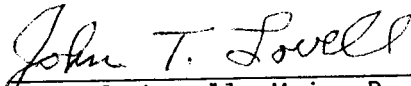


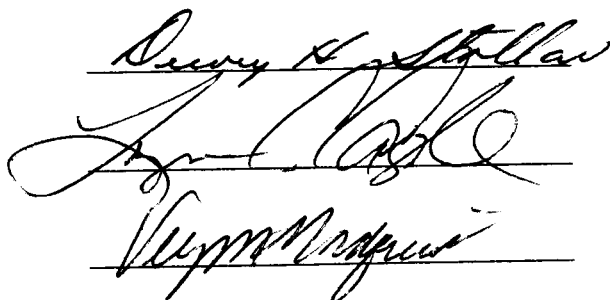
To the Graduate Council:

I am submitting herewith a dissertation written by Vicki Smith Dean entitled "An Analysis of Tennessee's 1980-81 Inservice Education Programs Based on the Perceptions of Public School Teachers and Administrators." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Educational Administration and Supervision.



John T. Lovell, Major Professor

We have read this dissertation
and recommend its acceptance:



Accepted for the Council:



Vice Chancellor
Graduate Studies and Research

AN ANALYSIS OF TENNESSEE'S 1980-81 INSERVICE EDUCATION PROGRAMS
BASED ON THE PERCEPTIONS OF PUBLIC SCHOOL
TEACHERS AND ADMINISTRATORS

A Dissertation
Presented for the
Doctor of Education
Degree
The University of Tennessee, Knoxville

Vicki Smith Dean
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ABSTRACT

The study was conducted as part of a larger study on identifying the perceptions of teachers and administrators toward inservice education (ISE) in Tennessee. In the present study, questions concerning the differences in perceptions among the groups were addressed. The groups' perceptions on (1) the success of current ISE programs, (2) the occurrence and desirability of various ISE processes and (3) the relationship of various characteristics to successfully rated programs were measured.

The research design was organized to provide a group comparison on measured variables. A sample of schools was selected and teachers (T), building level administrators (BLA), and central office administrators (COA) associated with that school were surveyed. The questionnaires were mailed to the identified sample and yielded information on the various components of the ISE process. Follow-up procedures were used to increase the number of respondents and collect information on a sample of non-respondents. The researcher analyzed the data with non-parametric statistics for significant differences (frequency counts and chi-square) using the Statistical Package for the Social Sciences.

The major findings of the research were that teachers, building level administrators and central office administrators perceived current and desirable ISE programs significantly different.

Administrators, especially central office administrators, perceived the programs as more successful than teachers and are more personally satisfied. Comparisons among the groups yielded differences most often between central office administrators and teachers. Also, overall, the groups rated 33 of 43 process variables higher on desirability than occurrence. The five process variables identified by previous research studies as associated with successful programs were not rated as occurring frequently by any group. Subgroups who rated their programs as successful did not rate the success variables as occurring frequently.

Based on these findings, it appears that the main recipients of current ISE programs (T) are not satisfied nor do they perceive the programs as successful, which agrees with other national research studies on ISE. A significant discrepancy exists among the groups as to the current concept of ISE and what it should be. All groups would prefer to use a wider range of ISE variables and the variables, identified as previously associated with successful national programs, did not occur frequently in Tennessee ISE programs.

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CHAPTER I

INTRODUCTION

Inservice Education (ISE) is a critical element in public school organizations. The nation-wide investment of fiscal and human resources in the ISE process documents its status as an important component of staff/organizational development. For example, Feistritzer (1979) estimated total funding for United States Department of Education projects (or components of projects) devoted to professional development at \$280 million for FY (Fiscal Year) 1978 and \$300 million for FY 1979. These funding levels are approximately 3 percent of the Office of Education's annual budget for the corresponding years--\$10 billion for FY 1978 and \$12 billion for FY 1979. A corresponding figure on a state level (Florida) is \$5.00 of each \$745.00 per full-time equivalent student (Zenke, 1976).

The current investment in human resources is also substantial. It is estimated that 80,000 professors, supervisors and consultants are involved in ISE. This results in a ratio of one ISE professional for every 25 teachers (Joyce, 1978). With this investment of fiscal and personnel resources, widespread interest in documenting and improving ISE services became crucial.

All segments of the educational community are critical of ISE practices (Arends, et al., 1978; Firth, 1977). ISE's failure

to create significant change in our educational system has been attributed to various structural, sociological, psychological and political factors (Williams, 1978). Dale Mann (1976) also implied that the ISE failure is a result of trying to apply educational methods to political situations. Educators' frustrations with the outcomes of current ISE programs have been repeatedly documented in the literature (Edelfelt and Johnson, 1975; Joyce, 1976; McLaughlin and Marsh, 1978).

While much has been written about ISE, the literature provided little direction for policy makers in improving professional development. Definitions and concepts were unclear and the facts and testable propositions absent. The writing "is almost exclusively rhetorical and more ornamental than useful" (Cruickshank, Lorish and Thompson, 1979). Without a clear descriptive conceptual framework, developing ISE definitions and models remained a problem. Efforts to improve teacher performance and create change using current practices were haphazard and a source of continued frustration (Cruickshank, et al., 1979).

Tennessee's ISE situation paralleled the national concern. The Tennessee State Legislature and the State Board of Education acknowledged the importance of ISE by mandating ten days of ISE activities per year. Funds were approved to pay teachers for their participation. According to the law, these programs "should be designed to improve the school curriculum and promote

the continuous professional growth of all personnel" (Tennessee Code Annotated 49-1709).

The Tennessee State Department of Education has further defined inservice education as follows:

. . . A program of planned activities designed to increase the competencies needed by all certificated personnel in the performance of their professional responsibilities. In this context, "competencies" are defined as the knowledge, skills and attitudes which enable personnel to carry out their tasks with maximum effectiveness.

This definition (developed by the Supervisors' Study Council in October, 1977) was included in a set of guidelines (Cox, 1980) approved by the State Board of Education for local education agencies to follow when planning ISE programs. Intended to improve staff development activities, the guidelines required every local education agency to submit an ISE proposal for FY 1980-1981. The proposal was subject to the approval and monitoring process of the State Department of Education. The guidelines were issued on a one year trial basis (1980-81).

If Tennessee's ISE is to fulfill its goal of increasing competencies needed by all certified personnel in the performance of their professional responsibilities, the characteristics of ISE programs must be identified. Also, the perceptions of administrators and teachers relative to the ISE process must be analyzed and factors which account for differing perceptions identified.

I. STATEMENT OF THE PROBLEM

Despite the time, money and resources invested in ISE nationally and on the state level, very little is known about effective ISE practices. Moreover, there was a lack of descriptive and research based knowledge on the practices used in Tennessee. The perceptions of teachers and administrators regarding current and desirable ISE programs were needed to develop a more comprehensive data base through which ISE could be designed, implemented, evaluated and improved.

II. PURPOSE OF THE STUDY

The purpose of the present study was to add to the knowledge base by identifying and comparing the perceptions of teachers and administrators regarding actual and desirable ISE programs in Tennessee. Comparisons to national data on successful practices were also needed to determine state level recommendations on ISE.

III. QUESTIONS TO BE ANSWERED

The following questions were addressed in this study:

1. Did significant differences exist in the perceived success and satisfaction (whether ISE met personal needs) ratings among the three groups (building level administrators, central office administrators and teachers).

2. Did significant differences exist in the perceptions of teachers, building level administrators and central office administrators regarding the occurrence and desirability of the ISE process including the following components:

- a. purposes of ISE?
- b. planning of ISE?
- c. methods used in ISE programs?
- d. implementation of ISE?
- e. evaluation of ISE programs?

3. What inservice education practices were identified as effective in the research literature, and did these exist in Tennessee?

4. Which ISE practices, identified by research as successful, were associated with ISE programs rated as successful by teachers, building level administrators and central office administrators?

IV. RESEARCH DESIGN

The present study was conducted as part of a large study on the perceptions of teachers and administrators toward ISE in Tennessee. A group comparison on measured variables, which included: (1) success of current programs, (2) process components of ISE purposes, planning, methods, implementation and evaluation, and (3) frequency of successful practices, was determined by the use of a survey questionnaire. The questionnaires were mailed to teachers and

administrators selected by a systematic sample of schools. Data were analyzed with non-parametric statistics for significant differences using the Statistical Package for the Social Sciences.

V. IMPORTANCE OF THE STUDY

Several general observations were apparent from an examination of the current status of ISE. The Legislature and State Board of Education mandated the commitment of fiscal and human resources to the process of inservice education. A minimum of ten paid days devoted to inservice education per year was required. This mandate implied a level of importance to the concept of ISE as a means of promoting professional development. In an effort to improve the quality of inservice education, the State Department of Education adopted a temporary set of Guidelines for Planning Approvable In-Service Education Activities. While these guidelines demonstrated a concern for improving ISE, attempts to improve ISE programs should begin with a clear identification of what is actually practiced at the local level. The collection of baseline data was critical to the description of the present status of ISE.

ISE appeared as a national concern as well as a local one. Several factors were frequently cited when discussing the rising importance of ISE. These national trends included reduced teacher mobility and turnover, declining enrollments and tightened budgets

(Firth, 1977). With these pressures, local education agencies devoted increasing attention to ISE. Superintendents currently had stable, tenured staff and could no longer rely on new teachers to bring the fresh ideas out of the teacher preparation programs and into their classrooms. The ISE process appeared to be the major vehicle for meeting the need for change and adaptation (Champagne, 1980).

However, the only consensus that seemed to exist about ISE was its ineffectiveness (McLaughlin and Marsh, 1978). Beyond this agreement, little guidance was available in the literature on how local education agencies could define, plan and implement successful ISE programs. The available guidance came from two national studies that investigated recent ISE efforts.

Rand Corporation and Kettering Foundation's Institute for the Development of Educational Activities (I/D/E/A) conducted national studies of educational innovation and school renewal (Williams, 1978). While I/D/E/A staff actually participated in the school renewal process and studied the process from an observer/participant viewpoint, Rand conducted an ex post facto study. The Rand data were collected largely through questionnaires and interviews. Both studies identified characteristics associated with effective staff development efforts. Their findings were remarkably similar, considering their different research methodologies and total operational independence (Williams, 1978).

Howey and Joyce have also been major contributors to the ISE literature. Their writing supported other criticisms that ISE was not in the best of health. Howey and Joyce (1978) recommended that:

. . . Before any prescription is given, the first step is (1) a more penetrating examination of the major problems associated with this process, and (2) a more exhaustive analysis of what contributes to these problems.

VI. ASSUMPTIONS AND DELIMITATIONS

Assumptions

1. The research literature on inservice education identified some effective practices (Arends, et al., 1978; Berman and McLaughlin, 1975; Cruickshank, et al., 1979).

2. Teacher/administrator perceptions were important variables to consider when developing inservice education programs (Arends, et al., 1978).

3. Teacher/administrator perceptions represented an acceptable verification of the status of ISE programs.

4. A survey instrument using forced choice items was an effective method of obtaining information on current practices and staff perceptions.

Delimitations

1. The perceptions of administrators and teachers toward ISE were delimited to data provided by responses to the questionnaire.

2. The survey was delimited to a systematic sample of teachers and administrators employed full-time during the 1980-81 year in the public school systems of Tennessee

3. The study was delimited to perceptual data provided by the respondents at only one point in time.

VII. DEFINITION OF TERMS

The following terms are defined to eliminate confusion:

Change/innovation process. A strategy based on an influence (by the change agent) model designed to effect school reform. The process includes phases of: (1) initiation, (2) implementation, (3) partisan mutual adaption, (4) continuation, and (5) dissemination/diffusion; according to Mann (1976).

Evaluation of inservice education. The evaluation of inservice education consists of assessing the value of the program through careful examination to determine if purposes have been accomplished.

Implementation of inservice education. The implementation of inservice education involves the actualization of definitive plans designed to fulfill the stated purposes of the program, including designated responsibilities for the participants.

Inservice education. The program of activities designed by the local school system to develop and maintain the skills and knowledge of staff members constitutes inservice education. The improvement of instructional services is recognized as the purpose.

Methods of inservice education. The methods of ISE comprise the systematic use of specific procedures to carry out the inservice education program and accomplish its purposes.

Organizational resources. The amount of fiscal and human resources devoted to ISE within the local educational agency.

Perception. The consciousness possessed by an individual, the awareness of objects or other data gathered through the senses and the knowledge gained by perception.

Plan for inservice training. The required form submitted by each school system to the Tennessee State Department of Education which outlined the 1980-81 program of inservice education at the local district level.

Planning of inservice education. The planning of ISE is the detailed scheme or methods worked out prior to implementation for the accomplishment of objectives.

Purposes of inservice education. The purposes of inservice education were the objectives of the designated plan or program based on identified needs and/or interests of participants. Purposes specify desired results, usually involving changes in attitudes and/or behaviors for the improvement of instruction.

Staff development. A staff development program includes all efforts of school officials to recruit, select, orient, train or reassign staff members so as to provide the best possible staff for the operation of the schools; generally used to include ISE.

VIII. ORGANIZATION OF THE STUDY

The study was divided into five chapters as follows:

Chapter I contains the general introduction, statement of the problem, purpose of the study, questions to be answered, research design, definitions, importance of the study, assumptions, limitations and organization of the study.

Chapter II contains a review of the literature of ISE. Included are sections on: historical developments and current problems; research and theory concerning the process of ISE; model programs and successful characteristics.

Chapter III contains the research design, a description of the sample and data collection and analysis procedures.

Chapter IV is a presentation and analysis of the data.

Chapter V contains the summary, findings, conclusions and recommendations based on the research conducted.

CHAPTER II

A REVIEW OF RELATED LITERATURE AND RESEARCH

This chapter is an analysis and synthesis of the literature related to inservice education (ISE). Data for this chapter were obtained from research studies, books, theses and periodical literature. The information is organized to include: (1) a historical overview of the development of ISE (including legislative and fiscal policies, and current status of ISE), (2) research and theory concerning the process of ISE, (3) model programs and, finally (4) a synthesis of characteristics of successful programs.

I. HISTORICAL DEVELOPMENTS AND CURRENT TRENDS

ISE as Remediation (1800-1930)

Before the normal school appeared (in the mid-nineteenth century), a community's main requirement for a teacher was sound character and the ability to read, write and compute better than students and the communities they served. Teachers were viewed only as information-givers (Edelfelt and Lawrence, 1975).

The first ISE programs consisted of an occasional teacher's convention or institute. A pattern of permanent license with unchanging teaching methodology and subject area content was established and reflected in public school practice until well into

this century (Dillon, 1976). Harris (1980) cited the reactive nature of ISE as a reoccurring problem with ISE initially conceived as a response to inadequate preservice preparation. Teacher evaluations of ISE were consistently negative; yet ISE maintained this reactive stance.

In the 1930's, despite technological and social change, inservice institutes, now called teacher workshops, were still seen as a means of extending the teacher's knowledge of her/his subject. Three-fourths of teachers had attended college for two or more years, which was an improvement over the last century, but ISE remained a means of remediating deficiencies in subject matter (Edelfelt and Lwarence, 1975).

New Workshop Techniques (1940-1960)

Response to the dissatisfaction with teacher workshops of the 30's yielded the "era of techniques of ISE." The most influential writing of the 1940's was by Blain, Burton and Brueckner, who emphasized a vast array of "improvement devices." These devices included discussion groups, work groups, group therapy, buzz groups and role playing. This emphasis on process, procedure and techniques coupled with emerging group dynamics studies and the ever-present teacher shortage resulted in expanded use of ISE as a major means of professional development (Harris, 1980).

During this time, ISE was a popular publication topic. The National Education Association's publication "The Teaching Profession

Grows In Service" (1949) appeared. It stressed the importance of planned programs (Harris, 1980). The Fifty-Sixth Yearbook of National Society for the Study of Education was also devoted to this topic (Stephens and Hartman, 1978). Several pioneer studies were financed by the Fund for Advancement of Education. The researchers who directed these studies, Edmonds, Ogletree and Wenn, recommended ISE be viewed as professional growth, and continuous, constant effort be expended to achieve quality programs (Harris, 1980). Tower (1956) reported superintendents' preferences on ISE for teachers in a research study which cited similar conclusions. Stephens and Hartman (1978) summarized ISE, during this phase, as: activities conducted at the school district level in a workshop format and frequently with the teacher associations.

Curriculum Reform and Federal Involvement (1960-1975)

The postsputnik era resulted in some modifications of traditional ISE patterns. Postgraduate inservice programs included summer school and extension courses. Typically these graduate studies were extensions of the traditional four-year programs (Stephens and Hartman, 1978). The 1970's revealed increasing dissatisfaction with predominately university controlled ISE. Demands were made to involve teachers in planning and organizational efforts and to offer more practical programs (Edelfelt, 1974).

Federal Government involvement also began. The National Science Foundation (NSF) institutes were implemented and cost 30

million in 1959 and 40 million in 1962, despite evidence of the limitations of this approach (Harris, 1980). The Educational Professions Development Act (EPDA) was passed by Congress in 1964 and emphasized field-based program change. This act was short-lived and only provided funds for five years. A quote by Davis (Harris, 1980) describes ISE during EPDA hearings as:

. . . The slum of American education. . . . disadvantaged, poverty stricken, neglected, psychologically isolated, whittled with exploitation and broken promises.

Legislative and fiscal constraints were also placed on ISE. During the Ford and Nixon administrations, legislative efforts were concentrated on changing from categorical to general funding, which failed (Florio, 1978). Legislative support for professional development as a separate category never materialized. United States Office of Education (USOE) was involved in professional development but the exact amount of involvement was difficult to verify. For example, in 1978, 21 of USOE's 120 categorical programs had a component for educational professional development. However, the degree of involvement varied greatly: from 2 percent to 100 percent of total program appropriations (Feistritzer, 1979).

Seventy-five percent of the USOE programs which had a component for ISE did not have specific regulations or guidelines. Within USOE, only four programs were totally dedicated to professional development, i.e., Teachers Corps, Teacher Centers, Education of the Handicapped Personnel Preparation and Vocational Education Personnel Development (Florio, 1978).

Collective Bargaining

Another area of political influence of ISE was collective bargaining. Teacher organizations increased their efforts in negotiating and winning control of ISE (Luke, 1976). The demands were for quality inservice design to meet teacher needs (Ryor, Shanker and Sandefur, 1979). Shanker, president of American Federation of Teachers, voiced concern over purposes, governance, fiscal responsibility and content (Ryor, et al., 1979). Both national teacher organization leaders (Shanker and Ryor) quoted Rand study findings on the ineffectiveness of innovative programs unless the teachers who carry them out were involved in the decision-making process (Ryor, et al., 1979). Other teacher demands included: public financial support for ISE, release time to attend meetings, workshops, meaningful programs and teacher designed needs assessments (Luke, 1976).

