figures fall into the very positive response category (Table IV, page 55). Because both means were over 3.5 for this item the supervisor and teacher mean responses were considered congruent.

Item S10/T11, stating that their school district had begun the supervisory process to improve instruction, had respective supervisor and teacher means of 3.74 and 3.12. This difference (.62) constituted a major incongruence between supervisor and teacher perceptions and understanding.

Item S14/T16 stated that classroom observations were conducted in an objective manner. Supervisor and teacher means for item S14/T16 were 3.70 and 3.40 respectively. This difference of .3 was considered to represent a minor incongruence between respondent groups.

Item S21/T24 stated that participation in the supervisory process had helped teachers and supervisors to view themselves and their colleagues as being self-renewing educators. Supervisor and teacher mean responses for this item were 3.28 and 2.97 respectively. This difference was viewed as a minor incongruence between respondents.

Item S28/T32, stating that participation in the present supervisory process had helped supervisors and teachers feel more positive about instructional supervision, possessed a .66 difference between respondent means. The respective supervisor and teacher means for this item were 3.75 and 3.09. This disparity in means was considered to represent a major incongruence between respondents regarding this item.

Item S35/T39, stating that the supervisory process had helped to develop trust relationships between teachers and supervisors, had respective supervisor and teacher means of 3.35 and 3.05. Despite a difference in mean responses of .3, but because both figures fell in the same quadrant (3.0 to 3.49), respective mean responses to this item were considered to represent only a minor incongruence.

Item S38/T42, stating that the instructional supervision program helped to reinforce effective patterns, identify weaker patterns, and develop plans for improvement, had supervisor and teacher means of 3.59 and 3.12 respectively. This difference of .47 was considered to be very important and to represent a major incongruence. Attention was paid though to the fact that both mean responses were over 3.0.

One mean response item, T20, which was not a pair member exerted considerable negative effect upon the teacher grand mean. Item T20, stating that the amount of supervisor time devoted to classroom supervision demonstrated that supervision was a high priority in the school, had a teacher response mean of 2.71. Item T5, stating that supervisors communicated clearly with teachers during the process, with a mean of 3.42, exhibited a minor positive effect upon the teacher grand mean.

Analysis by Relative Frequency Percentages

A complete description of all relative frequency percentage data pertinent to the third research question is located in Table XVIII.

Analysis of the data on Table XVIII did not identify any major overall differences in perceptions and understanding between supervisors

and teachers. The difference of 26.1 (relative frequency percent) between supervisors and teachers in the strongly agree column was somewhat offset by a reverse difference of 15.0 in the agree column. Supervisor responses (96.7 percent) were positive (strongly agree or agree) compared to an 85.6 percent total for teachers.

TABLE XVIII

COMPARATIVE ITEMS WITH RESPECTIVE RELATIVE FREQUENCY PERCENTAGES (RESEARCH QUESTION 3)

| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present Or Not Usable | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| S | T | S | T | S | T | S | T | S | T | S | T |
| 2 | 2 | 82.5 | 58.6 | 17.5 | 37.4 | 0.0 | 2.9 | 0.0 | 0.7 | 0.0 | 0.4 |
| * | 5 | -- | 50.4 | 25.0 | 41.0 | -- | 6.5 | -- | 1.1 | -- | 1.1 |
| 10 | 11 | 70.0 | 30.2 | 25.0 | 51.4 | 0.0 | 10.1 | 0.0 | 4.3 | 5.0 | 4.0 |
| 14 | 16 | 70.0 | 46.0 | 30.0 | 48.2 | 0.0 | 4.0 | 0.0 | 1.1 | 0.0 | 0.7 |
| * | 20 | -- | 19.0 | -- | 41.0 | -- | 2.9 | -- | 9.0 | -- | 1.8 |
| 21 | 24 | 20.0 | 18.3 | 70.0 | 37.9 | 7.5 | 7.6 | 2.5 | 1.8 | 0.0 | 4.3 |
| * | 26 | -- | 27.3 | -- | 49.6 | -- | 15.8 | -- | 4.3 | -- | 2.9 |
| 28 | 32 | 75.0 | 28.8 | 25.0 | 53.6 | 0.0 | 12.9 | 0.0 | 3.6 | 0.0 | 1.1 |
| 35 | 39 | 42.5 | 25.9 | 52.5 | 55.0 | 2.5 | 11.9 | 2.5 | 4.7 | 0.0 | 2.5 |
| 38 | 42 | 57.5 | 24.5 | 40.0 | 61.2 | 0.0 | 9.0 | 0.0 | 2.2 | 2.5 | 3.2 |
| | $M_1$ | -- | 33.1 | -- | 49.6 | -- | 11.0 | -- | 3.3 | -- | 2.2 |
| | $M_2$ | 59.6 | 33.5 | 37.1 | 52.1 | 1.4 | 8.3 | 0.7 | 2.6 | 2.1 | 2.3 |

The difference in grand means for column 3 (disagree) was considered to be the most important of any overall supervisor/teacher differences in the table. Respective supervisor/teacher grand means for the disagree column were 1.4 and 8.3, a difference of moderate importance.

Corresponding items, S10/T11, S28/T32, S35/T39, and S38/T42, all exhibited wide differences in supervisor/teacher item means. Each of these items was discussed in the preceding section.

In general, Table XVIII indicated that several minor and a few moderate differences in perceptions and understanding existed between supervisors and teachers. No major differences in supervisor/teacher perceptions were identified.

Open-Ended Question Analysis

None of the five open-ended questions were tied directly to research question 3, but indirect information relating to the major question was provided in two ways.

The first procedure involved a response-by-response analysis of all transcribed statements on each of the five summary sheets. Each group of responses was examined for content relating to research question 3 and to determine the number of times both supervisors and teachers made the relevant responses. In summary the analysis of these responses yielded the following information: (1) Well over fifty different responses, spread fairly evenly across the five response areas, were related to major question three; (2) In a high percentage of cases individual responses had been made by both supervisors and teachers, and in most cases the ratios of respective supervisor and teacher response was similar to the total ratio of respondents in the study; (3) Of those responses made by only supervisors or teachers, in no case was the number of responses very high. This analysis indicated that there was at least a moderate congruence between respondent groups in relation to their differences in perceptions and understanding of the synergetic supervision process.

The second procedure entailed a comparison of all data found in each of the five response areas. Table XIX provides a compilation of all five summary statements.

TABLE XIX

SUMMARY OF RESPONDENT REPLIES TO OPEN-ENDED ITEMS 1-5 RELATING TO RESEARCH QUESTION 3

| | | Open-Ended Question Number | | | | | | Supervisor/ Teacher |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | Totals | Ratio |
| Statements describing positive improvements resulting from the implementation of the synergetic supervision process. | S | 35 | 28 | 26 | 21 | 19 | 129 | 1:3.5 |
| | T | 117 | 133 | 106 | 54 | 43 | 453 | |
| Statements describing no appreciable change resulting from the implementation of the synergetic supervision process. | S | 1 | 1 | 1 | 3 | 3 | 9 | 1:12.1 |
| | T | 27 | 20 | 25 | 37 | 17 | 109 | |
| Statements describing a deterioration resulting from the implementation of the synergetic supervision process. | S | 0 | 0 | 0 | 0 | 1 | 1 | 1:7.0 |
| | T | 0 | 0 | 3 | 1 | 3 | 7 | |

Analysis of Table XIX provided the following generalizations. The same general trends existed for both total supervisor and total teacher responses to the three divisions used to separate the questions. Many statements by both respondent groups (129 and 453 respectively, for supervisors and teachers) described positive improvements resulting from

the implementation of the synergetic supervision process. Comparatively few statements (9 and 109 respectively for teachers and supervisors) described no appreciable change. Very few statements (one and seven respectively for supervisors and teachers) by both respondent groups described a deterioration in one of the areas due to the implementation of the synergetic supervision process. The second trend was the overall supervisor/teacher ratio relationships between each of the three divisions. The supervisor/teacher ratios for total responses in each division were 1:3.5, 1:12.1, and 1:7.0 respectively for division 1 (positive effect), division 2 (no appreciable change), and division 3 (detrimental effect). This set of procedural analyses was considered to represent, as a minimum, moderate congruence between respondent groups regarding their differences in perceptions and understanding of the synergetic supervision process.

Analysis by School Organization

A summary of data depicting the effect of school organization upon the cluster of items relating to major question 3 is found in Table XX.

Examination of supervisor and teacher grand means identified no major differences influenced by any one or more school organization level. Respective pairs of supervisor-teacher grand means for elementary, middle school, junior high, and high school were 3.60-3.22, 3.45-3.12, 3.68-3.31, and 3.62-3.09.

Individual differences in supervisor-teacher grand means by school organization were .38, .33, .37, and .53 respectively for the elementary, middle, junior high, and high school divisions. A comparison

of the differences in grand means showing the high school division to possess approximately a .2 greater difference was considered to be of moderate importance.

TABLE XX

EFFECT OF RESPONDENTS' SCHOOL ORGANIZATION UPON QUESTIONNAIRE ITEMS RELATING TO RESEARCH QUESTION 3

| Questionnaire Item | | Elementary | | Middle School | | Junior High School | | High School | |
|---|---|---|---|---|---|---|---|---|---|
| S | T | S | T | S | T | S | T | S | T |
| 2 | 2 | 3.76 | 3.58 | 4.0 | 3.62 | 4.00 | 3.69 | 3.89 | 3.45 |
| * | 5 | * | 3.50 | * | 3.43 | * | 3.37 | * | 3.29 |
| 10 | 11 | 3.75 | 3.15 | 4.0 | 3.14 | 3.50 | 3.18 | 3.88 | 3.08 |
| 14 | 16 | 3.71 | 3.45 | 3.67 | 3.43 | 3.75 | 3.18 | 3.56 | 3.37 |
| * | 20 | * | 2.87 | * | 2.79 | * | 2.76 | * | 2.42 |
| 21 | 24 | 3.35 | 3.04 | 3.00 | 3.15 | 3.25 | 2.88 | 3.33 | 2.83 |
| * | 26 | * | 3.12 | * | 3.26 | * | 3.06 | * | 2.79 |
| 28 | 32 | 3.71 | 3.11 | 3.67 | 3.05 | 3.75 | 3.53 | 3.78 | 2.96 |
| 35 | 39 | 3.38 | 3.08 | 2.33 | 3.26 | 3.75 | 3.23 | 3.33 | 2.92 |
| 38 | 42 | 3.57 | 3.13 | 3.50 | 3.15 | 3.75 | 3.47 | 3.57 | 3.02 |
| | $M_1$ | -- | 3.20 | -- | 3.13 | -- | 3.20 | -- | 3.02 |
| | $M_2$ | 3.60 | 3.22 | 3.45 | 3.12 | 3.68 | 3.31 | 3.62 | 3.09 |

Analysis According to Years in Current Position

The effect of years in current position upon the incongruence of supervisor and teacher grand means varied considerably from group to group. Differences for the four divisions were: for the one to three year division .4 (considered to be of major importance); for the four to seven year division .63 (considered to be of major importance); for the eight to twelve year division .33 (considered to be of moderate importance); and for the thirteen or more year division .14 (considered to be of negligible importance). The fact that all grand means were over 3.10 was noted when considering the disparity between grand means due to years in

current position. No noteworthy difference existed between comparative teacher grand means, but one noticeable moderate trend did exist between supervisor grand means. Those supervisors having been in their current position for less than eight years (divisions 1 and 2) had an average grand mean of 3.7. Those supervisors having been in their current position for eight years or more (divisions 3 and 4) had an average grand mean of 3.4. This difference of .3 between groups was considered to be of moderate importance. Data related to the preceding analyses are found in Table XXI.

TABLE XXI

EFFECT OF RESPONDENTS' YEARS IN CURRENT POSITION UPON QUESTIONNAIRE ITEMS RELATING TO RESEARCH QUESTION 3

| Questionnaire Item | | 1-3 Years | | 4-7 Years | | 8-12 Years | | 13 or More Years | |
|---|---|---|---|---|---|---|---|---|---|
| S | T | S | T | S | T | S | T | S | T |
| 2 | 2 | 3.86 | 3.64 | 3.90 | 3.52 | 3.83 | 3.50 | 3.33 | 3.46 |
| * | 5 | -- | 3.49 | -- | 3.32 | -- | 3.44 | -- | 3.42 |
| 10 | 11 | 3.69 | 3.09 | 3.80 | 3.11 | 3.75 | 3.13 | 3.50 | 3.23 |
| 14 | 16 | 3.71 | 3.47 | 3.80 | 3.32 | 3.67 | 3.39 | 3.33 | 3.34 |
| * | 20 | -- | 2.80 | -- | 3.68 | -- | 2.64 | -- | 2.58 |
| 21 | 24 | 3.50 | 3.06 | 3.10 | 2.88 | 3.17 | 2.93 | 3.50 | 2.95 |
| * | 26 | -- | 3.08 | -- | 2.97 | -- | 3.02 | -- | 2.97 |
| 28 | 32 | 3.88 | 3.19 | 3.00 | 2.97 | 3.50 | 3.05 | 3.33 | 3.12 |
| 35 | 39 | 3.43 | 3.16 | 3.70 | 2.91 | 3.17 | 3.13 | 2.67 | 2.93 |
| 38 | 42 | 3.57 | 3.18 | 3.90 | 3.46 | 3.13 | 3.33 | 2.98 | |
| | $M_1$ | -- | 3.22 | -- | 3.18 | -- | 3.14 | -- | 3.10 |
| | $M_2$ | 3.66 | 3.26 | 3.74 | 3.11 | 3.51 | 3.18 | 3.28 | 3.14 |

Analysis by School District

The next two tables provided summaries of mean and relative frequency percentage data recorded on Tables LVII-LXIII and LXXXV-XCI in

Appendix A. School districts on both tables have been displayed in a similar manner.

Respective supervisor and teacher average grand means for those respondents working in schools having used the process two years or less were 3.63 and 3.24 (Table XXII). These average grand means were just slightly higher (.05 and .03) than the other group (four years or more experience) which possessed supervisor/teacher average grand means of 3.58 and 3.21, respectively. These very small differences were considered to be negligible. Therefore, it was concluded that the number of years a school had used the supervisory process had little or no effect upon how that school's personnel responded to the questionnaire items relating to research question 3.

TABLE XXII

COMPARATIVE SUPERVISOR/TEACHER GRAND MEANS BASED UPON NUMBER OF YEARS THEIR RESPECTIVE SCHOOL DISTRICTS HAD USED THE SYNERGETIC SUPERVISION PROCESS (RESEARCH QUESTION 3)

| | | S | T |
|---|---|---|---|
| Two Years or Less | | | |
| District A, North Carolina | $M_2$ | 3.54 | 3.01 |
| District A, Kentucky | $M_2$ | 3.76 | 3.24 |
| District A, Georgia | $M_2$ | 3.59 | 3.46 |
| Average of grand means | | 3.63 | 3.24 |
| Four Years or More | | | |
| District A, Ohio | $M_2$ | No data | 3.19 |
| District B, Ohio | $M_2$ | 3.59 | 3.28 |
| District C, Ohio | $M_2$ | 3.79 | 3.37 |
| District A, New York | $M_2$ | 3.36 | 2.98 |
| Average of grand means | | 3.58 | 3.21 |

Table XXIII depicts a breakdown of respondent answer choices regarding the effect of the number of years using the synergetic supervision process upon responses to research question 3 items. The greatest difference between supervisor average grand means existed in the agree column where the two years or less group was 6.4 percent greater than the four years or more group. The greatest disparity of average grand means between teachers occurred in the disagree column with the four years or more districts making that choice 5.1 percent of the time (12.8-7.7) more than the districts having had two years or less experience with the process.

## VI. QUESTIONNAIRE ANALYSIS RESEARCH QUESTION 4

Research question 4 provided information needed to identify the instructional and supervisory implications of the synergetic supervision process. There were twelve corresponding items in this cluster. Six of the items pertained more to instructional implications than to supervisory implications. The opposite was true of the remaining six items. Where it was felt appropriate and/or necessary, the cluster was broken down according to these subpopulations.

### Mean Analysis

Supervisor and teacher grand means for the entire cluster were 3.25 and 2.89 respectively. The difference of .36 between grand means was considered to be moderately important. Subgrand means were tabulated according to instruction and supervisory item subgroup and it was found that in both cases the supervisory implication subgroup grand

TABLE XXIII

COMPARATIVE SUPERVISOR/TEACHER RELATIVE FREQUENCY PERCENTAGES BASED UPON NUMBER OF YEARS THEIR RESPECTIVE SCHOOL DISTRICTS HAD USED THE SYNERGETIC SUPERVISION PROCESS (RESEARCH QUESTION 3)

| Years in Process | | Strongly Agree S | Strongly Agree T | Agree S | Agree T | Disagree S | Disagree T | Strongly Disagree S | Strongly Disagree T | No Response Or Not Pertinent S | No Response Or Not Pertinent T |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Two Years or Less | | | | | | | | | | | |
| District A, North Carolina | $M_2$ | 50.7 | 28.0 | 46.4 | 47.4 | 0.0 | 12.6 | 0.0 | 6.9 | 0.0 | 5.1 |
| District A, Kentucky | $M_2$ | 76.2 | 32.9 | 23.8 | 59.1 | 0.0 | 6.2 | 0.0 | 1.3 | 0.0 | 0.5 |
| District A, Georgia | $M_2$ | 60.0 | 50.4 | 40.0 | 45.4 | 0.0 | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| Average of Grand Means | | 62.3 | 37.1 | 36.7 | 50.6 | 0.0 | 7.7 | 0.0 | 2.7 | 0.0 | 1.9 |
| Four Years or More | | | | | | | | | | | |
| District A, Ohio | $M_2$ | No data | 30.7 | No data | 69.6 | No data | 9.6 | No data | 2.5 | No data | 0.7 |
| District B, Ohio | $M_2$ | 60.1 | 36.5 | 33.7 | 46.8 | 3.1 | 8.8 | 0.0 | 3.4 | 1.0 | 3.2 |
| District C, Ohio | $M_2$ | 78.6 | 38.5 | 21.4 | 50.0 | 0.0 | 12.2 | 0.0 | 2.1 | 0.0 | 4.1 |
| District A, New York | $M_2$ | 50.0 | 25.6 | 35.7 | 46.0 | 0.0 | 20.6 | 7.1 | 4.6 | 7.1 | 2.9 |
| Average of Grand Means | | 62.9 | 32.8 | 30.3 | 53.1 | 1.0 | 12.8 | 2.4 | 3.2 | 2.7 | 2.7 |

mean was slightly higher (approximately .1). The effect of these subgroups upon the total cluster grand means was considered negligible.

Discussion of items emphasizing instructional implications. Only one of the six items in this subgroup exhibited an overall major effect upon the grand means for the cluster, and that was item S18/T21. All of the other items (S4/T4, S7/T8, S15/T17, S23/T27, and S32/T36) had both supervisor and teacher respondent means which were relatively similar to the grand means for the entire cluster. Item S18/T21, stating that the present supervisory process had led to increased levels of student participation in class discussions, had respective supervisor and teacher means of 2.92 and 2.48.

Discussion of items emphasizing supervisory implications. Only one item, S36/T40, in this subgroup exhibited any overall major effect upon the grand means of the cluster. Item S36/T40, stating that participation in the present supervisory process had helped respondents to analyze their own leadership behavior, had respective supervisor and teacher means of 3.53 and 3.22. In both cases differences between supervisor and teacher item means and supervisor and teacher grand means were just below .3. This difference was considered to be of minor importance (see Table XXIV).

## Analysis by Relative Frequency Percentages

A complete description of all relative frequency percentage data pertinent to the fourth research question is depicted in Table XXV.

