

AN EVALUATION OF STAFF DEVELOPMENT
ACTIVITIES OF THE
NORTHEAST TECHNICAL ASSISTANCE CENTER

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Joseph A. Nelson
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AN EVALUATION OF STAFF DEVELOPMENT
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by
Joseph A. Nelson

APPROVED BY:

DIRECTOR OF DISSERTATION Edwin D. Bell
Dr. Edwin Bell

COMMITTEE MEMBER James D. Pressley
Dr. James Pressley

COMMITTEE MEMBER Evelyn M. Powers
Dr. Evelyn Powers

COMMITTEE MEMBER AND CHAIR OF THE DEPARTMENT OF
EDUCATIONAL LEADERSHIP

H. C. Hudgins, Jr.
Dr. H. C. Hudgins, Jr.

DEAN OF THE GRADUATE SCHOOL

Diane M. Jacobs
Dr. Diane M. Jacobs

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Abstract

Joseph A. Nelson AN EVALUATION OF STAFF DEVELOPMENT ACTIVITIES OF THE NORTHEAST TECHNICAL ASSISTANCE CENTER (Under the direction of Dr. Edwin Bell, Dr. H. C. Hudgins, Dr. James Pressley, and Dr. Evelyn Powers) Department of Educational Leadership, July 1993.

The purpose of this dissertation was to determine if the staff development activities of the Northeast Technical Assistance Center (NETAC) were effective according to the stakeholders identified in this study. The stakeholders included consultants of the NETAC, superintendents, administrators/supervisors, and teachers of the six school systems in the northeast region that were on the state accreditation warning list for 1991-1992. There were five variables that were pertinent to staff development, as identified by literature review and through direct observation. The five study variables were organization, communication, planning, implementation, and evaluation.

Review of the literature, data gathering from stakeholders, and examination of documents provided information specific to the five variables which allowed an analysis of the effectiveness of the NETAC's staff development activities.

Triangulation options were utilized for data collection and analysis. The quantitative data were analyzed through descriptive statistics, analysis of variance, and Cronbach's alpha. Quantitative information was presented in

tables and histograms. Qualitative data and content analysis of documents were presented in narrative form.

The findings indicated that stakeholders of the NETAC had an uneven understanding of its mission; communication specific to staff development activities were impeded between central offices and local schools; administrators/supervisors and teachers have not had appropriate involvement in the planning process; the consultants had successfully overcome resource and structural constraints in the implementation of staff development activities; and the stakeholders indicated shortcomings in the evaluation process.

This researcher concluded that the organization of the NETAC is critical for the delivery of staff development services. An effective communication process is essential for the exchange of information between the NETAC and the LEAs. Planning of staff development activities must be a collaborative effort between consultants of the NETAC and LEA personnel. Implementation of staff development services is fundamental to the operation of the technical assistance concept. Evaluation of staff development activities by the stakeholders of the NETAC is both desired and considered necessary.

DEDICATION

This study is dedicated to the boys and girls of Northeastern North Carolina for whom it is intended to benefit.

I also dedicate this study to my grandparents, the late John William and Alice Richardson Nelson and the late Charlie Wilmer and Katherine Braxton Warren, residents of rural Pitt County who always encouraged me to continue my education.

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CHAPTER 1

Introduction

The purpose of this study was to determine if staff development activities of the Northeast Technical Assistance Center in Williamston, North Carolina, are effective according to the stakeholders identified in this study. Five variables pertinent to effective staff development activities were identified by literature review and through direct observation. These variables were: 1) Organization, 2) Communication, 3) Planning, 4) Implementation, and 5) Evaluation. Review of the literature, data gathering from stakeholders, and examination of documents provided information specific to the five variables which allowed for analysis of the effectiveness of the Northeast Technical Assistance Center's staff development activities.

The study included data gathered from selected stakeholders with the North Carolina Department of Public Instruction, former department representatives, the state legislature, Northeast Region Superintendents' Council, and the local education agencies in the northeast region that did not meet the North Carolina State Accreditation Guidelines for 1991-1992.

Significance of the Study

This study was designed to determine if the present organization of the Northeast Technical Assistance Center was effective as designed and implemented for providing

staff development services to the six local education agencies that did not meet State Accreditation Standards for the 1991-1992 school year. This determination was based upon an analysis of the staff development activities of the Northeast Technical Assistance Center by use of the five variables identified in this study as research parameters.

Each school system that was placed on warning status in the northeast region was assured of receiving staff development services at least two days per month for the 1991-1992 school year. The intense focus on these systems provided a unique opportunity to obtain data.

The results of the study provided information to the stakeholders for purposes of reflection on the administration, practice, and utilization of staff development services offered by the Northeast Technical Assistance Center. The findings of this study may be used to determine if the current model is appropriate for other technical assistance centers in North Carolina.

Background of the Study

The general public's call for reform and renewal in education resulted in state legislative mandates for accountability (G.S. 115C-64.5) and the transition from regional education centers to technical assistance centers. Documents analyzed included the North Carolina General Statutes specific to education, documents maintained by the

Department of Public Instruction in general and more specifically, the Northeast Technical Assistance Center.

Staff development is essential for renewal on a large scale. Innovations in education such as "Effective Schools", learning styles, and an emphasis on higher order thinking have required the need for massive staff development efforts in the northeast region of North Carolina. In determining the specific variables for effective staff development and the use of consultants, direct observation and extensive literature searches have been conducted. These variables were used to ascertain the degree of staff development effectiveness according to the stakeholders of the Northeast Technical Assistance Center.

There was a unique opportunity to study the Northeast Technical Assistance Center as a result of its priority efforts directed toward the six school systems that did not meet State Accreditation Standards according to the 1991 State Report Card. The Northeast Technical Assistance Center utilized these "standards" as needs assessments for the purpose of planning staff development activities for these systems.

Staff Development, Adult Education, and the Use of Consultants

A review of the literature provided the historical context of staff development (See e.g. Schubert, 1986; Smith

& Tyler, 1942), current trends and models of staff development (See e.g. Howey & Vaughn, 1983; McKernan, 1992; Rodriguez & Johnstone, 1986), adult learning (See e.g. Brookfield, 1987; Mezirow, 1991; Reid, Hresko, & Swanson, 1991; Rogers, 1986), and the use and types of consultants (See e.g. Boyer & Lewis, 1985; Heron & Harris, 1987; Knoff, 1988). Other information was synthesized from a review of texts, professional journals, ERIC searches, and consultation with an adult education professional.

Overview of the Methodology

To determine the effectiveness of the staff development activities of the Northeast Technical Assistance Center, all research data gathering and data analysis focused on five variables that frequently occurred in the literature and were pertinent to the study based on direct observation of the Northeast Technical Assistance Center. These variables and their associated questions are - 1) Organization - Is the current organization of the Northeast Technical Assistance Center effective for the delivery of staff development? 2) Communication - Are the current methods of communication between the Northeast Technical Assistance Center and the local education agencies identified in the study effective? 3) Planning - Are the current methods of planning staff development activities by consultants of the Northeast Technical Assistance Center effective? 4)

Implementation -Are the current methods of staff development, as implemented by the consultants of the Northeast Technical Assistance Center effective for positively impacting student achievement? 5) Evaluation -Are the current methods of evaluating staff development activities presented by the consultants of the Northeast Technical Assistance Center effective?