The impact of collective bargaining also affected fiscal control of ISE. For example, Florida school boards began collective bargaining in 1975-76. School boards realized that they could not relinquish majority leadership (with funding control) of local teacher centers to labor as mandated by Teacher Center Legislation. This caused participation in the development of new teacher centers to quickly decline (Zenke, 1976).

Despite some attention at the bargaining table, ISE continued its historical patterns in the late 1970's. It was usually required of teachers and designed by administrators and universities. The

programs were generally piecemeal and patchwork, and consisted of remedial efforts (Edelfelt and Lawrence, 1975). School systems gave relatively low priority to ISE. A 1976 national study by NEA (National Education Association) revealed a significant discrepancy between what existed during ISE programs and what respondents wanted (National Education Association, 1976).

Current Issues: Why ISE Failed

Several major issues reflected the problems of ISE. The first was the lack of a conceptual framework for studying ISE. This compounded the problems of policy making at the local, state and national level. Also, legal structures existed in every state regarding regulation, certification and credit verification of ISE, but relationships of purpose and policy to conceptual frameworks were not clear (Massanari, 1977).

Another issue involved governance. Who should control ISE: the state or local education agency, teacher organizations, universities or some collaborative mix (Massanari, 1977)? These agencies traditionally assumed a win-lose stance toward each other (Arends, et al., 1978).

The process of ISE was viewed by Mann (1978) as similar to the process of politics. If the political process determined who will get what quality of services (and who will not), then the ISE process carried similar power and value implications. Williams (1978) hypothesized that the overwhelming failure of ISE efforts

were due to political (defined as economic or organizational self-interest) reasons. When the various groups involved in ISE behaved in their own best self-interest, the ineffectiveness of ISE was a result of the ensuing conflicts.

Howey and Joyce (1978) categorized ISE problems as (1) conceptual (no common definitions and purposes), (2) legal-political-economic (legislative mandates, governance and financing), (3) structural-organizational (time restraints and agency relationships), and (4) personal-psychological (perceptions of self-worth and enhancing one's mental health). While other authors (Houston and Freiberg, 1979 and Wood and Thompson, 1980) identified additional problems with ISE, most can be viewed as a variation of one of these categorizations.

II. COMPONENTS

For the present study, process components of purpose, planning, methods, implementation and evaluation were chosen as a means of defining the concept of ISE.

Why ISE?

An examination of the literature revealed general agreement as to the purposes of inservice education, although the extent of precision varied. Harris (1980) contended the major purpose of inservice education was the improvement of instruction. He

continued by stating that this phrase has substantial hidden meaning because improving rather than maintaining is implied.

Howey and Joyce (1978) agreed with this overall purpose, but developed a systematic typology of purposes as a result of a nationwide study. These included:

Job-Embedded Inservice Education. This type of inservice education occurs on the job.

Job-Related Inservice Education. A type of inservice education closely related to the job, but one that does not actually take place while teaching is going on.

Career Credential Inservice Education. This type of inservice education is organized to help one obtain a new credential or prepare for a new role.

General Professional Inservice Education. Inservice education designed to improve general competence, but not tailored to specifically identified needs.

Personal Inservice Education. Inservice education designed to facilitate personal development which may or may not be related to the job.

Lawrence (1974) in a review of ISE agreed that the potential purposes of ISE are so numerous and varied that the question, "What purpose for ISE?" should be replaced with, "What priorities?" Lawrence's research also indicated a greater chance of improved teacher and student achievement when teachers pursue their own professional priorities.

Harris (1980) found that certification and recertification as a purpose of inservice education received heavy emphasis in many states. While he commended these efforts to keep certification from becoming permanent by requiring continuing training he added, "unfortunately recertification plans emphasized course credits, required content, uniform expectations, and rigid schedules."

Dale Mann (1976) offered a different view on purposes. His interpretation of the Rand Study data indicated that precise purposes increased conflict and that generally goals were stated in such "softy-lofty" terms that no one could understand or object.

Who Should Plan ISE?

The planning of innovative programs was characterized by four general patterns according to a study reported by McLaughlin and Marsh (1978). They included the following:

Top-down. The planning was done by administrators. Teachers felt little personal involvement so plans were usually met with resistance or indifference. Central office staffs usually lacked awareness of needs and practices of particular schools and classroom teachers.

Grass-roots. This was planned by teachers, but only a little more successful than top-down. Teachers found it difficult to sustain initial enthusiasm and motivation where there was little indication that district officials cared. Even the successful projects withered due to staff turnover, indifference or lack of information on the part of the building principal.

No-planning. No systematic planning attempts were made.

Collaborative. This was planned by teachers and administrative staff from the proposal stage through implementation. Only this method of planning generated the broad-based institutional support necessary for effective implementation and continuation of successful practices.

The authors suggested that the commitment of teachers gained through the collaborative approach had the most consistent positive relationship to project goals of changes in teachers' and students' performances (McLaughlin and Marsh, 1978). Other researchers have substantiated the importance of involving teachers in a collaborative planning process (Arends, et al., 1978; Feinberg, 1974;

Hruska, 1978; Juris, 1973; Lawrence, 1974; Ludwig, 1977; McElhone, 1979; Patterson, 1975; Unruh and Turner, 1970; Wilen and Kindsvatter, 1978; Zirkel and Albert, 1979).

In research and practice, one of the more popular methods used to involve teachers in the planning of inservice education programs was the needs assessment. Ingersoll and Schneider (1978) did extensive work in this area, developing and utilizing an instrument which identified teaching competencies and skills. The results warned against depending solely on teacher responses for decisions, because the needs identified for inservice training may differ as a function of who was asked to respond.

Arends, et al., (1978) agreed and further stated that teachers were veterans at completing needs assessments. They identified several other problems, including the fact that choices were limited to a predetermined roster of selections. They emphasized that teachers tended to respond as: representatives of teachers as a group, rather than as individuals. Also, the teachers made absolutely predictable choices based not on their own experience in the classroom, but from whatever fad was currently receiving the most attention by the news media.

This finding was affirmed by Jones and Hayes (1980) who studied elementary reading teachers and found that teachers were either unaware of much need for additional knowledge or were reluctant to express their needs. Rogus and Martin (1979) speculated that

teachers have learned to deny any of their difficulties to others because their effectiveness has been judged on the absence of problems.

How Should ISE Occur?

Recognizing that methods should be directly related to designated purposes, this section examines methods according to group format, session leaders, and instructional techniques. Harris (1980) examined methods with the use of a graph which depicted relationships between group size, experience impact and complexity of objectives. He supported the idea that when less complex outcomes are sought, larger groups can be utilized. However, as objectives become increasingly complex and increased experience is required, small groups must be utilized.

Examination of existing practices by most researchers revealed a need for individualized approaches. Hunt (1978) stated that: given the concern about individual differences among students, it is surprising that the differences among two-and-a-half million teachers receive so little attention. Generally only differences such as experience versus inexperience or elementary versus secondary classifications were acknowledged.

Lawrence (1974) in his review agreed. Although individualization was reported in many programs, it meant only the pace and sequence might vary from person to person.

Wilson (1978) provided evidence of the inappropriateness of many large group approaches. She stated that learning occurred more readily with individualized methods. Beck (1978) affirmed this opinion by stating that: alternative, personalized and individualized approaches based on the unique learning styles of the teachers should be utilized. Rubin (1978) restated the need for differentiated ISE experiences as more likely to accomplish their objectives than programs that have common activities for all participants.

The choice of resource personnel to lead inservice education sessions was another major research question. Many writers found programs were more effective when teachers acted as session leaders. Reilly and Denbo (1975) in a research project involving elementary teachers in California suggested that inservice teachers were more likely to take the advice of experienced teachers who were currently teaching, rather than other professionals who had more specialized training but less teaching experience. Lawrence (1974) and Ainsworth (1976) agreed that teachers want a structured program of other teachers presenting new and different ideas.

Winterton (1977) compared the use of "within staff" resources with outside consultants and also found a number of positive benefits with the use of staff members. One was the availability of the retained expertise following the inservice education activity itself, and secondly the teacher was elevated among peers, a situation that created internal motivation for continued professional growth.

McElhone (1979) found that administrators were ineffective as inservice resources, but contradicted other studies concerning outside consultants. His research found that professional consultants were useful. Feinberg (1974) agreed with McElhone's findings. Howey and Joyce (1978) accounted for these differences in leader preferences by classifying inservice education on the basis of purpose. Teachers preferred one source over another, according to the particular purpose of the inservice activity.

When instructional techniques were considered, most researchers found that those techniques requiring the most active participation by teachers were generally more effective. Lawrence (1974) stated that ISE which required teachers to construct and generate ideas, materials and behaviors were more frequently successful than lecture programs. Supervised trial with feedback was also successful. Joyce and Showers (1980) reaffirmed this finding. Zirkel and Albert (1979) cited similar results and concluded that maximum effectiveness of most inservice activities included several if not all the training components of theory, modeling, practice, feedback, and coaching for application.

When Should ISE Happen?

Implementation of inservice education involved the scheduling and delivery of the strategies utilized. Mann (1976) contended that implementation began when the change project settled down to the hard work of trying to influence teacher behavior. McLaughlin

(1978) identified three types of interactions within the implementation process; mutual adaptation, cooptation (project change only), and non-implementation (projects broke down).

Many researchers identified a need for organizational change in the area of scheduling inservice education. They suggested release time for teachers (Arends, et al., 1978; Johnson, 1975; Vaughn, 1975; Wilen and Kindsvatter, 1978). Howey and Joyce (1978) summarized the position that teachers should be periodically released during the course of the instructional day to engage in inservice education. Their findings indicated that less than one in five teachers had ever been released on any kind of a regular basis. Arends, et al., (1978) addressed the issue of payment for release time. Their solution was state-level funding. Winterton (1977) suggested the fuller use of aides.

Other writers have emphasized the need for more time in general. Zigarmi, Betz, and Jenson (1977) stated that more time should be set aside not only for implementation but also for planning and follow-up activities. Also, longer inservice experiences were more useful than inservice experiences that lasted only a day or part of a day. Ngaujaye and Hanley (1978) indicated that the appropriate length of time for an inservice activity should be determined by the content and type of meeting.

Winterton (1977) found that time was the most inflexible element of the inservice process. He maintained that time for ISE

should become expected and an integral part of the teaching commitment.

Several strategies for the delivery of inservice education programs were identified but few actually utilized in research. Ingersoll, et al., (1975) in a study of inservice practices, found the most frequent activities were: school or district workshops, textbook publisher's instructional programs, state and national conventions, college or university courses, building-sponsored workshops, and summer college courses or travel. Lawrence (1974) in his research reported the narrowness of conception in this area. He stressed that four situational designs--workshops, institutes, courses, and mini-courses--accounted for nearly all the programs reported. Howey and Joyce (1978) and Arends, et al., (1978) concurred by reporting that after-school workshops and college credit courses were by far and away the most frequent forms of inservice.

Wood and Thompson (1980) and Johnson (1975) stated that continuing staff development should take many forms to achieve the variety of different purposes in ways appropriate to the learning styles of different individuals. Massanari (1977) suggested more experimentation was needed with alternative modes of exposing teachers to new ISE delivery systems.

How Should ISE be Evaluated?

Firth (1977) focused on evaluation as a necessary component for both program innovations and teacher successes. Lawrence (1974)

agreed and maintained that in terms of inservice education program development, evaluation served to improve both procedures and content. Lutz (1976) emphasized that evaluation should answer questions such as:

- a. Is the program doing what it was intended to do?
- b. How well are the objectives being fulfilled?
- c. How can the system be improved?
- d. Is the program cost efficient?

Harris (1980) stressed the planned systematic aspect of evaluation, which should identify strengths, weaknesses and possible improvements. The importance of involving teachers in the evaluation process was also addressed. Lawrence (1974) found that in nearly all the studies he reviewed, persons outside the school system conducted the evaluation. He contended: the value of teacher participation in planning and conducting inservice programs extends logically to the evaluation of programs as well.

III. MODELS

Deficit and Developmental

The literature revealed numerous models of inservice education reflecting differing views of staff development and growth. McLaughlin and Berman (1977) suggested, however, that two basic views underlie all models of teacher training. One, the deficit model, assumes inadequate knowledge and skill on the part of the teacher. Such a model is "top-down" implying that experts in the

central office knew what teachers' needs were and prescribed a regiment of programs to overcome the deficit (McLaughlin and Berman, 1977). The model was further refined to indicate other educators--principals, school district administrators, university professors, state department officials, and legislators--operate on this set of expectations: that teachers lacked the necessary skills to teach successfully. These officials reinforced their beliefs through a network of administrative regulations, credential requirements, university degree requirements and state laws. This left teachers with the impression that everyone was critical of them, and they were typically excluded from any discussion of their "deficit" and how to carry out its removal (McLaughlin and Marsh, 1978). Ainsworth (1976) and Bunker (1979) reiterated that inservice was provided to change teachers with the inference that one was doing was wrong and this must be corrected.

The developmental model, in contrast, comprised a point of view which pervades a school district. It involved a set of expectations about the role of teachers, their professional needs, and their responsibility for solving their own problems in the classroom. The following six attributes characterize this view:

1. Developmental districts provided discretionary funds and authority for ISE to principals and teachers.
2. The continuing "training" of principals was necessary and appropriate as districts recognized the role shift from authoritarian administrator to educational leader and school manager.
3. Teacher centers were often established.
4. An emphasis was placed on small groups within schools which worked collaboratively on problems.

5. Local resource people guided innovative efforts wherever possible and joint governance of programs by teachers and administrators occurred.

6. Release time instead of monetary incentives was used (McLaughlin and Berman, 1977).

As the authors pointed out, this model essentially provided a set of options, had a flexible program format, stressed individual and small group learning situations, and provided concrete opportunities directly tied to on-going activities. The developmental model was based on the Rand Change Agent Study (McLaughlin and Berman, 1977).

Jackson (1971) also referred to these two models labeling them the "defect" approach and the "growth" approach. The "defect" was ignorance, arising from a lack of exposure to the latest developments of instructional techniques. Many teachers had not kept up with what was going on. This charge implied the teacher was either professionally lazy or had attended the wrong school. The "growth" approach, in contrast, emphasized inservice education experiences which provided the teacher with the time and tools necessary to conceptualize his/her experience and to reach insights that alter perceptions of role and task.

Another major study, the Kettering Foundation's Institute for the Development of Educational Activities (I/D/E/A), also developed a model as the result of a longitudinal study of the change process. It was also a "developmental" or "growth" model (Williams, 1978).

Political

The political issue was addressed by Dale Mann (1976) in his inservice education program model which also related to planned change strategies. He stressed the importance of two models. The first encompassed a "goal-seeking" or "rational" model in which the impetus for change comes from a desire to move to a preferred future. The second consisted of a "problem-solving" orientation in which dissatisfaction with a current situation prompted a definitive remedy. Mann emphasized that within these models of change is the implicit notion that those who seek to change schools must change teachers. This idea was also expressed by Luntz (1976). The failure of many change efforts of the 1960's demonstrated the process of change was similar to the process of politics with fundamental value and power structures involved. The innovation failures did not recognize that teachers at the delivery level had final and definitive say.

Organizational

Arends, et al., (1978) addressed both individual and group development in structuring delivery models for inservice education. The linking-agent model was devised from an agricultural base. This model suggested inservice agents who linked individuals and school clients to resources and practices developed and validated by others. The agents traveled to the schools, helped clients identify their needs, and assisted in providing research-validated

solutions. Unlike most inservice delivery models, this one took the service to the client. Emphasis was also given to the organizational development concept that stressed changing organizational arrangements rather than individuals.

The Howey and Joyce (1978) model also addressed structural and organizational changes. First, they suggested a more realistic conceptualization of teacher roles (beginning in preservice). Then, structural-organizational changes in schools, which went beyond the common needs assessment surveys, were needed. The problem was seen as not so much with individual teachers but in the organization. Joyce (1976) also proposed that future models of inservice education should take into account four dimensions of structure--the governance system, the substantive system, the delivery system, and the model system. Within these four systems, he conceptualized that there were more than enough varieties available to permit vast improvement in the structure of inservice teacher education without necessitating any inventions.

Cruickshank, Lorish and Thompson (1979) developed a model based on teaching research which included four classes of variables: presage, context, process and product. Again recognizing the organizational component, they concurred that inservice education programs happened in the sociopolitical context of a school system. This model acknowledged that inservice was affected not only by the social dynamics of teachers as a learning group but also by the

political forces surrounding the why, what, and when of inservice programs. The interaction of the variables was significant. The variables were defined as follows: presage variables included characteristics of inservice leaders such as experience, knowledge, and attitudes. Context variables accounted for the characteristics of teachers, participants, school and community setting, and the learning group climate. Process variables referred to the actual instructional activities--lectures, discussions, and simulations. Product variables referred to the long- and short-term effects of the three previous variables.

Individualization

An extensive discussion of inservice education models was provided by William Beck (1978). Stressing the use of individualized approaches, he identified nine models by differentiating among educational variables of goals, means and evaluation. Goals and/or means could be established by individual teachers, others, or, teachers in cooperation with others. Combinations of variables created the nine typologies. These typologies are illustrated by the following examples.

Typology one, which specified both goals and means directed by teachers, was represented by the Jackson "growth" model identified earlier in this Chapter (see page 29). Typology three was represented by the Rubin model, which featured goals established by individual teachers with guidance and assistance provided by others in reaching

these goals. Typology five, the University of Houston model, was competency-based with both goals and means established by others. Another model of typology five was the Shelby model developed by Shelby County Schools, Tennessee. In the Shelby County model, a professional growth committee, composed of teachers and school leaders, established a list of acceptable inservice activities. The University City, Missouri model typified typology eight. In the model, both teachers and school leaders were accountable for inservice growth, with teachers joining school leaders in establishing goals and means, with final evaluation handled by the leaders. Typology nine, the Harris-Bessent model, emphasized cooperative inservice ventures with the teacher involved in all stages of inservice education. School leaders collaborated in establishing both goals and means. In summary, Beck (1978) suggested the use of an inservice education coordinator to assist teachers in selecting an inservice model which best fit their personal and professional needs.