The greatest differences between supervisor and teacher in relative frequency percentages grand means were found in column 1

TABLE XXIV

COMPARATIVE ITEMS WITH RESPECTIVE MEANS
(RESEARCH QUESTION 4)

| Supervisors | | Teachers | |
|---|---|---|---|
| Question | Mean | Mean | Question |
| 4 | 3.23 | 2.88 | 4 |
| 7 | 3.45 | 2.95 | 8 |
| 11 | 3.28 | 2.68 | 12 |
| 15 | 3.30 | 2.97 | 17 |
| 18 | 2.92 | 2.48 | 21 |
| 20 | 3.23 | 3.03 | 23 |
| 23 | 3.15 | 2.93 | 27 |
| 24 | 3.08 | 2.89 | 28 |
| 30 | 3.30 | 2.83 | 34 |
| 32 | 3.08 | 2.89 | 36 |
| 33 | 3.40 | 2.89 | 37 |
| 36 | 3.53 | 3.22 | 40 |
| $M_2$ | 3.25 | 2.89 | |

TABLE XXV

COMPARATIVE ITEMS WITH RESPECTIVE RELATIVE FREQUENCY
PERCENTAGES (RESEARCH QUESTION 4)

| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present Or Not Usable | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| S | T | S | T | S | T | S | T | S | T | S | T |
| 4 | 4 | 30.0 | 15.8 | 60.0 | 58.3 | 7.5 | 20.1 | 0.0 | 4.0 | 2.5 | 1.8 |
| 7 | 8 | 50.0 | 20.9 | 45.0 | 52.9 | 5.0 | 20.5 | 0.0 | 2.5 | 0.5 | 3.2 |
| 11 | 12 | 37.5 | 9.0 | 52.5 | 52.9 | 5.0 | 28.4 | 2.5 | 5.4 | 2.5 | 4.3 |
| 15 | 17 | 35.0 | 20.1 | 60.0 | 55.4 | 5.0 | 19.8 | 0.0 | 1.4 | 0.0 | 3.2 |
| 18 | 21 | 7.5 | 9.0 | 72.5 | 34.2 | 15.0 | 46.6 | 0.0 | 6.1 | 5.0 | 4.3 |
| 20 | 23 | 42.5 | 21.2 | 37.5 | 50.7 | 15.0 | 17.3 | 2.5 | 0.7 | 2.5 | 10.1 |
| 23 | 27 | 15.0 | 13.3 | 82.5 | 64.0 | 0.0 | 19.1 | 0.0 | 0.4 | 2.5 | 3.2 |
| 24 | 28 | 20.0 | 15.1 | 70.0 | 57.9 | 7.5 | 21.9 | 2.5 | 2.2 | 0.0 | 2.9 |
| 30 | 34 | 35.0 | 18.3 | 60.0 | 48.2 | 5.0 | 25.2 | 0.0 | 4.7 | 0.0 | 3.6 |
| 32 | 36 | 17.5 | 14.4 | 72.5 | 60.1 | 10.0 | 21.2 | 0.0 | 2.2 | 0.0 | 2.2 |
| 33 | 37 | 45.0 | 15.8 | 50.0 | 54.0 | 5.0 | 14.7 | 0.0 | 7.2 | 0.0 | 8.3 |
| 36 | 40 | 52.5 | 30.9 | 47.5 | 59.7 | 0.0 | 5.0 | 0.0 | 2.2 | 0.0 | 2.2 |
| | $M_2$ | 32.2 | 16.9 | 59.2 | 54.0 | 6.7 | 21.6 | 0.6 | 3.3 | 1.3 | 4.1 |

(strongly agree) and in column 3 (disagree). In both cases the discrepancies were approximately 15 percent. Two individual items, S11/T12 and S30/T34, contributed greatly to both disparities in grand means. Both items pertained to supervisor implications. Item S11/T12, stating that instructional needs identified through the supervision process were considered in staff development activities, produced a 28.5 percent discrepancy (37.5-9.0) between supervisors and teachers in the strongly agree column. The same item produced a 23.4 percent discrepancy (5.0-28.4) of the reverse nature in the disagree column.

Item S30/T34, stating that the present supervisory process had helped to improve communication between teachers and administrators, produced a 16.7 percent difference (35.0-18.3) between supervisors and teachers in the strongly agree column. The same item produced a 20.2 difference in percentage (5.0-25.2) of the reverse nature in the disagree column.

No item's relative frequency percentage figure for either supervisors or teachers was greater than 7.2 in the strongly disagree column. Two column 1 (strongly agree) items, S7/T8 and S33/T37, had respective supervisor-teacher differences of 50.9-20.9 and 45.0-15.8. Both of these differences were considered noteworthy. Item S7/T8 had to do with the benefits of discussing the intended instructional transaction during the preobservation conference. Item S33/T37 asked the respondents if administrators had become more aware of instructional needs and processes through their involvement in supervisory activities. It was noted, however, that these figures were only for column 1 (strongly agree) and not representative of all positively related answers.

## Open-Ended Question Analysis

Analysis here was divided in two parts because two open-ended items tied in directly to each of the subquestions (instructional implications and supervisory implications) of research question 4. Open-ended items 1 and 2 were directly related to instructional implications, whereas items 3 and 4 were directly related to supervisory implications.

### Analysis of Instructional Implications—Item 1 Open-Ended Items

Table XCIX in Appendix C lists all respondent statements to open-ended item 1. Twenty-seven of the thirty-eight transcribed answers listed specific positive instructional implications. Transcribed statements 1, 2, 3, 4, 5, 7, 8, 9A, 9B, 9C, 10, 12, 13, 14, 15, 16, 18A, 18B, 18C, 18D, 18E, 19, 25, 27, 29, and 30 make up the twenty-seven specific answers. The ten statements with the highest respondent tallies are listed in Table XXVI.

### Analysis of Instructional Implications—Item 2 Open-Ended Items

Table C in Appendix C lists all respondent statements to open-ended item 2. Thirty of the thirty-nine transcribed answers listed specific positive instructional implications. Transcribed statements 1, 2A, 2B, 2C, 3A, 3B, 5A, 5B, 5C, 6, 7, 8A, 8B, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 28, and 29 comprised the thirty positive answers. The ten positive statements which occurred the greatest number of times are listed in Table XXVII.

TABLE XXVI

SUMMARY OF OPEN-ENDED ITEM 1 RESPONSES

| Tally | Statement Number | Positive Statements |
|---|---|---|
| (38) * | 18A | Improved instructional program* |
| (14) | 4 | Helped identify and improve areas of weakness in instructional program |
| (13) | 16 | Increased teacher awareness of all facets of instructional program |
| (10) | 9A | Improved explanations (guides, mean, etc.) for implementing curriculum |
| (8) | 8 | Improved overall teaching methods |
| (8) | 2 | Greater variety of instructional activities geared to student needs |
| (7) | 1 | Improved ability to state and examine objectives |
| (7) | 15 | Improved scheduling of future activities |
| (5) | 7 | Positive modification of curriculum |
| (4) | 3 | Improved classroom atmosphere |

*Indicates that statement is less specific than others.

TABLE XXVII

SUMMARY OF OPEN-ENDED ITEM 2 RESPONSES

| Tally | Statement Number | Positive Statements |
|---|---|---|
| (37)* | 5A | The quality and quantity of interaction has improved |
| (24) | 8A | Teachers now think more about student/ teacher interaction and its role in developing a positive atmosphere |
| (21) | 11 | The process accurately describes student/ teacher interaction patterns (both positive and negative) |
| (13) | 6 | The classroom map (flow charts) was responsible for more students being involved in positive interactions each day |
| (10) | 2C | Helps teacher focus on needs of particular children |
| (9) | 14 | More effective questions are being asked, i.e., more response time |
| (7)* | 1 | Made me aware of the student/teacher interaction was better than I had anticipated |
| (3) | 2A | Those who had previously fallen behind were identified and much of the problem eliminated |
| (3) | 3A | Behavior problems were cut considerably |
| (3) | 9 | Helps to balance out student participation—in a constructive way |

*Indicates that statement is less specific than others.

Analysis of Supervisory Implications—
Item 3 Open-Ended Questions

Open-ended item number 3 collected data regarding teacher/administrator interaction patterns. Table CI in Appendix C lists all respondent statements to item 3 as well as the number of times each response occurred.

Since teacher/administrator (supervisor) interactions constitute a very important part of any supervision process it was reasoned that these data would provide many useful supervisory implications.

Sixteen of the twenty-six transcribed statements listed specific positive supervisory implications resulting from the synergetic supervision process. Transcribed statements 2, 3, 4, 7, 8, 10A, 10B, 11, 12, 13, 14B, 15, 16, 19, 21, and 22 comprised these positive responses. The eight positive statements which occurred the greatest number of times are listed in Table XXVIII.

Seven of the transcribed statements, numbers 1A, 5A, 5B, 14A, 17, 18, and 20, described supervisory implications which were either neutral or negative. The only one of these statements made more than twice was statement number 1A. In statement 1A fifteen respondents had described the new supervisory process as having little or no effect upon supervision in their respective schools.

Analysis of Supervisory Implications—
Item 4 Open-Ended Questions

Information gathered by item 4 of the open-ended questions pertained to the influence the synergetic supervision process had upon

TABLE XXVIII

SUMMARY OF POSITIVE OPEN-ENDED ITEM 3 RESPONSES

| Tally | Statement Number | Positive Statements |
|---|---|---|
| (54)* | 10A | Area of major positive improvement—open- and professional |
| (25) | 7 | Helps open communications due to more continuous interaction |
| (13) | 3 | The new process fosters an entirely new kind of interaction pattern—it allows both teachers and supervisors to discuss methods and materials. |
| (10) | 4 | I had a good feeling about being observed in a noncritical way |
| (9) | 10B | Postobservation conferences have been very productive because of objective exchange of ideas |
| (8) | 8 | Teachers are beginning to view supervisors as a help, and any previous threat is being reduced |
| (4) | 12 | Specific accounts make it easier to pin-oint point problem areas. |
| (4) | 19 | The process makes me a better supervisor—teacher/supervisor interactions included |

*Indicates that statement is less specific than others.

staff development. Since part of research question 4 was aimed at identifying any supervisory implications it was thought that the analysis of this data would be appropriate. The improvement of the staff development program is an intended product of the synergetic supervision process.

Thirteen of the twenty transcribed statements listed specific positive supervisory outcomes relating to staff development. Transcribed statements 1, 3A, 3B, 3C, 3D, 5A, 5B, 8, 9, 11, 12, 13, and 14

all were considered supportive. The four positive statements which occurred the most times are listed on Table XXIX.

TABLE XXIX

SUMMARY OF POSITIVE OPEN-ENDED ITEM 4 RESPONSES

| Tally | Statement Number | |
|---|---|---|
| (57) | 3A | Inservice and staff development has improved. Note: many statements went on to say ... from weaknesses identified by the instructional supervision process. |
| (12) | 3C | Specific needs have been identified by the supervision process. |
| (2) | 5A | Faculty now have a greater opportunity in materials and curriculum development. |
| (7) | 8 | More work is needed in this area (staff development based upon needs identified in the observations). |

Note: The dashed divisional line was used to indicate that statement 4 was indirectly positive.

Three of the transcribed statements, numbers 2A, 2B, and 2C, were considered either neutral or negative. The only one of these items occurring more than once was statement 2A which appeared thirty-nine times. Item 2A stated that no appreciable change had occurred in staff development as a result of the synergetic supervision process.

Analysis by School Organization

A summary of data depicting the effects of school organization upon the cluster of items relating to major question 4 is located in Table XXX. In three of the four divisions (elementary, junior high, and high school) supervisor grand means were moderately higher (approximately

.35) than teacher grand means. This trend was similar to that found in the entire cluster. However, in the middle school division the teacher grand mean was slightly higher than the supervisor grand mean.

TABLE XXX

EFFECT OF RESPONDENTS' SCHOOL ORGANIZATION UPON QUESTIONNAIRE ITEMS RELATING TO RESEARCH QUESTION 4

| Questionnaire Item | | Elementary | | Middle School | | Junior High School | | High School | |
|---|---|---|---|---|---|---|---|---|---|
| S | T | S | T | S | T | S | T | S | T |
| 4 | 4 | 3.38 | 2.95 | 3.00 | 3.11 | 3.25 | 2.88 | 3.00 | 2.70 |
| 7 | 8 | 3.57 | 3.01 | 2.67 | 2.84 | 3.50 | 2.93 | 3.44 | 2.87 |
| 11 | 12 | 3.35 | 2.78 | 3.33 | 2.79 | 3.00 | 2.76 | 3.11 | 2.49 |
| 15 | 17 | 3.48 | 2.99 | 3.33 | 3.09 | 2.75 | 2.76 | 3.11 | 2.95 |
| 18 | 21 | 3.00 | 2.59 | 2.67 | 2.45 | 3.00 | 2.41 | 2.78 | 2.35 |
| 20 | 23 | 3.30 | 3.06 | 3.67 | 3.45 | 3.25 | 3.06 | 3.22 | 2.87 |
| 23 | 27 | 3.25 | 2.98 | 3.00 | 2.80 | 3.25 | 3.06 | 3.00 | 2.85 |
| 24 | 28 | 3.24 | 2.97 | 2.67 | 3.00 | 3.00 | 3.00 | 2.89 | 2.68 |
| 30 | 34 | 3.48 | 2.88 | 2.67 | 3.10 | 3.75 | 3.00 | 3.00 | 2.65 |
| 32 | 36 | 3.14 | 3.00 | 2.67 | 2.71 | 3.25 | 2.71 | 3.00 | 2.78 |
| 33 | 37 | 3.62 | 2.98 | 3.00 | 3.14 | 3.25 | 3.06 | 3.22 | 2.56 |
| 36 | 40 | 3.57 | 3.20 | 3.00 | 3.38 | 3.50 | 3.41 | 3.56 | 3.18 |
| | $M_2$ | 3.37 | 2.94 | 2.97 | 2.99 | 3.23 | 2.92 | 3.11 | 2.74 |

Analysis by Number of Years in Current Position

Table XXXI depicts the data collected describing the effect of years in current position upon instructional and supervisory implications. Supervisor/teacher paired grand means for division 1, 2, and 3 were similar. The respective paired grand means for these columns were: one to three years 3.24/2.93; four to seven years 3.42/2.88; and eight to twelve years 3.25/2.86. The supervisor/teacher grand means for division 4 (thirteen or more years) were 2.75/2.85, respectively. A difference of approximately .5 existed between the supervisory grand means for those respondents with thirteen or more years in their

current position and the other three divisions. This difference was considered to be of major importance.

TABLE XXXI

EFFECT OF RESPONDENTS' YEARS IN CURRENT POSITION UPON QUESTIONNAIRE ITEMS RELATING TO RESEARCH QUESTION 4

| Questionnaire Item | | 1-3 Years | | 4-7 Years | | 8-12 Years | | 13 or More Years | |
|---|---|---|---|---|---|---|---|---|---|
| S | T | S | T | S | T | S | T | S | T |
| 4 | 4 | 3.15 | 2.93 | 3.20 | 2.86 | 3.42 | 2.86 | 2.61 | 2.81 |
| 7 | 8 | 3.57 | 3.00 | 3.60 | 2.94 | 3.33 | 2.95 | 2.67 | 2.88 |
| 11 | 12 | 3.29 | 2.72 | 3.40 | 2.70 | 2.64 | 2.56 | 2.33 | 2.72 |
| 15 | 17 | 3.21 | 3.01 | 3.40 | 2.94 | 3.42 | 3.02 | 2.67 | 2.92 |
| 18 | 21 | 3.00 | 2.56 | 2.90 | 2.37 | 2.91 | 2.44 | 2.67 | 2.55 |
| 20 | 23 | 3.07 | 2.99 | 3.80 | 3.16 | 3.17 | 3.00 | 2.33 | 2.97 |
| 23 | 27 | 3.36 | 3.00 | 3.00 | 2.91 | 3.08 | 2.91 | 3.00 | 2.85 |
| 24 | 28 | 3.07 | 2.98 | 3.30 | 2.86 | 3.00 | 2.79 | 2.67 | 2.83 |
| 30 | 34 | 3.14 | 2.87 | 3.70 | 2.91 | 3.25 | 2.83 | 3.00 | 2.64 |
| 32 | 36 | 3.00 | 2.97 | 3.20 | 2.77 | 3.17 | 2.96 | 2.67 | 2.85 |
| 33 | 37 | 3.43 | 2.89 | 3.60 | 2.94 | 3.33 | 2.74 | 3.00 | 2.87 |
| 36 | 40 | 3.57 | 3.23 | 3.90 | 3.18 | 3.25 | 3.26 | 3.33 | 3.20 |
| | $M_1$ | 3.24 | 2.93 | 3.42 | 2.88 | 3.25 | 2.86 | 2.75 | 2.84 |

The data were examined to determine any existing differences between groups of subclusters (instructional implications/supervisory implications). All differences identified were considered to be negligible in size.

Analysis by School District

The next two tables provide summaries of mean and relative frequency percentage data recorded in Tables LXIV-LXX and XCII-XCVIII in Appendix A. School districts have been located in a similar manner in both tables.

The comparative average grand means between divisions for su supervisors were 3.40 (two years of less) and 3.11 (four years or more) (Table XXXII). This difference of .29 was considered to be of moderate importance. It was also noted that one school district, District A in New York state, with its 2.83 average mean was the only district below 3.00.

Comparative teacher average grand means for the same set of items were 2.97 (two years or less) and 2.90 (four years or more). This difference of .07 was considered to be negligible in nature. After having considered the above data analysis as well as the remaining data found on Table II, page 49, the following was determined. Only differences of a minor nature were identified among average grand means for items relating to research question 4 when comparing the effect of duration of use.

TABLE XXXII

COMPARATIVE SUPERVISOR/TEACHER GRAND MEANS BASED UPON NUMBER OF YEARS THEIR RESPECTIVE SCHOOL DISTRICTS HAD USED THE SYNERGETIC SUPERVISION PROCESS (RESEARCH QUESTION 4)

| | | S | T |
|---|---|---|---|
| Two Years or Less | | | |
| District A, North Carolina | $M_2$ | 3.48 | 2.74 |
| District A, Kentucky | $M_2$ | 3.49 | 3.04 |
| District A, Georgia | $M_2$ | 3.24 | 3.16 |
| Average of grand means | | 3.40 | 2.97 |
| Four Years or More | | | |
| District A, Ohio | $M_2$ | 0.0 | 2.78 |
| District B, Ohio | $M_2$ | 3.17 | 2.85 |
| District C, Ohio | $M_2$ | 3.33 | 3.08 |
| District A, New York | $M_2$ | 2.83 | 2.77 |
| Average of grand means | | 3.11 | 2.90 |

Table XXXIII depicts a breakdown of respondent answer choices regarding the effect of the number of years using the synergetic supervision process upon responses to research question 4 items.

An analysis of supervisor average grand means for the groups formed on the basis of time using the process yielded the following results. Supervisors from the two years or less group answered strongly agree 12.7 percent more of the time than those having used the process four or more years. On the other hand, those having used the process four or more years chose the disagree response 8 percent more than those having used the process two years or less.

Differences in teacher average grand means were not quite as great as for supervisors. In the case of teachers the major relationship between differences existed between agree and disagree responses. Teachers from the two years or less division chose the agree response 8.7 percent more times than those in the four years or more group. The majority of this difference was offset in the disagree column where teachers in the four years or more division chose the disagree response 6.3 percent more times than those in the two years or less group.

## VII. INTERVIEW ANALYSIS

### Introduction

The interview data consisted of the responses to ten interview items by the ten supervisors interviewed. Each of the ten interview items was designed to gather information related to one of the research questions. Interview items 1 and 2 were related to research question 1. Items 3 and 4 were related to research question 2. Item 9

TABLE XXXIII

COMPARATIVE SUPERVISOR/TEACHER RELATIVE FREQUENCY PERCENTAGES BASED UPON NUMBER OF YEARS THEIR RESPECTIVE SCHOOL DISTRICTS HAD USED THE SYNERGETIC SUPERVISION PROCESS (RESEARCH QUESTION 4)

| Years in Process | | Strongly Agree S | Strongly Agree T | Agree S | Agree T | Disagree S | Disagree T | Strongly Disagree S | Strongly Disagree T | No Response Or Not Pertinent S | No Response Or Not Pertinent T |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Two Years or Less | | | | | | | | | | | |
| District A, North Carolina | $M_2$ | 45.8 | 12.7 | 50.0 | 50.7 | 0.0 | 21.0 | 0.0 | 7.0 | 4.2 | 7.3 |
| District A, Kentucky | $M_2$ | 51.4 | 18.1 | 44.5 | 66.0 | 2.8 | 14.7 | 0.0 | 0.83 | 1.4 | 3.3 |
| District A, Georgia | $M_2$ | 30.0 | 26.8 | 64.2 | 60.3 | 4.2 | 10.6 | 0.0 | 1.0 | 0.8 | 1.5 |
| Average of Grand Means | | 42.4 | 19.2 | 52.9 | 59.0 | 2.3 | 15.4 | 0.0 | 3.0 | 2.1 | 4.0 |
| Four Years or More | | | | | | | | | | | |
| District A, Ohio | $M_2$ | No data | 12.2 | 0.0 | 53.1 | 0.0 | 27.3 | 0.0 | 2.9 | 0.0 | 3.1 |
| District B, Ohio | $M_2$ | 35.1 | 21.7 | 54.2 | 51.3 | 10.1 | 21.0 | 0.0 | 3.9 | 0.6 | 1.8 |
| District C, Ohio | $M_2$ | 41.6 | 29.4 | 58.3 | 48.8 | 0.0 | 10.3 | 0.0 | 2.0 | 0.0 | 9.5 |
| District A, New York | $M_2$ | 12.5 | 15.7 | 62.5 | 47.8 | 20.9 | 28.7 | 4.2 | 4.4 | 0.0 | 3.4 |
| Average of Grand Means | | 29.7 | 21.1 | 58.3 | 50.3 | 10.3 | 21.8 | 1.4 | 3.3 | 0.2 | 4.5 |

was related to research question 3. Items 5, 6, 7, and 8 were related to research question number 4. A complete list of the interview items can be found in Table CIV, Appendix D.

Interview Analysis—Research Question 1

Interview item 1. Interview item 1 asked the respondents if they felt that increased levels of mutual trust had been achieved in teacher/supervisor relationships as a result of the synergetic supervision process. This item tied in directly to assumption three of the synergetic supervision process.

Seven of ten respondents stated that mutual trust had definitely been improved as a result of the synergetic supervision process. Two respondents stated that mutual trust had been improved in some cases. One respondent stated that mutual trust was already at a high level when the process was initiated.

Interview item 2. Interview item 2 asked respondents to comment on the extent to which participants demonstrated acceptance of the underlying assumptions related to the improvement of instruction. Five of the ten interviewees felt that participants demonstrated a high acceptance of these assumptions. Two felt there was a moderate degree of acceptance in their school districts. Three respondents voiced neutral comments.

Interview Analysis—Research Question 2

Interview item 3. Item 3 asked respondents how effectively they thought each element of the process (preobservation, observation,

postobservation) was being conducted in their respective schools. Table XXXIV provides a summary of interviewee statements broken down into the three areas to which they were asked to respond.