This study relied on data gathered from the stakeholders of the Northeast Technical Assistance Center. The Department of Public Instruction stakeholders included the Superintendent of Public Schools of North Carolina, the Director of the North Carolina Technical Assistance Program, the Director and consultants of the Northeast Technical Assistance Center. The legislative stakeholders were represented by the Chairman of the Education Oversight Committee. The Local Education Agency stakeholders included the Chair of the Northeast Superintendent's Council, the six superintendents from the identified local education agencies, the supervisors directly involved with the staff development activities of the Northeast Technical Assistance Center, principals, assistant principals, and teachers of these agencies.

The study utilized qualitative and quantitative triangulation research methods. Quantitative methods included the distribution and statistical analysis of survey

responses. Qualitative methods included interviews and document analysis.

The instruments used consisted of surveys, interview questionnaires, and a document analysis checklist. A data matrix was developed to assist in visualizing and organizing data collection (See Appendix A).

Interviews were conducted with the Chairman of the Legislative Education Oversight Committee, the present State Superintendent of Public Instruction, the Director of the State Technical Assistance Program, the Director of the Northeast Technical Assistance Center, the consultants of the Center, the Chairman of the Northeast Region Superintendents' Council, and the Superintendents of the six identified local education agencies. To provide background information for this study, the former State Superintendent of Public Instruction, the former Director of the Migrant Education Center in Grifton, NC, and the Director of Exceptional Children's Services within the Department of Public Instruction were interviewed. Field procedures for interviews were developed and utilized to guide the interview data collection process (See Appendix B).

Surveys containing a hierarchical distribution of questions relevant to the five variables were distributed to NETAC consultants, superintendents, the LEA contact person (usually an instructional supervisor), and principals,

assistant principals, and teachers from one randomly selected elementary school, middle school, and high school in each of the six identified local education agencies. A format of the survey procedures was developed to guide survey data collection (See Appendix C).

Finally, the records analysis consisted of a checklist that was used to determine if the five variables were addressed in documents maintained by the Northeast Technical Assistance Center (See Appendix D). The "Agreement for Services" contract and the "Services Provided" documents were the primary records used for analysis. The North Carolina General Statutes and Technical Assistance Program documents were analyzed for their relevancy to the five variables.

Delimitations of the Study

Each Technical Assistance Center was allowed a certain degree of flexibility for planning and implementing staff development programs. The model of technical assistance identified in this study may not be representative of other technical assistance centers in the state. Therefore, the findings were based on the staff development activities of the Northeast Technical Assistance Center, and its work with the six school systems in the Northeast Region that did not meet State Accreditation Standards.

Definitions

1. Consultant Services - services of the Northeast Technical Assistance Center that are contracted and/or otherwise requested by a local education agency.
2. Contract for Services Document - a form used by the Technical Assistance Center to document the plan collaboratively developed for a school system for the provision of staff development services.
3. Documentation of Services - a form used by the Technical Assistance Center to document services rendered by one or more consultants to a local education agency.
4. Local Education Agency (LEA) - a city or county school system.
5. Northeast Region - the region of North Carolina the Northeast Technical Assistance Center was assigned to serve for the 1992-1993 calendar year. It included the following school systems: Beaufort, Washington City, Bertie, Camden, Currituck, Dare, Edenton-Chowan, Edgecombe, Hyde, Martin, Northampton, Tarboro City, Gates, Halifax, Hertford, Pitt, Pasquotank, Perquimans, Roanoke Rapids, Tyrrell, Washington, and Weldon City.
6. Teacher - a part-time or full-time employee of a local education agency that provides direct instruction to pupils. In this study, any reference to a teacher will only include those individuals that have been exposed to staff

development activities conducted by one or more of the consultants from the Northeast Technical Assistance Center.

Organization of the Study

This study is divided into five chapters:

Chapter 1-Introduction

Chapter 2-Literature Review

Chapter 3-Design and Methodology

Chapter 4-Results and Discussion

Chapter 5-Summary and Conclusions

CHAPTER TWO

LITERATURE REVIEW

Introduction

The Northeast Technical Assistance Center in Williamston, North Carolina, is one of six such centers in the state. It is an extension of the North Carolina Department of Public Instruction and provides educational services to twenty-two school systems in the northeast region of the state. As the Technical Assistance Center is presently organized, staff development is one of its major functions. The consultant staff coordinates programs in cooperation with community colleges, universities, and other agencies.

The following sections will address the organizational history of the Regional Education Program and its transition to a technical assistance agency. Information was provided by present and former employees of the North Carolina Department of Instruction and a member of the North Carolina Legislature. Additional information was also gathered from documents and literature produced by the North Carolina Department of Public Instruction. The remainder of the chapter will treat a review of the literature specific to staff development, adult learning, administrative initiatives in staff development, the use of consultants, and the consultation process. It concludes with selected examples of trends and models of staff development in the

United States. Each section of this chapter will reflect one or more of the five variables chosen as parameters for this study. The variables are organization, communication, planning, implementation, and evaluation.

Establishment of the Regional Education Program

Information relative to the establishment of the Regional Education Program came from several sources. One source was a document sent from the Department of Public Instruction entitled "A Brief History of Regional Education Centers in North Carolina". Other sources included formal interviews with Craig Phillips, former State Superintendent of Public Schools in North Carolina and Arch E. Manning, former Director of the Migrant Education Center in Grifton, North Carolina. Based on a recommendation from Phillips, an impromptu interview was held with Lowell Harris, State Director of Exceptional Children's Services regarding the difference between the now defunct Regional Education Training Program and the Regional Education Centers.

The concept of regional education centers originated from the results of a 1968 study by the Governor's Study Commission on the Public School System of North Carolina. The Commission, composed of individuals representing the business, civic, and professional communities, as well as parents from across the state, conducted the study to determine educational facility and resource needs and

problems that were prevalent in the state. The Study Commission reported detailed findings and presented recommendations based on the central question: "How best can the people of North Carolina meet their obligation to provide full educational opportunity for their children?"

The Study Commission's report noted a communication dilemma between the Department of Public Instruction and the local education agencies. The geographical size of the state and the multiplicity of organizational designs specific to the local education agencies were cited as factors that impeded the communication process. The Commission expressed the need for effective two-way communication between the Department of Public Instruction and the local education agencies, taking into consideration the needs that were specific to each region of the state.

To ameliorate the communication problem, the Study Commission made the following recommendations: 1) develop policies to address the problems and differences inherent to each region, 2) increase involvement of the citizenry in decision-making, and 3) increase utilization of local education agency personnel. To accomplish these recommendations, the Study Commission suggested that a regional council be formed to assist in the communication process between the central operations of the Department of Public Instruction and the local education agencies. A

council was established and it became an integral part of the regional center concept that was formulated within the Study Commission.

Craig Phillips, former State Superintendent of the North Carolina Department of Public Instruction, stated that Governor Dan K. Moore was the driving force behind the Study Commission and the subsequent report became known as the blueprint for education for the next 20 years after 1967. The report resulted from an extensive review of all the educational needs in North Carolina. Phillips was a member of the Governor's Study Commission on Education prior to becoming the state superintendent, and it became obvious to the members that there was a need to create eight educational districts in North Carolina. In each of those eight districts, regional centers were established to diffuse the Department of Public Instruction, to put the Department closer to the people so services would be more readily available. In response to a question concerning any special legislation that was specific to the establishment of the Regional Education Centers, Phillips stated that he was not aware of any. However, he did specifically point out that the establishment of the Regional Education Centers was not to be confused with the legislative establishment of the Regional Education Training Centers as authorized in Article 9, Part 4, 115-117 through 115-C-120 of the North

Carolina General Statutes. In an interview with Lowell Harris, Director of Exceptional Children, there was agreement on this fact and an acknowledgement that the legislation pertained to Special Education only. However, he did state that Phillips had asked his staff to design new plans for all programs. Harris further stated that the physical structures beginning as Regional Education Training Centers in fact "...evolved over the years or dissolved" into the Regional Education Centers that were the precursors to Technical Assistance Centers. According to Phillips, the earliest function of the staffs of the Regional Education Centers was to provide training, staff development, "...curriculum services, planning services, research services..." and other things that pertained to the Department of Public Instruction's mission.