Ingersoll (1976) also addressed the issue of individualization in stating that inservice education must be relevant to teacher needs, demonstrative of solutions and responsible to teacher input. Teaching requires a variety of competencies, and to assume equivalence of competence is not valid. Inservice instruction must be differentially arranged to meet varying competencies. Drummond (1979) agreed when he stressed: inservice education should be managed by

the people who work in the building and should deal with the individual and group problems and aspirations found there. He also supported development of the individualized approach for classifying ISE. The provision of service model utilized people outside the faculty who had services or ideas wanted or needed. The job-maintenance model was classified as a deficit model because those in power mandated or strongly suggested teachers submit to remediation. The personal-development model allowed teachers to break out of a routine and provided situations where they took the initiative. The problem-solving model involved three types: type A, the outside linkage model, type B, the situational-learning model and type C, the problem-management model. All of these types utilized problem-solving skills, either with outside assistance, application of research evidence, or changes in organizational relationships within a school system.

IV. RESEARCH ON SUCCESSFUL PRACTICES

By 1975, research supported what practitioners had known all along: educational miracles did not exist--no single curriculum model or program solved all problems. Attention then turned from evaluating educational products to the training and professional development needs of teachers. Findings supported the concept that schools should be developed as organizations. Arends, et al., (1978) summarized this view by stating, instead of trying to improve isolated components of schools, training and development efforts

must aim toward helping educators use resources they already possess. Thus, the design of inservice opportunities would be synergetic, with the overall effect becoming greater than the interactive constituent parts.

ISE practices had developed outside the context of any conceptual model. The educational community identified isolated practices that worked better than others. Although some options were clearly preferable to others, many wrong questions resulted from this lack of a conceptual base (Mann, 1976).

This philosophy differs from the traditional view of ISE as a concern about content to professional learning as part of program building in an organizational context. The Rand Study summarized ISE as a long term, non linear process (McLaughlin and Marsh, 1978). Process components were defined as purposes, planning, methods, implementation and evaluation. The successful practices that were identified in previous models and research will be categorized by these process components to form the following comprehensive view of ISE.

Purposes

The first component of ISE was the identification of the purpose(s). Many researchers identified the purpose of ISE as improving instructional performance of educational staff. Research did not exist on which ISE purpose was most closely associated with successful outcomes. Most models (Rand, Beck, I/D/E/A) supported

the concept that ISE was most successful when it met personal and organizational purposes. Combination (joint teacher-school) purposes resulted in the development of common priorities and long-term commitment by teachers and administrators (Berman and McLaughlin, 1978; Firth, 1977; Lawrence, 1974).

Planning

Collaborative planning between teachers and administrators was positively correlated with effective ISE. McLaughlin and Marsh (1978) reported that teachers' participation in decision making effected ISE practices. Collaborative planning was significantly more effective than: "top down" (administrator only) or "grass roots" (teacher only) planning. The quality of planning was important, not the amount. Also, teachers and administrative staff needed to reinvent the wheel each time an innovation was brought into a school setting. This helped teachers and administrators accept, understand and adjust the innovation to local needs (McLaughlin and Marsh, 1978).

Other researchers (Bunker, 1977; King, Hayes and Newman, 1977; and Wood and Thompson, 1980) emphasized the importance of involving teachers in the planning process. Wilen and Kindsvatter (1977) supported this concept of teacher involvement in planning, goals, content and instructional approach of ISE. Mann (1976) found that planning collaboratively resulted in "partisan mutual adaption" of innovations. This was an important characteristic of successful

ISE. Adopting programs generally changed innovative projects rather than visa versa. Good working relationships and teacher participation in project decisions were correlated--one helped the other. School climate ("esprit de corps," efficiency and effective management by the principal) also influenced the project quality.

Methods

Research also identified methods associated with successful ISE programs. Gordon Lawrence (1974), in an examination of ninety-seven studies and evaluation reports on inservice education programs, produced findings that have been corroborated by Beck, 1978; Berman and McLaughlin, 1977; Ingersoll and Schneider, 1978; and Mann, 1978. Individualized programs were more likely to produce desired results than those with universal activities. Also correlating with the later findings of Rand and Kettering I/D/E/A models, Lawrence (1974) determined that programs in which teachers participated in all phases of the program had a greater success rate than those where outside personnel were in charge. Programs which emphasized demonstrations, trials, and feedback methods were more effective in problem solving than those which emphasized merely absorbing ideas for future use. Lastly, while school-based and college-based programs were both effective to a certain extent, school-based programs were more successful in changing attitudes and behaviors, thus resulting in permanent changes in instructional programs. Results indicated that inservice programs that have the best chance

of being effective involved teachers in managing their own professional development activities, while pursuing personal and collective objectives, sharing with each other, applying new learning and receiving feedback (Lawrence, 1974).

Arends, et al., (1978) identified similar methods associated with successful ISE. These recommendations included individualized programs and multidimensional needs assessment systems provided within the organizational context.

Williams (1978), in a synthesis of studies, developed a hypothetical I/D/E/A Rand staff development model incorporating these additional characteristics:

- a. Teachers and administrators should be provided the skills and time necessary to focus their attention on local school problems.
- b. Teachers and administrators have within themselves a considerable amount of expertise to use on the problems they face.
- c. Some regional or local agency should be used to help school districts and school sites in developing their problem-solving capacity and in identifying, designing, and effectively utilizing appropriate staff-development and inservice activities.

Williams (1978) emphasized the preliminary nature of his model and the private political interests of the organizations and groups within the school system.

An additional finding of the Rand research (McLaughlin and Marsh, 1978) examined teacher characteristics associated with successful ISE efforts. Three characteristics were significant:

- a. Years of experience (negatively related to ability to change).
- b. Teacher tenure (teachers seemed to peak out after 5-7 years and experienced teachers were generally less satisfied with ISE).
- c. A sense of efficacy (teachers must believe they could help difficult or non-motivated students in order to benefit from ISE).

Wood and Thompson (1980) analyzed adult learning theories and identified methods associated with successful professional learning. Providing choices and alternatives and practice in "close to reality" situations was correlated with successful ISE. The following guidelines were suggested: adult learning should be experimental-- learning by doing and accommodate special learning styles of adults. Programs should be individualized with informal learning situations where social interaction can occur. Finally, the focus should be on job related tasks.

Edelfelt and Lawrence (1975) stated that successful ISE differentiates between provisionally certified (non-tenured) and tenured teachers. Mann (1976) identified these methods that were associated with successful ISE:

- a. Teacher trainers were from neighboring schools, rather than one's own school.
- b. Demonstration Teaching was done by trainers who had credibility and maintained enthusiasm.
- c. Multi-media materials for trainee's independent use were provided.

The contrast between effective and ineffective ISE methods is clear. Outside consultants, packaged or canned approaches, one shot training, pay for training, formal evaluation and comprehensive

(k-12) efforts were not effective. The effective practices are summarized as:

1. Individualized and related to on-the-job needs (choices and opportunities) within the organizational structure.
2. Ongoing, extended training held at the local school site,
3. Trainers that allow a variety of inputs,
4. Training that offered intrinsic rewards, and
5. Training that had observation and classroom opportunities (experimental based/learning) (McLaughlin and Marsh, 1978).

Implementation

What would an effective staff development model look like? Neither amount of money or a particular technology or curriculum was consistently associated with successful ISE. Administrative support and implementation strategies (learning by doing, on-line planning and concrete ongoing training) were important. This kind of implementation gave teachers the skill to identify and solve their own problems. It was also defined as a point of view that pervaded the district (discretionary funds, principals as participants, teacher centers, small divergent work groups, joint teacher-administrator governance and release time). It provided a variety of options and had a flexible program that was adaptive to different learner needs (Berman and McLaughlin, 1977).

Linkage and coordination with outside agencies was another critical implementation strategy. "Shopping around for help" was

associated with effective ISE (Arends, et al., 1978; Wilen and Kindsvatter, 1977).

ISE was also more effective if integrated with curriculum development and administrative reform. Organizational factors in the school site critically influenced professional learning. Teachers went through resocialization when adapting a new technology by ISE (McLaughlin, 1978).

Evaluation

The research on effective ISE evaluation is limited. One explanation was offered: school behavior is too complex to reasonably evaluate and our aim should presently be to formulate rather than test hypotheses (Berman and McLaughlin, 1978). Local school characteristics were important determiners of successful ISE and the need existed to evaluate these effects. However, Goodlad (1975) and Charters and Jones (1973) commented that we often measure the effects of "non-events" in evaluation studies, i.e., no change had occurred so nothing was there to evaluate.

Several researchers determined that reducing the use and threat of external judgments increased ISE effectiveness (Goodlad, 1975; Mann, 1976). Both researchers suggested that by separating the training and evaluation functions, the evaluation component focused on strengths, growth and uncovering next steps.

The credible independent multi-criteria evaluation of individual progress at relatively infrequent intervals by people

outside the teachers' school based chain of command, and unrelated to the teacher's "official" permanent-record performance evaluation, was most often preferred by teachers and administrators. Wilen and Kindsvatter (1978) also associated immediate, objective-based evaluation with highly successful ISE.

V. SUMMARY

This chapter has developed the concept of ISE from its historical beginnings to presently available definitions, components and models. Research studies identified process variables that were associated with successful ISE programs. These included: joint school-personal (organizational) purposes; collaborative planning; individualized methods; release time scheduling and independent multi-criteria evaluation. These variables formed the conceptual framework for the questionnaire, data gathering and analysis used in this study. The characteristics were categorized by purposes, planning, methods, implementation and evaluation. The design of the study focused on the actual occurrence and desirability of these characteristics in Tennessee.

CHAPTER III

PROCEDURE

The present study was conducted as part of a larger study on the perceptions of teachers and administrators toward inservice education (ISE) in Tennessee. In the present study, questions concerning the differences in perceptions among the groups were addressed. The groups' ratings on (1) the success of current ISE programs, (2) the occurrence and desirability of various ISE processes, and (3) the relationship of various characteristics to successfully rated current programs were analyzed.

I. DESIGN

The research design was organized to provide a group comparison on measured variables. These variables included success and satisfaction with current ISE programs; the occurrence and desirability of ISE process characteristics; and the relationship of process characteristics to successfully rated programs. A sample of schools was selected, and teachers, building level administrators and central office administrators associated with that school were surveyed. The questionnaire, mailed to the identified sample, yielded information on the various components of the ISE process. Follow-up procedures were used to increase the number of respondents and collect information on a sample of non-respondents. The

researcher used the Statistical Package for the Social Sciences (SPSS) to analyze data by non-parametric statistical techniques to determine comparisons among the groups.

II. SAMPLE

A random sample of schools (N=317) in Tennessee was selected to participate in the study. Included in the sample were all building level administrators associated with the schools, superintendents of the systems involved and a random sample of instructional supervisors. Teachers who were associated with these schools were systematically sampled. The groups included: teachers (N=728), building level administrators (N=317) and central office administrators (N=398), i.e., instructional supervisors (N=286) and superintendents (N=112). The following sampling procedure was used: an examination of the 1980-81 State Department of Education Directory of Public Schools indicated that 1,741 schools were listed under the classification of County School Systems, City School Systems or Special District School Systems. In the cases where a principal supervised more than one school, these schools were considered as one (under that principal). For the situations involving a person serving as both principal of the school and superintendent of the district, the schools were eliminated from the list. This was necessary to maintain the groups as mutually exclusive. These decisions reduced the total number of schools to 1,730. A random sample was drawn from this final group.

Based on the formula suggested by Hauskin (1963), the sample size of schools should be 317. This formula is:

$$n = \frac{\chi^2 N \phi (1 - \phi)}{d^2 (N - 1) + \chi^2 \phi (1 - \phi)}$$

Where N = population size

n = sample size

χ^2 = Chi-square

d = error range

ϕ = (.50 for largest sample size of percent of population with a given characteristic)

With this sample of schools, the groups of administrators to be surveyed were: the principals of the schools (N=317), the instructional supervisors (N=286), and the superintendents (N=112) of the districts in which the schools were located. Attempts were made to make the list of administrators as accurate as possible since the Directory of Public Schools was based on information submitted in the fall of 1980, and changes were known to have occurred. Updated files from the State Department of Education were used to accomplish this task.

In order to determine the final sample of teachers for the study, it was necessary to examine the lists of teachers on file in the offices of the State Department in Nashville. The population of teachers in the school sample was estimated to be between 7,000 and 8,000. A systematic sample of 10 percent was drawn by selecting every tenth person from the list of teachers (N=728).

III. DATA COLLECTION

Data were collected from three sources. (1) A literature review was undertaken to synthesize the available research information of successful ISE practices. (2) The Plan(s) for Inservice Training, submitted by each Local Education Agency (LEA) to the State Department of Education were reviewed. (3) Finally, a survey questionnaire was developed and mailed to the selected sample to determine their perceptions toward actual and desirable ISE practices. A complete description of each data collection procedure follows:

1. The literature review provided information on the theory and history of ISE in addition to research findings related to successful practices. The identification of successful practices established the structure for analysis of the Plan(s) for Inservice Training. The research on successful practices was also incorporated in the questionnaire on inservice education.

2. Through the cooperation of the State Department of Education, permission was received to examine the Plan(s) for Inservice Training submitted by each school system to the State Department for approval. Examination of the plans revealed variations in format and vague entries. The literature review established the necessary structure for analyzing the information. While the plans contained information on management details (number of days scheduled, committee composition, needs assessments and funding sources), purposes, objectives and activities, only the purposes were analyzed.

The information on management, purposes and objectives was not organized for summary analysis because of vast differences in content.

The analysis was organized to examine the priorities or purposes of training listed on the plan. These priorities were categorized by: improved teaching skills, improved professional competencies, personal development, organizational development, improved student outcomes and extended certification. They provided an indication of why the LEA developed its ISE (defined in broad context) objectives. The collection and analysis of these data on ISE purposes also yielded information as to why and how ISE was defined and used on the local level. Frequency counts were taken on the number of times each LEA listed particular purposes. These purposes were then categorized by the researchers. The researchers randomly reexamined ten Plans that had been coded by another researcher. Through repeated practice, agreement between researchers was reached on the categorization of the purposes.

3. The questionnaire used was developed through the extensive review of the literature as well as a review of the Plan(s) for Inservice Training. A field test (N=50) was conducted to determine reliability and face validity (Kerlinger, 1973).

Reliability was established by using a test-retest procedure. The retest was conducted 14 days after the initial administration, and statistical analysis yielded a correlation between forms of .721 (Hull and Nie, 1979). A reliability measure was also taken on data (N=744) from the actual sample. This measure yielded

an alpha reliability coefficient of .941. These two measures (test-retest and alpha) provided evidence of the instrument's reliability. The instrument was then reviewed by a panel of experts, which included prominent scholars and practitioners. The instrument was mailed to 18 persons and 11 responses were received (see Appendix A). Members of the panel included:

1. Dr. Joe Minor, Tennessee State Department of Education
2. Ms. Janice Shelby, Tennessee State Department of Education
3. Dr. Gordon Cawelti, Executive Director, The Association for Supervision and Curriculum Development
4. Ms. Betty Dillon-Petterson, Director of Staff Development, Lincoln Public Schools
5. Dr. Ben Harris, The University of Texas
6. Dr. Robert Krajewski, Auburn University
7. Dr. Gordon Lawrence, University of Florida
8. Dr. Dale Mann, Teachers College-Columbia University
9. Ms. Alice Miel, Teachers College-Columbia University
10. Dr. Fred Wood, Pennsylvania State University
11. Ms. Patricia Zigarmi, Journal of Staff Development

Face validity was judged adequate by both the field test sample and the panel of experts (Kerlinger, 1973). The recommended changes in format and style were made in the final questionnaire.

Questionnaire data were collected under five major headings (see Appendix B). In the demographic section, respondents were

asked to supply data about themselves, their school site and their local education agency. This included information such as position, years of experience, highest degree earned and satisfaction with current ISE practices. Appendix C contains the cover letter used with the questionnaire.

Through items in the next five sections, respondents answered questions concerning the desirability and occurrence of the components of the ISE process. Examples were used to describe the various alternatives to each component. The respondents indicated how closely each example matched actual occurrence (in their system) of the process and the personal desirability of the process.

IV. DATA ANALYSIS

The researcher analyzed and synthesized the data to determine the existence of significant differences of the types expressed in the "Questions to be Answered" section. The researcher processed the questionnaire data with the Statistical Package for the Social Sciences (SPSS) (1975), an integrated system of computer programs designed for the analysis of social science data.

Data analysis was based on the following return rate from the sample (N=744): central office administrators, N=256 or 64 percent; building level administrators, N=172, or 54 percent; and teachers, N=317 or 43 percent. Examination of the returned questionnaires revealed differences in how respondents marked their responses. While the instructions asked for a ranked response (each item

assigned a different number), a significant number of the responses were rated. The decision was made by the researchers to group the responses into high, neutral and low categories and use nominal level statistics chi-square (χ^2) and frequency counts to analyze data.

The teachers sample return rate was less than expected; therefore a sample of non-respondents was selected and the questionnaire data were collected by the use of phone calls and follow-up letters (Kerlinger, 1973). A separate analysis of the non-respondent group's data was performed. The non-respondent group's data were compared to the original sample's data and a chi-square test for significant differences was used. At the .05 level of significance, there were significant differences on eight of the items between the non-respondent group and the original respondent group. Since only four of the differences could be expected by chance the decision was made to report the χ^2 values for the eight variables on the basis of the initial response group. This procedure provided evidence of the similarity between the non-respondents and the original sample.

Details on the statistical procedures used to answer each question are as follows:

1. The chi-square test of significant differences for non-parametric data was used to compare the three groups (teachers, building level administrators and central office administrators) on perceived satisfaction and success. The data were treated at nominal level. An accepted significance level of .05 was established.

2. The chi-square test of significant differences was also used to compare the three groups (teachers, building level administrators and central office administrators) on the desirability and the actual occurrence of ISE variables (purposes, planning, methods, implementation and evaluation). The responses of the three groups on the occurrence of the various ISE purposes were also compared to the data reported in the state plans.

3. Descriptive frequency distributions were used to compare the existence of identified successful practices (as indicated by the research literature) in Tennessee as perceived by central office administrators, building level administrators and teachers.

4. The chi-square test of significant differences was used to determine which successful ISE practices were associated with high ratings of overall successful ISE programs, as perceived by central office administrators, building level administrators and teachers.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The present study was designed to examine the perceptions of Tennessee building level administrators (BLA), central office administrators (COA) and teachers (T) toward inservice education (ISE). Questions concerning the differences among the three groups (BLA, COA and T) were addressed. The groups' ratings on (1) the success of current ISE programs, (2) the occurrence and desirability of various ISE processes, i.e., purposes, planning, methods, implementation and evaluation and (3) the relationship of various characteristics to successfully rated programs were analyzed.