TABLE XXXIV

SUMMARY OF INTERVIEW ITEM 3 RESPONSES DIVIDED INTO THREE SUPERVISORY STEPS

| Number of Responses | Part of Process Referred to | Summary of Comments | Nature of Comment |
|---|---|---|---|
| (7) | Preobservation | Going good to very good | Positive |
| (1) | Preobservation | No specific comment | Neutral |
| (2) | Preobservation | Indicated some difficulty | Not positive |
| (6) | Observation | Good to very good | Positive |
| (2) | Observation | No specific comment | Neutral |
| (2) | Observation | Indicated some difficulty | Not positive |
| (2) | Postobservation | Good to very good | Positive |
| (3) | Postobservation | No specific comment | Neutral |
| (5) | Postobservation | Weakest area | Not positive |

From these data it was determined that both the preobservation and observation phases of the process were being conducted better than the postobservation portion of the process.

Table XXXV provides a list of specific respondent comments, ranked according to the number of times each comment was made by different interviewees.

Interview item 4. Item 4 asked the respondents what steps they had taken or would recommend taking to strengthen the process or improve its implementation. The interviewees provided a total of nineteen different statements to this question. Table XXXVI lists four pertinent statements which were made by more than one respondent.

TABLE XXXV

INTERVIEW ITEM 3 RESPONSES LISTED ACCORDING TO FREQUENCY OF RESPONSE

| Frequency of Responses | Specific Comments |
|---|---|
| (6) | The preobservation sessions are going good to very good. |
| (5) | The observation portion of the process is going good to very good. |
| (5) | The weakest area is postobservation; it is difficult to objectively review data. |
| (3) | Overall the process is fairly well conducted in our school. |
| (3) | There is plenty of room for me (supervisor) to improve. |
| (1) | Success of process depends upon supervisor. |
| (1) | Success of process depends upon in-service. |
| (1) | The process works well if done in its entirety. |
| (1) | The postobservations have gone well. |

TABLE XXXVI

INTERVIEW ITEM 4 RESPONSES LISTED ACCORDING TO FREQUENCY OF RESPONSE

| Frequency of Responses | Response |
|---|---|
| (5) | Recommended ongoing staff development to insure continued success. |
| (3) | When initiating the process, identify key people and begin with them. |
| (2) | Follow the recommended timetable for preobservation, observation, and postobservation. |

Of those interviewed, no one felt that the overall process had need for anything other than minor adaptations. The major recommendation was for improving staff development.

Interview Analysis—Research Question 3

Because only supervisors were interviewed finding depicting differences in supervisor/teacher perceptions and understanding could not be drawn from these data alone. However, conclusions were drawn later by comparing this information with related questionnaire data.

Interview item 9. Interview item 9 asked respondents to describe the advice or suggestions they might give to a colleague preparing to implement the supervision/observation process. Table CXIII in Appendix D provides a complete list of responses made by the ten interviewees.

Table XXXVII lists seven statements which were made by more than one respondent.

TABLE XXXVII

INTERVIEW ITEM 9 RESPONSES OCCURRING MORE THAN ONCE

| Frequency of Responses | |
|---|---|
| (7) | Go into it slowly, using a limited number of people you feel comfortable with. |
| (4) | It is important that teachers receive a positive thorough introduction to the process. |
| (3) | Develop a plan, and involve people in this development who will be affected by that plan. |
| (3) | Be honest with teachers when first beginning, tell them you are new to the process and you will make progress together. |
| (2) | Demonstrate genuine commitment to the process (not just lip service). |
| (2) | Read the book describing synergetic supervision, and continue to read. |

It was determined from the analysis of all the interviewee (supervisor) comments that as a group their understanding of the process was very good. It was also determined that as a group they perceived the process to be very positive and worthwhile.

## Interview Analysis—Research Question 4

As stated in the introduction, interview data pertaining to research question 4 was broken down into instructional and supervisory implications. Interview items 5 and 6 related to instructional implications. Interview items 7 and 8 related to supervisory implications.

## Instructional Implications

Interview item 5. Interview item 5 asked respondents to describe the areas of instruction they felt had improved most as a result of the synergetic supervision process. Respondents were also asked to specifically describe some of the instructional patterns which had been improved. In addition, they were asked to describe the major steps taken to make these improvements. Table XXXVIII summarizes the information gathered for interview item 5.

A total of fifteen different types of instructional improvement were identified by the respondents. Improvements in classroom management were mentioned most often (five times). Table CIX in Appendix D provides a complete list of interview item 5 responses.

Data gathered in interview item 5 indicated that there were many positive instructional improvements (implications) in the school

TABLE XXXVIII

SUMMARY OF DATA COLLECTED BY INTERVIEW ITEM 5

| Nature of Comment | Frequency of Response | Areas of Improvement with Greatest Frequencies | Means of Pattern Identification |
|---|---|---|---|
| Direct | (5) | Classroom management | Classroom observations |
| | (3) | Planning for instruction | Process as a whole |
| | (2) | Classroom questioning | Staff development, whole process |
| | (2) | No one specific area—improvements in many areas | Process as a whole |
| Indirect | (5) | Teacher instructional awareness | Classroom observations |
| | (2) | Organization of curriculum | Process as a whole |

districts of all those interviewed. It was felt that responses were generally lacking in depth as regards the steps taken to make improvements. However, each entire interview was only alloted thirty minutes maximum time to complete.

Interview item 6. Interview item 6 asked interviewees to describe the extent to which they felt that participation in the process had encouraged teachers to plan and organize instruction more effectively. Table XXXIX provides a summary of the interview responses.

All those interviewed felt that the synergetic supervision process did cause teachers to improve their planning for instruction. Ninety percent of those interviewed described positive changes in instructional planning which were considered of high magnitude.

TABLE XXXIX

SUMMARY OF DATA COLLECTED BY INTERVIEW ITEM 6

| Frequency of Response | Response |
|---|---|
| (9) | Planning and organizing for instruction was improved to a great extent for most teachers involved in the process. |
| (2) | To a great extent, at least for observation cycle. |
| (1) | At least 30 or 40 percent conscientiously improved. |
| (1) | Once teachers became aware of instructional elements, it's hard for them not to be positively affected. |

## Supervisory Implications

Interview item 7. Interview item 7 asked respondents to describe ways in which they felt that participation in the supervision/observation process had influenced or affected their leadership role and performance. All interviewees felt the synergetic supervision process had positively influenced both their leadership role and their performance. Over half of the respondents indicated that the process had greatly improved their expertise in helping teachers improve instruction. They went on to state that this increase in their supervisory abilities caused teachers to view them more as instructional leaders, and they had therefore become more comfortable as a result of their changed role. Table XL lists the four specific items which were repeated by more than one interviewee. Table CXI in Appendix D provides a complete summary of statements for interview item 7.

TABLE XL

INTERVIEW ITEM 7 RESPONSES OCCURRING MORE THAN ONCE

| Frequency of Response | Response |
|---|---|
| (7) | This process has legitimized all supervisory positions (given them expertise); therefore, supervisors have high self-esteem. |
| (6) | I'm now more of an instructional leader, and my teachers desired this change. |
| (4) | I feel more comfortable (more confident because I'm more capable to do my job). |
| (2) | The process made me more aware of what was going on; it gave me a handle to supervision. |

Interview item 8. Interview item 8 asked the interviewees to describe the effects the synergetic supervision process had had on the nature and perceived role of the staff development programs in their districts. Analysis of interview item 8 responses yielded the following results. In schools where the process had been in effect for a number of years and where it had been supported from the top (board, superintendent, principal) there had been significant changes in both the perceived role and the actual nature of staff development. The majority of teachers and supervisors felt much better about staff development following these changes. They now see it as being tied directly to instructional needs and no longer simply being a random choice of educational items.

Those supervisors who had recently initiated the synergetic process saw a need to alter staff development in their schools. They felt that in the future this alteration would take place in their schools.

Table CXII in Appendix D provides a complete summary of responses to interview item 8. Table XLI lists those responses repeated by more than one interviewee.

TABLE XLI

INTERVIEW ITEM 8 RESPONSES OCCURRING MORE THAN ONCE

| Frequency of Response | Response |
|---|---|
| (3)* | The new process has made teachers more aware of their needs and therefore what they feel staff development should be doing. |
| (3)* | It has had tremendous positive implications. Its open-ended, can go on forever. |
| (3)** | We did do some limited in-service based upon collected data. |
| (3)** | We haven't done as much as we should have. |
| (2)** | It is beginning to supply a better data base from which to plan staff development activities. |

*Statements reflecting changes in the perceived role of staff development.

**Statements reflecting changes in the nature of staff development.

It was determined from the analysis of interview item 8 that the synergetic supervision process had had a moderately important overall effect upon staff development in those instances where the process had been in effect for three or more years. It was also determined that the interviewees in those schools where the process was relatively new had already made tentative plans to modify staff development in the future.

# VIII. SUMMARY

Questionnaire and interview data collected to answer the four research questions were analyzed and presented in this chapter. The questionnaire data were analyzed by individual research questions. Each cluster of research questions was examined by mean analysis and relative frequency percent in addition to being compared to the related open-ended item responses. Each cluster of questions was also analyzed to determine the nature of school organization, years in current position, and respective school district influences upon respondents.

Interview data were analyzed by individual research question. Each research question was analyzed according to those interview items relating to it.

Chapter V summarizes the data, presents findings, draws conclusions, and makes recommendations.

# CHAPTER V

## SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

## I. SUMMARY

### Introduction

The purpose of this descriptive research was to determine how the synergetic supervisory process was being operationalized in several schools and districts. Data concerning the perceptions of supervisors and teachers from five states were collected and analyzed. The majority of the data was collected via questionnaires. Additional data were collected through interviews.

### Questions

The following research questions directed the study:

1. Determine the extent to which the assumptions underlying the synergetic process are being acted upon.
2. Determine how effectively the procedures of the synergetic supervision process are being implemented.
3. Determine the nature of any differences in perceptions and understandings of teachers and supervisors regarding the synergetic process.
4. Identify the instructional and supervisory implications of the synergetic supervisory process.

Chapter II, the review of related literature, revealed that very little research of this type has been done. Several studies present

opinions concerning supervision, but no follow-up or status studies similar to this research were identified.

Chapter III, which presented the methodology and procedures of the study, provided a rationale for descriptive research as well as an in-depth explanation of how the descriptive research tools were developed and used in this study.

In Chapter IV data were described and analyzed according to the research questions to which they pertained. In this chapter the findings and conclusions are presented according to a similar format.

## II. FINDINGS

Due to the nature of this study the findings and related specific conclusions have been incorporated into this section. Section III (CONCLUSIONS) summarizes and highlights those conclusions considered to be of major importance.

The discussion of findings has been organized to correspond to the four major research questions. For each question a similar format has been used in discussing the findings and conclusions.

### Question 1

Questionnaire items pertaining to research question 1 were designed to determine the extent to which the assumptions underlying the synergetic process were being acted upon. Respective supervisor/teacher grand means for this cluster of items were 3.54 (very positive) and 3.22 (positive). Based upon these grand means, it was concluded that

the underlying assumptions of the synergetic process were being acted upon in a great majority of cases. The difference between grand means of .32 was not considered to represent a major incongruence between supervisor and teacher respondent groups.

Effect of school organization. In the case of supervisors there was no apparent important influence caused by differences in the respondents' school organization affiliation. In the case of teachers a minor trend was identified. With each increase in level of school organization (elementary, middle, junior high, high school) the grand means steadily decreased.

Effect of years in current position. A review of supervisor grand means for the group with thirteen or more years in their current positions showed this respondent group to be moderately lower than the other division. The number of years in current position had no apparent effect upon how teachers answered questionnaire items related to research question 1.

Effect of years school district had used process. The number of years a school district had used the supervisory process had little effect upon how respondents answered the items related to research question 1. The average supervisor and teacher grand means for those districts having used the process for two years or less were slightly higher than those with longer periods of involvement.

Open-ended questions. A summary of data collected via the open-ended items on the survey instrument indicated that a wide majority of those

respondents who answered these questions were both aware of and practicing the underlying assumptions of the synergetic supervision process.

Interview analysis. The data collected by personal interviews lent positive support to those collected via the survey instrument. Respondent statements consistently supported the conclusions that those using the synergetic supervision process in a great majority of cases both knew of and were acting upon the assumptions of the process.

Question 2

Questionnaire items pertaining to research question 2 were designed to determine how effectively the procedures of the synergetic process were being implemented. Respective supervisor and teacher grand means for this cluster of items were 3.55 (very positive) and 3.26 (positive). Based upon these grand means, it was concluded that in most cases the procedures of the synergetic supervision process were being effectively implemented. The difference of .29 between supervisor and teacher grand means was considered to represent a minor incongruence between these groups.

Effect of school organization. Supervisor grand means were all approximately .30 higher than teacher grand means. Neither respondent group demonstrated or exhibited any noteworthy trend related to level of school organization. The supervisor/teacher grand means for the respondents from middle schools were approximately .3 lower than the

supervisor/teacher grand means at the other three levels of school organization. A comparison of all primary grades with those above the primary level produced combined grand means which were very similar. It was concluded that any effect upon respondent answers to question 2 items associated with the individual's school organization was minimal.

Effect of years in current position. No major overall differences existed between combined supervisor and teacher grand means for each division. However, there was an important difference between the supervisors from the various divisions. Respective grand means for supervisors according to years in current position were: one to three years (3.60); four to seven years (3.78); eight to twelve years (3.40); and thirteen or more years (3.20). This pattern of grand means indicated that supervisors who had been in their positions for a number of years tended not to respond as positively as those with fewer years in their current position concerning how effectively procedures of the synergetic process had been implemented.

Effect of years school district had used process. The number of years a school district had used the supervisory process had a very minimal effect upon how respondents answered the items related to research question 2.

Open-ended questions. Analysis of those open-ended responses which were related to research question 2 indicated that procedures were generally being effectively implemented. The postobservation phase

was shown to be the least effectively implemented. Despite the fact that some procedures appeared to have been more effectively implemented than others, not a single procedure was described as having been poorly implemented.

Interview analysis. Interview item 3 asked respondents how effectively they thought each element of the process (preobservation, observation, postobservation) was being conducted in their respective schools. From these data it was determined that both the preobservation and observation phases of the process were being conducted with very few problems. The data indicated that the postobservation phase was also a source of more but not an excessive number of problems.

Question 3

Questionnaire items pertaining to research question 3 were designed to determine the nature of any differences in perceptions and understandings of teachers and supervisors regarding the synergetic process. Respective supervisor and teacher grand means for this cluster of items were 3.61 (very positive) and 3.18 (positive). The incongruence in grand means of 0.43 was considered to represent an important difference. However, it should not be overlooked that both grand means were well above 3.00 which constituted the "agree" choice on the survey instrument. Analysis by relative frequency percentages of each individual cluster item indicated that several minor and a few moderate differences in perceptions and understandings existed between supervisors and teachers.

Effect of school organization. Examination of supervisor and teacher grand means identified no major differences influenced by level of school organization. The difference in supervisor/teacher grand means for the high school division exceeded the differences computed for the other levels by .20, considered to be a figure of moderate importance. The effect of school organization upon research question 3 responses was concluded to be of a minor nature.

Effect of years in current position. The effect of years in current position upon the relative congruence of supervisor and teacher grand means varied considerably from group to group. Major incongruencies between supervisors and teachers were depicted for those in the first two divisions (1-3 years and 4-7 years). The third division (8-12 years) produced only a negligible difference. It was concluded that the major influence upon the variations in congruence was a moderate causal effect in which supervisor grand means tended to decline according to the number of years in current position.

Effect of years school district had used process. The number of years a school district had used the process had a negligible effect upon how respondents answered the items related to research question 3.

Open-ended questions. None of the five open-ended questions were tied directly to research question 3, but an indirect analysis for information related to the major question was completed. This analysis indicated that there was (at minimum) a moderate congruence between

respondent groups regarding their perceptions and understanding of the synergetic supervision process.

Interview analysis. Because only supervisors were interviewed findings depicting differences in supervisor/teacher perceptions and understanding could not be drawn from these data.

Question 4

Questionnaire items pertaining to research question 4 were designed to identify the instructional and supervisory implications of the synergetic supervision process. Respective supervisor and teacher grand means for this cluster of items were 3.25 (positive) and 2.89 (somewhat positive). Half of this twelve-item cluster were statements related to instructional implications while the other half pertained to supervisory implications. The effect of these subgroups upon the total cluster grand means was found to be negligible. The incongruence between supervisor and teacher grand means of .36 was considered to be moderate in nature.

Effect of school organization. Examination of supervisor and teacher grand means identified two noteworthy differences influenced by the respondents' respective position in school organization. First, high school teachers' responses were somewhat lower (0.2) than the grand means for the other three organizational levels (elementary, middle, and junior high). Second, whereas the elementary, junior high and high school divisions all had supervisor grand means approximately .35 higher than those for teachers, the supervisor grand mean for the middle school division was 0.2 less than that for teachers.

It was concluded that a very minor trend did exist regarding the respondents' respective school organization and their responses to the items for research question 4. As one analyzes data from elementary, middle, junior high, and high school levels in school organization, there is a minor tendency for respondent grand means to decrease.

Effect of years in current position. In each of the first three divisions (1-3 years, 4-7 years, 8-12 years) the respective supervisor and teacher grand means were all very similar to those for the entire cluster. The only apparent important influence due to years in current position was found in division four (13 or more years). In this division the supervisor grand mean was approximately 0.5 below the grand means of supervisors in all other groups. The data were inconclusive to support describing any major trend resulting from the influence of years in current position upon research question 4 items.

Effect of years school district had used process. The number of years a school district had used the supervisory process had a very minimal effect upon how teachers responded to questionnaire items for research question 4. In the case of supervisors those having had limited experience with the process (two years or less) responded moderately higher. Much of this difference was caused by one district in the four years or more group which had a grand mean approximately .35 below that of any other district.

Open-ended questions. Findings in this section are broken down into instructional and supervisory implications. Two open-ended items

pertained to instructional implications. Approximately 80 percent of the responses to these items described positive instructional implications. Neutral implications were expressed in approximately 10 percent of the responses. There were no negative responses. Tables XXVI and and XXVII (pages 91 and 92) list those positive statements made most often. Supervisor percentages were consistently slightly more positive than teacher responses.

Two open-ended items pertained to supervisory implications. Approximately 75 percent of the responses to these items described positive supervisory implications. Approximately 15 percent of the responses to these items were neutral and described no change in supervision as a whole. Negative implications were expressed in fewer than 1 percent of the responses. Supervisor percentages were consistently slightly more positive than teacher responses. Tablex XXVIII and XXIX (pages 94 and 95) list those positive responses made most often.

These findings supported the related data gathered by both the questionnaire portion of the survey instrument and the related interview data.

Interview analysis. There were two interview items regarding instructional implications. Interview item 5 asked respondents to describe the areas of instruction they felt had improved the most as a result of the synergetic supervision process. Data gathered by item 5 indicated there were many positive instructional implications in the

schools of each interviewee. No neutral or negative responses were received.

Interview item 6 asked interviewees to what extent they felt that participation in the process had encouraged teachers to plan and organize instruction more effectively. All those interviewed felt that the synergetic supervision process did cause teachers to improve their planning for instruction.

There were two interview items which pertained to supervisory implications. Interview item 7 asked respondents to describe in what ways they felt that participation in the supervision/observation process had influenced or affected their leadership role and performance. All interviewees felt the synergetic supervision process had positively influenced both their leadership role and performance.

Interview item 8 asked the interviewees to describe the effects the synergetic supervision process had had on the nature and perceived role of the staff development programs in their districts. In schools where the process had been in effect for a number of years and where it had been supported from the top (board, superintendent, principal) there had been significant changes in both the perceived role and the actual nature of staff development. Those supervisors who had just recently initiated the synergetic supervision process saw a need for and planned to alter staff development in their schools.

It was concluded from interview items 5, 6, 7, and 8 that the synergetic supervision process had in a high majority of cases led to both improved instruction and an improved supervisory process.

# III. CONCLUSIONS

The underlying assumptions of the synergetic process were being acted upon in a great majority of cases.

Supervisors who had been in their current position for thirteen or more years were the least supportive group regarding this general conclusion. The data collected provided no apparent reason(s) for this one moderate difference between respondent groups. Neither the respondents' respective school organization affiliation nor the years their school districts had used the process yielded any important variations between groups of respondents.

In most cases the procedures of the synergetic supervision process were being effectively implemented.

Of the three phases of the synergetic process (preobservation, observation, postobservation) practitioners were having the most difficulty with the postobservation phase. The data collected indicated that most of this difficulty arose from an inability to analyze and institute positive specific remedial steps towards better instruction based upon the data collected during the observation session. It would appear that the basis for this problem was an insufficient basic understanding of one or more significant aspects of instruction. As was the case regarding the previous major conclusion, supervisors who had been in their current position for thirteen or more years were the least supportive of this general conclusion. Neither the respondents' respective school organizations nor the years their school districts

had used the process yielded any important variations between groups of respondents regarding this general conclusion.

Several minor and a few major specific incongruencies existed between supervisors and teachers regarding their differences in perceptions and understanding of the synergetic supervision process.

Overall the data indicated at minimum a moderate congruence in their perceptions and understandings of the synergetic supervision process. Based upon the data collected, it was concluded that much of what incongruence did exist could have been collectively reduced had the following items been planned for and realized:

1. A more thorough and efficient initiation of teachers to the synergetic process and a staff development process geared more to the improvement of instruction.
2. Actions on the part of supervisors (administration) which demonstrated that the process of improving instruction was a higher priority.
3. An even greater percentage of supervisors who demonstrated they knew and believed in the basic assumptions of synergetic supervision.
4. An even greater percentage of teachers who approached the process positively.

As it applied to a high majority of those schools involved in this study, the synergetic supervision process had improved instruction by improving the overall supervision of instruction process.