Once it was agreed that the regional center concept would reduce the communication impediments and related deficiencies, planning commenced immediately after January 1, 1969. In February of 1971, the first two regional centers were officially established and were followed by the third in 1972, and the fourth and fifth centers in 1974. On July 1, 1977, the last three centers were organized and established. When the centers were established, an initial allotment of two new positions was assigned to each center: a regional director and a secretary. Subsequently, the

remaining positions were filled with staff from the decentralization of the Raleigh-based sections of the Department of Public Instruction (DPI). The decentralization of the Raleigh-based staff was based on the philosophy that if the staff were closer to the people they serve, it would greatly enhance two-way communication.

In 1985, The Department of Public Instruction decided to transfer the budgetary allotments for clerical staff from division budgets to regional center budgets. Although the budgetary transfer increased the regional budgets, cutbacks in the division budgets countered perceived increases in the Department of Public Instruction's total budget. In 1985, the budget of each individual center totaled approximately \$189,000 per year. Combined, all the regional centers' budgets amounted to \$1,514,442 per year. In that same year, the North Carolina General Assembly provided for the addition of the "Alcohol and Drug Defense" program which added a coordinator and one-half secretarial position to each of the eight regional centers.

In the Northeast Region, the present Technical Assistance Center began in Grifton, North Carolina, and was known as the Migrant Education Center. Arch E. Manning was the first Director of the Migrant Education Center which began in 1972 with a staff of three people. The Center was moved to Williamston, North Carolina, several years after it

opened and became the Northeast Regional Center which provided a greater variety of services. When the Center moved, Bill Britt became its Director, and Manning continued to serve as a migrant education consultant at the Center until his retirement. The move to Williamston was an attempt to provide a more geographically-centered location which was to be accessed by the local education agencies assigned to the region. In 1985, fifteen local education agencies were assigned to what was then known as Education Region 1, the Northeast Region.

Establishment of the Technical Assistance Program

Beginning in the early 1980's, reports such as "A Nation At Risk", began to emerge which exposed a decline in the standard of American education. These reports captured the attention of the tax-paying citizenry, resulting in increased calls for accountability on the national, state, and local educational levels. With the economy declining in the 1980's and the United States suffering a loss of economic status on world trade markets, public and private sectors sought long-term solutions to the nation's ills. The obvious point of attack became the nation's schools. Every media source available inundated the general public with qualitative and quantitative reports on minute and gross deficiencies in American education. In February 1990, the President of the United States and the nation's

governors announced six national goals aimed at improving the education of children. The educational community responded with curricular and instructional innovations that have required massive staff development for its service providers.

North Carolina's initiatives were prompted by a new State Superintendent of Public Instruction who responded to the challenges of educational improvement with a new plan in 1990 called the "Twenty Point Plan for Reshaping Education". Among the recommendations for improving student performance was a mandate from the Superintendent to reorganize the Department of Public Instruction. Part of this reorganization required that the eight regional centers be consolidated into five technical assistance centers to provide integrated, intensive technical assistance to local school districts. According to Bill Church, the director of the State Technical Assistance Program, the State Superintendent made an "administrative-organizational decision" to change to Technical Assistance Centers. He added that no legislative amendments exist authorizing the change. An assistant executive director with the North Carolina State Board of Education has responded that the State Board of Education did not "change" the regional centers to technical assistance centers and concurred with

the Director of the Technical Assistance Program that it was an administrative decision by the State Superintendent.

Technical assistance has been defined and described by a North Carolina Department of Public Instruction document entitled "Q and A, Technical Assistance: A System of Organizing for Results" (1991). It defined technical assistance "...as the provision of services which impact directly and positively on student achievement." Technical assistance is a collaborative effort by instructional specialists at the technical assistance centers and personnel in the local education agencies to develop a plan of action for improvement. The technical assistance program was designed to serve all LEAs, but those systems demonstrating the greatest need (i.e. warning status/low-performing units) receive priority service. Technical assistance focuses on student achievement and is delivered by a team of instructional specialists over a period of time. According to the "Question and Answer" document, the regulatory and monitoring functions of the regional education centers were eliminated and did not become part of the technical assistance concept. The technical assistance program was designed to assist local school systems in reaching state accreditation standards and Senate Bill 2 goals.

The organization of each individual center is based on the needs of the systems in its region. Therefore, the structure of each center may be different. A personnel allotment of eighteen positions was given to each center when it was established, with additional personnel allotted from the State Department of Public Instruction and the Teacher on Loan Program on an as-needed basis. When the centers were established, the instructional specialists were provided with intensive professional development that focused upon the latest research-based strategies for curricular and instructional development. The "Question and Answer" document stipulated that a 12-member Technical Assistance Advisory Council consisting of superintendents and lead curriculum professionals from each of the six regions would provide advice and counsel on the implementation of the Technical Assistance Program. The Superintendents' Council in each region was also cited as a group to be consulted regarding the progress of the technical assistance concept.

In separate interviews, the State Superintendent, Bob Etheridge, the State Director of the Technical Assistance Program, Bill Church, and the Chairman of the Legislative Education Oversight Committee, Senator Ed Warren, responded to open-ended questions specific to their role in the past, present, and future operation of the Technical Assistance

Program. The open-ended questions represented eight categories relative to the Technical Assistance Program which included 1) Organizational History, 2) Implementation, 3) Staffing, 4) Finance, 5) Communication, 6) Evaluation, and 7) Planning. Each of these eight categories will, in turn be treated.

Organizational history. The State Superintendent felt that the regional education centers had served the state well, but the primary job of the staffs involved providing singular workshops. In contrast, technical assistance provided teams of instructional specialists going into the school systems, developing plans "...and working to make sure the students and schools improve...." The primary focus was on student achievement.

The State Technical Assistance Program Director was in relative agreement. He stated that early in the process of reorganization, the senior cabinet, which included the Deputy Superintendent, Roger Jackson, the State Superintendent, and himself, began to look at how other states were organized. As a result, the focus of the centers became student performance/student achievement. At about the "...same time, legislation, relative to the designation of low-performing, warning status LEAs, focus on the accountability aspects of the report card, etc., became a way of life". The task then became, "in a climate of

reduction, what can we do...with the smallest possible staff...to accomplish the focus on student achievement?" The initial proposal for each center included eighteen professionals and six support staff, a director, and an office manager for a total staff of twenty-four. Because of cutbacks in the agency (DPI), the staffs ended up consisting of twelve instructional specialists, four support staff, a director, and an office manager for a total staff of eighteen. The Technical Assistance Program Director stated that everything that took place out of the Centers was specific to student achievement/student performance. Those activities were "...to include a planning component and then focus on implementation of that plan." "Each center was asked to participate as a partner to those LEAs with the greatest need, develop a plan jointly, and either the Center would implement the strategies included in the plan or they would broker the services necessary to implement the plan." When brokering for services, the plan included utilizing the Raleigh-based staff, the university system, and/or private consultants, depending on the specific needs of the LEA(s).