Data analyzed in this chapter were collected through examination of Plan(s) for Inservice Training and the use of the Inservice Education Questionnaire which was mailed to teachers and administrators associated with the systematic sample of schools. Usable responses were received from 256 central office administrators, 172 building level administrators and 317 teachers. The data were analyzed through the use of the Statistical Package for the Social Sciences (SPSS). Organization of results follows the design of the questionnaire and data are presented under the appropriate research question.

I. SUCCESS/SATISFACTION RATINGS

This section reports the findings for the question: "Did significant differences exist in the perceived success and satisfaction

(whether ISE met personal needs) ratings among the three groups (BLA, COA, and T)?" Both groups of administrators rated ISE as highly successful (71.5 percent of COA and 50 percent of BLA) while only 32.3 percent of teachers perceived current ISE programs as successful. In contrast, less than 20 percent of the administrators rated ISE as not successful (BLA = 15.7 percent and COA = 5.9 percent) while 38.3 percent of teachers rated ISE as not successful, as indicated in Table I. The chi-square test was used to determine if there were significant differences among the groups relative to perceived success. The large chi-square (χ^2) values are indicative of a systematic relationship between the three groups and the way they rated success ($\chi^2 = 120.434$, degrees of freedom (df) = 4, probability (F) = .000).

Comparisons of the ratings of BLA, COA, and T on the "success of your system's 1980-1981 program" yielded significant differences among all three groups. As indicated in Table II, chi-square values were all significant at the .05 level with two degrees of freedom (BLA x COA = 22.807, COA x T = 108.427, BLA x T = 28.684). Thus, all three groups differed significantly in their perceptions of whether ISE programs were successful. Administrators, especially COA, perceived current programs as successful, while a smaller percentage of teachers perceived ISE as successful.

A related question was the rating of whether the current ISE programs met personal needs. A large percentage of COA (56.5 percent) rated current ISE programs as having maximum benefit. Only 37.8 percent

TABLE I

RELATIVE FREQUENCY OF HIGH AND LOW RATINGS OF PERCEIVED
 SUCCESS AND SATISFACTION OF 1980-1981 INSERVICE
 EDUCATION (ISE) PROGRAMS BY TENNESSEE BUILDING
 LEVEL ADMINISTRATORS (BLA), CENTRAL OFFICE
 ADMINISTRATORS (COA) AND TEACHERS (T)
 ON THE QUESTIONNAIRE: INSERVICE
EDUCATION

Variables	BLA	COA	T
Success-High	.50	.715	.323
Success-Low	.157	.059	.383
Satisfaction-High	.378	.566	.224
Satisfaction-Low	.279	.159	.532

TABLE II

CHI-SQUARE VALUES OF PERCEIVED SUCCESS AND SATISFACTION OF 1980-1981 INSERVICE EDUCATION (ISE) PROGRAMS BY TENNESSEE TEACHERS (T), BUILDING LEVEL ADMINISTRATORS (BLA) AND CENTRAL OFFICE ADMINISTRATORS (COA) ON THE QUESTIONNAIRE:
INSERVICE EDUCATION

Variables	BLA x COA x T [#]	BLA x COA	COA x T	BLA x T
Success	*120.434(4)	*22.807(2)	*108.427(2)	*28.684(2)
Satisfaction	*105.754(4)	*15.953(2)	*96.381(2)	*29.351(2)

* = Significant chi-square at the .05 level.

() = Degrees of freedom.

= Total number of sample is 735.

of BLA and 22.4 percent of T agreed that ISE Programs met personal needs. In contrast, a large percentage of teachers (53.2 percent) rated ISE "of no personal benefit," while only 15.9 percent of COA and 27.9 percent of BLA rated ISE programs low on personal benefit, as indicated in Table I, page 54. The large chi-square value ($\chi^2 = 105.754$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated perceived personal satisfaction. Comparisons among the groups also were significant. As indicated in Table II, page 55, chi-square values were all significant at the .05 level with 2 degrees of freedom: (BLA x COA, $\chi^2 = 15.953$; COA x T, $\chi^2 = 96.381$; and BLA x T, $\chi^2 = 29.351$).

Again, all three groups differed significantly in their rating of the personal benefit of current ISE programs. Administrators, especially COA, perceived current ISE programs as having personal benefit, while a large percentage of T rated ISE programs as having no personal benefit.

II. ISE COMPONENTS RATINGS

This section reports the findings for the question: "Did differences exist between the groups on the variables associated with the process of ISE, i.e., purposes, planning, methods, implementation and evaluation?" The perceptions of each variable are reported by frequency of occurrence and desirability.

In the questionnaire, the components of the ISE process were categorized: purposes, planning, methods, implementation and evaluation.

Respondents rated the categories of purposes, planning and evaluation from examples listed of the actual types. The remaining sections on methods and implementation contained lists of the various choices. The choices within each category were determined by the review of the literature and suggestions from the field test or panel of experts. As discussed in Chapter III, while respondents were asked to rank their choices within each section from highest to lowest, a significant number rated the choices. The researchers recoded the responses into categories of high, neutral and low through the SPSS program. Comparison analysis was then based on non-parametric procedures appropriate for nominal level data.

Purposes of ISE

Information on purposes was gathered by examining the Plan(s) for Inservice Training and from Section I of the Questionnaire: Inservice Education. Purposes, as determined by the priorities listed in the Plan(s) for Inservice Training, are presented in Table III. Twenty-six (4.3 percent) of the priorities listed by the school systems dealt with improving classroom performance; 378 (62.9 percent) addressed general professional improvement; 16 (2.7 percent) dealt with personal development; 181 (30.1 percent) addressed organizational development; and no priorities were listed to extend certification. Thus, most of the school systems developed ISE programs designed for general professional improvement or organizational development.

TABLE III

ABSOLUTE AND RELATIVE FREQUENCY OF PURPOSES REPORTED BY
 TENNESSEE LOCAL EDUCATION AGENCIES IN THE PLAN FOR
INSERVICE TRAINING (1980-1981)

Purposes	Absolute	Relative
Improve Classroom Performance	26	.043
Improve General Professional Competencies	378	.629
Personal Development	16	.027
Organizational Development	181	.301
Improve Student Performance	0	.000
Extend Certification	0	.000
Totals	601	1.000

Purposes surveyed by the questionnaire included those identified in Chapter I. Each example represented an identified purpose. Item A--ISE should develop more positive self-concepts--referred to personal development. Item B--ISE should help meet certification requirements--represented the purposes of extending certification. Item C--ISE should develop positive faculty relationships--focused on one component of organizational development. Item D--ISE should improve student performance--represented the ultimate purpose of all ISE activities. Item E--ISE should improve teaching skills--referred to improvement of classroom performance. Item F--ISE should broaden professional competencies--represented improved general professional competence. Item G--ISE should only meet State Department requirements--referred to the ten day minimum requirement for ISE mandated by the State of Tennessee.

Purpose: personal development. The groups (BLA, COA, and T) did not rate the purpose of personal development significantly different on frequency of occurrence, as indicated in Table IV ($\chi^2 = 3.088$, $df = 4$, $F = .543$). The percentages of the groups that rated this purpose as occurring frequently were: BLA = 25.8 percent, COA = 25.3 percent, and T = 22.6 percent (Table IV).

The groups (BLA, COA, and T) did not rate the purpose of personal development significantly different on desirability ($\chi^2 = 6.274$, $df = 4$, $F = .180$) (Table IV). The percentages of the groups that rated this purpose as highly desirable were: BLA = 51.5 percent, COA = 45.5 percent, T = 48 percent, as indicated in Table V.

TABLE IV
CHI-SQUARE VALUES OF OCCURRENCE AND DESIRABILITY OF INSERVICE EDUCATION (ISE) PURPOSES AS PERCEIVED BY
TENNESSEE TEACHERS (T), BUILDING LEVEL ADMINISTRATORS (BLA) AND CENTRAL OFFICE ADMINISTRATORS
(COA) ON THE QUESTIONNAIRE: INSERVICE EDUCATION (1980-1981)

Variables: Purposes	Frequency of Occurrence			Desirability		
	$\frac{BLA \times COA \times T}{df=4}$	$\frac{BLA \times COA}{df=2}$	$\frac{COA \times T}{df=2}$	$\frac{BLA \times COA \times T}{df=4}$	$\frac{BLA \times COA}{df=2}$	$\frac{COA \times T}{df=2}$
Personal Development	3.088			6.274		
Certification	2.561			*84.706	*16.749	*83.813
Organizational	*15.134	4.945	*15.126	*12.317	2.669	*7.382
Improved Student Performance	*18.651	4.580	*18.616	*25.229	3.085	*23.789
Improved Classroom Performance	*31.581	*15.210	*30.043	*10.822	4.816	*10.467
Improved General Professional Competency	*25.890	*10.457	*25.523	*20.976	*10.640	*18.263
Meeting State Department Requirements	*43.750	*10.864	*41.594	*11.109		2.493

* = Significant chi-square at the .05 level.

df = Degrees of freedom.

TABLE V

RELATIVE FREQUENCY OF HIGH RATINGS ON FREQUENCY OF OCCURRENCE AND DESIRABILITY OF INSERVICE EDUCATION (ISE) PURPOSES AS PERCEIVED BY TENNESSEE TEACHERS (T), BUILDING LEVEL ADMINISTRATORS (BLA) AND CENTRAL OFFICE ADMINISTRATORS (COA)
ON THE QUESTIONNAIRE: INSERVICE EDUCATION (1980-1981)

Variables: Purposes	Frequency of Occurrence		Desirability	
	BLA	COA	BLA	T
Personal Development	.258	.253	.515	.48
Certification	.141	.093	.281	.45
Organizational	.282	.288	.521	.44
Improve Student Performance	.228	.243	.42	.31
Improve Classroom Performance	.488	.669	.822	.79
Improve General Professional Competencies	.448	.567	.675	.634
Meeting State Department Requirements	.368	.223	.078	.132

Purpose: certification. The groups did not rate the certification purpose significantly different on frequency of occurrence, as indicated in Table IV, page 60 ($\chi^2 = 2.561$, $df = 4$, $F = .634$). The percentages of the groups that rated this purpose as occurring frequently were: BLA = 14.1 percent, COA = 9.3 percent, and T = 12.8 percent, Table V, page 61.

The groups rated this purpose highly desirable as follows: BLA = 28.1 percent, COA = 13.2 percent, T = 45 percent (Table V, page 61). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of certification. The large chi-square value ($\chi^2 = 84.706$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated certification as a purpose. The comparisons between the groups, by pairs, also yielded significant differences. As indicated in Table IV, page 60, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 16.749$; COA x T, $\chi^2 = 83.813$; and BLA x T, $\chi^2 = 18.059$).

Purpose: organizational development. The three groups rated the purpose of organizational development significantly different on frequency of occurrence and desirability. The three groups rated the purpose of organizational development as occurring most frequently as follows: BLA = 28.2 percent, COA = 28.8 percent, T = 30.3 percent (Table V, page 61). The large chi-square value ($\chi^2 = 15.134$, $df = 4$, $F = .004$) implies a systematic relationship between the three groups

and the way they rated organizational development as a purpose. The comparisons between the groups, by pairs, also yielded significant differences. As indicated in Table IV, page 60, the following chi-square value was significant at the .05 level with two degrees of freedom (COA x T, $\chi^2 = 15.126$).

The groups rated the purpose of organizational development highly desirable as follows: BLA = 52.1 percent, COA = 44.1 percent, T = 44 percent (Table V, page 61). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of organizational purposes. The large chi-square value ($\chi^2 = 12.317$, $df = 4$, $F = .015$) implies a systematic relationship between the three groups and the way they rated organizational development as a purpose. The comparison among the groups, by pairs, also yielded significant differences. As indicated in Table IV, page 60, the following chi-square values were significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 7.382$, and BLA x T, $\chi^2 = 6.289$).

Purpose: improved student performance. The three groups rated improved student performance significantly different on frequency of occurrence and desirability. The three groups rated the purpose of improved student performance most frequently as follows: BLA = 22.8 percent, COA = 24.3 percent, T = 21 percent (Table V, page 61). The chi-square test was used to determine the significance of differences among the groups relative to how often improved student outcomes occurred. The large chi-square value ($\chi^2 = 18.656$, $df = 4$, $F = .001$)

implies a systematic relationship between the three groups and the way they rated improved student performance as a purpose. The comparisons between the groups, by pairs, also yielded significant differences. As indicated in Table IV, page 60, the following chi-square value was significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 18.616$) of improved student performance.

The group rated the purpose of improved student performance highly desirable as follows: BLA = 42 percent, COA = 45.7 percent, and T = 31 percent (Table V, page 61). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of improved student outcomes. The large chi-square value ($\chi^2 = 25.229$, $df = 4$, $F = .000$) implied a systematic relationship between the three groups and the way they rated improved student performance as a purpose. The comparisons between the groups by pairs, also yielded significant differences. As indicated in Table IV, page 60, the following chi-square values were significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 23.789$; and BLA x T, $\chi^2 = 7.789$).

Purpose: improved classroom performance. The three groups rated improved classroom performance significantly different on frequency of occurrence and desirability. The three groups rated the purpose of improved classroom performance as occurring most frequently as follows: BLA = 48.8 percent, COA = 66.9 percent, and T = 44.3 percent (Table V, page 61). The chi-square test was used to

determine the significance of differences among the groups relative to how often improved classroom performance occurred. The large chi-square value ($\chi^2 = 31.581$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated improved classroom performance as a purpose. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table IV, page 60, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 15.210$; COA x T, $\chi^2 = 30.043$).

The groups rated the purpose of improved classroom performance highly desirable as follows: BLA = 82.2 percent, COA = 89.1 percent, and T = 79 percent (Table V, page 60). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of improved teaching skills. The large chi-square value ($\chi^2 = 10.822$, $df = 4$, $F = .028$) implies a systematic relationship between the three groups and the way they rated improved classroom performance as a purpose. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table IV, page 60, the following chi-square value was significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 10.467$).

Purpose: improved general professional competence. The three groups rated improved general professional competencies significantly different on frequency of occurrence and desirability. The

three groups rated the purpose of improved general professional competence as occurring most frequently as follows: BLA = 44.8 percent, COA = 56.7 percent, and T = 37.5 percent (Table V, page 61). The chi-square test was used to determine the significance of differences among the groups relative to how often improved general professional competencies occurred. The large chi-square value ($\chi^2 = 25.890$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated improved general professional competencies. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table IV, page 60, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 10.457$ and COA x T, $\chi^2 = 25.523$).

The groups rated this purpose of improved general professional competencies highly desirable as follows: BLA = 67.5 percent, COA = 79.9 percent, and T = 63.4 percent (Table V, page 61). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of improved professional competencies. The large chi-square value ($\chi^2 = 20.976$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated improved professional competencies. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table IV, page 60, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 10.640$, and COA x T, $\chi^2 = 18.263$).

Purpose: meeting state department requirements. The groups rated meeting state department requirements significantly different on frequency of occurrence but not desirability. The groups rated the purpose of meeting state department requirements as occurring most frequently as follows: BLA = 36.8 percent, COA = 22.3 percent, and T = 48.3 percent (Table V, page 61). The chi-square test was used to determine the significance of differences among the groups relative to how the purpose of meeting state department requirements occurred. The large chi-square value ($\chi^2 = 43.750$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated department requirements as a purpose. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table IV, page 60, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 10.684$; COA x T, $\chi^2 = 41.594$; and BLA x T, $\chi^2 = 11.109$).

As indicated in Table IV, page 60, the three groups did not rate the purpose of meeting state department requirements significantly different on desirability ($\chi^2 = 7.119$, $df = 4$, $F = .130$). The percentages of the groups that rated this purpose as highly desirable were: BLA = 7.8 percent, COA = 7.3 percent and T = 13.2 percent (Table V, page 61).

In summary, the groups rated five of the seven purposes differently on frequency of occurrence and five of the seven purposes differently on desirability. The purposes rated significantly

different on both occurrence and desirability were: organizational development, improved student performance, improved classroom performance and improved general professional competencies.

The purposes rated as frequently occurring by the groups were different from those frequencies reported as frequently occurring on the state plans, i.e., general professional improvement and organizational development. BLA rated the purpose of improved classroom performance as occurring most frequently (48.8 percent) and most desirable (67.5 percent). COA rated the purpose of improved classroom performance as occurring most frequently (66.9 percent) and most desirable (89.1 percent). T rated the purpose of meeting state department requirements as occurring most frequently (48.3 percent) and improving classroom performance as the most desirable (79 percent).

Planning of ISE

This section will report the findings for the question: "Did differences exist among the groups concerning the frequency of occurrence and desirability of the ISE Process variables of planning?" Planning patterns in the questionnaire were also represented by examples. Item A--represented consultant planning--between faculty and outside consultants. Item B--school faculties should plan their own inservice education--represented a grass-roots approach to planning with teacher control. Item C--the staff of a center should plan for the school--referred to a top-down pattern of planning, with

administrators acting as the decision makers. Item D--faculty volunteers should join the committee in planning--referred to a collaborative pattern of planning.

Planning: consultant. As indicated in Tables VI and VII, the three groups did not rate consultant planning significantly different on frequency of occurrence ($\chi^2 = 2.85$, $df = 4$, $F = .583$). The percentages of the groups that rated consultant planning as occurring frequently were: BLA = 12 percent, COA = 8.4 percent, and T = 12.6 percent.

The three groups rated consultant planning highly desirable as follows: BLA = 15.3 percent, COA = 6.3 percent, T = 21.8 percent (Table VII). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of consultant planning. The large chi-square value ($\chi^2 = 28.859$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated consultant planning. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VI, the following chi-square values were significant at the .05 level with two degrees of freedom (BLA x COA, $\chi^2 = 9.073$, and COA x T, $\chi^2 = 28.779$).

Planning: grass-roots. The three groups rated grass-roots planning significantly different on frequency of occurrence and desirability. The groups rated grass-roots planning as occurring

TABLE VI

CHI-SQUARE VALUES OF OCCURRENCE AND DESIRABILITY OF INSERVICE EDUCATION (ISE) PLANNING AS PERCEIVED BY TENNESSEE TEACHERS (T), BUILDING LEVEL ADMINISTRATORS (BLA) AND CENTRAL OFFICE ADMINISTRATORS (COA) ON THE QUESTIONNAIRE: INSERVICE EDUCATION (1980-1981)

Variables:	Planning	Frequency of Occurrence			Desirability		
		BLA x COA x T df=4	BLA x COA df=2	COA x T df=2	BLA x COA df=2	COA x T df=2	BLA x T df=2
Consultant		2.852			*9.073	*28.779	4.484
Grass-Roots		*16.103	5.940	*15.633	*13.952	*17.445	.025
Top-Down		6.046			4.890	*31.179	*8.094
Collaborative		7.327				8.410	

* = Significant chi-square at the .05 level.

df = Degrees of freedom.