Approximately 75 percent (slightly lower for those specifically relating to instruction) of the open-ended item and interview item responses pertaining to instructional and supervisory implication described positive improvements. Very few (less than 5 percent) of the responses described any detrimental effects resulting from the synergetic process relating to either instruction or supervision.

The major instructional implications identified by the study were:

1. In a high percentage of cases (p. 80) the data indicated that the synergetic supervision process caused teachers to think more about student/teacher interaction patterns, leading to a higher quality of interaction (more productive).
2. The data indicated that the process enabled many teachers to better focus upon the needs of individual students.
3. Many teachers became much more proficient in classroom management. Many teachers became much more proficient in classroom questioning techniques.
4. Overall planning for instruction was improved.
5. As those using the synergetic process become more knowledgeable regarding instruction per se, the above items as well as several other related items will improve even more.

The major supervisory implications identified by the study were:

1. Teacher/administrator (supervisor) interaction patterns were expanded and improved upon.
2. Staff development, as it related to supervision of instruction, was improved.

3. The synergetic process had begun to supply a better data base upon which to base staff development.
4. The process improved the ability of teachers to better analyze their own teaching behavior.
5. Many supervisors felt they had become better instructional leaders.

## IV. RECOMMENDATIONS

The following recommendations are provided, based on the findings obtained from this study.

1. Prior to the adoption of the synergetic supervision process by a school or system, staff development workshops and training in the synergetic process are encouraged and the synergetic process should be thoroughly understood by teachers, supervisors, and all administrators.
2. Since establishing trust is an important factor to consider in the synergetic supervision process, beginning a program with a small number of teachers with whom trust is already established, then spreading the program throughout the district, is one recommended approach.
3. Additional studies following a format similar to that used in this research should be undertaken to identify and evaluate the underlying assumptions of other contemporary supervision of instruction processes.
4. This research should be replicated with the purposes of validating the original findings while at the same time attempting to gather data which might answer pertinent questions identified in this initial study.

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# APPENDIXES

# APPENDIX A

## MEAN ANALYSIS, RELATIVE FREQUENCY PERCENTAGES, AND DESCRIPTION OF RESPONDENTS

TABLE XLII

MEAN ANALYSIS BY SCHOOL, DISTRICT A, NORTH CAROLINA
(RESEARCH QUESTION 1)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 3 | 3.50 | 3.17 | 3 |
| 5 | 3.75 | 3.13 | 6 |
| 8 | 3.50 | 2.83 | 9 |
| * | -- | 2.83 | 14 |
| 13 | 3.75 | 3.28 | 15 |
| 16 | 3.50 | 3.68 | 18 |
| 21 | 3.25 | 2.91 | 24 |
| 26 | 3.67 | 2.96 | 30 |
| 34 | 3.50 | 2.75 | 38 |
| $M_1$ | -- | 3.06 | |
| $M_2$ | 3.55 | 3.09 | |

Note: A * in the question column indicates that there is no corresponding item in that respondent group's (teacher or supervisor) questionnaire.

TABLE XLIII

MEAN ANALYSIS BY SCHOOL, DISTRICT A, KENTUCKY
(RESEARCH QUESTION 1)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 3 | 3.67 | 3.35 | 3 |
| 5 | 4.00 | 3.57 | 6 |
| 8 | 3.50 | 3.17 | 9 |
| * | -- | 3.17 | 14 |
| 13 | 3.83 | 3.57 | 15 |
| 16 | 3.83 | 3.67 | 18 |
| 21 | 3.50 | 3.21 | 24 |
| 26 | 3.83 | 3.03 | 30 |
| 34 | 3.50 | 2.96 | 38 |
| $M_1$ | -- | 2.31 | |
| $M_2$ | 3.71 | 3.32 | |

TABLE XLIV

MEAN ANALYSIS BY SCHOOL, DISTRICT A, GEORGIA
(RESEARCH QUESTION 1)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 3 | 3.50 | 3.59 | 3 |
| 5 | 3.80 | 3.82 | 6 |
| 8 | 2.89 | 3.18 | 9 |
| * | -- | 3.12 | 14 |
| 13 | 3.90 | 3.65 | 15 |
| 16 | 4.00 | 3.77 | 18 |
| 21 | 3.50 | 3.24 | 24 |
| 26 | 3.40 | 3.18 | 30 |
| 34 | 3.40 | 3.18 | 38 |
| $M_1$ | -- | 3.41 | |
| $M_2$ | 3.55 | 3.45 | |

TABLE XLV

MEAN ANALYSIS BY SCHOOL, DISTRICT A, OHIO
(RESEARCH QUESTION 1)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 3 | No data | 3.31 | 3 |
| 5 | No data | 3.50 | 6 |
| 8 | No data | 2.55 | 9 |
| * | No data | 3.31 | 14 |
| 13 | No data | 3.69 | 15 |
| 16 | No data | 3.17 | 18 |
| 21 | No data | 2.99 | 24 |
| 26 | No data | 3.06 | 30 |
| 34 | No data | 3.00 | 38 |
| $M_1$ | -- | 3.18 | |
| $M_2$ | -- | 3.16 | |

TABLE XLVI

MEAN ANALYSIS BY SCHOOL, DISTRICT B, OHIO
(RESEARCH QUESTION 1)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 3 | 3.43 | 3.17 | 3 |
| 5 | 3.79 | 3.49 | 6 |
| 8 | 3.21 | 2.90 | 9 |
| * | -- | 3.17 | 14 |
| 13 | 3.79 | 3.60 | 15 |
| 16 | 3.86 | 3.86 | 18 |
| 21 | 3.15 | 2.93 | 24 |
| 26 | 3.21 | 3.04 | 30 |
| 34 | 3.39 | 3.00 | 38 |
| $M_1$ | -- | 3.24 | |
| $M_2$ | 3.49 | 3.25 | |

TABLE XLVII

MEAN ANALYSIS BY SCHOOL, DISTRICT C, OHIO
(RESEARCH QUESTION 1)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 3 | 4.00 | 3.24 | 3 |
| 5 | 3.50 | 3.75 | 6 |
| 8 | 3.00 | 3.00 | 9 |
| * | -- | 3.40 | 14 |
| 13 | 4.00 | 3.62 | 15 |
| 16 | 4.00 | 3.76 | 18 |
| 21 | 3.00 | 2.95 | 24 |
| 26 | 4.00 | 3.10 | 30 |
| 34 | 3.50 | 3.05 | 38 |
| $M_1$ | -- | 3.32 | |
| $M_2$ | 3.63 | 3.31 | |

TABLE XLVIII

MEAN ANALYSIS BY SCHOOL, DISTRICT A, NEW YORK
(RESEARCH QUESTION 1)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 3 | 3.50 | 3.15 | 3 |
| 5 | 3.50 | 3.29 | 6 |
| 8 | 2.50 | 2.81 | 9 |
| * | -- | 3.15 | 14 |
| 13 | 4.00 | 3.32 | 15 |
| 16 | 4.00 | 3.59 | 18 |
| 21 | 3.00 | 2.75 | 24 |
| 26 | 3.00 | 2.81 | 30 |
| 34 | 3.00 | 2.72 | 38 |
| $M_1$ | -- | 3.04 | |
| $M_2$ | 3.31 | 3.06 | |

TABLE XLIX

MEAN ANALYSIS BY SCHOOL, DISTRICT A, NORTH CAROLINA
(RESEARCH QUESTION 2)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 1 | 3.25 | 3.38 | 1 |
| 6 | 3.50 | 3.08 | 7 |
| 9 | 3.50 | 2.92 | 10 |
| 12 | 3.25 | 3.00 | 13 |
| 17 | 3.50 | 3.33 | 19 |
| 19 | 3.50 | 2.96 | 22 |
| 22 | 3.75 | 3.13 | 25 |
| 25 | 3.50 | 2.96 | 29 |
| 27 | 3.50 | 3.09 | 31 |
| 29 | 3.50 | 2.96 | 33 |
| 31 | 3.25 | -- | * |
| $M_1$ | 3.45 | -- | |
| $M_2$ | 3.45 | 3.08 | |

TABLE L

MEAN ANALYSIS BY SCHOOL, DISTRICT A, KENTUCKY
(RESEARCH QUESTION 2)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 1 | 3.67 | 3.63 | 1 |
| 6 | 3.67 | 3.50 | 7 |
| 9 | 3.83 | 3.43 | 10 |
| 12 | 3.67 | 3.21 | 13 |
| 17 | 3.83 | 3.50 | 19 |
| 19 | 3.83 | 3.23 | 22 |
| 22 | 3.67 | 3.40 | 25 |
| 25 | 3.50 | 3.23 | 29 |
| 27 | 3.67 | 2.86 | 31 |
| 29 | 3.83 | 3.03 | 33 |
| 31 | 3.50 | -- | * |
| $M_1$ | 3.64 | | |
| $M_2$ | 3.63 | 3.30 | |

TABLE LI

MEAN ANALYSIS BY SCHOOL, DISTRICT A, GEORGIA
(RESEARCH QUESTION 2)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 1 | 3.80 | 3.59 | 1 |
| 6 | 3.40 | 3.71 | 7 |
| 9 | 3.70 | 3.82 | 10 |
| 12 | 3.70 | 3.53 | 13 |
| 17 | 3.50 | 3.59 | 19 |
| 19 | 3.50 | 3.24 | 22 |
| 22 | 3.50 | 3.53 | 25 |
| 25 | 3.40 | 3.47 | 29 |
| 27 | 3.80 | 3.35 | 31 |
| 29 | 3.50 | 3.53 | 33 |
| 31 | 3.40 | -- | * |
| $M_1$ | 3.56 | -- | |
| $M_2$ | 3.58 | 3.54 | |

TABLE LII

MEAN ANALYSIS BY SCHOOL, DISTRICT A, OHIO
(RESEARCH QUESTION 2)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 1 | No data | 3.37 | 1 |
| 6 | No data | 3.54 | 7 |
| 9 | No data | 3.56 | 10 |
| 12 | No data | 3.36 | 13 |
| 17 | No data | 3.41 | 19 |
| 19 | No data | 3.19 | 22 |
| 22 | No data | 3.09 | 25 |
| 25 | No data | 3.10 | 29 |
| 27 | No data | 3.24 | 31 |
| 29 | No data | 3.22 | 33 |
| 31 | No data | -- | * |
| $M_1$ | -- | -- | |
| $M_2$ | -- | 3.31 | |

TABLE LIII

MEAN ANALYSIS BY SCHOOL, DISTRICT B, OHIO
(RESEARCH QUESTION 2)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 1 | 3.71 | 3.47 | 1 |
| 6 | 3.36 | 3.30 | 7 |
| 9 | 3.79 | 3.47 | 10 |
| 12 | 3.57 | 3.21 | 13 |
| 17 | 3.64 | 3.24 | 19 |
| 19 | 3.57 | 3.23 | 22 |
| 22 | 3.43 | 3.11 | 25 |
| 25 | 3.43 | 3.16 | 29 |
| 27 | 3.71 | 3.38 | 31 |
| 29 | 3.43 | 2.86 | 33 |
| 31 | 3.36 | -- | * |
| $M_1$ | 3.55 | -- | |
| $M_2$ | 3.56 | 3.24 | |

TABLE LIV

MEAN ANALYSIS BY SCHOOL, DISTRICT C, OHIO
(RESEARCH QUESTION 2)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 1 | 4.00 | 3.71 | 1 |
| 6 | 3.00 | 3.70 | 7 |
| 9 | 4.00 | 3.76 | 10 |
| 12 | 4.00 | 3.65 | 13 |
| 17 | 4.00 | 3.43 | 19 |
| 19 | 3.50 | 3.19 | 22 |
| 22 | 3.00 | 3.19 | 25 |
| 25 | 4.00 | 3.19 | 29 |
| 27 | 4.00 | 3.50 | 31 |
| 29 | 4.00 | 3.38 | 33 |
| 31 | 3.00 | -- | * |
| $M_1$ | 3.68 | -- | |
| $M_2$ | 3.75 | 3.47 | |

TABLE LV

MEAN ANALYSIS BY SCHOOL, DISTRICT A, NEW YORK
(RESEARCH QUESTION 2)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 1 | 3.50 | 3.21 | 1 |
| 6 | 2.50 | 3.09 | 7 |
| 9 | 2.50 | 2.91 | 10 |
| 12 | 3.00 | 3.13 | 13 |
| 17 | 3.50 | 3.23 | 19 |
| 19 | 3.00 | 2.94 | 22 |
| 22 | 3.50 | 3.03 | 25 |
| 25 | 3.00 | 3.09 | 29 |
| 27 | 2.50 | 2.79 | 31 |
| 29 | 3.00 | 2.59 | 33 |
| 31 | 2.50 | -- | * |
| $M_1$ | 2.95 | -- | |
| $M_2$ | 3.00 | 3.00 | |

TABLE LVI

MEAN ANALYSIS BY SCHOOL, DISTRICT A, NORTH CAROLINA
(RESEARCH QUESTION 3)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 2 | 3.50 | 3.20 | 2 |
| * | -- | 3.16 | 5 |
| 10 | 3.75 | 3.04 | 11 |
| 14 | 3.75 | 3.08 | 16 |
| * | -- | 2.67 | 20 |
| 21 | 3.25 | 2.91 | 24 |
| * | -- | 2.63 | 26 |
| 28 | 3.75 | 3.00 | 32 |
| 35 | 3.00 | 2.78 | 39 |
| 38 | 3.75 | 3.09 | 42 |
| $M_1$ | -- | 2.95 | |
| $M_2$ | 3.54 | 3.01 | |

TABLE LVII

MEAN ANALYSIS BY SCHOOL, DISTRICT A, KENTUCKY
(RESEARCH QUESTION 3)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 2 | 4.00 | 3.60 | 2 |
| * | -- | 3.50 | 5 |
| 10 | 4.00 | 3.27 | 11 |
| 14 | 3.83 | 3.53 | 16 |
| * | -- | 3.03 | 20 |
| 21 | 3.50 | 3.21 | 24 |
| * | -- | 3.37 | 26 |
| 28 | 3.67 | 3.00 | 32 |
| 35 | 3.67 | 3.07 | 39 |
| 38 | 3.67 | 3.00 | 42 |
| $M_1$ | -- | 3.26 | |
| $M_2$ | 3.76 | 3.24 | |

TABLE LVIII

MEAN ANALYSIS BY SCHOOL, DISTRICT A, GEORGIA
(RESEARCH QUESTION 3)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 2 | 3.70 | 3.77 | 2 |
| * | -- | 3.82 | 5 |
| 10 | 3.70 | 3.47 | 11 |
| 14 | 3.60 | 3.53 | 16 |
| * | -- | 2.94 | 20 |
| 21 | 3.50 | 3.24 | 24 |
| * | -- | 3.24 | 26 |
| 28 | 3.60 | 3.53 | 32 |
| 35 | 3.60 | 3.29 | 39 |
| 38 | 3.40 | 3.41 | 42 |
| $M_1$ | -- | 3.42 | |
| $M_2$ | 3.59 | 3.46 | |

TABLE LIX

MEAN ANALYSIS BY SCHOOL, DISTRICT A, OHIO
(RESEARCH QUESTION 3)

| Comparable Questions for Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 2 | No data | 3.58 | 2 |
| * | No data | 3.44 | 5 |
| 10 | No data | 2.95 | 11 |
| 14 | No data | 3.46 | 16 |
| * | No data | 2.48 | 20 |
| 21 | No data | 2.99 | 24 |
| * | No data | 3.03 | 26 |
| 28 | No data | 3.13 | 32 |
| 35 | No data | 3.13 | 39 |
| 38 | No data | 3.10 | 42 |
| $M_1$ | | 3.13 | |
| $M_2$ | | 3.19 | |

TABLE LX

MEAN ANALYSIS BY SCHOOL, DISTRICT A, OHIO
(RESEARCH QUESTION 3)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 2 | 3.93 | 3.61 | 2 |
| * | -- | 3.45 | 5 |
| 10 | 3.75 | 3.16 | 11 |
| 14 | 3.64 | 3.87 | 16 |
| * | -- | 2.81 | 20 |
| 21 | 3.15 | 2.93 | 24 |
| * | -- | 3.14 | 26 |
| 28 | 3.79 | 3.12 | 32 |
| 35 | 3.21 | 3.11 | 39 |
| 38 | 3.64 | 3.19 | 42 |
| $M_1$ | -- | 3.24 | |
| $M_2$ | 3.59 | 3.28 | |

TABLE LXI

MEAN ANALYSIS BY SCHOOL, DISTRICT C, OHIO
(RESEARCH QUESTION 3)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 2 | 4.00 | 3.71 | 2 |
| * | -- | 3.65 | 5 |
| 10 | 3.50 | 3.40 | 11 |
| 14 | 4.00 | 3.55 | 16 |
| * | -- | 3.00 | 20 |
| 21 | 3.00 | 2.95 | 24 |
| * | -- | 3.00 | 26 |
| 28 | 4.00 | 3.35 | 32 |
| 35 | 4.00 | 3.32 | 39 |
| 38 | 4.00 | 3.30 | 42 |
| $M_1$ | -- | 3.32 | |
| $M_2$ | 3.79 | 3.37 | |

TABLE LXII

MEAN ANALYSIS BY SCHOOL, DISTRICT A, NEW YORK
(RESEARCH QUESTION 3)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 2 | 4.00 | 3.53 | 2 |
| * | -- | 3.18 | 5 |
| 10 | 4.00 | 3.03 | 11 |
| 14 | 3.50 | 3.29 | 16 |
| * | -- | 2.47 | 20 |
| 21 | 3.00 | 2.75 | 24 |
| * | -- | 2.63 | 26 |
| 28 | 4.00 | 2.70 | 32 |
| 35 | 2.00 | 2.67 | 39 |
| 38 | 3.00 | 2.88 | 42 |
| $M_1$ | -- | 2.91 | |
| $M_2$ | 3.36 | 2.98 | |

TABLE LXIII

MEAN ANALYSIS BY SCHOOL, DISTRICT A, NORTH CAROLINA
(RESEARCH QUESTION 4)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 4 | 3.50 | 2.42 | 4 |
| 7 | 3.50 | 2.72 | 8 |
| 11 | 4.00 | 2.65 | 12 |
| 15 | 3.75 | 2.73 | 17 |
| 18 | 3.00 | 2.54 | 21 |
| 20 | 3.25 | 2.77 | 23 |
| 23 | 3.00 | 2.88 | 27 |
| 24 | 3.50 | 2.75 | 28 |
| 30 | 3.50 | 3.67 | 34 |
| 32 | 3.50 | 2.84 | 36 |
| 33 | 3.75 | 2.91 | 37 |
| 36 | 3.50 | 3.00 | 40 |
| $M_1$ | -- | -- | |
| $M_2$ | 3.48 | 2.74 | |

TABLE LXIV

MEAN ANALYSIS BY SCHOOL, DISTRICT A, KENTUCKY
(RESEARCH QUESTION 4)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 4 | 3.83 | 3.03 | 4 |
| 7 | 3.83 | 3.23 | 8 |
| 11 | 3.67 | 3.14 | 12 |
| 15 | 3.67 | 3.00 | 17 |
| 18 | 3.33 | 2.59 | 21 |
| 20 | 2.80 | 2.89 | 23 |
| 23 | 3.33 | 3.07 | 27 |
| 24 | 3.50 | 3.28 | 28 |
| 30 | 3.50 | 3.07 | 34 |
| 32 | 3.33 | 2.96 | 36 |
| 33 | 3.50 | 3.17 | 37 |
| 36 | 3.50 | 3.07 | 40 |
| $M_1$ | -- | -- | |
| $M_2$ | 3.49 | 3.04 | |

TABLE LXV

MEAN ANALYSIS BY SCHOOL, DISTRICT A, GEORGIA
(RESEARCH QUESTION 4)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 4 | 3.11 | 3.12 | 4 |
| 7 | 3.50 | 3.29 | 8 |
| 11 | 2.90 | 2.81 | 12 |
| 15 | 3.30 | 3.19 | 17 |
| 18 | 2.70 | 3.00 | 21 |
| 20 | 3.60 | 3.19 | 23 |
| 23 | 3.20 | 3.00 | 27 |
| 24 | 3.10 | 3.13 | 28 |
| 30 | 3.30 | 3.18 | 34 |
| 32 | 3.10 | 3.35 | 36 |
| 33 | 3.50 | 3.13 | 37 |
| 36 | 3.60 | 3.53 | 40 |
| $M_1$ | -- | -- | |
| $M_2$ | 3.24 | 3.16 | |

TABLE LXVI

MEAN ANALYSIS BY SCHOOL, DISTRICT A, OHIO
(RESEARCH QUESTION 4)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 4 | No data | 2.87 | 4 |
| 7 | No data | 2.83 | 8 |
| 11 | No data | 2.48 | 12 |
| 15 | No data | 2.93 | 17 |
| 18 | No data | 2.39 | 21 |
| 20 | No data | 3.03 | 23 |
| 23 | No data | 2.84 | 27 |
| 24 | No data | 2.78 | 28 |
| 30 | No data | 2.51 | 34 |
| 32 | No data | 2.88 | 36 |
| 33 | No data | 2.57 | 37 |
| 36 | No data | 3.28 | 40 |
| $M_1$ | | -- | |
| $M_2$ | | 2.78 | |