Both the State Superintendent and the Technical Assistance Program Director cited the key work of Roger Jackson, the Deputy State Superintendent in the development of the technical assistance concept. Also cited were Sammy Campbell-Parrish, former Assistant State Superintendent and

Ken Newbold, former Deputy Superintendent for the Department of Public Instruction for their contributions.

Implementation. The State Superintendent cited the disparity in needs of systems as a major implementation problem. He pointed out that as the state report card was adopted and outcomes based education became a consideration, it became obvious that more resources needed to be allocated to those systems demonstrating the greatest need. This presented a problem where even though one tries to focus on those systems with the greatest needs "...you cannot totally pull away from other systems or they will slip too".

The Technical Assistance Program Director cited recent legislative actions that determine, at least in part, the role of the program. The legislation cited included low-performance, performance-based accountability, and site based management. According to the Director, the intent in the implementation process has been to remain close to that which was outlined. The major problem in implementation has been trying to serve the LEAs that are not on the low-performing, warning status list as a result of the large number of systems and prior commitments.

The Chairman of the Legislative Education Oversight Committee stated that his knowledge of the technical assistance concept began when the State Superintendent announced his "Twenty Point Plan" (1990). Points 19 and 20

specifically addressed the technical assistance concept. He said that he was very interested in the success of the Centers, especially in relation to recent legislation.

Staffing. The core staff of each Technical Assistance Center consists of twelve instructional specialists, four support staff, a director, and an office manager.

The State Superintendent commented that, given available resources, the number of staff in each center was based on the needs that existed. Since the initial allotments, more resources were made available from the 1992 legislative session, creating additional positions, especially in the northeast region. He admitted that there is still a need for more people. However, the Superintendent stated that the Raleigh-based staff is being utilized for curriculum development and monitoring that is required by law. In essence, the Raleigh-based staff could be moved all over the state to assist with overloads and not cause a permanent disproportionate allotment to any one center.

The Director of the Technical Assistance Program provided much of the same information as the State Superintendent, but also added information specific to the Teacher on Loan Program. The Teacher on Loan Program began during the 1991-1992 school year and involved selecting eight teachers from across the state to serve as

instructional specialists within certain Technical Assistance Centers. According to the director, the Teachers on Loan "...are assigned to regions with the greatest need in terms of the largest number of LEAs that fall into the warning status category. For example, "the northeast and Raleigh centers received three, and the southeast and southwest center received one each."

Since the interviews were completed, a Department of Public Instruction news release dated March 12, 1993, contained an outline of a plan by the State Superintendent to move more personnel to the Technical Assistance Centers. The plan included sending seventy to eighty members of the Raleigh-based staff to the centers. The news release continued to report that a Government Performance Audit "...validated the value of the Technical Assistance Centers..." and recommended that further staffing be available for those centers.

Finance. The State Superintendent stated that the budgetary decisions that were made relative to the Technical Assistance Program were based on staffing patterns and department funding. Additional resources were needed when the Technical Assistance Program was implemented and since then, more resources have been added because the initial allotment was not adequate. His final statement was that

this was done in 1992, and it was his intention to do so again in 1993.

The Director of the Technical Assistance Program was much more specific in his response to the issue of finances. He related that the budgets of the centers are differentiated based on the number of LEAs served as well as those that are in difficulty. The operational base began at "...about \$100,000 and then went up from there to the point that there is about a \$35,000 differential between the lowest funded and the highest funded. The reason for the differential, according to the director, is because money needed to be "...set aside for contract services and things in...[the] northeast center, for example, because of the number of LEAs in difficulty." Other centers did not have such extensive problems. The \$100,000 base budget does not include salaries. The Director reported that the total Technical Assistance Program budget is approximately \$10,000,000 which includes rent, utilities, and salaries. Operationally, the program gets two sources of funding. State funding covers operational costs and is approximately \$84,000 per center. There is no differentiation between centers in the allocation of state dollars.

The Director said the second source of funding...is the Chapter 2, School Improvement dollars which is a federal grant... Every center gets \$12,000 that is

specifically for the purpose of travel and subsistence on all activities that have a school improvement focus (Personal Communication with Bill Church).

He added that this money can be used for purposes of state accreditation, Senate Bill 2, Performance Based Accountability, or any activity that has a school improvement focus. The \$84,000 of state funds plus the \$12,000 of Chapter 2 money gave each center a budget of \$96,000. On top of that, the Director allotted each center \$5,000 for staff development of their staffs which, brought the base allotment for every center to \$101,000. He stated that after that, a differentiation is made based on the number of low performing and warning status units that are in a center's region. For every low-performing school system in the region, a center is allotted \$5,000 and for every system on a warning status, it is allotted \$4,000. The lowest operational budget is in the west at \$101,000 and the highest is the northeast at \$135,000. He added that the salary differential is significantly different. Although the allotments of staff are the same for each center, the number of years an employee has invested in state employment will determine his rate of pay.

Communication. The State Superintendent said that communication of decisions and activities relative to the technical assistance centers "...has been a growing

process." There was an attempt to make a slow change to technical assistance to be more aligned with curricular and not with financial or auxiliary services. The intent was to "...absolutely improve the life-blood of where children are ...[and]...to make that transition as direct as possible." His final comment on the subject of communication specifically addressed the fact that another person was put "...in the process of leadership to make sure that functions better."

The Technical Assistance Program Director was much more specific in his response relative to the communication process. He related that the technical assistance center directors are members of the Department cabinet which meets monthly, and they have access to the same information as Division Directors.

He felt that there is a "good two-way communication system in terms of anything that goes to the LEAs that involves curriculum, instruction, or accountability". Internally, he stated that there is a "...pretty good family relationship with most of the people where...a simple telephone call takes care of most of it." In terms of a formal communication process, the director of each center gets information and "...then selects the individual staff member that communication can be directed to." He used examples such as communication skills and mathematics where

there is not a direct link (to instructional specialists). For information to flow back the other way, it goes from the instructional specialists to the center director, and on to the appropriate division director. The Technical Assistance Program Director admitted that there is work to be done in the communication area. He sees the "...need to forge some of the old ties between consultant level staff both here (in Raleigh) and in the field." He stated that planning needs known in advance will enhance open communication and access human resources that are available from the specific Divisions.

Evaluation. In response to a question concerning the evaluation of the success of the Technical Assistance Program in providing staff development services, the State Superintendent responded that there are individual and unit evaluation plans. These plans, referred to as work plans "...are based on what they plan to do to improve the math, science, etc. whatever it is with the unit (LEA) they work with, so they are evaluated on how well they do." He also added that this is new in the state and perhaps may be even new in the nation.

The Technical Assistance Program Director cited the area of program evaluation as one that needs to be seriously addressed. His primary concern was the relationship a Center has with an LEA for improving student performance.