TABLE VII

RELATIVE FREQUENCY OF HIGH RATINGS ON FREQUENCY OF OCCURRENCE AND DESIRABILITY OF INSERVICE
EDUCATION (ISE) PLANNING AS PERCEIVED BY TENNESSEE TEACHERS (T), BUILDING LEVEL
ADMINISTRATORS (BLA) AND CENTRAL OFFICE ADMINISTRATORS (COA)
ON THE QUESTIONNAIRE: INSERVICE EDUCATION (1980-1981)

Variables: Planning	Frequency of Occurrence		Desirability	
	BLA	COA	BLA	T
Consultant	.12	.084	.153	.218
Grass-Roots	.379	.436	.435	.427
Top-Down	.097	.107	.168	.278
Collaborative	.327	.356	.521	.413

most frequently as follows: BLA = 37.9 percent, COA = 43.6 percent, T = 40.4 percent (Table VII, page 71). The chi-square test was used to determine the significance of differences among the groups relative to how often grass-roots planning occurred. The large chi-square value ($\chi^2 = 16.103$, $df = 4$, $F = .003$) implies a systematic relationship between the three groups and the way they rated grass-roots planning. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VI, page 70, the following chi-square value was significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 15.633$).

The groups rated grass-roots planning highly desirable as follows: BLA = 43.5 percent, COA = 48.6 percent, T = 42.7 percent (Table VII, page 71). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of grass-roots planning. The large chi-square value ($\chi^2 = 18.907$, $df = 4$, $F = .001$) implies a systematic relationship between the three groups and the way they rated grass-roots planning. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VI, page 70, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 13.952$, and COA x T, $\chi^2 = 17.445$).

Planning: top-down. As indicated in Tables VI and VII, pages 70 and 71, the groups did not rate the occurrence of top-down planning significantly different ($\chi^2 = 6.046$, $df = 4$, $F = .196$). The

percentages of the groups that rated top-down planning as occurring frequently were: BLA = 9.7 percent, COA = 10.7 percent, and T = 16.4 percent.

The groups rated top-down planning highly desirable as follows: BLA = 16.8 percent, COA = 9.9 percent, and T = 27.8 percent (Table VII, page 71). The chi-square test was used to determine the significant differences among the groups relative to the desirability of top-down planning. The large chi-square value ($\chi^2 = 32.646$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated top-down planning. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VI, page 70, the following chi-square values were significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 31.179$ and BLA x T, $\chi^2 = 8.094$).

Planning: collaborative. As indicated in Tables VI and VII, pages 70 and 71, the three groups did not rate the occurrence of collaborative planning significantly different ($\chi^2 = 7.327$, $df = 4$, $F = .120$). The percentages of the groups that rated collaborative planning as occurring frequently were: BLA = 32.7 percent, COA = 35.6 percent, and T = 26.3 percent.

As indicated in Tables VI and VII, pages 70 and 71, the three groups did not rate the desirability of collaborative planning significantly different ($\chi^2 = 8.410$, $df = 4$, $F = .078$). The percentages of the groups that rated collaborative planning as desirable were: BLA = 52.1 percent, COA = 49.6 percent, and T = 41.3 percent.

Summary

The groups rated the occurrence and desirability of one planning method significantly different: grass-roots. Within the groups the largest differences were between COA and T. In desirability, differences between groups were found on grass-roots, consultant and top-down planning. Again, the greatest differences were between COA and T.

BLA rated grass-roots planning as occurring most frequently (37.9 percent) and collaborative planning as most desirable (52.1 percent). COA rated grass-roots planning as occurring most frequently (43.6 percent) and collaborative planning as most desirable (49.6 percent). T rated grass-roots planning as occurring most frequently (40.4 percent) and as most desirable (42.7 percent).

Methods of ISE

This section will report the findings for the question: "Did differences exist among the groups concerning the frequency of occurrence and desirability of the ISE process variables of methods?" Methods were divided into three parts: format, session leaders and instructional techniques.

Format: individualized. The groups did not rate the frequency of occurrence of using an individualized format significantly different ($\chi^2 = 7.295$, $df = 4$, $F = .121$), as indicated in Tables VIII and IX. The percentages of the groups that rated using an

TABLE VIII

CHI-SQUARE VALUES OF OCCURRENCE AND DESIRABILITY OF INSERVICE EDUCATION (ISE) METHODS AS PERCEIVED BY TENNESSEE TEACHERS (T), BUILDING LEVEL ADMINISTRATORS (BLA) AND CENTRAL OFFICE ADMINISTRATORS (COA) ON THE QUESTIONNAIRE: INSERVICE EDUCATION (1980-1981)

Variables: Methods	Frequency of Occurrence			Desirability		
	BLA x COA x T df=4	BLA x COA df=2	COA x T df=2	BLA x COA x T df=4	BLA x COA df=2	COA x T df=2
<u>Format</u>						
Individualized	7.295			*15.404	3.851	*14.407
Small Group	*10.306	*7.612	*7.826	.319		
School Faculty	.820			7.741		
System-Wide	7.767			*23.367	5.124	*19.967
<u>Leaders</u>						
Other Teachers	*10.631	*10.581	2.731	3.854	4.391	*31.442
Outside Consultants	4.553				4.522	*40.269
Administrators	*20.967	5.660	*20.284	4.330	*15.388	*24.110
You as Leader	*59.680	*6.134	*54.359	*22.557	4.201	*15.502
<u>Instructional Techniques</u>						
Lecture	*47.729	*16.195	*43.405	1.847		
Discussion	3.048				2.178	*17.103
Self Instruction	1.740			*18.411		
Simulation	*28.488	*12.365	*24.398	2.529		
Direct Classroom Assistance	*55.948	*23.291	*51.099	2.072	2.178	*24.385
						*12.267

* = Significant chi-square at the .05 level.

df = Degrees of freedom.

TABLE IX

RELATIVE FREQUENCY OF HIGH RATINGS ON FREQUENCY OF OCCURRENCE AND DESIRABILITY OF INSERVICE EDUCATION (ISE) METHODS AS PERCEIVED BY TENNESSEE TEACHERS (T), BUILDING LEVEL ADMINISTRATORS (BLA) AND CENTRAL OFFICE ADMINISTRATORS (COA) ON THE QUESTIONNAIRE: INSERVICE EDUCATION (1980-1981)

Variables: Methods	Frequency of Occurrence		Desirability	
	BLA	COA	BLA	T
<u>Format</u>				
Individualized	.124	.13	.301	.374
Small Group	.27	.378	.485	.51
School Faculty	.288	.278	.305	.218
System-Wide	.462	.351	.173	.146
<u>Leaders</u>				
Other Teachers	.178	.315	.488	.315
Outside Consultants	.327	.307	.289	.511
Administrators	.308	.326	.179	.146

TABLE IX (Continued)

Variables: Methods	Frequency of Occurrence		Desirability	
	BLA	COA	BLA	COA
You as Leader	.098	.180	.069	.09
Instructional Techniques				
Lecture	.688	.477	.184	.152
Discussion	.704	.760	.570	.543
Self-Instruction	.163	.168	.285	.232
Simulation	.293	.470	.752	.786
Direct Classroom Assistance	.195	.349	.750	.769
				.586

individualized format as occurring frequently were: BLA = 12.4 percent, COA = 13 percent, and T = 12.5 percent.

The groups rated this format highly desirable as follows: BLA = 30.1 percent, COA = 22.3 percent, and T = 37.4 percent (Table IX, pages 76 and 77). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of individualized format. The large chi-square value ($\chi^2 = 15.404$, $df = 4$, $F = .003$) implies a systematic relationship between the three groups and the way they rated using an individualized format. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VIII, page 75, the following chi-square value was significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 14.407$).

Format: small group. The groups rated the small group format as occurring most frequently as follows: BLA = 27 percent, COA = 37.8 percent, and T = 29.8 percent (Table IX, pages 76 and 77). The chi-square test was used to determine the significance of differences among the groups relative to how often the format of using small groups occurred. The large chi-square value ($\chi^2 = 10.306$, $df = 4$, $F = .036$) implies a systematic relationship between the three groups and the way they rated using a small group format. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VIII, page 75, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 7.612$ and COA x T, $\chi^2 = 7.826$).

The three groups did not rate the desirability of using a small group format significantly different ($\chi^2 = .319$, $df = 4$, $F = .989$), as indicated in Table VIII, page 75. The percentages of the groups that rated using a small group format highly desirable were: BLA = 48.5 percent, COA = 49.8 percent, and T = 51 percent.

Format: total school faculty. As indicated in Tables VIII and IX, pages 75, 76, and 77, the groups did not rate the frequency of occurrence of using a total school faculty format significantly different ($\chi^2 = .820$, $df = 4$, $F = .936$). The percentages of the three groups that rated using the total school faculty format as occurring frequently were: BLA = 28.8 percent, COA = 27.8 percent, and T = 29.6 percent.

As indicated in Tables VIII and IX, pages 75, 76 and 77, the three groups did not rate the desirability of using a total school faculty format significantly different ($\chi^2 = 7.741$, $df = 4$, $F = .102$). The percentages of the three groups that rated using the total school faculty format as highly desirable were: BLA = 30.5 percent, COA = 21.8 percent, and T = 21.8 percent.

Format: system-wide or multi system. As indicated in Tables VIII and IX, pages 75, 76 and 77, the three groups did not rate frequency of occurrence of using a system-wide or multi system format significantly different ($\chi^2 = 7.767$, $df = 4$, $F = .101$). The percentages of the three groups that rated using a system-wide or multi

system format as occurring frequently were: BLA = 46.2 percent, COA = 35.1 percent, and T = 44.1 percent.

The groups rated using a system-wide or multi system format highly desirable as follows: BLA = 17.3 percent, COA = 27 percent, and T = 14.6 percent. The chi-square test was used to determine the significance of differences among the groups relative to the desirability of using a system-wide or multi system format. The large chi-square value ($\chi^2 = 23.367$, $df = 4$, $F = .001$) implies a systematic relationship between the three groups and the way they rated using a system-wide or multi system format. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Tables VIII and IX, pages 75, 76 and 77, the following chi-square values were significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 19.967$ and BLA x T, $\chi^2 = 6.427$).

Session leaders: other teachers. The three groups rated using other teachers as session leaders significantly different on frequency of occurrence and desirability. The groups rated using other teachers as session leaders as occurring most frequently as follows: BLA = 17.8 percent, COA = 31.5 percent, and T = 25.7 percent (Table IX, pages 76 and 77). The chi-square test was used to determine the significance of differences among the groups relative to how often other teachers as session leaders occurred. The large chi-square value ($\chi^2 = 10.631$, $df = 4$, $F = .031$) implies a systematic relationship between the three groups and the way they rated using

other teachers as session leaders. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VIII, page 75, the following chi-square value was significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 10.581$).

The groups rated using other teachers as session leaders as highly desirable as follows: BLA = 48.8 percent, COA = 53.3 percent, and T = 31.5 percent (Table IX, pages 76 and 77). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of using other teachers as session leaders. The large chi-square value ($\chi^2 = 34.290$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated using other teachers as session leaders. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VIII, page 75, the following chi-square values were significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 31.442$ and BLA x T, $\chi^2 = 13.635$).

Session leaders: outside consultants. As indicated in Tables VIII and IX, pages 75, 76, and 77, the group did not rate using outside consultants as session leaders significantly different on frequency of occurrence ($\chi^2 = 4.553$, $df = 4$, $F = .336$). The percentages of the three groups that rated using outside consultants as session leaders as occurring frequently were: BLA = 32.7 percent, COA = 30.7 percent, and T = 36.5 percent.

The three groups rated using outside consultants as session leaders highly desirable as follows: BLA = 28.9 percent, COA = 24.6 percent, and T = 51.1 percent (Table IX, pages 76 and 77). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of using outside consultants as session leaders. The large chi-square value ($\chi^2 = 51.355$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated using other teachers as session leaders. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VIII, page 75, the following chi-square values were significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 40.269$ and BLA x T, $\chi^2 = 23.755$).

Session leaders: administrators. The three groups rated using administrators as session leaders significantly different on frequency of occurrence and desirability. The groups rated using administrators as session leaders as occurring most frequently as follows: BLA = 30.8 percent, COA = 32.6 percent, and T = 35.6 percent (Table IX, pages 76 and 77). The chi-square test was used to determine the significance of differences among the groups relative to how often using administrators as session leaders occurred. The large chi-square value ($\chi^2 = 20.267$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated using administrators as session leaders. The comparisons among

the groups, by pairs, also yielded significant differences. As indicated in Table VIII, page 75, the following chi-square value was significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 20.284$).

The groups rated using administrators as session leaders highly desirable as follows: BLA = 17.9 percent, COA = 24.3 percent, and T = 14.6 percent (Table IX, pages 76 and 77). The chi-square test was used to determine the significance of differences among the groups relative to desirability of using administrators as session leaders. The large chi-square value ($\chi^2 = 25.547$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated using administrators as session leaders. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VIII, page 75, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 15.388$; COA x T, $\chi^2 = 24.110$).

Session leaders: you as leader. The groups rated you as leader significantly different on frequency of occurrence and desirability. The groups rated you as leader as occurring most frequently as follows: BLA = 9.8 percent, COA = 18 percent, and T = 6.3 percent (Table IX, pages 76 and 77). The chi-square test was used to determine the significance of differences among the groups relative to how often you as session leader occurred. The large chi-square value ($\chi^2 = 59.680$, $df = 4$, $F = .000$) implies a systematic relationship

between the three groups and the way they rated you as leader. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VIII, page 75, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 6.134$; COA x T, $\chi^2 = 54.359$; and BLA x T, $\chi^2 = 22.557$).

The three groups rated you as leader highly desirable as follows: BLA = 6.9 percent, COA = 9 percent, and T = 8.2 percent (Table IX, pages 76 and 77). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of you as session leader. The large chi-square value ($\chi^2 = 34.020$, $df = 4$, $F .000$) implies a systematic relationship between the three groups and the way they rated you as session leader. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VIII, page 75, the following chi-square values were significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 15.502$ and BLA x T, $\chi^2 = 30.956$).

Instructional techniques: lecture. The three groups rated using lecture as an instructional technique significantly different on frequency of occurrence. The three groups rated using lecture as an instructional technique as occurring most frequently as follows: BLA = 68.8 percent, COA = 47.7 percent, and T = 74.7 percent (Table IX, pages 76 and 77). The chi-square test was used to determine the significance of differences among the groups relative to how often using lecture

as an instructional technique occurred. The large chi-square value ($\chi^2 = 47.729$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated using lecture as an instructional technique. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VIII, page 75, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 19.195$; COA x T, $\chi^2 = 43.405$).

As indicated in Tables VIII and IX, pages 75, 76, and 77, the three groups did not rate using lecture as an instructional technique significantly different on desirability ($\chi^2 = 8.589$, $df = 4$, $F = .072$). The percentages of the three groups that rated using lecture as an instructional technique as highly desirable were: BLA = 18.4 percent, COA = 15.2 percent, and T = 23.3 percent.

Instructional techniques: discussion. As indicated in Tables VIII and IX, pages 75, 76, and 77, the three groups did not rate using discussion as an instructional technique significantly different on frequency of occurrence ($\chi^2 = 3.048$, $df = 4$, $F = .550$). The percentages of the three groups that rated using discussion as an instructional technique as occurring frequently were: BLA = 70.4 percent, COA = 76 percent, and T = 70.1 percent.

As indicated in Tables VIII and IX, pages 75, 76, and 77, the three groups did not rate using discussion as an instructional technique significantly different on desirability ($\chi^2 = 4.191$,

df = 4, $F = .381$). The percentages of the three groups that rated using discussion as an instructional technique as highly desirable were: BLA = 57 percent, COA = 54.3 percent, and T = 52.3 percent.

Instructional techniques: self instruction. As indicated in Tables VIII and IX, pages 75, 76, and 77, the three groups did not rate using self instruction as an instructional technique significantly different on frequency of occurrence ($\chi^2 = 1.74$, df = 4, $F = .783$). The percentages of the three groups that rated using self instruction as an instructional technique as occurring frequently were: BLA = 16.3 percent, COA = 16.8 percent, and T = 19.6 percent.

The groups rated using self instruction as an instructional technique highly desirable as follows: BLA = 28.5 percent, COA = 23.2 percent, and T = 39.4 percent (Table IX, pages 76 and 77). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of using self instruction as an instructional technique. The large chi-square value ($\chi^2 = 18.411$, df = 4, $F = .001$) implies a systematic relationship between the three groups and the way they rated using self instruction as an instructional technique. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VIII, page 75, the following chi-square value was significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 17.103$).

Instructional techniques: simulation. The three groups rated using simulation as an instructional technique significantly

different on frequency of occurrence. The groups rated using simulation as an instructional technique as occurring most frequently as follows: BLA = 29.3 percent, COA = 47 percent, and T = 27 percent (Table IX, pages 76 and 77). The chi-square test was used to determine the significance of differences among the groups relative to how often using simulation as an instructional technique occurred. The large chi-square value ($\chi^2 = 28.488$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated using simulation as an instructional technique. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VIII, page 75, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 12.365$; COA x T, $\chi^2 = 24.398$).

As indicated in Tables VIII and IX, pages 75, 76, and 77, the three groups did not rate using simulation as an instructional technique significantly different on desirability ($\chi^2 = 2.529$, $df = 4$, $F = .640$). The percentages of the three groups that rated using simulation as an instructional technique as highly desirable were: BLA = 75.2 percent, COA = 78.6 percent, and T = 74.4 percent.

Instructional techniques: direct classroom assistance. The three groups rated using direct classroom assistance as an instructional technique significantly different on frequency of occurrence and desirability. The groups rated using direct classroom assistance as an instructional technique as occurring most frequently as follows:

BLA = 19.5 percent, COA = 34.9 percent, and T = 14.7 percent (Table IX, pages 76 and 77). The chi-square test was used to determine the significance of differences among the groups relative to how often using direct classroom assistance as an instructional technique occurred. The large chi-square value ($\chi^2 = 55.948$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated using direct classroom assistance as an instructional technique. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VIII, page 75, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 23.291$; COA x T, $\chi^2 = 51.099$).