TABLE LXVII

MEAN ANALYSIS BY SCHOOL, DISTRICT B, OHIO
(RESEARCH QUESTION 4)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 4 | 3.07 | 2.90 | 4 |
| 7 | 3.43 | 3.04 | 8 |
| 11 | 3.21 | 2.68 | 12 |
| 15 | 3.07 | 3.07 | 17 |
| 18 | 2.93 | 2.49 | 21 |
| 20 | 3.29 | 3.00 | 23 |
| 23 | 3.15 | 3.00 | 27 |
| 24 | 2.93 | 2.95 | 28 |
| 30 | 3.21 | 2.97 | 34 |
| 32 | 2.86 | 2.95 | 36 |
| 33 | 3.36 | 2.88 | 37 |
| 36 | 3.50 | 2.23 | 40 |
| $M_1$ | -- | -- | |
| $M_2$ | 3.17 | 2.85 | |

TABLE LXVIII

MEAN ANALYSIS BY SCHOOL, DISTRICT C, OHIO
(RESEARCH QUESTION 4)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 4 | 3.00 | 2.95 | 4 |
| 7 | 3.50 | 3.22 | 8 |
| 11 | 3.00 | 2.74 | 12 |
| 15 | 3.00 | 3.33 | 17 |
| 18 | 3.00 | 2.72 | 21 |
| 20 | 3.50 | 3.21 | 23 |
| 23 | 3.00 | 3.06 | 27 |
| 24 | 3.00 | 2.95 | 28 |
| 30 | 4.00 | 3.21 | 34 |
| 32 | 3.50 | 3.05 | 36 |
| 33 | 3.50 | 3.00 | 37 |
| 36 | 4.00 | 3.53 | 40 |
| $M_1$ | -- | -- | |
| $M_2$ | 3.33 | 3.08 | |

TABLE LXIX

MEAN ANALYSIS BY SCHOOL, DISTRICT C, NEW YORK
(RESEARCH QUESTION 4)

| Comparable Questions with Respective Means | | | |
|---|---|---|---|
| Supervisor | | Teacher | |
| Question | Mean | Mean | Question |
| 4 | 3.00 | 2.85 | 4 |
| 7 | 2.50 | 2.72 | 8 |
| 11 | 3.50 | 2.67 | 12 |
| 15 | 3.50 | 2.77 | 17 |
| 18 | 2.50 | 2.19 | 21 |
| 20 | 3.50 | 3.28 | 23 |
| 23 | 3.00 | 2.75 | 27 |
| 24 | 2.00 | 2.66 | 28 |
| 30 | 2.50 | 2.84 | 34 |
| 32 | 2.50 | 2.50 | 36 |
| 33 | 2.50 | 2.97 | 37 |
| 36 | 3.00 | 3.09 | 40 |
| $M_1$ | -- | -- | |
| $M_2$ | 2.83 | 2.77 | |

TABLE LXX

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, NORTH CAROLINA
(RESEARCH QUESTION 1)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 3 | 3 | 50.0 | 44.4 | 50.0 | 36.0 | 0.0 | 4.0 | 0.0 | 12.0 | 0.0 | 4.0 |
| 5 | 6 | 75.0 | 28.0 | 25.5 | 56.0 | 0.0 | 8.0 | 0.0 | 4.0 | 0.0 | 4.0 |
| 8 | 9 | 50.0 | 8.0 | 50.0 | 72.0 | 0.0 | 8.0 | 0.0 | 8.0 | 0.0 | 4.0 |
| * | 14 | -- | 24.0 | -- | 44.0 | -- | 16.0 | -- | 12.0 | -- | 4.0 |
| 13 | 15 | 75.0 | 52.0 | 25.0 | 28.0 | 0.0 | 16.0 | 0.0 | 4.0 | 0.0 | 0.0 |
| 16 | 18 | 50.0 | 68.0 | 50.0 | 32.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 24 | 25.0 | 20.0 | 75.0 | 52.0 | 0.0 | 12.0 | 0.0 | 8.0 | 0.0 | 8.0 |
| 26 | 30 | 50.0 | 16.0 | 25.0 | 56.0 | 0.0 | 12.0 | 0.0 | 4.0 | 25.0 | 12.0 |
| 34 | 38 | 50.0 | 8.0 | 50.0 | 60.0 | 0.0 | 24.0 | 0.0 | 4.0 | 0.0 | 4.0 |
| | $M_1$ | -- | 29.8 | -- | 49.0 | -- | 10.5 | -- | 6.2 | -- | 4.5 |
| | $M_2$ | 53.1 | 30.5 | 43.8 | 48.4 | 0.0 | 11.1 | 0.0 | 5.5 | 3.1 | 4.4 |

TABLE LXXI

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, KENTUCKY
(RESEARCH QUESTION 1)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 3 | 3 | 66.7 | 36.7 | 33.3 | 56.7 | 0.0 | 3.3 | 0.0 | 0.0 | 0.0 | 3.3 |
| 5 | 6 | 100.0 | 56.7 | 0.0 | 43.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 9 | 50.0 | 23.3 | 50.0 | 70.0 | 0.0 | 6.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| * | 14 | -- | 16.7 | -- | 80.0 | -- | 0.0 | -- | 0.0 | -- | 3.3 |
| 13 | 15 | 83.3 | 56.7 | 16.7 | 43.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 18 | 83.3 | 70.0 | 16.7 | 26.7 | 0.0 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 24 | 50.0 | 30.0 | 50.0 | 56.7 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 3.3 |
| 26 | 30 | 83.3 | 13.3 | 16.7 | 76.7 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 34 | 38 | 50.0 | 10.0 | 50.0 | 70.0 | 0.0 | 13.3 | 0.0 | 0.0 | 0.0 | 6.7 |
| | $M_1$ | -- | 34.8 | -- | 58.1 | -- | 5.2 | -- | 0.0 | -- | 1.8 |
| | $M_2$ | 70.8 | 37.1 | 29.2 | 56.4 | 0.0 | 5.8 | 0.0 | 0.0 | 0.0 | 2.1 |

TABLE LXXII

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, GEORGIA
(RESEARCH QUESTION 1)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 3 | 3 | 50.0 | 58.8 | 50.0 | 41.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 6 | 80.0 | 82.4 | 20.0 | 17.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 9 | 10.0 | 35.3 | 70.0 | 47.1 | 0.0 | 17.6 | 10.0 | 0.0 | 10.0 | 0.0 |
| * | 14 | -- | 29.4 | -- | 58.8 | -- | 5.9 | -- | 5.9 | -- | 0.0 |
| 13 | 15 | 90.0 | 64.7 | 10.0 | 35.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 18 | 100.0 | 82.4 | 0.0 | 11.8 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 24 | 50.0 | 41.2 | 50.0 | 41.2 | 0.0 | 17.6 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26 | 30 | 40.0 | 29.4 | 60.0 | 58.8 | 0.0 | 11.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 34 | 38 | 40.0 | 23.5 | 60.0 | 70.0 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| | $M_1$ | -- | 49.7 | -- | 42.4 | -- | 7.2 | -- | | -- | 0.0 |
| | $M_2$ | 57.5 | 52.2 | 40.0 | 40.4 | 0.0 | 7.4 | 1.1 | 0.7 | 1.1 | 0.0 |

TABLE LXXIII

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, OHIO
(RESEARCH QUESTION 1)

| Questionnaire Item | | Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 3 | 3 | -- | 37.5 | -- | 56.3 | -- | 6.3 | -- | 0.0 | -- | 0.0 |
| 5 | 6 | -- | 50.0 | -- | 50.0 | 00 | 0.0 | -- | 0.0 | -- | 0.0 |
| 8 | 9 | -- | 5.0 | -- | 47.5 | -- | 41.2 | -- | 3.7 | -- | 2.5 |
| * | 14 | -- | 36.2 | -- | 60.0 | -- | 2.5 | -- | 1.2 | -- | 0.0 |
| 13 | 15 | -- | 68.8 | -- | 31.3 | -- | 0.0 | -- | 0.0 | -- | 0.0 |
| 16 | 18 | -- | 71.2 | -- | 28.7 | -- | 0.0 | -- | 0.0 | -- | 0.0 |
| 21 | 24 | -- | 12.5 | -- | 71.2 | -- | 13.7 | -- | 0.0 | -- | 2.5 |
| 26 | 30 | -- | 17.5 | -- | 71.2 | -- | 11.2 | -- | 0.0 | -- | 0.0 |
| 34 | 38 | -- | 13.7 | -- | 72.5 | -- | 13.7 | -- | 0.0 | -- | 0.0 |
| | $M_1$ | 0.0 | -- | 0.0 | -- | 0.0 | -- | 0.0 | -- | 0.0 | -- |
| | $M_2$ | 0.0 | 34.7 | 0.0 | 54.3 | 0.0 | 9.8 | 0.0 | 0.5 | 0.0 | 0.6 |

TABLE LXXIV

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT B, OHIO
(RESEARCH QUESTION 1)

| Questionnaire Item | | | Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | | S | T | S | T | S | T | S | T | S | T |
| 3 | 3 | | 50.0 | 36.9 | 42.9 | 50.8 | 7.1 | 7.7 | 0.0 | 4.6 | 0.0 | 0.0 |
| 5 | 6 | | 78.6 | 46.2 | 21.4 | 52.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 |
| 8 | 9 | | 28.6 | 29.6 | 64.3 | 50.8 | 7.1 | 21.5 | 0.0 | 3.1 | 0.0 | 0.0 |
| * | 14 | | -- | 44.6 | -- | 38.5 | -- | 12.3 | -- | 4.6 | -- | 0.0 |
| 13 | 15 | | 78.6 | 55.4 | 21.4 | 43.1 | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 18 | | 85.7 | 76.9 | 14.3 | 23.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 23 | | 28.6 | 18.5 | 50.0 | 61.5 | 14.3 | 16.9 | 0.0 | 0.0 | 7.1 | 3.1 |
| 26 | 30 | | 21.4 | 20.0 | 78.6 | 61.5 | 0.0 | 16.9 | 0.0 | 0.0 | 0.0 | 1.5 |
| 34 | 38 | | 35.7 | 23.1 | 57.1 | 61.5 | 0.0 | 9.2 | 0.0 | 3.1 | 0.0 | 3.1 |
| | | $M_1$ | -- | 39.0 | -- | 49.0 | -- | 9.6 | -- | 1.7 | -- | 1.1 |
| | | $M_2$ | 50.9 | 38.3 | 43.8 | 50.6 | 3.6 | 9.2 | 0.0 | 1.3 | 0.9 | 1.2 |

TABLE LXXV

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT C, OHIO
(RESEARCH QUESTION 1)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | | S | T | S | T | S | T | S | T | S | T |
| 3 | 3 | | 100.0 | 28.6 | 0.0 | 66.7 | 0.0 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 6 | | 50.0 | 71.4 | 50.0 | 23.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.8 |
| 8 | 9 | | 0.0 | 9.5 | 100.0 | 81.0 | 0.0 | 9.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| * | 14 | | -- | 42.9 | -- | 47.6 | -- | 4.8 | -- | 0.0 | -- | 4.8 |
| 13 | 15 | | 100.0 | 61.9 | 0.0 | 38.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 18 | | 100.0 | 76.2 | 0.0 | 23.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 23 | | 0.0 | 33.3 | 100.0 | 46.6 | 0.0 | 4.8 | 0.0 | 4.8 | 0.0 | 0.0 |
| 26 | 30 | | 100.0 | 28.2 | 0.0 | 57.1 | 0.0 | 14.3 | 0.0 | 0.0 | 0.0 | 4.8 |
| 34 | 38 | | 38.1 | 14.3 | 38.1 | 66.7 | 9.5 | 9.5 | 4.8 | 0.0 | 9.5 | 9.5 |
| | | $M_1$ | -- | 44.1 | -- | 50.2 | -- | 5.3 | -- | 0.5 | -- | 2.7 |
| | | $M_2$ | 61.0 | 44.2 | 36.0 | 50.5 | 13.7 | 5.4 | 0.8 | 0.9 | 1.2 | 2.4 |

TABLE LXXVI

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, NEW YORK
(RESEARCH QUESTION 1)

| Questionnaire Item | | | Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | | S | T | S | T | S | T | S | T | S | T |
| 3 | 3 | | 50.0 | 26.5 | 50.0 | 61.8 | 0.0 | 11.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 6 | | 50.0 | 44.1 | 50.0 | 44.1 | 0.0 | 8.8 | 0.0 | 2.9 | 0.0 | 0.0 |
| 8 | 9 | | 0.0 | 8.8 | 50.0 | 58.8 | 50.0 | 26.5 | 0.0 | 0.0 | 0.0 | 5.9 |
| * | 14 | | -- | 32.4 | -- | 50.0 | -- | 17.6 | -- | 0.0 | -- | 0.0 |
| 13 | 15 | | 50.0 | 47.1 | 0.0 | 44.1 | 0.0 | 2.9 | 0.0 | 5.9 | 50.0 | 0.0 |
| 16 | 18 | | 100.0 | 64.7 | 0.0 | 32.4 | 0.0 | 0.0 | 0.0 | 2.9 | 0.0 | 0.0 |
| 21 | 24 | | 0.0 | 17.6 | 100.0 | 41.2 | 0.0 | 29.4 | 0.0 | 5.9 | 0.0 | 5.9 |
| 26 | 30 | | 0.0 | 11.8 | 50.0 | 52.9 | 0.0 | 23.5 | 0.0 | 2.9 | 50.0 | 8.8 |
| 34 | 38 | | 0.0 | 5.9 | 50.0 | 55.9 | 0.0 | 32.4 | 0.0 | 0.0 | 50.0 | 5.9 |
| | | $M_1$ | -- | 28.7 | -- | 49.0 | -- | 17.0 | -- | 2.3 | -- | 2.9 |
| | | $M_2$ | 31.3 | 28.3 | 43.8 | 48.9 | 6.25 | 16.9 | 0.0 | 2.6 | 18.8 | 3.3 |

TABLE LXXVII

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, NORTH CAROLINA
(RESEARCH QUESTION 2)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 1 | 1 | 25.0 | 40.0 | 75.0 | 52.0 | 0.0 | 4.0 | 0.0 | 0.0 | 0.0 | 4.0 |
| 6 | 7 | 50.0 | 28.0 | 50.0 | 56.0 | 0.0 | 12.0 | 0.0 | 4.0 | 0.0 | 0.0 |
| 9 | 10 | 50.0 | 24.0 | 50.0 | 52.0 | 0.0 | 16.0 | 0.0 | 8.0 | 0.0 | 0.0 |
| 12 | 13 | 25.0 | 24.0 | 75.0 | 56.0 | 0.0 | 8.0 | 0.0 | 8.0 | 0.0 | 4.0 |
| 17 | 19 | 50.0 | 32.0 | 50.0 | 64.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 |
| 19 | 22 | 50.0 | 12.0 | 50.0 | 60.0 | 0.0 | 16.0 | 0.0 | 0.0 | 0.0 | 12.0 |
| 22 | 25 | 75.0 | 16.0 | 25.0 | 76.0 | 0.0 | 4.0 | 0.0 | 0.0 | 0.0 | 4.0 |
| 25 | 29 | 50.0 | 16.0 | 50.0 | 60.0 | 0.0 | 12.0 | 0.0 | 4.0 | 0.0 | 8.0 |
| 27 | 31 | 50.0 | 36.0 | 50.0 | 36.0 | 0.0 | 12.0 | 0.0 | 8.0 | 0.0 | 8.0 |
| 29 | 33 | 50.0 | 20.0 | 50.0 | 52.0 | 0.0 | 8.0 | 0.0 | 8.0 | 0.0 | 12.0 |
| 31 | * | 25.0 | -- | 75.0 | -- | 0.0 | -- | 0.0 | -- | 0.0 | -- |
| | $M_1$ | 45.5 | -- | 54.5 | -- | 0.0 | -- | 0.0 | -- | 0.0 | -- |
| | $M_2$ | 47.5 | 24.8 | 52.5 | 56.4 | 0.0 | 9.] | 0.0 | 4.0 | 0.0 | 5.6 |

TABLE LXXVIII

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, KENTUCKY
(RESEARCH QUESTION 2)

| Questionnaire Item | | Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 1 | 1 | 66.7 | 63.3 | 33.3 | 36.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 7 | 66.7 | 53.3 | 33.3 | 43.3 | 0.0 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 10 | 83.3 | 50.0 | 16.7 | 43.3 | 0.0 | 6.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 13 | 66.7 | 23.3 | 33.3 | 70.0 | 0.0 | 3.3 | 0.0 | 0.0 | 0.0 | 3.3 |
| 17 | 19 | 83.3 | 53.3 | 16.7 | 43.3 | 0.0 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 22 | 83.3 | 30.0 | 16.7 | 63.3 | 0.0 | 6.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 25 | 66.7 | 40.0 | 33.3 | 60.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25 | 29 | 50.0 | 26.7 | 50.0 | 70.0 | 0.0 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27 | 31 | 66.7 | 16.7 | 33.3 | 46.7 | 0.0 | 30.0 | 0.0 | 0.0 | 0.0 | 6.7 |
| 29 | 33 | 83.3 | 20.0 | 16.7 | 63.3 | 0.0 | 16.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31 | * | 50.0 | -- | 50.0 | -- | 0.0 | -- | 0.0 | -- | 0.0 | -- |
| | $M_1$ | 69.7 | -- | 32.3 | -- | 0.0 | -- | 0.0 | -- | 0.0 | -- |
| | $M_2$ | 71.7 | 37.7 | 28.3 | 60.0 | 0.0 | 7.3 | 0.0 | 0.0 | 0.0 | 1.0 |

TABLE LXXIX

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, GEORGIA
(RESEARCH QUESTION 2)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 1 | 1 | 80.0 | 58.8 | 20.0 | 41.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 7 | 40.0 | 76.5 | 60.0 | 17.6 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 10 | 80.0 | 82.4 | 10.0 | 17.6 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 13 | 70.0 | 52.9 | 30.0 | 47.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 19 | 50.0 | 64.7 | 50.0 | 29.4 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 22 | 50.0 | 29.4 | 50.0 | 64.7 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 25 | 50.0 | 52.9 | 50.0 | 47.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25 | 29 | 30.0 | 47.1 | 50.0 | 52.9 | 10.0 | 0.0 | 0.0 | 0.0 | 10.0 | 0.0 |
| 27 | 31 | 80.0 | 52.9 | 20.0 | 29.4 | 0.0 | 17.6 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29 | 33 | 50.0 | 41.2 | 50.0 | 52.9 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31 | * | 40.0 | -- | 60.0 | -- | 0.0 | -- | 0.0 | -- | 0.0 | -- |
| | $M_1$ | 56.4 | -- | 40.9 | -- | 1.8 | -- | 0.0 | -- | 0.0 | -- |
| | $M_2$ | 58.2 | 55.9 | 39.0 | 40.0 | 2.0 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 |

TABLE LXXX

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, OHIO
(RESEARCH QUESTION 2)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 1 | 1 | -- | 43.8 | -- | 48.7 | -- | 5.0 | -- | 1.2 | -- | 1.2 |
| 6 | 7 | -- | 56.3 | -- | 41.2 | -- | 2.5 | -- | 0.0 | -- | 0.0 |
| 9 | 10 | -- | 58.7 | -- | 38.7 | -- | 2.5 | -- | 0.0 | -- | 0.0 |
| 12 | 13 | -- | 37.5 | -- | 61.2 | -- | 1.2 | -- | 0.0 | -- | 0.0 |
| 17 | 19 | -- | 45.0 | -- | 51.2 | -- | 3.7 | -- | 0.0 | -- | 0.0 |
| 19 | 22 | -- | 25.0 | -- | 67.5 | -- | 6.3 | -- | 0.0 | -- | 0.0 |
| 22 | 25 | -- | 21.2 | -- | 65.0 | -- | 10.0 | -- | 1.2 | -- | 2.5 |
| 25 | 29 | -- | 21.2 | -- | 67.5 | -- | 11.2 | -- | 0.0 | -- | 0.0 |
| 27 | 31 | -- | 35.0 | -- | 51.2 | -- | 11.2 | -- | 0.0 | -- | 2.5 |
| 29 | 33 | -- | 31.3 | -- | 53.7 | -- | 10.0 | -- | 0.0 | -- | 5.0 |
| 31 | * | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | $M_1$ | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | $M_2$ | 0.0 | 37.5 | 0.0 | 54.5 | 0.0 | 6.4 | 0.0 | 0.2 | 0.0 | 1.1 |

TABLE LXXXI

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT B, OHIO
(RESEARCH QUESTION 2)

| Questionnaire Item | | Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 1 | 1 | 71.4 | 61.5 | 28.6 | 27.7 | 0.0 | 6.2 | 0.0 | 3.1 | 0.0 | 1.5 |
| 6 | 7 | 35.7 | 44.6 | 64.3 | 41.5 | 0.0 | 9.2 | 0.0 | 1.5 | 0.0 | 8.1 |
| 9 | 10 | 92.9 | 61.5 | 0.0 | 26.2 | 0.0 | 6.2 | 7.1 | 3.1 | 0.0 | 3.1 |
| 12 | 13 | 57.1 | 43.1 | 42.9 | 44.6 | 0.0 | 6.2 | 0.0 | 4.6 | 0.0 | 1.5 |
| 17 | 19 | 64.3 | 38.5 | 35.7 | 49.2 | 0.0 | 3.1 | 0.0 | 4.6 | 0.0 | 4.6 |
| 19 | 22 | 57.1 | 35.4 | 42.9 | 53.8 | 0.0 | 7.7 | 0.0 | 1.5 | 0.0 | 1.5 |
| 22 | 25 | 42.9 | 27.7 | 57.1 | 60.0 | 0.0 | 7.7 | 0.0 | 3.1 | 0.0 | 1.5 |
| 25 | 29 | 42.9 | 29.2 | 57.1 | 58.5 | 0.0 | 9.2 | 0.0 | 0.0 | 0.0 | 3.1 |
| 27 | 31 | 71.4 | 49.2 | 28.6 | 38.5 | 0.0 | 6.2 | 0.0 | 3.1 | 0.0 | 3.1 |
| 29 | 33 | 42.9 | 23.1 | 57.1 | 47.7 | 0.0 | 16.9 | 0.0 | 7.7 | 0.0 | 4.6 |
| 31 | * | 35.7 | -- | 64.3 | -- | 0.0 | -- | 0.0 | -- | 0.0 | -- |
| | $M_1$ | 55.9 | -- | 43.5 | -- | 0.0 | -- | 0.8 | -- | 0.0 | -- |
| | $M_2$ | 57.9 | 41.3 | 41.4 | 44.8 | 0.0 | 7.9 | 0.7 | 3.2 | 0.0 | 2.8 |