To clarify his point, he gave the example of going into an LEA to improve math scores and the final judgment depended on whether or not the improvement actually occurred. He suggested that the process is objective-"here is the current status, here is our goal, did we get there?" He cited the need for a document that can be utilized to receive feedback from the LEAs. A major concern was that because so much attention has been focused upon the LEAs in greatest need, the other LEAs are not receiving the assistance as desired. The Director stated that he had received negative comments from LEAs who were not on the low performing/warning status list and was therefore hesitant to ask for their evaluation when the results appear to be obvious. However, the Director did express his frustration over the Technical Assistance Program's inability to satisfy all of the state's LEAs requests. He pointed out that regardless of the fact that the centers are not staffed to do such a formal evaluation of progress, it still needs to be done. A reference was made to the Performance Management System (PMS) that is used to evaluate personnel which he feels helps some, but he admits that they "...still have a long way to go with that."

The Chairman of the Legislative Education Oversight Committee expressed his desire to see more accountability for the Technical Assistance Program as well as the other

educational programs in the state. According to Senator Warren, the demand for accountability in public education originated from the general public and not the legislature.

Planning. The State Superintendent responded to the planning question for the future plans for the technical assistance program by pointing out that everything the Department of Public Instruction does should ultimately be focused on student improvement or monitoring. The Department has planned to bring in a nationally-known expert to assist the Raleigh-based staff, technical assistance personnel and even legislators with performance based accountability. He feels that performance based accountability is "...on the cutting edge of what is happening around the country so we [DPI] and schools [can] improve to help student performance." Based on this vision, he stated that "if you put the resources in the right place and focus, you can get results."

Responding to the planning question, the Director of the Technical Assistance Program stated that plans are being made to make technical assistance a "customer driven process." This process would involve determining the needs of the customer and how to meet those needs. It also presents a challenge for determining what "delivery vehicles" would be best for providing services without taking "...teachers out of the classroom anymore than

necessary." He also felt that the Technical Assistance Program should "...probably become the service/staff development arm of the agency." This would mean that "...all of the services, all of the staff development [would] emanate from the centers." "Not that we would do all of it, but...basically be the clearinghouse for that to occur, the facilitator." By doing this, he pointed out, it would "...eliminate some of the duplication and some of the staff development that is not as priority-focused as...." it should be.

Program survivability. This question related to the viability of the Technical Assistance Program, as it currently exists, for the delivery of staff development services. The State Superintendent responded that staff development was probably not the role of the Technical Assistance Program. He defined staff development as "...going out and giving staff training." He defined the role of technical assistance as "...helping them [LEAs] work directly with improved outcomes." It also included coordinating staff development from sources such as universities and or private/out-of-state consultants.

The Director of the Technical Assistance Program felt assured that the staff development function would continue to improve and benefit the LEAs. He referred again to making the program more "customer-driven" and "build[ing]

the service around...[the] customers' concept of their needs." In that case, he added, the program in the northeast may not resemble other programs in any given region, but as far as he was concerned, that would be acceptable as long as the needs of the customer were being met. In order to accomplish this goal though, he felt that the size of each center's staff and the operational dollars would probably have to be doubled. In his opinion, the driving force that will keep the Technical Assistance Program viable is the Performance Based Accountability Legislation.

Staff Development, Adult Education, the Use of Consultants and Administrative Initiatives in Staff Development

Staff development practices in the public schools of North Carolina vary greatly. The realm of activities presented in local systems ranges from extensive staff development requiring lengthy participation and follow-up to an after-school one hour session. Some school systems utilize nationally known experts in curricular and instructional areas, university faculty, State Department of Public Instruction staff, the expertise of their own system/faculty, while others use a combination of all of these.

The major impetus for staff development activities lies in the need for changing and improving our schools. The

expectations placed on our schools by society for improving and maintaining high academic standards prompt the use of strategies which include staff development programs. Staff development is the "...most potentially effective means to promote growth, understanding, and change" (Griffin, 1983, p. 3). Changing and improving our schools, often referred to as "school renewal" cannot be considered only in organizational terms. It must be kept in mind that educational organizations are based on the interaction of many human beings, each with their own needs, desires, and expectations. Therefore, any types of staff development must take into consideration a multitude of complexities that range from the needs and desires of the human stakeholders to organizational and bureaucratic complexities. Schiffer (1980) reminded the reader that "...man's relationship with the environment is transactional—that is, one both shapes and is shaped by the environment" (p. 128).

Historical Context

The evolving nature of staff development practice is directly related to the advancement of knowledge. Research-based discoveries of learning methodology and an age of instant information access contribute to the knowledge explosion, which necessitates the need for current and continuous quality staff development. Schiffer (1980)

indicated that the beginnings of staff development have been traced to 1839. The premise then was that teacher education programs did not fully prepare teachers for the task of teaching.

During the late nineteenth and early twentieth centuries, advances were made in science and technology that required the use of staff development to update the knowledge of teachers even though their methods of transferring this knowledge were ignored (Howey & Vaughan, 1983). Even though theories of learning were being realized by Dewey and others, there was a lack of knowledge of how teachers actually taught (or should teach) suggesting that there was nothing in the realm of staff development that could fulfill their pedagogical needs (Howey & Vaughan, 1983).

Howey and Vaughan (1983) also pointed out that societal events and crises such as Brown vs. Board of Education in 1954, the launching of Sputnik in 1957, the Vietnam War, and the social and political activities of the 60's and 70's prompted the increased demand for staff development activities.

Ralph Tyler played an important part in the advancement of the practice of staff development for teachers during the "Eight Year Study" in the 1930's when arrangements were made for teachers to meet to advance their ideas and projects for

their classrooms (Schubert, 1986). During the phase of research on evaluation, Tyler suggested that the results of evaluations of the teaching program and of individual studies will require "...modifications in teaching and in the educational program itself" which would be facilitated through staff development programs (Smith & Tyler, 1942, p. 30). The recognition by Tyler and the others associated with the "Eight Year Study" of the importance of staff development provided the modern foundation for its personal and organizational usefulness in the educational renewal process.

Current Trends in Staff Development

Current trends in staff development practices reflect more of a research orientation specific to the needs of practicing adult educators. This is reflected in most of the current definitions of staff development. Schiffer (1980) referred to staff development as a process of change that is planned and oriented toward a new future outcome. Schlecty and Whitford (1983) saw staff development as a continuing education function focused on making participants more aware of their vocational realm and improving job-specific skills. A more recent definition referred to by Schubert (1986) stated in simple terms that staff development is only that job-specific education which teachers receive after their formal college training. No

longer can teachers be seen only as simple utilizers of staff development that is carelessly forced upon them. Barth (1990) suggested that staff development is essential not only to the growth of the professional educator, but is equally essential for and directly related to the growth of their students. No one can argue the importance of staff development as a means to an end, but seldom is the "end" clearly defined.

The term "teacher empowerment" denotes an assumption that teachers are assuming a greater role in their own professional development. This empowerment has tremendous ramifications in yet another age of school renewal. The school is simply an organization in its broadest context and renewal can be achieved only through the development and continued growth of its individual members. These individual members must be collectively focused and collaboratively engaged in activities which promote professional development aimed at student growth and organizational renewal. As empowered professionals, teachers must begin to accept their responsibility for development in terms of being active researchers into their own practices (McKernan, 1992). It is the teachers themselves who should know best what their own needs are as well as those of their students. Goodlad (1984) suggested that staff development be designed to help teachers do a

better job of what they are currently doing, which reinforces the notion that teachers should be actively involved in planning their own staff development programs and thus gaining empowerment.