The three groups rated using direct classroom assistance as an instructional technique highly desirable as follows: BLA = 75 percent, COA = 76.9 percent, and T = 58.6 percent (Table IX, pages 76 and 77). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of classroom assistance as an instructional technique. The large chi-square value ($\chi^2 = 29.074$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated using direct classroom assistance as an instructional technique. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table VIII, page 75, the following chi-square values were significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 24.385$ and BLA x T, $\chi^2 = 12.267$).

Summary

The groups differed significantly on the frequency of occurrence on one format: small groups. The groups differed significantly on the desirability of two formats: individualized and system-wide.

BLA rated using a system-wide or multi system format as occurring most frequently (46.2 percent) and using a small group format as most desirable (48.5 percent). COA rated using a small group format as occurring most frequently (37.8 percent) and as most desirable (49.8 percent). T rated using a system-wide or multi system format as occurring most frequently (44.1 percent) and using a small group format as most desirable (51 percent).

The groups differed significantly on the frequency of occurrence of three types of leaders: other teachers, administrators and you as leader. Significant differences in desirability were found in all four types of leaders: other teachers, outside consultants, administrators and you as leader.

BLA rated using outside consultants as leaders as occurring most frequently (32.7 percent) and using other teachers as leaders as most desirable (53.3 percent). COA rated using administrators as leaders as occurring most frequently (32.6 percent) and using other teachers as leaders as most desirable (53.3 percent). T rated using outside consultants as occurring most frequently (36.5 percent) and most desirable (51.1 percent).

The group differed significantly on the frequency of occurrence of three types of instructional techniques: lecture, simulation and direct classroom assistance. Significant differences in desirability were found between self instruction and direct classroom assistance.

BLA rated using discussion as an instructional technique as occurring most frequently (70.4 percent) and using simulation as an instructional technique as most desirable (75.2 percent). COA rated using discussion as an instructional technique as occurring most frequently (76 percent) and using simulation as an instructional technique as most desirable (78.6 percent). T rated using lecture as an instructional technique as occurring most frequently (74.7 percent) and using simulation as an instructional technique as most desirable (74.4 percent).

Implementation of ISE

This section will report the findings for the question: "Did differences exist among the groups concerning the frequency of occurrence and desirability of the ISE process variables: implementation?" Implementation was divided into two parts: scheduling and strategies.

Scheduling: ten salaried days. As indicated in Tables X and XI, the three groups did not rate the scheduling variable: ten salaried days significantly different on frequency of occurrence ($\chi^2 = 9.269$,

TABLE X

CHI-SQUARE VALUES OF OCCURRENCE AND DESIRABILITY OF INSERVICE EDUCATION (ISE) IMPLEMENTATION AS PERCEIVED BY TENNESSEE TEACHERS (T), BUILDING LEVEL ADMINISTRATORS (BLA) AND CENTRAL OFFICE ADMINISTRATORS (COA) ON THE QUESTIONNAIRE: INSERVICE EDUCATION (1980-1981)

Variables: Implementation	Frequency of Occurrence			Desirability		
	$\frac{BLA \times COA \times T}{df=4}$	$\frac{BLA \times COA}{df=2}$	$\frac{COA \times T}{df=2}$	$\frac{BLA \times COA \times T}{df=4}$	$\frac{BLA \times COA}{df=2}$	$\frac{COA \times T}{df=2}$
<u>Scheduling</u>						
10 Salaried Days	9.269			9.274		
Before and After School	3.803			1.989		
Weekends	5.513			*18.462	2.292	*14.779
Release Time	*11.199	2.054	*11.151	*42.351	*27.758	*33.477
Ongoing	1.808			*16.808	*14.205	2.075
<u>Strategies</u>						
Workshops	*37.901	*9.084	*35.892	6.152		
Conferences	*37.029	5.181	*33.862	7.890		
Conventions	.248			8.612		
Interschool Visits	*27.177	3.402	*19.124	*13.011	.326	*10.107
Intraschool Visits	*17.504	4.640	*13.682	2.447		
College Courses	.859			*19.493	*7.290	*18.921
Committee Work	*16.403	*10.785	*13.481	*11.281	4.619	*11.049
Internship	2.079			8.605		
Individualized	9.406			4.979		

* = Significant chi-square at the .05 level.

df = Degrees of freedom.

TABLE XI

RELATIVE FREQUENCY OF HIGH RATINGS ON FREQUENCY OF OCCURRENCE AND DESIRABILITY OF INSERVICE EDUCATION (ISE) IMPLEMENTATION AS PERCEIVED BY TENNESSEE TEACHERS (T), BUILDING LEVEL ADMINISTRATORS (BLA) AND CENTRAL OFFICE ADMINISTRATORS (COA)
ON THE QUESTIONNAIRE: INSERVICE EDUCATION (1980-1981)

Variables: Implementation	Frequency of Occurrence		Desirability	
	BLA	COA	BLA	T
<u>Scheduling</u>				
10 Salaried Days	.926	.931	.806	.781
Before and After School	.642	.607	.384	.363
Weekends	.147	.211	.163	.193
Release Time	.109	.079	.553	.516
Ongoing	.152	.140	.460	.312
<u>Strategies</u>				
Workshops	.818	.901	.833	.803
Conferences	.711	.774	.658	.591
Conventions	.215	.215	.283	.262

TABLE XI (Continued)

Variables: Implementation	Frequency of Occurrence		Desirability	
	BLA	COA	BLA	COA
Interschool Visits	.197	.279	.516	.496
Intraschool Visits	.169	.266	.471	.440
College Courses	.338	.318	.403	.283
Committee Work	.430	.571	.433	.487
Internships	.126	.103	.372	.242
Individualized	.321	.362	.500	.466

df = 4, $F = .055$). The percentages of the three groups that rated the scheduling variable: ten salaried days as occurring frequently were: BLA = 92.6 percent, COA = 93.1 percent, T = 87.9 percent.

The three groups did not rate the scheduling variable: ten salaried days significantly different on desirability ($\chi^2 = 9.274$, df = 4, $F = .055$). The percentages of the three groups that rated the scheduling variable: ten salaried days as highly desirable were: BLA = 80.6 percent, COA = 86 percent, and T = 78.1 percent, as indicated in Tables X and XI, pages 90, 91, and 92.

Scheduling: before and after school. As indicated in Tables X and XI, pages 90, 91, and 92, the three groups did not rate the scheduling variable: before and after school significantly different on frequency of occurrence ($\chi^2 = 3.803$, df = 4, $F = 4.33$). The percentage of the three groups that rated the scheduling variable: before and after school as occurring frequently were: BLA = 64.2 percent, COA = 60.7 percent, and T = 57.2 percent.

The three groups did not rate the scheduling variable: before and after school significantly different on desirability ($\chi^2 = 1.989$, df = 4, $F = .738$). The percentages of the three groups that rated the scheduling variable: before and after school as highly desirable were: BLA = 38.4 percent, COA = 40.2 percent, and T = 36.3 percent, as indicated in Tables X and XI, pages 90, 91, and 92.

Scheduling: weekends or summer. As indicated in Tables X and XI, pages 90, 91, and 92, the three groups did not rate the

scheduling variable: weekends or summer significantly different on frequency of occurrence ($\chi^2 = 5.513$, $df = 4$, $F = .239$). The percentages of the three groups that rated the scheduling variable: weekends or summer as occurring frequently were: BLA = 14.7 percent, COA = 21.1 percent, and T = 14.5 percent.

The three groups rated the scheduling variable: weekends or summer highly desirable as follows: BLA = 16.3 percent, COA = 22.4 percent, and T = 19.3 percent (Table XI, pages 91 and 92). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of the scheduling variable: weekends or summer. The large chi-square value ($\chi^2 = 18.462$, $df = 4$, $F = .001$) implies a systematic relationship between the three groups and the way they rated the scheduling variable: weekends or summer. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table X, page 90, the following chi-square values were significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 14.779$ and BLA x T, $\chi^2 = 11.336$).

Scheduling: release time. The group rated the scheduling variable: release time significantly different on frequency of occurrence and desirability. The groups rated the scheduling variable release time as occurring most frequently as follows: BLA = 10.9 percent, COA = 7.9 percent, and T = 14.3 percent (Table XI, pages 91 and 92). The chi-square test was used to determine the significance of

differences among the groups relative to how often release time occurred. The large chi-square value ($\chi^2 = 11.199$, $df = 4$, $F = .024$) implies a systematic relationship between the three groups and the way they rated the scheduling variable: release time. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table X, page 90, the following chi-square value was significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 11.151$).

The group rated the scheduling variable: release time highly desirable as follows: BLA = 55.3 percent, COA = 29.7 percent, and T = 51.6 percent (Table XI, pages 91 and 92). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of release time. The large chi-square value ($\chi^2 = 42.351$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated the scheduling variable: release time. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table X, page 90, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 27.758$ and COA x T, $\chi^2 = 33.477$).

Scheduling: ongoing. As indicated in Tables X and XI, pages 90, 91, and 92, the three groups did not rate the scheduling variable: ongoing significantly different on frequency of occurrence ($\chi^2 = 1.808$, $df = 4$, $F = .771$). The percentages of the three groups that

rated the scheduling variable: ongoing as occurring frequently were: BLA = 15.2 percent, COA = 14 percent, and T = 15.4 percent.

The groups rated the scheduling variable: ongoing highly desirable as follows: BLA = 46 percent, COA = 29 percent, and T = 31.2 percent (Table XI, pages 91 and 92). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of scheduling variable: ongoing. The large chi-square value ($\chi^2 = 16.808$, $df = 4$, $F = .002$) implies a systematic relationship between the three groups and the way they rated the scheduling variable: ongoing. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table X, page 90, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 14.205$ and BLA x T, $\chi^2 = 10.066$).

Strategies: workshops. The groups rated the strategy: workshops significantly different on frequency of occurrence. The group rated the strategy: workshops as occurring most frequently as follows: BLA = 81.8 percent, COA = 90.1 percent, and T = 71.6 percent (Table XI, pages 91 and 92). The chi-square test was used to determine the significance of differences among the groups relative to how often the strategy: workshops occurred. The large chi-square value ($\chi^2 = 37.901$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated the strategy: workshops. The comparisons among the groups, by pairs, also yielded

significant differences. As indicated in Table X, page 90, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 9.084$; COA x T, $\chi^2 = 35.892$ and BLA x T, $\chi^2 = 7.270$).

As indicated in Tables X and XI, pages 90, 91, and 92, the three groups did not rate the strategy: workshops significantly different on desirability ($\chi^2 = 6.152$, $df = 4$, $F = .188$). The percentages of the three groups that rated the strategy: workshops as highly desirable were: BLA = 83.3 percent, COA = 86.6 percent, and T = 80.3 percent.

Strategy: conferences. The groups rated the strategy: conferences significantly different on frequency of occurrence. The groups rated the strategy: conferences as occurring most frequently as follows: BLA = 71.1 percent, COA = 77.4 percent, and T = 58.9 percent (Table XI, pages 91 and 92). The chi-square test was used to determine the significance of differences among the groups relative to how often conferences occurred. The large chi-square value ($\chi^2 = 37.029$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated the strategy: conferences. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table X, page 90, the following chi-square values were significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 33.862$ and BLA x T, $\chi^2 = 9.610$).

As indicated in Tables X and XI, pages 90, 91, and 92, the three groups did not rate the strategy: conferences significantly different on desirability ($\chi^2 = 7.890$, $df = 4$, $F = .096$). The percentages of the three groups that rated the strategy: conferences as highly desirable were: BLA = 65.8 percent, COA = 68.8 percent, and T = 59.1 percent.

Strategy: conventions. As indicated in Tables X and XI, pages 90, 91, and 92, the three groups did not rate the strategy: conventions significantly different on frequency of occurrence ($\chi^2 = .248$, $df = 4$, $F = .993$). The percentages of the three groups that rated the strategy: conventions as occurring frequently were: BLA = 21.5 percent, COA = 21.5 percent, and T = 23.1 percent.

The three groups did not rate the strategy conventions: significantly different on desirability ($\chi^2 = 8.612$, $df = 4$, $F = .072$). The percentages of the three groups that rated the strategy: conventions as occurring frequently were: BLA = 28.3 percent, COA = 25.4 percent, and T = 26.2 percent, as indicated in Tables X and XI, pages 90, 91, and 92.

Strategy: interschool visits. The three groups rated strategy: interschool visits significantly different on occurrence and desirability. The groups rated the strategy: interschool visits as occurring most frequently as follows: BLA = 19.7 percent, COA = 27.9 percent, and T = 16.5 percent (Table XI, pages 91 and 92). The

chi-square test was used to determine the significance of differences among the groups relative to how often the strategy: interschool visits occurred. The large chi-square value ($\chi^2 = 21.177$, $df = 4$, $F = .003$) implies a systematic relationship between the three groups and the way they rated the strategy: interschool visits. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table X, page 90, the following chi-square values were significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 19.124$ and BLA x T, $\chi^2 = 6.347$).

The groups rated the strategy: interschool visits highly desirable as follows: BLA = 51.6 percent, COA = 49.6 percent, T = 44.6 percent (Table XI, pages 91 and 92). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of the strategy: interschool visits. The large chi-square value ($\chi^2 = 13.011$, $df = 4$, $F = .011$) implies a systematic relationship between the three groups and the way they rated the strategy: interschool visits. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table X, page 90, the following chi-square values were significant at the .05 level with 2 degrees of freedom ($\chi^2 = 10.107$ and BLA x T, $\chi^2 = 6.398$).

Strategy: intraschool visits. The three groups rated the strategy: intraschool visits significantly different on frequency of occurrence. The groups rated the strategy: intraschool visits

as occurring most frequently as follows: BLA = 16.9 percent, COA = 26.6 percent, and T = 15.6 percent (Table XI, pages 91 and 92). The chi-square test was used to determine the significance of differences among the groups relative to how often the strategy: intraschool visits occurred. The large chi-square value ($\chi^2 = 17.504$, $df = 4$, $F = .002$) implies a systematic relationship between the three groups and the way they rated the strategy intraschool visits. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table X, page 90, the following chi-square values were significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 13.682$).

As indicated in Tables X and XI, pages 90, 91, and 92, the three groups did not rate the strategy: intraschool visits significantly different on desirability ($\chi^2 = 2.447$, $df = 4$, $F = .654$). The percentages of the three groups that rated the strategy: intraschool visits as highly desirable were: BLA = 47.1 percent, COA = 44 percent, and T = 41.9 percent.

Strategy: college courses. The three groups did not rate the strategy: college courses significantly different on frequency of occurrence ($\chi^2 = .859$, $df = 4$, $F = .930$). The percentages of the three groups that rated the strategy: college courses as occurring frequently were: BLA = 33.8 percent, COA = 31.8 percent, and T = 34.5 percent, as indicated in Tables X and XI, pages 90, 91, and 92.

The groups rated the strategy: college courses highly desirable as follows: BLA = 40.3 percent, COA = 28.3 percent, and T = 44.3 percent (Table XI, pages 91 and 92). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of the strategy: college courses. The large chi-square value ($\chi^2 = 19.493$, $df = 4$, $F = .001$) implies a systematic relationship between the three groups and the way they rated the strategy: college courses. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table X, page 90, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 7.290$ and COA x T, $\chi^2 = 18.921$).

Strategy: committee work. The three groups rated the strategy: committee work significantly different on frequency of occurrence and desirability. The groups rated the strategy: committee work as occurring most frequently as follows: BLA = 43 percent, COA = 57.1 percent, and T = 46.6 percent (Table XI, pages 91 and 92). The chi-square test was used to determine the significance of differences among the groups relative to how often the strategy: committee work occurred. The large chi-square value ($\chi^2 = 16.403$, $df = 4$, $F = .003$) implies a systematic relationship between the three groups and the way they rated the strategy: committee work. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table X, page 90, the following chi-square values

were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 10.785$ and COA x T, $\chi^2 = 13.481$).

The groups rated the strategy: committee work highly desirable as follows: BLA = 43.3 percent, COA = 48.7 percent, and T = 39.3 percent (Table XI, pages 91 and 92). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of strategy: committee work. The large chi-square value ($\chi^2 = 11.281$, $df = 4$, $F = .024$) implies a systematic relationship between the three groups and the way they rated the strategy: committee work. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table X, page 90, the following chi-square value was significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 11.049$).

Strategy: internships. As indicated in Tables X and XI, pages 90, 91, and 92, the groups did not rate the strategy: internships significantly different on frequency of occurrence ($\chi^2 = 2.079$, $df = 4$, $F = .721$). The percentages of the three groups that rated the strategy: internships as occurring frequently were: BLA = 12.6 percent, COA = 10.3 percent, and T = 12.2 percent.

The three groups did not rate the strategy: internships significantly different on desirability ($\chi^2 = 8.605$, $df = 4$, $F = .072$). The percentages of the three groups that rated the strategy:

internships as highly desirable were: BLA = 37.2 percent, COA = 24.2 percent, and T = 27.1 percent, as indicated in Tables X and XI, pages 90, 91, and 92.

Strategy: individualized. As indicated in Tables X and XI, pages 90, 91, and 92, the three groups did not rate the strategy: individualized significantly different on frequency of occurrence ($\chi^2 = 9.406$, $df = 4$, $F = .052$). The percentages of the three groups that rated the strategy: individualized as occurring frequently were: BLA = 32.1 percent, COA = 36.2 percent, and T = 30.4 percent.

The three groups did not rate the strategy: individualized significantly different on desirability ($\chi^2 = 4.979$, $df = 4$, $F = .290$). The percentages of the three groups that rated the strategy internships as highly desirable were: BLA = 50 percent, COA = 46.6 percent, and T = 53.4 percent, as indicated in Tables X and XI, pages 90, 91, and 92.

Summary

Implementation was divided into two sections: scheduling and strategies. In the section on scheduling, the groups rated release time significantly different on frequency of occurrence and desirability. In addition, on desirability, the groups also rated the scheduling techniques: weekends and ongoing significantly different.

BLA rated the scheduling variable: ten salaried days as occurring most frequently (92.6 percent) and as most desirable

(80.6 percent). COA rated the scheduling variable: ten salaried days as occurring most frequently (93.1 percent) and most desirable (86 percent). T rated the scheduling variable: ten salaried days as occurring most frequently (87.9 percent) and most desirable (78.1 percent).