TABLE LXXXII

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT C, OHIO
(RESEARCH QUESTION 2)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 1 | 1 | 100.0 | 71.4 | 0.0 | 28.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 7 | 100.0 | 71.4 | 0.0 | 19.0 | 0.0 | 4.8 | 0.0 | 0.0 | 0.0 | 4.8 |
| 9 | 10 | 100.0 | 81.0 | 0.0 | 14.3 | 0.0 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 13 | 100.0 | 61.9 | 0.0 | 33.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.8 |
| 17 | 19 | 100.0 | 47.6 | 0.0 | 47.6 | 0.0 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 20 | 50.0 | 28.6 | 50.0 | 42.9 | 0.0 | 19.0 | 0.0 | 4.8 | 0.0 | 0.0 |
| 22 | 25 | 0.0 | 33.3 | 50.0 | 52.4 | 0.0 | 14.3 | 50.0 | 0.0 | 0.0 | 0.0 |
| 25 | 29 | 100.0 | 33.3 | 0.0 | 57.1 | 0.0 | 4.8 | 0.0 | 4.8 | 0.0 | 0.0 |
| 27 | 31 | 100.0 | 52.4 | 0.0 | 38.1 | 0.0 | 4.8 | 0.0 | 0.0 | 0.0 | 4.8 |
| 29 | 33 | 100.0 | 52.4 | 0.0 | 38.1 | 0.0 | 4.8 | 0.0 | 4.8 | 0.0 | 0.0 |
| 31 | * | 0.0 | -- | 100.0 | -- | 0.0 | -- | 0.0 | -- | 0.0 | 0.0 |
| | $M_1$ | 77.3 | -- | 18.2 | -- | -- | -- | 4.55 | -- | -- | -- |
| | $M_2$ | 85.0 | 53.3 | 10.0 | 37.1 | 0.0 | 6.2 | 5.0 | 1.4 | 0.0 | 1.4 |

TABLE LXXXIII

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, NEW YORK
(RESEARCH QUESTION 2)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | | S | T | S | T | S | T | S | T | S | T |
| 1 | 1 | | 50.0 | 29.4 | 50.0 | 61.8 | 0.0 | 8.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 7 | | 0.0 | 29.4 | 50.0 | 50.0 | 50.0 | 14.7 | 0.0 | 2.9 | 0.0 | 2.9 |
| 9 | 10 | | 0.0 | 23.5 | 50.0 | 50.0 | 50.0 | 20.6 | 0.0 | 5.9 | 0.0 | 0.0 |
| 12 | 13 | | 0.0 | 23.5 | 100.0 | 58.8 | 0.0 | 11.8 | 0.0 | 0.0 | 0.0 | 5.9 |
| 17 | 19 | | 50.0 | 29.4 | 50.0 | 52.9 | 0.0 | 8.8 | 0.0 | 0.0 | 0.0 | 8.8 |
| 19 | 22 | | 0.0 | 17.6 | 100.0 | 55.9 | 0.0 | 23.5 | 0.0 | 0.0 | 0.0 | 2.9 |
| 22 | 25 | | 50.0 | 20.6 | 50.0 | 55.9 | 0.0 | 17.6 | 0.0 | 0.0 | 0.0 | 5.9 |
| 25 | 29 | | 0.0 | 14.7 | 100.0 | 73.5 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 5.9 |
| 27 | 31 | | 0.0 | 23.5 | 50.0 | 41.2 | 50.0 | 20.6 | 0.0 | 11.8 | 0.0 | 2.9 |
| 29 | 33 | | 0.0 | 11.8 | 50.0 | 35.3 | 0.0 | 44.1 | 0.0 | 2.9 | 50.0 | 5.9 |
| 31 | * | | 0.0 | -- | 50.0 | -- | 50.0 | -- | 0.0 | -- | 0.0 | -- |
| | | $M_1$ | 13.6 | -- | 63.6 | -- | 18.2 | -- | 0.0 | -- | 4.5 | -- |
| | | $M_2$ | 15.0 | 22.3 | 65.0 | 53.5 | 15.0 | 17.6 | 0.0 | 2.4 | 5.0 | 4.1 |

TABLE LXXXIV

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, NORTH CAROLINA
(RESEARCH QUESTION 3)

| Questionnaire Item | | | Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | | S | T | S | T | S | T | S | T | S | T |
| 2 | 2 | | 50.0 | 32.0 | 50.0 | 56.0 | 0.0 | 12.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| * | 5 | | -- | 32.0 | -- | 48.0 | -- | 12.0 | -- | 4.0 | -- | 4.0 |
| 10 | 11 | | 75.0 | 40.0 | 25.0 | 36.0 | 0.0 | 4.0 | 0.0 | 16.0 | 0.0 | 4.0 |
| 14 | 16 | | 75.0 | 28.0 | 25.0 | 60.0 | 0.0 | 4.0 | 0.0 | 8.0 | 0.0 | 0.0 |
| * | 20 | | -- | 8.0 | -- | 56.0 | -- | 24.0 | -- | 8.0 | -- | 4.0 |
| 21 | 24 | | 25.0 | 20.0 | 75.0 | 52.0 | 0.0 | 12.0 | 0.0 | 8.0 | 0.0 | 8.0 |
| * | 26 | | -- | 8.0 | -- | 52.0 | -- | 28.0 | -- | 8.0 | -- | 4.0 |
| 28 | 32 | | 75.0 | 32.0 | 25.0 | 44.0 | 0.0 | 16.0 | 0.0 | 8.0 | 0.0 | 0.0 |
| 35 | 39 | | 0.0 | 20.0 | 100.0 | 40.0 | 0.0 | 24.0 | 0.0 | 8.0 | 0.0 | 8.0 |
| 33 | 42 | | 75.0 | 24.0 | 25.0 | 44.0 | 0.0 | 16.0 | 0.0 | 0.0 | 0.0 | 16.0 |
| | | $M_1$ | -- | 25.6 | -- | 48.4 | -- | 15.2 | -- | 6.8 | -- | 4.8 |
| | | $M_2$ | 50.7 | 28.0 | 46.4 | 47.4 | 0.0 | 12.6 | 0.0 | 6.9 | 0.0 | 5.1 |

TABLE LXXXV

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, KENTUCKY
(RESEARCH QUESTION 3)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 2 | 2 | 100.0 | 60.0 | 0.0 | 40.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| * | 5 | -- | 50.0 | -- | 50.0 | -- | 0.0 | -- | 0.0 | -- | 0.0 |
| 10 | 11 | 100.0 | 36.7 | 0.0 | 53.3 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 16 | 83.3 | 53.3 | 16.7 | 46.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| * | 20 | -- | 30.0 | -- | 43.3 | -- | 20.0 | -- | 3.3 | -- | 3.3 |
| 21 | 24 | 50.0 | 30.0 | 50.0 | 56.7 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 3.3 |
| * | 26 | -- | 43.3 | -- | 50.0 | -- | 6.7 | -- | 0.0 | -- | 0.0 |
| 28 | 32 | 66.7 | 16.7 | 33.3 | 70.0 | 0.0 | 10.0 | 0.0 | 3.3 | 0.0 | 0.0 |
| 35 | 39 | 66.7 | 20.0 | 33.3 | 70.0 | 0.0 | 6.7 | 0.0 | 3.3 | 0.0 | 0.0 |
| 38 | 42 | 66.7 | 13.3 | 33.3 | 76.7 | 0.0 | 6.7 | 0.0 | 3.3 | 0.0 | 0.0 |
| | $M_1$ | -- | 35.3 | -- | 55.6 | -- | 7.0 | -- | 1.4 | -- | 0.7 |
| | $M_2$ | 76.2 | 32.9 | 23.8 | 59.1 | 0.0 | 6.2 | 0.0 | 1.3 | 0.0 | 0.5 |

TABLE LXXXVI

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, GEORGIA
(RESEARCH QUESTION 3)

| Questionnaire Item | | | Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | | S | T | S | T | S | T | S | T | S | T |
| 2 | 2 | | 80.0 | 76.5 | 20.0 | 23.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| * | 5 | | -- | 82.4 | -- | 17.6 | -- | 0.0 | -- | 0.0 | -- | 0.0 |
| 10 | 11 | | 70.0 | 47.1 | 30.0 | 52.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 16 | | 60.0 | 58.8 | 40.0 | 35.3 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| * | 20 | | -- | 17.6 | -- | 58.8 | -- | 23.5 | -- | 0.0 | -- | 0.0 |
| 21 | 24 | | 50.0 | 41.2 | 50.0 | 41.2 | 0.0 | 17.6 | 0.0 | 0.0 | 0.0 | 0.0 |
| * | 26 | | -- | 52.9 | -- | 17.6 | -- | 29.4 | -- | 0.0 | -- | 0.0 |
| 28 | 32 | | 60.0 | 52.9 | 40.0 | 47.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35 | 39 | | 60.0 | 35.3 | 40.0 | 58.8 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 38 | 42 | | 40.0 | 41.2 | 60.0 | 58.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | $M_1$ | -- | 50.6 | -- | 41.2 | -- | 8.2 | -- | -- | -- | -- |
| | | $M_2$ | 60.0 | 50.4 | 40.0 | 45.4 | 0.0 | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 |

TABLE LXXXVII

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, OHIO
(RESEARCH QUESTION 3)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 2 | 2 | -- | 58.7 | -- | 40.0 | -- | 1.2 | -- | 0.0 | -- | 0.0 |
| * | 5 | -- | 50.0 | -- | 43.8 | -- | 6.3 | -- | 0.0 | -- | 0.0 |
| 10 | 11 | -- | 18.8 | -- | 57.5 | -- | 13.7 | -- | 5.0 | -- | 5.0 |
| 14 | 11 | -- | 51.0 | -- | 43.8 | -- | 5.0 | -- | 0.0 | -- | 0.0 |
| * | 20 | -- | 15.0 | -- | 35.0 | -- | 32.5 | -- | 17.5 | -- | 0.0 |
| 21 | 24 | -- | 12.5 | -- | 71.2 | -- | 13.7 | -- | 0.0 | -- | 2.5 |
| * | 26 | -- | 21.2 | -- | 60.0 | -- | 13.7 | -- | 2.5 | -- | 0.0 |
| 28 | 30 | -- | 22.5 | -- | 67.5 | -- | 10.0 | -- | 0.0 | -- | 0.0 |
| 35 | 39 | -- | 28.7 | -- | 57.5 | -- | 11.2 | -- | 2.5 | -- | 0.0 |
| 38 | 42 | -- | 22.5 | -- | 66.2 | -- | 7.5 | -- | 2.5 | -- | 1.2 |
| | $M_1$ | -- | 30.1 | -- | -- | -- | -- | -- | -- | -- | -- |
| | $M_2$ | -- | 30.7 | -- | 69.6 | -- | 9.6 | -- | 2.5 | -- | 0.7 |

TABLE LXXXVIII

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT B, OHIO
(RESEARCH QUESTION 3)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 2 | 2 | 92.9 | 67.2 | 7.1 | 27.6 | 0.0 | 0.0 | 0.0 | 3.4 | 0.0 | 1.7 |
| * | 5 | -- | 55.2 | -- | 36.2 | -- | 6.9 | -- | 1.7 | -- | 0.0 |
| 10 | 11 | 64.3 | 32.8 | 21.4 | 50.0 | 0.0 | 6.9 | 0.0 | 5.2 | 0.0 | 5.2 |
| 14 | 16 | 63.3 | 43.1 | 35.7 | 50.0 | 0.0 | 5.2 | 0.0 | 0.0 | 0.0 | 1.7 |
| * | 20 | -- | 22.4 | -- | 41.4 | -- | 31.0 | -- | 5.2 | -- | 0.0 |
| 21 | 24 | 28.6 | 17.2 | 50.0 | 53.4 | 14.3 | 20.7 | 0.0 | 1.7 | 7.1 | 6.9 |
| * | 26 | -- | 36.2 | -- | 46.6 | -- | 8.6 | -- | 6.9 | -- | 1.7 |
| 28 | 32 | 78.6 | 36.2 | 21.4 | 43.1 | 0.0 | 13.8 | 0.0 | 5.2 | 0.0 | 1.7 |
| 35 | 39 | 28.6 | 31.0 | 64.3 | 51.7 | 7.1 | 6.9 | 0.0 | 6.9 | 0.0 | 3.4 |
| 38 | 42 | 64.3 | 31.0 | 35.7 | 56.9 | 0.0 | 8.6 | 0.0 | 1.7 | 0.0 | 1.7 |
| | $M_1$ | -- | 34.0 | -- | 45.9 | -- | 10.9 | -- | 2.8 | -- | 2.4 |
| | $M_2$ | 60.1 | 36.5 | 33.7 | 46.8 | 3.1 | 8.8 | 0.0 | 3.4 | 1.0 | 3.2 |

TABLE LXXXIX

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT C, OHIO
(RESEARCH QUESTION 3)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | | S | T | S | T | S | T | S | T | S | T |
| 2 | 2 | | 100.0 | 71.4 | 0.0 | 28.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| * | 5 | | -- | 61.9 | -- | 33.3 | -- | 0.0 | -- | 0.0 | -- | 4.8 |
| 10 | 11 | | 50.0 | 38.1 | 50.0 | 57.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.8 |
| 14 | 16 | | 100.0 | 52.4 | 0.0 | 42.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.8 |
| * | 20 | | -- | 28.6 | -- | 42.9 | -- | 19.0 | -- | 4.8 | -- | 4.8 |
| 21 | 24 | | 0.0 | 14.3 | 100.0 | 61.9 | 0.0 | 19.0 | 0.0 | 0.0 | 0.0 | 3.8 |
| * | 26 | | -- | 19.0 | -- | 57.1 | -- | 19.0 | -- | 0.0 | -- | 4.8 |
| 28 | 32 | | 100.0 | 52.4 | 0.0 | 28.6 | 0.0 | 9.5 | 0.0 | 4.8 | 0.0 | 4.8 |
| 35 | 39 | | 100.0 | 38.1 | 0.0 | 47.6 | 0.0 | 0.0 | 0.0 | 4.8 | 0.0 | 9.5 |
| 38 | 42 | | 100.0 | 38.1 | 0.0 | 52.4 | 0.0 | 0.0 | 0.0 | 4.8 | 0.0 | 0.0 |
| | | $M_1$ | -- | 37.9 | -- | 48.1 | -- | 6.7 | -- | 1.9 | -- | 4.3 |
| | | $M_2$ | 78.6 | 38.5 | 21.4 | 50.0 | 0.0 | 12.2 | 0.0 | 2.1 | 0.0 | 4.1 |

TABLE XC

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, NEW YORK
(RESEARCH QUESTION 3)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 2 | 2 | 100.0 | 44.1 | 0.0 | 47.8 | 0.0 | 8.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| * | 5 | -- | 38.2 | -- | 44.1 | -- | 14.7 | -- | 2.9 | -- | 0.0 |
| 10 | 11 | 100.0 | 29.4 | 0.0 | 44.1 | 0.0 | 20.6 | 0.0 | 2.9 | 0.0 | 2.9 |
| 14 | 16 | 50.0 | 38.2 | 50.0 | 55.9 | 0.0 | 2.9 | 0.0 | 2.9 | 0.0 | 0.0 |
| * | 20 | -- | 8.8 | -- | 35.3 | -- | 41.2 | -- | 8.8 | -- | 5.9 |
| 21 | 24 | 0.0 | 17.6 | 100.0 | 41.3 | 0.0 | 29.4 | 0.0 | 5.9 | 0.0 | 5.9 |
| * | 26 | -- | 17.6 | -- | 35.3 | -- | 29.4 | -- | 11.8 | -- | 5.9 |
| 28 | 32 | 100.0 | 20.6 | 0.0 | 35.3 | 0.0 | 32.4 | 0.0 | 8.8 | 0.0 | 2.9 |
| 35 | 39 | 0.0 | 14.7 | 50.0 | 44.1 | 0.0 | 29.4 | 50.0 | 8.8 | 0.0 | 2.9 |
| 38 | 42 | 0.0 | 14.7 | 50.0 | 55.9 | 0.0 | 20.6 | 0.0 | 2.9 | 50.0 | 5.9 |
| | $M_1$ | -- | 24.4 | -- | 43.9 | -- | 22.9 | -- | 5.8 | -- | 3.2 |
| | $M_2$ | 50.0 | 25.6 | 35.7 | 46.0 | 0.0 | 20.6 | 7.14 | 4.6 | 7.14 | 2.9 |

TABLE XCI

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, NORTH CAROLINA
(RESEARCH QUESTION 4)

| Questionnaire Item | | Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 4 | 4 | 50.0 | 4.0 | 50.0 | 48.0 | 0.0 | 28.0 | 0.0 | 16.0 | 0.0 | 4.0 |
| 7 | 8 | 50.0 | 12.0 | 50.0 | 56.0 | 0.0 | 24.0 | 0.0 | 8.0 | 0.0 | 0.0 |
| 11 | 12 | 75.0 | 8.0 | 0.0 | 40.0 | 0.0 | 28.0 | 0.0 | 4.0 | 25.0 | 20.0 |
| 15 | 17 | 75.0 | 16.0 | 25.0 | 44.0 | 0.0 | 16.0 | 0.0 | 12.0 | 0.0 | 12.0 |
| 18 | 21 | 0.0 | 4.0 | 75.0 | 48.0 | 0.0 | 40.0 | 0.0 | 4.0 | 25.0 | 4.0 |
| 20 | 23 | 25.0 | 12.0 | 75.0 | 48.0 | 0.0 | 24.0 | 0.0 | 4.0 | 0.0 | 12.0 |
| 23 | 27 | 0.0 | 0.0 | 100.0 | 88.0 | 0.0 | 12.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24 | 28 | 50.0 | 12.0 | 50.0 | 56.0 | 0.0 | 20.0 | 0.0 | 8.0 | 0.0 | 4.0 |
| 30 | 34 | 50.0 | 16.0 | 50.0 | 40.0 | 0.0 | 32.0 | 0.0 | 8.0 | 0.0 | 4.0 |
| 32 | 36 | 50.0 | 20.0 | 50.0 | 56.0 | 0.0 | 12.0 | 0.0 | 12.0 | 0.0 | 0.0 |
| 33 | 37 | 75.0 | 24.0 | 25.0 | 36.0 | 0.0 | 16.0 | 0.0 | 8.0 | 0.0 | 16.0 |
| 36 | 40 | 50.0 | 24.0 | 50.0 | 48.0 | 0.0 | 8.0 | 0.0 | 8.0 | 0.0 | 12.0 |
| | $M_1$ | 45.8 | 12.7 | 50.0 | 50.7 | 0.0 | 21.0 | 0.0 | 7.3 | 4.16 | 7.3 |
| | $M_2$ | 45.8 | 12.7 | 50.0 | 50.7 | 0.0 | 21.0 | 0.0 | 7.3 | 4.16 | 7.3 |

TABLE XCII

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, KENTUCKY
(RESEARCH QUESTION 4)

| Questionnaire Item | | Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 4 | 4 | 83.3 | 10.0 | 16.7 | 83.3 | 0.0 | 6.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 8 | 83.3 | 33.3 | 16.7 | 57.7 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 12 | 66.7 | 26.7 | 33.3 | 56.7 | 0.0 | 13.3 | 0.0 | 0.0 | 0.0 | 3.3 |
| 15 | 17 | 66.7 | 13.3 | 33.3 | 70.0 | 0.0 | 13.3 | 0.0 | 0.0 | 0.0 | 3.3 |
| 18 | 21 | 33.3 | 10.0 | 66.7 | 36.7 | 33.3 | 40.0 | 0.0 | 3.3 | 0.0 | 10.0 |
| 20 | 23 | 16.7 | 6.7 | 33.3 | 63.3 | 0.0 | 16.7 | 0.0 | 0.0 | 16.7 | 13.3 |
| 23 | 27 | 33.3 | 16.7 | 66.7 | 73.3 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24 | 28 | 50.0 | 30.0 | 50.0 | 66.7 | 0.0 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 34 | 50.0 | 16.7 | 50.0 | 73.3 | 0.0 | 3.3 | 0.0 | 3.3 | 0.0 | 3.3 |
| 32 | 36 | 33.3 | 10.0 | 66.7 | 70.0 | 0.0 | 13.3 | 0.0 | 0.0 | 0.0 | 6.7 |
| 33 | 37 | 50.0 | 23.3 | 50.0 | 70.0 | 0.0 | 6.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 36 | 40 | 50.0 | 20.0 | 50.0 | 70.0 | 0.0 | 6.7 | 0.0 | 3.3 | 0.0 | 0.0 |
| | $M_1$ | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | $M_2$ | 51.4 | 18.1 | 44.5 | 66.0 | 2.8 | 14.7 | 0.0 | 0.83 | 1.4 | 3.3 |