More recent models of staff development programs are addressing critical factors associated with quality staff development. One such list of critical factors includes the use of teacher evaluations for planning (McLaughlin & Pfeifer, 1988). Another list includes interaction, comprehensiveness, continuity, potency, support structures, and related personnel documentation (Howey & Vaughan, 1983). In addition, another list includes planned change, focus on political, personal, and organizational needs and goals, and provides for "...'mutual adaptation' among persons, the organization, and the desired new future condition," systemic change, and the use of feedback for the purpose of evaluation (Schiffer, 1980, p. 162). Thus, the importance of planning and evaluation are highlighted in these lists as being integral to staff development.

Systematic planning has been directly related to successful staff development programs. According to Medved (1986), systematic planning of staff development programs should include conducting needs assessments. His study involved participant collaboration which was identified by research conducted by the National Rural Project.

Participants should have an integral role in planning and selecting content in staff development activities (Daresh, 1988). In his research, Daresh (1988) cited a well documented literature base and results of numerous surveys specific to the needs of staff development participants. The research indicated that there is clear evidence of the desire of participants to collaborate in the design of staff development activities. Some current staff development activities do not adhere to the preceding factors identified with successful staff development programs and yield little, if any results toward school renewal or professional development. Staff development activities which lack planning, specific purpose, or relevance to those subjected to it may be more harmful than no activity at all. The disillusionment of teachers toward professional growth as a result of poorly planned staff development activities which ignore collaboration creates morale problems that impede professional growth.

The literature is replete with criticism of poorly planned staff development activities. Schiffer (1980) suggested three main reasons why staff development activities often fail. They include: 1) an unresponsiveness to political realities, 2) over-commitment to organizational goals while ignoring individual goals, and 3) over-commitment to individual goals while ignoring

organizational goals. Accordingly, there should be a balance of political reality, the needs of individuals, and the needs of the organization when planning any staff development programs.

Another area of concern is the fragmentation of staff development activities when they are implemented. These are referred to as "one shot" activities by Schubert (1986). In "one shot" staff development activities, teachers are exposed to information or products that have little, if any relevance to the organization or its individuals. They are usually a result of some policy requiring a workshop for the purpose of providing certificate renewal credit. In these cases, those responsible for the implementation of the activity, usually an administrator or supervisor, fail to take the time to collaborate with the workshop participants. Instead of seriously considering the needs of the organization and its individuals, the responsible party settles for convenience. Howey and Vaughan (1983) suggested that many professionals accept the "one shot" method of implementing staff development activities because there is some entertainment value associated with them. When the participants of such activities evaluate them, they usually base their responses on how satisfying the activity was instead of its relevance to their needs.

Howey and Vaughan (1983) also cited five general criticisms leveled toward inadequately-designed staff development activities. 1) The needs of the schools in relation to information presented is inconsistent. 2) Problems of continuity and coordination exist. 3) The effectiveness of activities presented is not evaluated when implemented. 4) The activity is designed only to ameliorate problems rather than foster professional development. 5) The purpose of the activity is focused on the teacher only as the source for problem-solving without taking into account the socio-political factors impacting upon the school environment.

Issues from Adult Education

A major consideration for staff development organizers when implementing programs is recognition of unique characteristics of adult learners. These characteristics are based upon the experiences, abilities, roles, and aspirations of the adult learner and should influence the development of adult learning activities (Knox, 1986). Adults, in a rapidly advancing technological world are forced by necessity to be life-long learners. This section will focus on two aspects of adult education: 1) the general characteristics of the adult learner and 2) pedagogical considerations for the adult educator when one implements staff development programs or activities.

The first aspect involves the unique characteristics of adult learners. Staff development coordinators and participants must collaboratively plan for adult audiences. The last thing adults need in their professional lives is an activity that has no relevance to them, especially if it involves their being forced to participate in child-like situations and/or activities. Therefore, it is extremely important for the staff development organizer and/or coordinator to address the needs of the adult learners. An environment that is conducive to adult learning will reflect learning and instruction theory that is based on the needs and characteristics of adult learners (van der Kamp, 1992). One characteristic is based on the assumption that adults have an orientation to education and learning that is different from children. A second characteristic is they approach learning with an accumulation of a variety of life experiences. A third characteristic is they are undergoing developmental trends that involve age-related matters such as physical, mental, and social implications, and a fourth characteristic is there is a certain amount of anxiety and understanding of the world in which they live (Smith, 1982). Another similar list of characteristics of adult learners offered by Rogers (1986) revealed that adults are in an advanced continuing process of growth; they bring with them a variety of experiences and values; they have

competing interests; and they come to the learning experience with their own unique style of learning.

These issues are reflective of a very different type of learner from the child learner that most staff development presenters have experienced and upon which they base their staff development pedagogy. Based on androgogical philosophy, there are appropriate approaches to educating children, which usually are not appropriate for adults based on the prior variety of experiences adults bring with them, their stage of life and its associated maturational processes, and their purpose for continuing their education (Brookfield, 1986).

The second important aspect relevant to adult learners is pedagogical methods which adult educators should consider when they are involved in staff development activities. One recent adult education pedagogical philosophy relies on what can be described as the constructivist approach to educating the adult learner (Mezirow, 1991). Constructivist thought employs the experientialist philosophy of learners reflecting on their own experiences and constructing their knowledge on the basis of prior experience. As Schubert (1986) indicated, the interests of the learner are bound in his experience. This enables him to pursue those interests by utilizing newly-acquired knowledge. Mezirow (1991) agreed with Schubert and insisted that the constructivist

orientation is supported by research that reveals that it is not so much "...what happens to people, but how they interpret and explain what happens to them that determine their actions, their hopes, their commitment, their emotional well-being, and their performance"(p. xiii). In the constructivist context, according to Mezirow (1991), adult learners utilize their own experiences when introduced to knowledge and interpret and validate it through interacting and communicating in their environment. Whatever meaning is attached to events or phenomena is based upon prior life experiences. Constructivist learning approaches are not isolated for use with adults only, but because adults have encountered many more life experiences than children, their perceptions of a learning experience are much more complex. Mezirow (1991) recognized the work of Philip Candy and identified several characteristics of the constructivist approach to adult learning:

- *People participate in the construction of reality.
- *Construction is a constant activity that focuses on change and novelty rather than fixed conditions.
- *Commonly accepted categories or understandings are socially constructed, not derived from observation.
- *Given forms of understanding depend on the vicissitudes of social processes, not on the empirical validity of the perspective.

- *Forms of negotiated understanding are integrally connected with other human activities.

- *The "subjects" of research should be considered as knowing beings.

- *Locus of control resides within the subjects themselves and complex behavior is constructed purposefully.

- *Human beings can attend to complex communications and organize complexity rapidly.

The implications for a constructivist approach require the adult educator to teach adult learners holistically, moving from whole to part to whole. The adult educator must also realize that learning can be a covert activity and that errors can actually promote growth.

The adult educator must provide educational activities relevant to the adult learner in order for that learner to construct personal meaning (Bhola, 1989). Constructivist pedagogy encourages learners to be active participants in their own learning (Reid, Hresko, & Swanson, 1991). Adult learners cannot be seen as simple receptors of knowledge who are forced to give back to the educator exactly what was given to them. The adult learner must be exposed to pertinent knowledge so whatever is accepted is constructed and utilized in accordance with personal needs and goals.

Another area of concern for adult educators is the integration of the development of critical thinking in staff development activities. The facilitation of critical thinking for adult learners in a staff development setting requires active participation by participants. Critical thinking activities should involve identification and analysis of assumptions as well as an exploration of alternative ways of thinking and acting (Brookfield, 1987). Activities that involve and encourage diversity, flexibility, risk taking, and spontaneity should be apparent. The adult educator would actively participate in affirming the self worth of the learners, listening attentively, reflecting and mirroring ideas and actions, and motivating them. Modeling critical thinking by the adult educator is a necessary strategy that reinforces the significance of critical thinking in the learning process (Brookfield, 1987).