In the section on strategies, the groups rated interschool visits and committee work significantly different on frequency of occurrence and desirability. Workshops, conferences and intra-school visits were also rated differently on frequency of occurrence. College courses were rated differently on desirability.

BLA rated the strategy: workshops as occurring most frequently (81.8 percent) and as most desirable (83.3 percent). COA rated the strategy: workshops as occurring most frequently (90.1 percent) and as most desirable (86.6 percent). T rated the strategy: workshops as occurring most frequently (71.6 percent) and as most desirable (80.3 percent).

Evaluation of ISE

This section will report the findings for the question: "Did differences exist among the groups concerning the frequency of occurrence and desirability of inservice education process variable evaluation?"

Evaluation patterns were again represented by examples in the questionnaires. Item A represented the use of a questionnaire to determine attitudes toward ISE sessions. Item B represented

the use of a knowledge-level test as an evaluation instrument. Item C specified the use of State Department of Education official to rate the quality of ISE programs. Item D represented a multi-criteria approach to evaluation, while Item E specified a personalized approach.

Evaluation: attitude questionnaire. As indicated in Tables XII and XIII, the three groups rated the evaluation method: attitude questionnaire significantly different on frequency of occurrence. The groups rated the evaluation method: attitude questionnaire frequency as follows: BLA = 65.1 percent, COA = 70.5 percent, and T = 60.9 percent (Table XIII). The chi-square test was used to determine the significance of differences among the groups relative to how often evaluation method: attitude questionnaire occurred. The large chi-square value ($\chi^2 = 11.186$, $df = 4$, $F = .025$) implies a systematic relationship between the three groups and the way they rated the evaluation method: attitude questionnaire. The comparisons among the groups by pairs, also yielded significant differences. As indicated in Table XII, the following chi-square value was significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 11.065$).

As indicated in Tables XII and XIII, the groups did not rate the evaluation method: attitude questionnaire significantly different on desirability ($\chi^2 = 2.317$, $df = 4$, $F = .678$). The percentages of the groups that rated the evaluation method attitude

TABLE XII
CHI-SQUARE VALUES OF OCCURRENCE AND DESIRABILITY OF INSERVICE EDUCATION (ISE) EVALUATION AS PERCEIVED BY TENNESSEE
TEACHERS (T), BUILDING LEVEL ADMINISTRATORS (BLA) AND CENTRAL OFFICE ADMINISTRATORS (COA)
ON THE QUESTIONNAIRE: INSERVICE EDUCATION (1980-1981)

Variables: Evaluation	Frequency of Occurrence			Desirability		
	$\frac{BLA \times COA \times T}{df=4}$	$\frac{BLA \times COA}{df=2}$	$\frac{COA \times T}{df=2}$	$\frac{BLA \times COA \times T}{df=4}$	$\frac{BLA \times COA}{df=2}$	$\frac{COA \times T}{df=2}$
Attitude Questionnaire	*11.186	3.814	*11.065	1.015	2.317	
Knowledge-Level-Test	1.148				2.937	
Official Rating	*20.016	4.793	*19.529	4.095	*34.251	*7.225
Multi-Criteria Independent	*19.351	*6.984	*17.596	2.643	*26.201	4.095
Personal	6.227				5.086	*10.367

* = Significant chi-square at the .05 level.

df = Degrees of freedom.

TABLE XIII

RELATIVE FREQUENCY OF HIGH RATINGS ON FREQUENCY OF OCCURRENCE AND DESIRABILITY OF INSERVICE EDUCATION (ISE) EVALUATION AS PERCEIVED BY TENNESSEE TEACHERS (T), BUILDING LEVEL ADMINISTRATORS (BLA) AND CENTRAL OFFICE ADMINISTRATORS (COA)
ON THE QUESTIONNAIRE: INSERVICE EDUCATION (1980-1981)

Variables: Evaluation	Frequency of Occurrence		Desirability	
	BLA	COA	BLA	T
Attitude Questionnaire	.651	.705	.638	.641
Knowledge Level Test	.200	.235	.256	.272
Official Rating	.091	.035	.175	.241
Multi-Criteria Independent	.388	.525	.689	.537
Personal	.237	.311	.487	.491

questionnaire as highly desirable were: BLA = 63.8 percent, COA = 67.6 percent, and T = 64.1 percent.

Evaluation: knowledge level test. As indicated in Tables XII and XIII, pages 107 and 108, the three groups did not rate the evaluation method: knowledge level test significantly different on frequency of occurrence ($\chi^2 = 1.148$, $df = 4$, $F = .887$). The percentages of the groups that rated the evaluation method: knowledge level test as occurring frequently were: BLA = 20 percent, COA = 23.5 percent, and T = 24.2 percent).

The three groups did not rate the evaluation method: knowledge level test significantly different on desirability ($\chi^2 = 2.937$, $df = 4$, $F = .568$). The percentages of the groups that rated the evaluation method knowledge level test as highly desirable were: BLA = 25.6 percent, COA = 24.9 percent, and T = 27.2 percent, as indicated in Tables XII and XIII, pages 107 and 108.

Evaluation: official rating. The three groups rated the evaluation method: official rating significantly different on frequency of occurrence and desirability. The groups rated the evaluation method: official rating as occurring most frequently as follows: BLA = 9.1 percent, COA = 3.5 percent, and T = 14.7 percent (Table XIII, page 109). The chi-square test was used to determine the significance of differences among the groups relative to how often evaluation official rating occurred. The large

chi-square value ($\chi^2 = 20.016$, $df = 4$, $F = .001$) implies a systematic relationship between the three groups and the way they rated the evaluation method: official rating. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table XIII, page 108, the following chi-square value was significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 19.529$).

The groups rated the evaluation method: official rating highly desirable as follows: BLA = 17.5 percent, COA = 8.5 percent, and T = 24.1 percent (Table XIII, page 108). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of evaluation method: official rating. The large chi-square value ($\chi^2 = 34.251$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated the evaluation method: official rating. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table XIII, page 108, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 7.225$; COA x T, $\chi^2 = 31.978$ and BLA x T, $\chi^2 = 8.651$).

Evaluation: multi-criteria. The three groups rated the evaluation method: multi-criteria significantly different on frequency of occurrence and desirability. The groups rated the evaluation method: multi-criteria as occurring most frequently as

follows: BLA = 38.8 percent, COA = 52.5 percent, and T = 36.9 percent (Table XIII, page 108). The chi-square test was used to determine the significance of differences among the groups relative to how often the evaluation method: multi-criteria occurred. The large chi-square value ($\chi^2 = 19.351$, $df = 4$, $F = .001$) implies a systematic relationship between the three groups and the way they rated the evaluation method: multi-criteria. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table XII, page 107, the following chi-square values were significant at the .05 level with 2 degrees of freedom (BLA x COA, $\chi^2 = 6.984$ and COA x T, $\chi^2 = 17.596$).

The groups rated the evaluation method: multi-criteria highly desirable as follows: BLA = 68.9 percent, COA = 72.4 percent, and T = 53.7 percent (Table XIII, page 108). The chi-square test was used to determine the significance of differences among the groups relative to the desirability of the evaluation method: multi-criteria. The large chi-square value ($\chi^2 = 26.201$, $df = 4$, $F = .000$) implies a systematic relationship between the three groups and the way they rated the evaluation method: multi-criteria. The comparisons among the groups, by pairs, also yielded significant differences. As indicated in Table XII, page 107, the following chi-square values were significant at the .05 level with 2 degrees of freedom (COA x T, $\chi^2 = 22.469$ and BLA x T, $\chi^2 = 10.367$).

Evaluation: personalized. As indicated in Tables XII and XIII, pages 107 and 108, the three groups did not rate the evaluation method: personalized significantly different on frequency of occurrence ($\chi^2 = 6.227$, $df = 4$, $F = .183$). The percentages of the three groups that rated the evaluation method: personalized as occurring frequently were: BLA = 23.7 percent, COA = 31.1 percent, and T = 30.4 percent.

The three groups did not rate the evaluation method: personalized significantly different on desirability ($\chi^2 = 5.086$, $df = 4$, $F = .279$). The percentages of the three groups that rated the evaluation method: personalized as highly desirable were: BLA = 48.7 percent, COA = 46.5 percent, and T = 49.1 percent, as indicated in Tables XII and XIII, pages 107 and 108.

Summary

On evaluation methods, the groups rated two examples, official rating and multi-criteria, significantly different on frequency of occurrence and desirability. The groups also rated the attitude questionnaire significantly different on frequency of occurrence.

BLA rated the evaluation method: attitude questionnaire as occurring most frequently (65.1 percent) and the evaluation method: multi-criteria as most desirable (68.9 percent). COA rated the evaluation method: attitude questionnaire as occurring most frequently (70.5 percent) and the evaluation method: multi-criteria as most desirable (72.4 percent). T rated the evaluation method: attitude

questionnaire as occurring most frequently (60.9 percent) and as most desirable (64.1 percent).

III. OCCURRENCE OF SUCCESSFUL PRACTICES

This section reports findings related to the question: "What inservice education practices were identified as successful in the research literature, and did these exist in Tennessee?" As indicated in Chapter II, previous research studies have identified process variables associated with successful ISE programs. These are : joint school-personal (organizational) purposes, collaborative planning, individualized methods, release time scheduling and multi-criteria independent evaluation. These are listed in Table XIV.

The first success characteristic, organizational purpose, was rated significantly different by COA and T. Twenty-eight percent of COA perceived the frequent occurrence of organizational purposes, while 30.3 percent of teachers perceived the frequent occurrence of this purpose. BLA (28.2 percent) agreed closely with COA. The groups which reported organizational purposes as occurring infrequently were small (BLA = 17.8 percent, COA = 10.3 percent, and T = 22 percent).

The second characteristic associated with successful ISE was collaborative planning. The three groups did not rate this variable significantly different. A total of 35.6 percent of COA rated this as occurring frequently while BLA responses were similar (32.7 percent), and T responses lower, with 26.3 percent

TABLE XIV

FREQUENCY OF HIGH AND LOW RATINGS ON FREQUENCY OF OCCURRENCE OF
 SUCCESSFUL INSERVICE EDUCATION (ISE) PRACTICES AS PERCEIVED
 BY TENNESSEE CENTRAL OFFICE ADMINISTRATORS (COA),
 BUILDING LEVEL ADMINISTRATORS (BLA) AND
 TEACHERS (T) ON THE QUESTIONNAIRE:
INSERVICE EDUCATION (1980-1981)

Variables	Groups					
	BLA		COA		T	
	High	Low	High	Low	High	Low
Purpose						
Organizational	.288	.103	.282	.178	.303	.22
Planning						
Collaborative	.356	.136	.327	.176	.263	.207
Methods						
Individualized	.130	.498	.124	.575	.125	.602
Implementation						
Release Time	.079	.73	.109	.748	.143	.758
Evaluation						
Multi-Criteria	.525	.281	.388	.366	.369	.47

reporting that collaborative planning occurred frequently. Infrequent occurrence ratings on collaborative planning were 13.6 percent, 17.6 percent and 20.7 percent as reported by the COA, BLA and T groups.

An individualized format was also associated with successful ISE. The three groups did not rate this variable significantly different. A total of 13.0 percent of COA rated this as occurring frequently with BLA and T groups responding similarly with 12.4 percent and 12.5 percent respectively. In contrast, an individualized format was rated by all groups as occurring infrequently. The infrequent ratings were as follows: COA = 49.8 percent, BLA = 57.5 percent, and T = 60.7 percent.

Release time as a scheduling technique was also associated with successful ISE and rated significantly different by COA and T. COA (7.9 percent) perceived the frequent occurrence of release time while 14.3 percent of T perceived frequent occurrence of this technique. BLA (10.9 percent) rated release time higher than COA and lower than the T group. In contrast, a majority of all three groups rated release time as occurring infrequently (BLA = 74.8 percent, COA = 73 percent, and T = 75.8 percent).

Finally, multi-criteria evaluation conducted independently was associated with successful ISE and rated significantly different by the three groups. Of the COA group, 52.5 percent, rated multi-criteria evaluation as frequently occurring while 38.8 percent of the BLA group agreed and 36.9 percent of the T group agreed. The

groups rated the infrequent occurrence of multi-criteria evaluation as follows: BLA = 36.6 percent, COA = 28.1 percent, and T = 47 percent.

In summary, none of the variables, previously associated with successful ISE, were clearly perceived by any group as occurring frequently. Multi-criteria evaluation was rated as frequently occurring by the largest relative frequency (COA) while release time was rated as frequently occurring by the smallest relative frequency (COA). Two variables, collaborative planning and individualization, were not rated significantly different by the three groups involved.

V. RELATIONSHIPS OF SUCCESSFUL PRACTICES/OVERALL SUCCESS

This section reports findings related to the question: "Which inservice education practices, identified by research as successful, were associated with inservice education programs rated successful by central office administrators, building level administrators, and teachers?"

Relative frequencies are reported in terms of the two variables, successfully rated ISE (by the three groups) and successful practices; i.e., organizational purposes, collaborative planning, individualized methods, release time, scheduling, and multi-criteria evaluation. No significant differences between the groups were found. The subgroups within each sample that rated ISE

as successful also rated the occurrence of each variable similarly, as indicated in Table XV.

The frequency of occurrence of organizational purposes was rated by the success subgroups as follows: BLA = 30.1 percent, COA = 29.1 percent, and T = 36.5 percent. Collaborative planning also received moderate percentage ratings of frequency of occurrence by the success subgroups. COA (37.3 percent) rated collaborative planning as high, while 37.7 percent of BLA agreed and 40.7 percent of T group agreed.

Individualized methods were not perceived by the success subgroups as occurring frequently. Only 13 percent of COA group rated individualization as occurring frequently while 12.8 percent of BLA group agreed and 17 percent of T group concurred.

The frequency occurrence of release time scheduling was rated high by only 16.7 percent of the success--BLA subgroups; 73 percent of the success--COA subgroup and 21.2 percent of the success--T subgroups.

Multi-criteria independent evaluation occurred frequently according to 55.8 percent of the success--COA group; 40.8 percent of the success--BLA group; and 42.4 percent of the success--T group.

Thus, when subgroups of COA, BLA, and T were identified who believed their ISE was successful, no significant differences were noted between the groups on the occurrence of success variables. Perceptions that current ISE programs were successful were associated with similar ratings on practices that have been identified as successful.

TABLE XV

RELATIVE FREQUENCY OF HIGH RATINGS ON FREQUENCY OF OCCURRENCE
OF SUCCESSFUL PRACTICES AS RATED BY TENNESSEE CENTRAL OFFICE
ADMINISTRATORS (COA), BUILDING LEVEL ADMINISTRATORS (BLA)
AND TEACHERS (T) WHO RATED INSERVICE EDUCATION (ISE)
AS SUCCESSFUL ON THE QUESTIONNAIRE:
INSERVICE EDUCATION (1980-1981)

ISE Variables	Successful Groups		
	COA	BLA	T
Purposes			
Organizational	.291	.301	.365
Planning			
Collaborative	.373	.377	.407
Methods			
Individualized	.130	.128	.170
Implementation			
Release Time	.920	.917	.867
Evaluation			
Independent	.558	.408	.424

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

I. SUMMARY

Statement of the Problem

Despite the time, money and resources invested in inservice education (ISE) nationally and on a state level, very little is known about effective ISE practices. Moreover, there was a lack of descriptive and research based knowledge on the practices used in Tennessee. The perceptions of building level administrators (BLA), central office administrators (COA) and teachers (T) regarding current and desirable ISE programs were needed to develop a more comprehensive data base through which ISE could be designed, implemented, evaluated and improved.

Purpose of the Study

The purpose of the study was to add to the knowledge base by identifying and comparing the perceptions of teachers and administrators regarding actual and desirable ISE Programs in Tennessee. Comparisons to national data on successful practices were needed to determine the state-wide status and make recommendations on ISE.

Questions To Be Answered

1. Did significant differences exist in the perceived success and satisfaction (whether ISE met personal needs) ratings among the

three groups: building level administrators, central office administrators and teachers.

2. Did significant differences exist in the perceptions of building level administrators, central office administrators and teachers regarding the occurrence and desirability of these inservice education processes, including the following components:

- A. purposes?
- B. planning?
- C. methods?
- D. implementation? and
- E. evaluation?

3. What inservice education practices were identified as effective in the research literature and did these exist in Tennessee?

4. Which inservice education practices, identified as successful, were associated with inservice education programs rated as successful by building level administrators, central office administrators and teachers.

Procedure

This study was conducted as part of a larger study on the perceptions of teachers and administrators toward ISE in Tennessee. Data were collected from three sources.

1. A literature review related to the theory and practice of ISE was conducted to gather available research information on successful ISE practices.

2. The Plan(s) for Inservice Education, submitted by each school system in the state for State Department of Education approval, were analyzed as to their priorities or purposes. These indicated why the Local Education Agencies (LEA) developed specific ISE objectives.

3. Another description of existing ISE practices was provided by questionnaire data. The questionnaire used Likert ratings and rank order items. A field test and panel of experts were used to establish necessary validity and reliability. The questionnaire was used with a sample (by school) of teachers and administrators in Tennessee. This sample included 728 teachers, 317 building level administrators and 398 central office administrators. The data from the three groups were synthesized to determine the existence of significant differences of the types expressed as research questions.

Data Analysis

Frequency distributions were tabulated on the data gathered from The Plan(s) for Inservice Education. Non-parametric (nominal level) tests were used to analyze all questionnaire data. The chi-square test of significant differences was used to compare the three groups on perceived satisfaction and success. The chi-square was also used to compare the three groups on the occurrence and desirability of various ISE processes: purposes, planning, methods, implementation and evaluation. Frequency distributions were used

to describe the existence of identified ISE practices. Finally, the chi-square was used to determine which successful practices, as identified in the research literature, were associated with ISE programs perceived as successful.

II. FINDINGS

Findings are stated as they relate to the various research questions addressed in the study. Major questions were addressed in the same numerical order in which they appear throughout the study.

Success/Satisfaction Ratings

Did significant differences exist in the perceived success and satisfaction (whether ISE met personal needs) ratings among the three groups (BLA, COA, T)? The large chi-square value indicates significant differences among the groups on rating "success of current ISE programs." All three groups yielded significantly different ratings when compared pair-wise (i.e., BLA x COA, COA x T and BLA x T). COA perceived the most success while T perceived current programs as less successful.

A similar trend emerged with a large χ^2 value indicative of significant differences among the groups on rating satisfaction (whether ISE met personal needs) with current ISE programs. All three groups rated satisfaction significantly different when compared pair-wise (BLA x COA, COA x T and BLA x T). COA perceived

the most satisfaction and T, as a group, perceived the least satisfaction.