TABLE XCIII

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, GEORGIA
(RESEARCH QUESTION 4)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 4 | 4 | 20.0 | 23.5 | 60.0 | 64.7 | 10.0 | 11.8 | 0.0 | 0.0 | 10.0 | 0.0 |
| 7 | 8 | 50.0 | 35.3 | 50.0 | 58.8 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 12 | 10.0 | 11.8 | 80.0 | 58.8 | 0.0 | 17.6 | 10.0 | 5.9 | 0.0 | 5.9 |
| 15 | 17 | 30.0 | 17.6 | 70.0 | 76.5 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 21 | 0.0 | 21.5 | 70.0 | 52.9 | 30.0 | 23.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 23 | 60.0 | 23.5 | 40.0 | 64.7 | 0.0 | 11.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 27 | 20.0 | 23.5 | 80.0 | 52.9 | 0.0 | 23.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24 | 28 | 10.0 | 17.6 | 90.0 | 70.6 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 5.9 |
| 30 | 34 | 30.0 | 35.3 | 70.0 | 52.9 | 0.0 | 5.9 | 0.0 | 5.9 | 0.0 | 0.0 |
| 32 | 36 | 20.0 | 35.3 | 70.0 | 64.7 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33 | 37 | 50.0 | 17.6 | 50.0 | 70.6 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 5.9 |
| 36 | 40 | 60.0 | 58.8 | 40.0 | 35.3 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| | $M_1$ | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | $M_2$ | 30.0 | 36.8 | 64.2 | 60.3 | 4.2 | 10.6 | 0.0 | 1.0 | 0.8 | 1.5 |

TABLE XCIV

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, OHIO
(RESEARCH QUESTION 4)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 4 | 4 | -- | 12.5 | -- | 60.0 | -- | 25.0 | -- | 0.0 | -- | 2.5 |
| 7 | 8 | -- | 12.5 | -- | 57.5 | -- | 30.0 | -- | 0.0 | -- | 0.0 |
| 11 | 12 | -- | 2.5 | -- | 52.5 | -- | 33.7 | -- | 10.0 | -- | 1.2 |
| 15 | 17 | -- | 13.7 | -- | 60.0 | -- | 20.0 | -- | 0.0 | -- | 6.3 |
| 18 | 21 | -- | 7.5 | -- | 27.5 | -- | 57.5 | -- | 5.0 | -- | 2.5 |
| 20 | 23 | -- | 23.7 | -- | 36.7 | -- | 21.2 | -- | 0.0 | -- | 18.8 |
| 23 | 27 | -- | 11.2 | -- | 58.7 | -- | 26.2 | -- | 0.0 | -- | 3.7 |
| 24 | 28 | -- | 7.5 | -- | 65.0 | -- | 25.0 | -- | 2.5 | -- | 0.0 |
| 30 | 34 | -- | 7.5 | -- | 40.0 | -- | 45.0 | -- | 5.0 | -- | 2.5 |
| 32 | 36 | -- | 11.2 | -- | 65.0 | -- | 23.7 | -- | 0.0 | -- | 0.0 |
| 33 | 37 | -- | 6.3 | -- | 47.5 | -- | 17.5 | -- | 12.5 | -- | 0.0 |
| 36 | 40 | -- | 30.0 | -- | 67.5 | -- | 2.5 | -- | 0.0 | -- | 0.0 |
| | $M_1$ | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | $M_2$ | 0.0 | 12.2 | 0.0 | 53.1 | 0.0 | 27.3 | 0.0 | 2.9 | 0.0 | 3.1 |

TABLE XCV

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT B, OHIO
(RESEARCH QUESTION 4)

| Questionnaire Item | | Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 4 | 4 | 21.4 | 25.9 | 64.3 | 44.8 | 14.3 | 19.0 | 0.0 | 8.6 | 0.0 | 1.7 |
| 1 | 8 | 50.0 | 32.8 | 42.9 | 37.9 | 7.1 | 22.4 | 0.0 | 3.4 | 0.0 | 3.4 |
| 11 | 12 | 35.7 | 10.3 | 50.0 | 53.4 | 14.3 | 27.6 | 0.0 | 6.9 | 0.0 | 1.7 |
| 15 | 17 | 21.4 | 29.3 | 64.3 | 48.3 | 14.3 | 22.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 21 | 7.1 | 8.6 | 78.6 | 39.7 | 14.3 | 41.4 | 0.0 | 8.6 | 0.0 | 1.7 |
| 20 | 23 | 50.0 | 19.0 | 28.6 | 58.6 | 21.4 | 19.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 27 | 14.3 | 17.2 | 78.6 | 63.8 | 0.0 | 17.2 | 0.0 | 0.0 | 7.1 | 1.7 |
| 24 | 28 | 14.3 | 20.7 | 64.3 | 51.7 | 21.4 | 22.4 | 0.0 | 1.7 | 0.0 | 3.4 |
| 30 | 34 | 28.6 | 22.4 | 64.3 | 53.4 | 7.1 | 19.0 | 0.0 | 3.4 | 0.0 | 1.7 |
| 32 | 36 | 85.7 | 19.0 | 14.3 | 55.2 | 0.0 | 20.7 | 0.0 | 1.7 | 0.0 | 3.4 |
| 33 | 37 | 42.9 | 20.7 | 50.0 | 53.4 | 7.1 | 15.5 | 0.0 | 8.6 | 0.0 | 1.7 |
| 36 | 40 | 50.0 | 34.5 | 50.0 | 55.2 | 0.0 | 5.2 | 0.0 | 3.4 | 0.0 | 1.7 |
| | $M_1$ | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | $M_2$ | 35.1 | 21.7 | 54.2 | 51.3 | 10.1 | 21.0 | 0.0 | 3.9 | 0.6 | 1.8 |

TABLE XCVI

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT C, OHIO
(RESEARCH QUESTION 4)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 4 | 4 | 100.0 | 14.3 | 0.0 | 66.7 | 0.0 | 19.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 8 | 50.0 | 23.8 | 50.0 | 57.1 | 0.0 | 4.8 | 0.0 | 0.0 | 0.0 | 14.3 |
| 11 | 12 | 0.0 | 66.7 | 100.0 | 23.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.5 |
| 15 | 17 | 0.0 | 38.1 | 100.0 | 57.1 | 0.0 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 21 | 0.0 | 19.0 | 100.0 | 28.6 | 0.0 | 33.3 | 0.0 | 4.8 | 0.0 | 14.3 |
| 20 | 23 | 50.0 | 33.3 | 50.0 | 47.6 | 0.0 | 4.8 | 0.0 | 4.8 | 0.0 | 9.5 |
| 23 | 27 | 0.0 | 19.0 | 100.0 | 57.1 | 0.0 | 4.8 | 0.0 | 4.8 | 0.0 | 14.3 |
| 24 | 28 | 0.0 | 19.0 | 100.0 | 47.6 | 0.0 | 23.8 | 0.0 | 0.0 | 0.0 | 9.5 |
| 30 | 34 | 100.0 | 38.1 | 0.0 | 38.1 | 0.0 | 9.5 | 0.0 | 4.8 | 0.0 | 9.5 |
| 32 | 36 | 50.0 | 14.3 | 50.0 | 66.7 | 0.0 | 9.5 | 0.0 | 0.0 | 0.0 | 9.5 |
| 33 | 37 | 50.0 | 19.0 | 50.0 | 52.4 | 0.0 | 9.5 | 0.0 | 4.8 | 0.0 | 14.3 |
| 36 | 40 | 100.0 | 47.6 | 0.0 | 42.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.5 |
| | $M_1$ | 41.6 | 29.4 | 58.3 | 48.8 | 0.0 | 10.3 | 0.0 | 2.0 | 0.0 | 9.5 |

TABLE XCVII

RELATIVE FREQUENCY ANALYSIS BY SCHOOL, DISTRICT A, NEW YORK
(RESEARCH QUESTION 4)

| Comparable Items with Respective Relative Frequency Percentages | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Questionnaire Item | | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Response Not Present or Not Usable | |
| S | T | S | T | S | T | S | T | S | T | S | T |
| 4 | 4 | 0.0 | 20.6 | 100.0 | 47.1 | 0.0 | 23.5 | 0.0 | 5.9 | 0.0 | 2.9 |
| 7 | 8 | 0.0 | 11.8 | 50.0 | 52.9 | 50.0 | 20.6 | 0.0 | 8.8 | 0.0 | 5.9 |
| 11 | 12 | 50.0 | 11.8 | 50.0 | 44.1 | 0.0 | 38.2 | 0.0 | 2.9 | 0.0 | 2.9 |
| 15 | 17 | 50.0 | 17.6 | 50.0 | 44.1 | 0.0 | 35.3 | 0.0 | 2.9 | 0.0 | 0.0 |
| 18 | 21 | 0.0 | 2.9 | 50.0 | 23.5 | 50.0 | 55.9 | 0.0 | 11.8 | 0.0 | 5.9 |
| 20 | 23 | 50.0 | 32.9 | 50.0 | 55.9 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 5.9 |
| 23 | 27 | 0.0 | 8.8 | 100.0 | 52.8 | 0.0 | 32.4 | 0.0 | 0.0 | 0.0 | 5.9 |
| 24 | 28 | 0.0 | 11.8 | 50.0 | 41.8 | 0.0 | 38.2 | 50.0 | 2.9 | 0.0 | 5.9 |
| 30 | 34 | 0.0 | 20.6 | 50.0 | 44.1 | 50.0 | 23.5 | 0.0 | 5.9 | 0.0 | 5.9 |
| 32 | 36 | 0.0 | 5.9 | 50.0 | 44.1 | 50.0 | 44.1 | 0.0 | 5.0 | 0.0 | 0.0 |
| 33 | 37 | 0.0 | 20.6 | 50.0 | 58.8 | 50.0 | 17.6 | 0.0 | 2.9 | 0.0 | 0.0 |
| 36 | 40 | 0.0 | 23.5 | 100.0 | 64.7 | 0.0 | 8.8 | 0.0 | 2.9 | 0.0 | 0.0 |
| | $M_1$ | 12.5 | 15.7 | 62.5 | 47.8 | 20.9 | 28.7 | 4.16 | 4.4 | 0.0 | 3.4 |

TABLE XCVIII

DESCRIPTION AND PERCENT OF RESPONDENTS BY DISTRICT, SCHOOL ORGANIZATION, YEARS IN CURRENT POSITION, EDUCATIONAL BACKGROUND, AND SEX

| Category | Supervisor | Percent | Teacher | Percent |
|---|---|---|---|---|
| State | | | | |
| Georgia | 2 | 5.0 | 17 | 6.1 |
| Kentucky | 6 | 15.0 | 30 | 10.3 |
| Ohio | 18 | 45.0 | 159 | 57.2 |
| North Carolina | 4 | 10.0 | 25 | 9.0 |
| New York | 2 | 25.0 | 34 | 12.2 |
| Unknown | 0 | 00.0 | 13 | 4.7 |
| Total | 40 | 100.0 | 278 | 100.0 |
| School Organization | | | | |
| Elementary | 21 | 52.5 | 146 | 52.5 |
| Middle School | 3 | 7.5 | 21 | 7.6 |
| Junior High | 4 | 10.0 | 17 | 6.1 |
| High School | 9 | 22.5 | 87 | 31.3 |
| Other | 3 | 7.5 | 4 | 1.4 |
| Total | 40 | 100.0 | 278 | 100.0 |
| Years in Current Position | | | | |
| 1-3 | 14 | 35.0 | 106 | 38.1 |
| 4-7 | 10 | 25.0 | 67 | 24.1 |
| 8-12 | 12 | 25.0 | 56 | 20.1 |
| 13 + | 3 | 7.5 | 41 | 14.7 |
| No Response | 1 | 2.5 | 8 | 2.9 |
| Total | 40 | 100.0 | 278 | 100.0 |
| Educational Background | | | | |
| B.A./B.S. | 0 | 0.0 | 89 | 32.0 |
| B.A./B.S. + | 0 | 0.0 | 78 | 28.1 |
| Master's | 4 | 10.0 | 47 | 16.9 |
| Master's + | 30 | 75.0 | 53 | 19.1 |
| Ed.S. | 5 | 12.5 | 0 | 0.0 |
| Ed.D. or Ph.D. | 1 | 2.5 | 0 | 0.0 |
| Unknown | 0 | 0.0 | 11 | 4.0 |
| Total | 40 | 100.0 | 278 | 100.0 |
| Sex | | | | |
| Male | 29 | 72.5 | 82 | 29.5 |
| Female | 7 | 17.5 | 159 | 57.2 |
| No Response | 4 | 10.0 | 37 | 13.3 |
| Total | 40 | 100.0 | 278 | 100.0 |

# APPENDIX B

## LETTER TO ADMINISTRATORS AND QUESTIONNAIRES COMPLETED BY SUPERVISORS AND TEACHERS

THE UNIVERSITY OF TENNESSEE
KNOXVILLE 37916

College of Education

Department of
Curriculum and Instruction
May 9, 1978

Dear

I have enclosed the questionnaires that we have developed to determine the effects of the supervision process that I have been involved in with you and your administrators. It is our hope that the results of this research will help all of us to refine and improve our approach to supervision and instructional improvement. I am confident that the results, which we will share with you, will assist you in future staff development activities.

The individual responses will be strictly confidential and no attempt will be made to identify any individual teacher or administrator. Our summary for you will provide information about the implementation of the process on a district wide basis.

It should take at most twenty minutes for each individual to fill out the questionnaire so this should not be a time consuming task. The procedure for administering the instrument is as follows:

a. Ask each administrator or supervisor who has been using the process that we have developed to complete one of the questionnaires for supervisors. (These have been underlined in red.) The form should then be stapled or taped so that the address panel is on the outside and mailed directly to us.
b. Identify those teachers who have been supervised during this year with our supervisory process and ask them to complete the form for teachers and return the instrument directly to us. (These have been underlined in blue.)
c. If you have any questions about procedures call me collect at (615) 974-4426.

We appreciate your help with this project. Hopefully, the information we receive will help all of us to strengthen our process for improving instruction.

Sincerely,

Jerry J. Bellon

First Class
Permit No. 414
Knoxville, Tn

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Bureau of Educational Research
and Service
212 Claxton Education Building
The University of Tennessee
Knoxville, Tennessee 37916

ATTN: Dr. Jerry Bellon

Dear Educator:

As you complete this instrument, it is recommended that you focus on your own perceptions of the supervisory process in which you are a participant. This will help us to develop a portrayal of the current process as it affects survey respondents representing school districts in various regions of the nation. Please respond to each item on the basis of your current information, even if you feel that this may reflect an insufficient knowledge base.

The presentation of findings from this supervisory perception check, currently being administered to a sample of teachers and principals, will be carefully monitored to maintain strict confidentiality. No individual respondent will be identified in any portrayal of district or sample group data.

When you have completed each section, please place your return address in the appropriate space on the folded instrument and staple the form for mailing. Prompt return of the survey form will greatly facilitate the further progress of this research. Your cooperation is sincerely appreciated, and we will be pleased to provide results of the study upon request. Thank you again for your support.

Sincerely,

Dr. J. J. Bellon, Head
Mr. Clark Shultes, Research Asst.
Department of Curriculum & Instruction

Please respond to each item below by marking the appropriate "X"

SA = Strongly agree
A = Agree
D = Disagree
SD = Strongly disagree

| | SA | A | D | SD |
|---|---|---|---|---|
| 1. Supervisors understand the teacher's objectives prior to each supervisory classroom observation. | X | X | X | X |
| 2. Each supervisory classroom observation is followed by a joint analysis of the data collected. | X | X | X | X |
| 3. Supervision as presently conducted focused on instruction rather than on the teacher's personal characteristics. | X | X | X | X |
| 4. The supervision program has helped to develop instructional plans to accommodate student differences. | X | X | X | X |
| 5. The teacher and I reach agreement during the post-observation conference about what took place during the lesson observed. | X | X | X | X |
| 6. I use a running log of teacher and/or student verbal behavior during an observation to gather data about teacher or student verbal patterns. | X | X | X | X |
| 7. Discussing the intended instructional transactions during the pre-observation conference has helped teachers to plan more effectively. | X | X | X | X |
| 8. School and/or district goals give direction to our supervision and instructional improvement processes. | X | X | X | X |
| 9. Post-observation conferences are usually held within one day of the classroom visit. | X | X | X | X |
| 10. Our school (district) began the present supervisory process in order to improve instruction. | X | X | X | X |
| 11. Instructional needs identified through the supervision process are considered in planning staff development activities. | X | X | X | X |
| 12. The teacher and I are generally able to reconstruct student or teacher behavior patterns from the classroom map and/or verbal log. | X | X | X | X |
| 13. Instructional effectiveness generally increases when teachers are proficient in the use of a variety of techniques and strategies. | X | X | X | X |
| 14. Classroom observations are presently conducted in an objective manner. | X | X | X | X |
| 15. The supervisory process has increased teacher awareness of different types and levels of classroom questions. | X | X | X | X |
| 16. Supervisors are most effective when they establish and maintain positive relationships with teachers. | X | X | X | X |
| 17. Agreement about an appropriate observational focus is reached during the pre-observation conference. | X | X | X | X |
| 18. The present supervisory process has led to increased levels of student participation in class discussions. | X | X | X | X |
| 19. Our post-observation conferences generally provide information for improving or more instructional patterns. | X | X | X | X |

| | SA | A | D | SD |
|---|---|---|---|---|
| 20. Summaries of supervisory conferences represent a major data source used for teacher evaluation. | X | X | X | X |
| 21. Participation in the present supervisory process has helped teachers and supervisors to view themselves and their colleagues as being self-renewing educators. | X | X | X | X |
| 22. As a rule our first step in pattern assment during the post-observation conference is to review the objectives for the observed lesson. | X | X | X | X |
| 23. The present supervisory process has prompted teachers to select instructional modes to support intended outcomes. | X | X | X | X |
| 24. The present supervisory process has encouraged a greater emphasis on cooperative planning and problem solving. | X | X | X | X |
| 25. We have generally been able to assess identified patterns during the post-observation conference. | X | X | X | X |
| 26. The present supervision process has demonstrated that instruction can be improved by changing patterns which interfere with attainment of objectives. | X | X | X | X |
| 27. I use a map or diagram to gather data about teacher or student physical patterns. | X | X | X | X |
| 28. Participation in the present supervisory process has helped me to feel more positive about instructional supervision. | X | X | X | |

| | SA | A | D | SD |
|---|---|---|---|---|
| 29. The current supervisory process emphasizes instructional improvement rather than teacher evaluation. | X | X | X | X |
| 30. The present supervisory process has helped to improve communication between teachers and administrators. | X | X | X | X |
| 31. Planning for future instruction is one aspect of each post-observation conference. | X | X | X | X |
| 32. The present supervisory process has caused teachers to be more concerned about learner outcomes. | X | X | X | X |
| 33. School administrators have become more aware of instructional needs and processes through their involvement in supervisory activities. | X | X | X | X |
| 34. We have found that instructional analysis and practice of specific behavior patterns has helped to improve instruction. | X | X | X | X |
| 35. The present supervisory process has helped to develop trust relationships between myself and those whom I supervise. | X | X | X | X |
| 36. Participation in the present supervisory process has helped me to analyze my own leadership behavior. | X | X | X | X |
| 37. ~~Our school (district) began~~ the present supervisory process in order to improve instruction. | X | X | X | X |
| 38. Our instructional supervision program helps to reinforce effective patterns, identify weaker patterns, and develop a plan for improvement. | X | X | X | X |

Please comment briefly on specific outcomes of the supervisory process in relation to each area listed below:

1. The Instructional Program

2. Student/Teacher Interaction Patterns

3. Teacher/Administrator Interaction Patterns

4. The Staff Development Program

5. Other Outcomes

Please complete the following information section to permit appropriate data analysis:

District_____

School Organization:

Elementary_____ High School___
Middle School____ Other_____
Junior High_____

Present Administrative Position:

Years in Current Position:

1-3_____ 8-12_____

4-7_____ 13+ _____

Educational Background:

B.A./B.S._____ Masters+_____

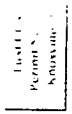
B.A./B.S.+____ Ed.S _____

Masters_____ Ed.D or Ph.D_____

Optional Item:

Sex: M____F____





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212 Claxton Education Building
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ATTN: Dr. Jerry Bellon

Dear Educator:

As you complete this instrument, it is recommended that you focus on your own perceptions of the supervisory process in which you are a participant. This will help us to develop a portrayal of the current process as it affects survey respondents representing school districts in various regions of the nation. Please respond to each item on the basis of your current information, even if you feel that this may reflect an insufficient knowledge base.

The presentation of findings from this supervisory perception check, currently being administered to a sample of teachers and principals, will be carefully monitored to maintain strict confidentiality. No individual respondent will be identified in any portrayal of district or sample group data.

When you have completed each section, please place your return address in the appropriate space on the folded instrument and staple the form for mailing. Prompt return of the survey form will greatly facilitate the further progress of this research. Your cooperation is sincerely appreciated, and we will te pleased to provide results of the study upon request. Thank you again for your support.