The pedagogical considerations presented are not intended to serve as an ideal model for adult education. The use of all or portions of these methods will depend on a variety of resource and participant variables that exist in any given staff development situation. These variables will function in the context created by the administration of the organizational system.

Administrative Initiatives in Staff Development

Schools cannot operate as islands unto themselves. They must operate in an open systems context which allows the needs and competing interests of the stakeholders to be addressed in the planning, implementation, and evaluation of staff development activities (Hanson, 1991). Given an open system context, there must still be a central authority that is held accountable for implementing effective and meaningful staff development. It should be the responsibility of the school administrator, the central office, and the board of education to have a philosophy consistent with staff development principles which promote personal and organizational growth. Schiffer (1980) identified four characteristics essential for staff development leadership: 1) support from the educational leadership for a functional staff development model which produces obvious results, 2) the creation of a climate conducive to growth that promotes trust and support among the stakeholders especially in allowing teachers to be experimental, innovative, and take risks, 3) managing the change process by coordinating, monitoring, and evaluating staff development activities, and 4) sharing leadership with the stakeholders in a unified and collaborative manner that fosters trust, communication, and opportunities for real professional growth and organizational renewal.

The development of professionals within a school system is dependent upon the organization's realization of the value of those professionals as evidenced by the organization's attempts to continually train them (Harris & Dawes, 1988). Usually, an educational organization demonstrates its commitment to its human resources by policies that reflect an understanding of the need for continual quality staff development and its willingness to commit human and material resources to the effort.

A note of caution is offered by Barth (1990) in the administration of staff development programs. He suggested that attempts by administrators, especially school principals, to plan staff development for teachers based solely on observations that are intrusive on a teacher's domain will tend to have a negative effect on teacher-administrator relationships. In this case, the more collaborative work that is done, the less principals physically intrude on classrooms, and the principal in turn will have a more realistic view of a teacher's performance. Collaboration allows the principal to examine the culture of a school and utilize professional reflective evaluations to plan staff development that will reflect the true needs of the staff (Leithwood, 1990). The key here is the collaboration of the principals and teachers, for without

it, mistrust and paranoia may hamper staff development efforts that support professional and organizational growth. It should be the responsibility of the principal to initiate the collaborative process for many reasons, but especially for the purposes of staff development.

It is important that the principal foster communication concerning the parameters in which the staff development program can realistically operate. Information must be shared concerning evaluative efforts aimed at improving the school, as well as the human and financial resource constraints (Rodriguez & Johnstone, 1986).

The importance of communication is highlighted by Hoy and Miskel (1987) when they state that "Communication permeates every aspect of school life" (p. 356). They contend that an educational leader's success is directly related to his ability to communicate with the teachers and students. Luneburg and Orstein (1991) discussed the importance of communication skills within the school environment. They stated that "the potential pay-off of effective communication is enormous in terms of the productivity and attitudes of faculty and students" (p. 189). He highlighted the importance of communication by citing an adaptation of Mary Bozik's work, "Ten Ways That Principals Can Promote Effective Communication", Principal 69 (1989, pp. 34-36) NAESP. In five of Bozik's ways, she

encouraged administrators to: 1) view their total role as a communicator, 2) understand that effective communication can prevent and assist in solving problems, 3) have a desire to communicate, 4) "model effective communication", and 5) essentially provide opportunities, encouragement, and rewards for communication. The principal is ultimately responsible for enabling a collaborative process whereby teachers and administrators develop a staff development program that is based on research and evaluative activities that promote long-range effectiveness. Long-range effectiveness for staff development is dependent upon teachers realizing that principals support the activity and provide opportunities for "... follow-up practice, coaching, and peer support in problems related to the implementation of new skills and behaviors" (Rodriguez & Johnstone, 1986, p. 88).

A related activity by the principal, which in many instances is overlooked, is the attendance of the principal at staff development activities. Based on observation by the researcher, the mere presence of a principal signals support to teachers, reinforces the notion that the principal is genuinely interested in the activity, and has a grasp of what skills and knowledge the teachers are being exposed to. The attendance of the principal at staff development activities builds trust between the principal

and the teachers and proves especially valuable when teachers are being innovative, but yet held accountable through evaluations. Therefore, it is imperative that the school principal assume responsibility for providing an environment that is conducive to quality staff development while exhibiting a genuine concern for the professional growth of the teachers and a long-range commitment for organizational renewal.

The Use of Consultants and the Consultation Process

The literature contains a variety of alternatives for the types and uses of consultants for staff development purposes (e.g., Heron & Harris, 1987, Boyer & Lewis, 1985). In any case, where the need for staff development exists, caution should be used in determining what type and how a consultant should be utilized. If there is a collaborative effort, staff development coordinators and teachers should conduct thorough research on their needs and the credibility of a desired consultant (Heron & Harris, 1987). Claims by consultants of miraculous results that can be directly attributed to them are not few. Academic professionals should do their homework well when considering the use of a consultant.

To understand better the role of consultants and the consultation process for the purpose of staff development, it is imperative to offer several pertinent definitions of

consultation. A definition offered by Knoff (1988) of the consultation process suggested that the consultant work in a "non-hierarchical relationship" with the consultee and that any line of authority in the process should be absent. This definition also includes a "problem-solving process" that addresses the identification and analysis of the problem and the intervention and evaluation of strategies. However, this definition addresses only the need for consultation services as a response to a problem. It does not reflect the need for growth and change. To provide assistance, Heron and Harris (1987) referred to the consultation process as a support service that can be afforded the classroom teacher for the improvement of the academic and social behavior realms of students. To summarize these definitions into a dynamic context, consultation should be considered as a process that requires the collaborative participation of professionals for the purposes of planning, problem solving, evaluation, and professional growth which directly or indirectly promotes the academic and social-behavioral growth of the affected students.

There are four general categories of consultants that have been recognized in the literature and/or identified by the North Carolina State Superintendent of Public Instruction : 1) private (i.e. Marian Leibowitz, Fenwick English, Robert Hanson, Larry Lezotte, etc), 2) university

(Boyer & Lewis, 1985), 3) educational agency (i.e. Technical Assistance Consultants), and 4) collegial (Rodriguez & Johnstone, 1986). Each brings its own merits and problems. The selection of one or a combination of these consultants should be based on the knowledge of the consultants, their familiarity with specific situations, willingness to work collaboratively, and their ability to provide extended support services.

According to Heron and Harris (1987), the consultation process will generally be in one of two categories: a developmental consultation or a problem-centered consultation. Developmental consultation is a long-range, systematic plan of action that is goal-oriented and focusses on the needs of students. The developmental process involves the consultant collaborating with one or more teachers for the purposes of problem identification, planning, exploring different types of interventions, and evaluating activities. Developmental consultation may also require the services of other consultants to provide assistance in highly specific areas. The developmental consultation approach is appealing because it is long-term and proactive as opposed to being reactive. An example of a developmental consultation would be in the planning of long-range programs that specify intended outcomes for students. Once the needs and outcomes for the students have been

determined, a plan of action is developed that includes the use of consultant(s) to remediate deficits in staff expertise.