Thus, COA perceived current ISE programs much differently than T. As a group, COA were more likely to be satisfied with current programs (and perceive these as successful) than T. BLA reported scores lower than COA and higher than T on both ratings: success and satisfaction. The two administrator groups perceived current programs as more successful and were more satisfied than teachers.

ISE Components Rating

Did significant differences exist in the perceptions of building level administrators, central office administrators and teachers regarding the occurrence and desirability of these inservice education processes including the following components: purposes, planning, methods, implementation and evaluation? These findings are summarized below.

The purposes listed on The Plan(s) for Inservice Education suggest different frequencies of occurrence than the questionnaire ratings. The two most frequently listed purposes were organizational development (30 percent) and general professional competencies (63 percent). In contrast, on the questionnaire, COA and BLA rated the purpose improved classroom performance as occurring most frequently, while T rated meeting the purpose of meeting State Department requirements as occurring most frequently. The purpose improved classroom performance was rated by all groups as most desirable. Also, the

groups rated all the purposes higher on desirability than occurrence, except, meeting State Department requirements. Significant differences on occurrence and desirability of purposes were most often between COA x T (N=10).

On the planning component, the three groups rated grass-roots planning as occurring most frequently. Collaborative planning was rated by COA and BLA as most desirable while T rated grass-roots planning as most desirable. Again, the groups rated all the planning variables higher on desirability than occurrence. Significant differences were most often between COA x T (N=4).

The methods section yielded information on three variables: format, session leaders and instructional techniques. In the ratings on format, the groups differed. Two variables were rated higher on occurrence than desirability (total school faculty and system-wide) and two were rated higher on desirability than occurrence (individualized and small group). Again, significant differences were most often between COA and T (N=3). BLA and T rated system-wide or multi-system format as occurring most frequently, while COA rated small group format as occurring most frequently. The three groups rated small group format as most desirable.

The groups rated all the leader variables higher on occurrence than desirability except, other teachers as leaders. Pair-wise differences were most often between COA x T (N=4) and BLA x T (N=4). BLA and T agreed in rating using outside consultants as session leaders as occurring most frequently, while COA rated using

administrators as session leaders as occurring most frequently. BLA and COA rated using other teachers as session leaders as most desirable, while T rated using outside consultants as session leaders most desirable.

The groups rated all the instructional techniques higher on desirability than occurrence except for two, lecture and discussion. Pair-wise differences were most often between COA x T (N=5). BLA and COA rated the instructional technique of discussion as occurring most frequently, while T rated the instructional technique of lecture as occurring most frequently. The three groups rated the technique of simulation as most desirable.

The ISE component of implementation was divided into two parts: scheduling and strategies. The groups rated all the scheduling methods higher in desirability than occurrence except two (the regularly scheduled ten salaried days and before and after school). Pair-wise differences were most often between COA x T (N=3). The three groups were consistently similar in their rating of the scheduling method: ten salaried days as occurring most frequently and as most desirable.

The three groups were also consistent in their rating the strategy: workshops as occurring most frequently and as most desirable. Also, the groups again rated the strategy variables higher on desirability than occurrence, except two (conferences and committee work). Pair-wise differences were most often between COA x T (N=8).

Finally the groups rated all the evaluation variables higher on desirability than occurrence except attitude questionnaire. Pairwise differences were most often between COA x T (N=5). The three groups rated the evaluation method of attitude questionnaire as occurring most frequently. BLA and COA rated using multi-criteria evaluation as most desirable while T rated using attitude questionnaires as most desirable.

Occurrence of Successful Practices

What inservice education practices were identified as effective in the research literature and did these exist in Tennessee? Variables identified in the research literature as associated with successful programs were included in the survey questionnaire. These five variables were then examined as to which ones occurred in the highly frequent range. The organizational purpose was perceived to frequently occur by less than 30.3 percent of the groups. Collaborative planning was perceived to occur frequently by less than 35.6 percent of the groups. Individualized methods were perceived to occur frequently by less than 13.5 percent of the groups. Release time was perceived to occur frequently by less than 14.3 percent of the groups. Independent multi-criteria evaluation was perceived to occur by the largest percentage of the groups from 36.9 percent (T) to 52.5 percent (COA).

Thus, no variable was clearly perceived by any group to occur frequently. The groups rated these variables as occurring

consistently similar (differing by less than 15 percent). Release time received the lowest rating and independent multi-criteria evaluation received the highest.

Relationship of Successful Practices to Overall Success

What inservice education practices, identified by reasearch as successful, were associated with inservice education programs rated as successful by teachers, building level administrators, and central office administrators? The scores of subgroups of BLA, COA and T, who rated ISE as successful, were also examined for their ratings of the frequency of occurrence of the successful variables (i.e., Question 3). Again, overall, the variables were not clearly perceived as occurring frequently, although the percentages were higher with the success subgroups than with the total sample. The organizational purpose was perceived to occur frequently by less than 36.5 percent of the success subgroups. Collaborative planning was perceived to occur frequently by less than 40.7 percent of the success subgroups. Individualized methods were perceived to occur frequently by less than 17 percent of the success subgroups. Release time was perceived to occur frequently by less than 21.2 percent of the success subgroups. Finally, independent evaluation was perceived to occur frequently by 55.5 percent or less of the success subgroups.

Thus, no variables were perceived to occur frequently by the subgroups. Overall, the subgroups rated the variables consistently similar and as occurring more frequently than the general sample.

III. CONCLUSIONS

1. Whereas, administrators and teachers perceived current ISE programs differently and the main recipients of ISE (teachers) agreed with national findings that ISE was not successful while administrators believed it was successful; it appears that those who control and direct ISE (especially COA) viewed ISE as more successful than it actually was.

2. Whereas, ISE process variables were rated significantly different by the three groups (with differences most often between COA x T), the meaning of ISE varied, depending on the respondent's affiliation; i.e., whether the respondent was in control of ISE or was the recipient.

3. Whereas the three groups rated 33 process variables (total = 43) higher on desirability than occurrence, it appears that only a limited number of the available ISE variables were utilized; due to a lack of knowledge about alternatives.

4. Whereas current ISE programs in Tennessee are perceived by questionnaire respondents as consisting of system-wide workshops and conferences led by consultants who use lecture or discussion and evaluate by attitude questionnaire (and not those ISE variables previously identified as associated with successful programs); ISE does not appear to differ significantly from traditional (1930-1935) ISE programming. Again, perhaps this is due to a lack of (1) information on proven successful practices and/or (2) the resources necessary to implement those practices.

IV. RECOMMENDATIONS

The conclusions reached as a result of this study have generated several recommendations for practicing school administrators and educational researchers.

1. The perceptions of Tennessee educators toward ISE variables should be further examined for agreement with actual occurrence by case study and behavioral observations.

2. State-level guidelines on ISE should be expanded to include definitions and an overall conceptual framework.

3. Case study and behavioral observations should be used to compare successful and non-successful programs for the existence of "successful variables."

4. A more varied range of variables, perceived as desirable, should be utilized in the ISE process and evaluated by a variety of techniques.

5. The following questions have implications for further research:

- A. What factors account for differing perceptions, particularly between COA and T?

- B. What variables are associated with perceptions of successful practices in Tennessee?

- C. How can a wider range of ISE process variables considered to be desirable, be used in actual practice?

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APPENDICES

APPENDIX A

COVER LETTERS TO JURY OF EXPERTS

March 17, 1981

Dr. Gordon Cawelti
Executive Director, ASCD
225 North Washington Street
Alexandria, VA 22314

Dear Dr. Cawelti:

In a few days you will receive a questionnaire from Zulette Melnick, Vicki Dean and Ed Smith, graduate students at The University of Tennessee. They are studying administrator perceptions and attitudes toward inservice education in the State of Tennessee. This instrument has been developed as part of a study which I am helping to direct.

Your prompt attention to the questionnaire will greatly help the study. Many thanks.

Sincerely,

John T. Lovell, Professor
Educational Administration
and Supervision

JTL/mlw

March 26, 1981

Dr. Gordon Cawelti
Executive Director, ASCD
225 North Washington Street
Alexandria, VA 22314

Dear Dr. Cawelti:

As part of a doctoral research project of the Department of Educational Administration and Supervision at The University of Tennessee, Knoxville, a jury of experts has been identified in the area of inservice education. You have been selected to serve on this jury as a result of your expertise and experience in this area.

Enclosed is a questionnaire which has been designed to obtain perceptions and attitudes of public school teachers and administrators toward inservice education in the state of Tennessee. Please examine this questionnaire to determine how well it represents the intended content area. On the questionnaire or a separate sheet indicate any areas which have been omitted, areas which should be deleted, or areas which are not clear. Comments on the instrument construction would be helpful.

Thank you for your participation in this study. We would appreciate your response within the next five days. Enclosed for your convenience is a stamped, return addressed envelope.

After the study is complete, we shall be happy to furnish you a copy of the results if you desire.

Sincerely yours,

Vicki Dean

Zulette Melnick

Ed Smith

Enclosure

APPENDIX B

INSERVICE EDUCATION QUESTIONNAIRE

ID _____
(1-4)
(5) Card 1

QUESTIONNAIRE
INSERVICE EDUCATION

This questionnaire is designed to gather information regarding your attitudes and perceptions toward inservice education. Please take about 15 minutes to complete.

- (6) A. Check one category which best describes the school level(s) in which you have responsibility:

1 <u> </u> Elementary	4 <u> </u> K-8th Grade
2 <u> </u> Middle-Junior High	5 <u> </u> K-12th Grade
3 <u> </u> Senior High	6 <u> </u> Other _____ (specify)

- (7) B. Check the size of the system in which you work:

1 Less than 5,000 students
2 5,000 - 10,000 students
3 More than 10,000 students

- (8) C. Years of experience in education:

1 <u> </u> 0-3	3 <u> </u> 8-12	5 <u> </u> 20 +
2 <u> </u> 4-7	4 <u> </u> 13-20	

- (9) D. Highest Degree Earned:

	Less than			
1 <u> </u>	Bachelors	3 <u> </u>	Masters	5 <u> </u> Doctorate
2 <u> </u>	Bachelors	4 <u> </u>	Specialist or M.S. + 45	

The next four questions should be answered based on your perceptions.

- (10) E. Rate your system's financial support of inservice education (1980-81)
- | No Support | 1 | 2 | 3 | 4 | 5 | 6 | Adequate Support |
|------------|---|---|---|---|---|---|------------------|
| | | | | | | | 7 8 |
- (11) F. Rate your system's commitment of central office staff time to inservice education
- | No Time | 1 | 2 | 3 | 4 | 5 | 6 | Adequate Time |
|---------|---|---|---|---|---|---|---------------|
| | | | | | | | 7 8 |
- (12) G. Rate your system's 1980-81 inservice education program
- | Not Successful | 1 | 2 | 3 | 4 | 5 | 6 | Very Successful |
|----------------|---|---|---|---|---|---|-----------------|
| | | | | | | | 7 8 |
- (13) H. Rate the extent to which your system's inservice education program meets your personal needs
- | No Benefit | 1 | 2 | 3 | 4 | 5 | 6 | Maximum Benefit |
|------------|---|---|---|---|---|---|-----------------|
| | | | | | | | 7 8 |

*General Instructions: Rank the following examples in each section, using consecutive numbers (1 = most, largest number = least). On the left side of the page, rank Frequency of occurrence in your system (1980-1981). On the right side of the page, rank Desirability to you. If an example does not occur in your system, do not rank it under Frequency, only Desirability.

I. Purposes - A committee has been formed in your school system to develop a comprehensive inservice education program. You have been asked to serve on this committee. The committee must decide what the purpose of the inservice education program should be. Rank the following examples which were presented by different members of the committee.

Rank according to
frequency of occurrence in
your system
(1 = most frequent)
(7 = least frequent)

Rank according to
desirability
(1 = most desirable)
(7 = least desirable)

(14)	_____	A. Inservice education should develop more positive self concepts.	_____	(21)
(15)	_____	B. Inservice education should help meet certification requirements for upgrading or adding endorsements.	_____	(22)
(16)	_____	C. Inservice education should develop positive faculty relationships.	_____	(23)
(17)	_____	D. Inservice education should improve student performance (such as achievement test scores).	_____	(24)
(18)	_____	E. Inservice education should improve teaching skills.	_____	(25)
(19)	_____	F. Inservice education should broaden professional competencies.	_____	(26)
(20)	_____	G. Inservice education should only meet state department requirements.	_____	(27)

II. Planning - One of your system's elementary schools is interested in developing an inservice education program to assist teachers in working with handicapped students. How should your committee plan this inservice education?

Rank the following according
to frequency of occurrence in
your system
(1 = most frequent)
(4 = least frequent)

Rank the following according
to desirability
(1 = most desirable)
(4 = least desirable)

(28)	_____	A. The committee should plan the inservice education using a nationally known consultant	_____	(32)
(29)	_____	B. The committee should designate school faculties as planners of their own inservice education	_____	(33)
(30)	_____	C. The committee should hire the staff of a special education center to plan the inservice education	_____	(34)
(31)	_____	D. Faculty volunteers should be invited to join the committee for planning sessions	_____	(35)

III. Methods - The inservice education committee has to determine which methods will be used.

Rank according to frequency
of occurrence in your system
(1 = most frequent)
(4 = least frequent)

Rank according to
desirability
(1 = most desirable)
(4 = least desirable)

1. Format

(36)	_____ A. Individualized Format _____	(40)
(37)	_____ B. Small Group Format _____	(41)
(38)	_____ C. Total School Faculty Format _____	(42)
(39)	_____ D. System-Wide or Multi-System Format _____	(43)

(1 = most frequent)
(4 = least frequent)

(1 = most desirable)
(4 = least desirable)

2. Session Leaders

(44)	_____ A. Other Teachers in Your School _____	(48)
(45)	_____ B. College Personnel, teachers or consultants outside your system _____	(49)
(46)	_____ C. Building level or central office personnel _____	(50)
(47)	_____ D. You as leader _____	(51)

(1 = most frequent)
(5 = least frequent)

(1 = most desirable)
(5 = least desirable)

3. Instructional Techniques

(52)	_____ A. Lecture _____	(57)
(53)	_____ B. Discussion _____	(58)
(54)	_____ C. Self Instructional Modules or Professional Reading _____	(59)
(55)	_____ D. Simulation including any combination of presentation, modeling, practice, feedback _____	(60)
(56)	_____ E. Direct classroom assistance when applying new skills _____	(61)

IV. Implementation - The inservice education committee must decide which procedures will be used

ID _____
(1-4)
(5) Card 2

Rank according to frequency of
occurrence in your system

(1 = most frequent)
(5 = least frequent)

Rank according to
desirability

(1 = most desirable)
(5 = least desirable)

1. Scheduling of Inservice Education Activities

(6)	_____	A. Regularly scheduled inservice education days (The 10 salaried days paid by the State)	_____	(11)
(7)	_____	B. Before & after the normal school day (including faculty meetings)	_____	(12)
(8)	_____	C. Weekends or summer	_____	(13)
(9)	_____	D. Release time during the school day	_____	(14)
(10)	_____	E. Collegial, ongoing, everyday	_____	(15)

(1 = most frequent)
(9 = least frequent)

(1 = most desirable)
(9 = least desirable)

2. Strategies

(16)	_____	A. Workshops	_____	(25)
(17)	_____	B. Conferences	_____	(26)
(18)	_____	C. State or National Conventions	_____	(27)
(19)	_____	D. Interschool Observational Visits	_____	(28)
(20)	_____	E. Intraschool Observational Visits	_____	(29)
(21)	_____	F. College or University Courses	_____	(30)
(22)	_____	G. Committee Work	_____	(31)
(23)	_____	H. Internships (administrative, research, etc.)	_____	(32)
(24)	_____	I. Individualized, Self Determined	_____	(33)

V. Evaluation - The final task facing the inservice education committee is to decide on evaluation criteria.

Rank according to
frequency of occurrence in
your system

(1 = most frequent)
(5 = least frequent)

Rank according to
desirability

(1 = most desirable)
(5 = least desirable)

(34)	_____	A. Your committee should design a questionnaire to be completed after every session to determine attitudes toward the training	_____	(39)
(35)	_____	B. Each workshop leader should construct a knowledge-level test on the content presented	_____	(40)
(36)	_____	C. A state education department official should attend and rate the quality of the workshops	_____	(41)
(37)	_____	D. A combination approach of questionnaires, interviews, classroom observation and official ratings could be developed	_____	(42)
(38)	_____	E. Personalized--each individual should maintain a log on the effectiveness of inservice education activities	_____	(43)

Thank you!

APPENDIX C

COVER LETTER AND FOLLOW-UP TO RESPONDENTS

April 16, 1981

Dear Colleague:

As you know, the State Department of Education has adopted a set of inservice education guidelines on a one year trial basis (1980-81). These guidelines will be revised based on feedback from the local education agencies.

As part of our doctoral research at The University of Tennessee, Knoxville, we are conducting a state wide survey of attitudes toward current inservice education practices. We would greatly appreciate your time in completing the enclosed survey within five days. Please return the survey in the attached self-addressed envelop.

The coding found at the top of the survey form is for control purposes only and will be used as a means to identify non-respondents for follow-up contact. No effort will be made to identify the respondents, the schools, nor the school systems in the study.

Sincerely,

Vicki Dean

Zulette Melnick

Ed Smith

DMS/mlw

Attachment

Dear Colleague,

HELP! You received a questionnaire on inservice education several weeks ago (4-20-81). Our records indicate you have not yet responded.

We really need your opinion to make the study truly reflective of Tennessee educators.

THANK YOU FOR YOUR TIME,

Dean, Melnick & Smith
Bureau of Educational Research
University of Tennessee
Knoxville, TN 37916

VITA

Vicki Smith Dean was born in Greenville, South Carolina on August 7, 1951. She attended South Carolina public schools and was graduated from Berea High School in 1969. Her undergraduate degree, with a major in Education, was received from Emory University, Atlanta, Georgia, in December 1972.

Following a period of classroom teaching in South Carolina, she entered a Master's degree program at Clemson University, Clemson, South Carolina. This degree, with a major in Pupil Personnel Services, was awarded in August 1974.

In 1976, she began employment with a public school cooperative in Tennessee and entered The University of Tennessee, Knoxville as a doctoral student in September 1977. She received the Doctor of Education degree with a major in Educational Administration and Supervision in December 1981.

The author is a member of Alpha Delta Pi, Association for Supervision and Curriculum Development, Council for Exceptional Children, National Association for the Education of Young Children and American Educational Research Association.