Sincerely,

Dr. J. J. Bellon, Head
Mr. Clark Shultes, Research Asst.
Department of Curriculum & Instruction

Please respond to each item below by marking the appropriate "X"

SA = Strongly agree
A = Agree
D = Disagree
SD = Strongly disagree

| | SA | A | D | SD |
|---|---|---|---|---|
| 1. Supervisors understand the teacher's objectives prior to each supervisory classroom observation. | X | X | X | X |
| 2. Each supervisory classroom observation is followed by a joint analysis of the data collected. | X | X | X | X |
| 3. Supervision as presently conducted focuses on instruction rather than on the teacher's personal characteristics. | X | X | X | X |
| 4. The supervision program has helped to develop instructional plans to accommodate student differences. | X | X | X | X |
| 5. My supervisor communicates clearly with me during the supervisory process. | X | X | X | X |
| 6. My supervisor and I reach agreement during the post-observation conference about what took place during the lesson observed. | X | X | X | X |
| 7. My supervisor uses a running log of teacher and/or student verbal behavior during an observation to gather data about teacher or student verbal patterns. | X | X | X | X |
| 8. Discussing the intended instructional transactions during the pre-observation conference has helped me to plan more effectively. | X | X | X | X |
| 9. School and/or district goals give direction to our supervision and instructional improvement processes. | X | X | X | X |
| 10. Post-observation conferences are usually held within one day of the classroom visit. | X | X | X | X |

| | SA | A | D | SD |
|---|---|---|---|---|
| 11. Our school (district) began the present supervisory process in order to improve instruction. | X | X | X | X |
| 12. Instructional needs identified through the supervision process are considered in planning staff development activities. | X | X | X | X |
| 13. My supervisor and I are generally able to reconstruc student or teacher behavior patterns from the classroom map and/or verbal log. | X | X | X | X |
| 14. My supervisor tries to develop the talents and resources of those with whom he/she works. | X | X | X | X |
| 15. Instructional effectiveness generally increases when teachers are proficient in the use ofa variety techniques and strategies. | X | X | X | X |
| 16. Classroom observations are presently conducted in an objective manner. | X | X | X | X |
| 17. The supervisory process has increased teacher awareness of different types and levels of classroom questions. | X | X | X | X |
| 18. Supervisors are most effective when they establish and maintain positive relationships with teachers. | X | X | X | X |
| 19. Agreement about an appropriate observational focus is reached during the pre-observation conference. | X | X | X | X |
| 20. The amount of time devoted to classroom supervision by my supervisor demonstrates that this is a high priority in our school. | X | X | X | X |
| 21. The present supervisory process has led to increased levels of student participation in class discussions. | X | X | X | X |

| | SA | A | D | SD |
|---|---|---|---|---|
| 22. Our post-observation conferences have generally provided direction for improving one or more instructional patterns. | X | X | X | X |
| 23. Summaries of supervisory conferences represent a major data source used for teacher evaluation. | X | X | X | X |
| 24. Participation in the present supervisory process has helped teachers and supervisors to view themselves and their colleagues as being self-renewing educators. | X | X | X | X |
| 25. As a rule our first step in pattern assessment during the post-observation conference is to review the objectives for the observed lesson. | X | X | X | X |
| 26. My supervisor fulfills the role of instructional leader. | X | X | X | X |
| 27. The present supervisory process has prompted teachers to select instructional modes to support intended outcomes. | X | X | X | X |
| 28. The present supervisory process has encouraged a greater emphasis on cooperative planning and problem solving. | X | X | X | X |
| 29. We have generally been able to assess identified patterns during the post-observation conference. | X | X | X | X |
| 30. The present supervision process has demonstrated that instruction can be improved by changing patterns which interfere with attainment of objectives. | X | X | X | X |
| 31. My supervisor uses a classroom map or diagram to gather data about teacher or student physcial patterns. | X | X | X | X |

| | SA | A | D | SD |
|---|---|---|---|---|
| 32. Participation in the present supervisory process has helped me to feel more positive about instructional supervision. | X | X | X | X |
| 33. The current supervisory process emphasizes instructional improvement rather than teacher evaluation. | X | X | X | X |
| 34. The present supervisory process has helped to improve communication between teacher and administrators. | X | X | X | X |
| 35. Participation in the present supervisory process has helped me to feel more positive about instructional supervision. | X | X | X | X |
| 36. The present supervisory proces has caused teachers to be more concerned about learner outcomes. | X | X | X | X |
| 37. School administrators have become more aware of instructional needs and processes through their involvement in supervisory activities. | X | X | X | X |
| 38. We have found that instructional analysis and practice of specific behavior patterns has helped to improve instruction. | X | X | X | X |
| 39. The present supervisory process has helped to develop a trust relationship between myself and my supervisor. | X | X | X | X |
| 40. Participation in the present supervisory process has helped me to analyze my own teaching behavior. | X | X | X | X |
| 41. Our school (district) began the present supervisory process in order to improve instruction. | X | X | X | X |
| 42. Our instructional supervision program helps to reinforce effective patterns, identify weaker patterns, and develop a plan for improvement. | X | X | X | X |

Please comment briefly on specific outcomes of the supervisory process in relation to each area listed below:

1. The Instructional Program

2. Student/Teacher Interaction Patterns

3. Teacher/Administrator Interaction Patterns

4. The Staff Development Program

5. Other Outcomes

Please complete the following information section to permit appropriate data analysis:

District_____

School Organization:

Elementary_____ High School_____
Middle School____ Other_____
Junior High_____

Present Teaching Assignments:

Years in Current Position:

1-3_____ 8-12_____

4-7_____ 13+ _____

Educational Background:

B.A./B.S._____ Masters_____

B.A./B.S.+____ Masters +_____

Ed.S_____

Ed.D or Ph.D_____

Optional Item:

Sex: M_____F_____

# APPENDIX C

## TEACHER AND SUPERVISOR RESPONSES TO OPEN-ENDED ITEMS

TABLE XCIX

TALLIED TEACHER AND SUPERVISOR RESPONSES TO OPEN-ENDED ITEM I: INSTRUCTIONAL OUTCOMES

| Number of Teachers Making the Response | Responses | Number of Supervisors Making the Response |
|---|---|---|
| 8 | 1. Improved ability to state and examine objectives (and goals). | |
| 6 | 2. Greater variety of instructional activities geared to student needs. | 1 |
| 3 | 3. Improved classroom atmosphere. | 1 |
| 12 | 4. Helped identify and improve areas of weakness in instructional program. | 3 |
| 2 | 5. Better distribution of teacher time and efforts among all students. | |
| 4 | 6. Insufficient time (1 observation/year) to improve instruction. | 1 |
| 4 | 7. Positive modification of curriculum (due to teacher and/or supervisor input and strategies). | 1 |
| 7 | 8. Improved overall teaching methods—improved instruction. | 1 |
| 7 | 9. A. Improved explanations. | 4 |
| 1 | B. Long-range learning objectives for each child. | |
| | C. Better long-planning for instruction (guides, means, etc.) for implementing curriculum. | |
| 2 | 10. Increase in number of programs tried (examined). | |
| 17 | 11. A. No appreciable change. | |
| 6 | B. No appreciable change—"our instruction was good to begin with." | |
| 3 | 12. Increased emphasis on relationship between content, instructional strategies, modes of instruction and outcomes—improved instruction. | 1 |
| 1 | 13. Has increased availability of materials. | |
| 2 | 14. Helped slower learners. | |
| 6 | 15. Improved scheduling for future activities (methods, etc.). | 2 |
| 10 | 16. A. Increased teacher awareness of all facets of their instructional program. | 3 |
| 5 | B. Increased supervisor awareness of all facets of their instructional program. | 2 |

TABLE XCIX (continued)

| Number of Teachers Making the Response | Responses | Number of Supervisors Making the Response |
|---|---|---|
| 3 | 17. Increased plus-plus relationship (teacher/supervisor) | 2 |
| 25 | 18. A. Improved instructional program (a lot) "synergy." | 14 |
| 1 | B. Meet objectives more completely. | |
| | C. Guarantees teacher/supervisor interaction—which at times improves instruction. | 1 |
| 1 | D. Has improved—could be further improved by adding more materials for individual instruction. | |
| 1 | E. Now student objectives, not teacher objectives. | |
| 1 | 19. Reading has improved. | |
| 2 | 20. Should improve, too early to judge. | 4 |
| 1 | 21. Emphasizes instructional improvement. | 1 |
| 1 | 22. Process reinforces teachers' good work. | 1 |
| | 23. Improves instruction if the district has well-defined goals. | 1 |
| 1 | 24. Could be better if teachers were less uptight. | |
| 3 | 25. More learner oriented—instruction has improved. | |
| | 26. Instruction has improved for "concerned" teachers. | 1 |
| 1 | 27. Teacher now focuses on goals/objectives vs. materials. | |
| 1 | 28. Focus shift from housekeeping to instruction and learning. | |
| 1 | 29. This process allows for a thorough evaluation of instruction. | |
| 2 | 30. Instruction now viewed as continually changing and growing. | |
| 6 | 31. Practical approach to improving instruction. | |
| 1 | 32. Process works best with poorer teachers. | |

TABLE C

TALLIED TEACHER AND SUPERVISOR RESPONSES TO OPEN-ENDED ITEM II:
STUDENT/TEACHER INTERACTION PATTERNS

| Number of Teachers Making the Response | Responses | Number of Supervisors Making the Response |
|---|---|---|
| 3 | 1. Made me aware that supervisor/teacher interaction was better than I had anticipated (more aware of positive patterns. | 1 |
| 3 | 2. A. Those who had previously fallen behind are now identified and much of the problem eliminated. | |
| 2 | B. Help was given for several students. | |
| 10 | C. Helps teacher focus on needs of particular children. | |
| 3 | 3. A. Behavior problems were cut considerably (greater pattern awareness). | |
| 1 | B. Demonstrated the effectiveness of good eye contact | |
| 10 | 4. A. Interaction (supervisor/teacher) was good before, and is still good. | |
| 10 | B. No affect. | 1 |
| | C. Unable to identify. | 1 |
| 30 | 5. A. Supervisor/teacher interaction has improved (both in quality and quantity. | 7 |
| 1 | B. Verbal logs really help. | |
| 2 | C. Teachers' responses are more encouraging—less put down | |
| 11 | 6. Classroom map (flowchart) is responsible for more students being involved in positive interaction each day. | 2 |
| 2 | 7. Changes in seating arrangement have improved student interaction patterns. | |
| 15 | 8. A. Teachers and supervisors now think more about student/teacher interaction and its role in developing positive atmosphere. | 9 |
| 3 | B. . . . Whether supervisor/teacher interaction is weighted to teacher or student side. | |
| 3 | 9. Helps to balance out student participation in a constructive way. | |
| 1 | 10. Teachers and supervisors must keep a positive attitude towards all problems. | |

TABLE C (continued)

| Number of Teachers Making the Response | Responses | Number of Supervisors Making the Response |
|---|---|---|
| 19 | 11. The process accurately describes supervisor/teacher interaction (shows patterns of positive and negative relations); allows me (teacher) to change verbal and/or physical patterns for the better. | 2 |
| 2 | 12. Patterns become easy to identify—trick is to relate these to good teaching. | 1 |
| 2 | 13. Needs even more emphasis. | 1 |
| 7 | 14. More effective questions are asked; better (?) techniques; i.e., more response time. | 2 |
| 2 | 15. Teachers have better movement patterns due to greater involvement with students. | |
| 2 | 16. Develops a good relationship between student and teacher and supervisor. | |
| 1 | 17. Focus of observation often helps teacher in this area. | |
| 1 | 18. Supervisor/teacher patterns showed I favored the left side of room. | |
| 2 | 19. I now expect students to do more talking. | 1 |
| 1 | 20. Teachers need time to analyze and discuss these supervisor/teacher interaction patterns with people. | |
| 1 | 21. The teacher is more aware of the need to involve each student in class activities in which the student can succeed. | |
| 1 | 22. More concern with type of interaction. | 1 |
| 1 | 23. Teachers really like the student response charts. | 1 |
| 3 | 24. Teacher has made each student more secure in classroom (students are more positive in answering questions). | |
| 1 | 25. It takes time to improve in this area, but you can and should. | |
| 1 | 26. Some teachers don't want to notice supervisor/teacher interaction patterns. | 1 |
| 1 | 27. Has worked especially well with new teachers (improved supervisor/teacher interaction patterns). | 1 |
| 1 | 28. Team planning for better supervisor/teacher interaction has arizen. | |
| 1 | 29. Provides for direct observation of supervisor/teacher interaction. | |
| 1 | 30. Students tend to be under the Hawthorne affect. | |

TABLE CI

TALLIED TEACHER AND SUPERVISOR RESPONSES TO OPEN-ENDED ITEM III: TEACHER/ADMINISTRATOR INTERACTION PATTERNS

| Number of Teachers Making the Response | Responses | Number of Supervisors Making the Response |
|---|---|---|
| 14 | 1. A. No appreciable change. | |
| 5 | B. Teachers and administrators have always had good interactions. | 1 |
| 1 | 2. It would have been nice to have been observed just once by my principal or the superintendent rather than having them take the word of others. | |
| 10 | 3. The new process fosters an entirely new kind of positive interaction pattern—it allows both supervisor and teacher to discuss areas of importance, methods, and materials. | 3 |
| 10 | 4. I had a good feeling about being observed and helped in a noncritical way. | |
| 2 | 5. A. Improved positive interaction with county office, but not with administrative personnel in our school. | |
| 1 | B. Improved at local school, but not with "higher-ups." | |
| 6 | 6. Not known (not used), not enough time to tell yet. | |
| 21 | 7. Helps open (two-way positive)communications . . . due to more continuous interaction. | 4 |
| 4 | 8. Teachers are beginning to view supervisors as a help, and any previous threat is being reduced. | 4 |
| 2 | 9. Nonexistent before and after—administrators never observe teachers. | |
| 40 | 10. A. Area of major positive improvement (open, professional, and positive). | 14 |
| 8 | B. Postobservation conference have been very productive—more objective exchange of ideas. | 1 |
| 2 | 11. We now have two-way communications rather than one (at county level). | |
| 4 | 12. Specific accounts make it easier to pinpoint problem areas. | |
| 2 | 13. It has made the administration more aware of teacher problems plus provided a time for conferences. | |
| 2 | 14. A. The process is far too impersonal. | |
| 1 | B. Relations have become more personal (more positive). | |

TABLE CI (continued)

| Number of Teachers Making the Response | Responses | Number of Supervisors Making the Response |
|---|---|---|
| 1 | 15. I wish the supervisor had made more suggestions. | |
| 2 | 16. Preobservation was very helpful in this area. | |
| 1 | 17. The more I'm observed the less comfortable I feel with my supervisor. | |
| 1 | 18. On middle levels, generally good—some dysfunction with top level. | 1 |
| 2 | 19. The process makes me a better supervisor—teacher/supervisor interactions included. | 2 |
| 1 | 20. The process has not helped our administrators be more positive and less boring in supervision. | |
| 1 | 21. Functions and responsibilities have been more sharply delineated and cooperation has increased. | 2 |
| | 22. Teachers seem to be more open with problems after initial observation. | 1 |

TABLE CII

TALLIED TEACHER AND SUPERVISOR RESPONSES TO OPEN-ENDED ITEM IV: THE STAFF DEVELOPMENT PROGRAM

| Number of Teachers Making the Response | Responses | Number of Supervisors Making the Response |
|---|---|---|
| 1 | 1. I have grown professionally with the help of my supervisor. | |
| 36 | 2. A. There has been no appreciable change in staff development. | 3 |
| 1 | B. Our staff development has always been good. | |
| 1 | C. That which is attempted is not done in a positive manner. | |
| 43 | 3. A. In-service and staff development have improved from weaknesses identified by the supervisor. | 9 |
| 1 | B. Our future plans include improvements in staff development. | 2 |
| 4 | C. Specific needs have been identified (also strong areas) | 8 |
| | D. Emphasis has been on individual development. | 1 |
| 2 | 4. All our staff development has been done through the supervision personnel of the county office. | |
| 2 | 5. A. Faculty now have greater opportunities in materials and curriculum development. | |
| | B. Teachers feel freer to express their desires for in-service programs. | 1 |
| 5 | 6. Couldn't say one way or another—need more experience. | 1 |
| 1 | 7. Aids self-evaluation and improvement. | 1 |
| 4 | 8. I feel more work is needed in this area, the potential is there (staff development based upon needs identified in the observation). | 3 |
| | 9. We need it (staff development) now more than ever. | 1 |
| 1 | 10. They should bring in stimulating outside programs. | |
| 1 | 11. Helps show need for additional staff or paraprofessionals. | |
| | 12. Plus-plus relationships are a real outcome. | 1 |
| 1 | 13. Improved communications in several ways. | |
| 1 | 14. Provides an opportunity for teachers to keep up with current education trends. | |

TABLE CIII

TALLIED TEACHER AND SUPERVISOR RESPONSES TO OPEN-ENDED ITEM V: OTHER OUTCOMES

| Number of Teachers Making the Response | Responses | Number of Supervisors Making the Response |
|---|---|---|
| 3 | 1. My supervisor shared many materials with me. I'm positive it was her goal to help me improve my instruction. | 2 |
| 2 | 2. Our staff was observed by administration for first time in years. | 1 |
| 2 | 3. We (staff) feel more secure. | |
| 6 | 4. There needs to be more observation cycles—you need more than 1 or 2 observations/year. | |
| 7 | 5. This is the best supervision/evaluation system I know of—it helps teachers become more aware of otherwise unnoticed instructional factors. | 1 |
| 2 | 6. Because of it we've increased grants and title programs. | |
| 6 | 7. Many of the changes that occur would occur with or without the supervision. (Not much change) . . . most of us were concerned about these factors before). | 1 |
| 4 | 8. The process should be used more in evaluation. | |
| 1 | 9. The negative attitude held towards the county office is being upgraded. | 1 |
| 2 | 10. I deeply appreciate leaders (at county level) who take time to hear my ideas with empathy. | |
| 6 | 11. The process offers encouragement . . . it has given us self-awareness of teaching improvements . . . (pride increases) . . . I have a more positive attitude towards my teaching abilities. | 1 |
| 2 | 12. Better continuity of educational goals throughout the school. | |
| 1 | 13. With a large staff the process is extremely difficult, not impossible—just very demanding. | 1 |
| | 14. Good ideas and activities are reinforced during the postconference . . . in addition to future planning, etc. . . . | 3 |
| 2 | 15. I feel the Bellon process is too time consuming and that there are better ways to improve instruction. | |

TABLE CIII (continued)

| Number of Teachers Making the Response | Responses | Number of Supervisors Making the Response |
|---|---|---|
| 4 | 16. Evaluation has become much more objective . . . the staff's attitude towards evaluation is more positive . . . has demonstrated that observation/evaluation can be a tool, not a weapon. | |
| 1 | 17. Preobservation conferences give us very good insight as regards our curriculum. | |
| | 18. Supervisor/principals who didn't before are finally looking at specific teaching behaviors. | 1 |
| 1 | 19. Badly prepared observations can have the effect of causing animosity between the instructor and the supervisor. | |
| 2 | 20. Observations are more relaxed now—the atmosphere is more open and cleansed. Supervision means help not criticism. | 1 |
| 2 | 21. The process has helped improve communications—specifically curricular issues. | |
| 3 | 22. A. It has encouraged a closer relationship between teacher and principal.<br>B. Also, teacher/teacher interaction. | |
| 2 | 23. A. Teacher awareness of unnecessary mannerisms and student to student conversations has increased. | |
| | B. Administrators are more aware of what instruction consists of. | 2 |
| 1 | 24. Administration uses process for evaluation, but for supervision to improve instruction. | |
| 1 | 25. Should use a variety of plans and techniques and not just this one process. | |
| 1 | 26. We're trying to make an evaluation out of this and it's very hard to do. Some teachers clam up and don't notice anything in the log . . . they still get very uptight. | 1 |
| 1 | 27. Evaluating one lesson through this method should not be the total way of judging a teacher. | |

TABLE CIII (continued)

| Number of Teachers Making the Response | Responses | Number of Supervisors Making the Response |
|---|---|---|
| 1 | 28. This system has made me think very little of the observation process. | |
| 1 | 29. Teachers are better prepared for observation. | 1 |
| 1 | 30. Numerous summer workshops have been instituted to improve instruction. | |

# APPENDIX D

# INTERVIEW QUESTIONS

INTERVIEW QUESTIONS

1. Do you feel that increased levels of mutual trust have been achieved in teacher/supervisor relationships as a result of the supervision/observation process?

2. To what extent do participants in the process appear to be demonstrating acceptance of its underlying assumptions about the improvement of instruction?

3. How effectively do you believe each element of the process (pre-observation conference, classroom observation, postobservation conference) is being conducted at the present time?

4. What steps have you taken or would you recommend taking to strengthen the process or improve its implementation?

5. In which areas of instruction do you believe that the greatest improvements have occurred as a result of the supervision/observation process?

   Please describe some of the instructional patterns which have been improved and the major steps taken to makes these improvements.

6. To what extent do you feel that participation in the process has encouraged teachers to plan and organize instruction more effectively?

7. In what ways do you feel that participation in the supervision/observation process has influenced or affected your own leadership role and performance?

8. What effects has the process had on the nature and perceived role of the staff development program in your district?

9. What advice or suggestions might you give to a colleague preparing to implement the supervision/observation process?

10. Do you have any further comments you would like to make about the process or its implications?

# VITA

R. Clarke Shultes was born in Chicago, Illinois, on May 20, 1942, the son of Claude C. Shultes and Mary M. Parks Shultes. He graduated from Mt. Vernon Community High School, Mt. Vernon, Illinois, in 1961. He attended undergraduate school at Eastern Illinois University and Iowa State University before receiving a Bachelor of Science degree from Southern Illinois University in 1965.

He received the Master of Material Science degree from Oklahoma University in 1971. He received the Ed.D. from The University of Tennessee in December 1978. At the time of his graduation he was a teacher at Oak Park and River Forest High School where he had taught science and coached gymnastics since 1968.

He is married to the former Flora Ann Frentz of Orleans, Indiana, and has two delightful children, Joshua and Jenna.

Mr. Shultes is a member of Phi Delta Kappa, The National Association of Geology Teachers, and The National High School Gymnastics Coaches Association.