The other type of consultation process, the problem-centered consultation, is a reactionary approach that is necessitated by the need for immediate attention to a problem. This approach is short-term and requires the consultant's services only for the duration of the problem. The objectives for the consultation address only the specific problem at hand (Heron & Harris, 1987).

Because the educational process is so complex, the need for consultation may involve both developmental and problem-centered approaches. The combination of these approaches will require collaboration from the school staff and the consultant in problem identification (if necessary), planning, and evaluation of a short-term remedial or long-term renewal staff development process (Heron & Harris, 1987). Thus, consulting should be considered in terms of a systematic process requiring collaborative planning, implementation, and evaluation.

Communication between the consultant and the consultee during the consultation process is directly related to the success of an intervention. The consultant must have a clear understanding of the needs of his clients. An analysis of these needs will determine the necessity for

direct service, indirect service, or a combination of the two. A consultant providing a direct service works personally with a teacher and can include observations, modeling, providing staff development services, and performing evaluations. An indirect service is performed when a consultant works with a teacher to modify the behavior, attitudes, or perceptions of a third party which might include parents or students. Analyzing the knowledge level, skills, practices and needs of the teacher may indicate that the teacher might actually be the cause of a problem (Knoff, 1988). Clearly, a two-way communication process between the consultant and the teacher will allow for this determination.

The communication process may also encompass the students, their parents, and related service providers, if necessary. Heron and Harris (1987) insisted that for effective communication to exist among the consultants, professionals, students, and parents, a common meaning of needs and intentions must first be transmitted, received and then comprehended. In order to maintain effective channels of communication, the consultant must gain the acceptance of the consultees, establish his/her credibility, provide feedback, and disseminate information through verbal exchanges, printed communication, and the media.

The consultation process can be very complicated and requires considerable organization and skill in staff development practices if it is to be effective. A systematic plan of action is necessary for staff development consultation activities. Heron and Harris (1987), identified nine functions essential to the consultation process: 1) preentry - a self-examination by the consultant of the expertise necessary for an intervention; 2) entry - establishing communication with the consultee, exploring the situation to be addressed and collaboratively agreeing on remediation strategies; 3) gathering information - taking an in-depth look at the situation by observation and data gathering; 4) defining the problem - clarifying the problem and exploring possible causes; 5) determining solutions - exploring the most cost-effective and least complicated intervention; 6) stating objectives - describing the conditions for the interventions, parameters, and the evaluation plan; 7) implementing the plan - placing the collaboratively agreed upon program into effect, using a pre-planned alternative if necessary, and insuring that the plan is implemented as designed; 8) evaluating the plan - determining the degree of change caused by the intervention, the specific variables associated with the change and the overall significance of the intervention, and; 9) terminating the consultation - collaboratively agreeing that

the planned objectives were met as determined by the outcomes. The terminating phase of the consultation process should be a positive experience for the consultant and consultee, reflecting a growth experience for both parties and improved conditions as a result of the intervention.

The final section of this chapter will focus upon selected trends and models of staff development in the United States. Each trend or model selected reflected at least one or more of the five variables used as parameters for this study.

Selected Examples of Trends and Models of Staff Development in the United States

Nationwide, a variety of staff development models and trends exist. In their research, Heron and Harris (1982) identified and described three models of staff development which they referred to as "Consultation Models". The first model presented was the "triadic model". In the triadic model, any professional with an expertise relative to the needs of a student is utilized to assist a person or group who is in direct contact with the student. The ultimate benefactor of this interaction is the student. The second model presented was the "systems model". The systems model is cyclical and intended for continuation in the absence of consultant services. The third and final model presented by Heron and Harris (1982) was the "Vermont Consulting Teacher

Program". The Vermont program is based on the collaboration of the Vermont State Department of Education, local school districts, and universities for the purpose of providing consultive services to the regular teachers who have handicapped students in their classrooms. The Vermont program is represented by a model that begins when a referral for services is made. Once the referral is made, entry level measures are determined, instructional objectives are specified, a plan is developed and implemented, and the program concludes with an evaluation of its effectiveness.

In Oregon, the State Department of Education in Salem developed Staff Development and Retaining: Suggested Personnel Policy Guidelines for School Districts (Oregon, SDE, 1988). The intent of the staff development policy guidelines was to assist education personnel in performing more effectively. It cited the linkage of program and individual improvement as a key factor in staff development. It outlined characteristics of program improvement related to the instructional program needs of districts and schools, and activities designed to meet the needs of the learners. Among the staff development guidelines was a specific reference to collaborative planning, implementation, and evaluation of staff development activities. Staff Development Guideline Number Four specifically states: "All

staff should be represented in planning, implementing, and evaluating school district activities. Research shows evidence that staff development programs created through this process produce a higher number of desired results". Guideline Number Five cites the importance of the principal's involvement and support of staff development activities.

In Texas, the Texas Education Agency developed a State Plan for Regional Education Service Centers as Approved by the State Board of Education (1988) that specified a structure for the improvement of services of the centers. Based on school improvement initiatives throughout the state, the roles of the centers have focused upon providing staff development training and technical assistance to local education agencies. Parameters for the operation of the centers were developed and consist of state statutes and Texas Board of Education rules. The parameters for the operation of the Regional Education Services include purpose, organization, services, authority, and accountability.

In a study entitled "Effective In-Service Education in Texas", an attempt was made to distinguish the elements of effective staff development and to determine to what extent those elements were present in staff development programs in the Texas Public Schools. The study cited several

characteristics of effective staff development which had a broad base of support in the literature and included collaborative planning, program presentation (implementation), and evaluation (Kramer & Betz, 1987). The 720 respondents, all teachers in the Texas Public Schools, validated the importance of collaborative planning, the use of multiple strategies specific to instructional and professional support, and collaborative evaluation which addressed planning and implementation.

In Kansas, the State In-Service Education Opportunities Act gives certificated personnel an opportunity to gain recertification credit by participating in one or more types of staff development (Creamer & Gillaspay, 1987). In Kansas, involvement in university course work was traditionally the primary means of recertification. The State In-Service Education Opportunities Act provided nine steps as guidelines for preparing an in-service education plan. Generally these nine steps included 1) notifying the Kansas Department of Education of the intent to write a plan, 2) organizing a professional development council, 3) developing a needs assessment process, 4) establishing goals of the local in-service plan, 5) determining the plan's objectives, 6) identifying activity plans, objectives, and activities, 7) designing and evaluation, 8) submitting the plan to the appropriate board and agency, and 9) maintaining the staff

development plan. In step number two, organizing the professional development council, planning, implementation, and evaluation are identified as key elements of a staff development plan.

In Maryland, the SITIP Program (School Improvement through Instructional Processes) and state education agency sponsored staff development involving the use of technical assistants to provide support to local education agencies throughout the state. In a research study on distance instruction in Maryland, Roberts (1987) asserted that the major purposes of providing technical assistance was to provide an increase in teachers' skills and knowledge specific to instruction and increased student achievement. According to the study, the move to technical assistance was mandated by policy makers in Maryland with the specific intent of supporting local education agencies with instructional improvement. The roles of technical assistants in the state included, but were not limited to, communication, collaborative planning with local education agencies, implementing staff development training, and program evaluation. The study also pointed out that because technical assistance involved distance learning to facilitate the provision of services, it was imperative that technical assistants have a thorough knowledge of organizational theory. Conclusions drawn from the study,

which included data collection from the state and local education agencies, resulted in recommendations which supported the necessity of organizational analysis, communication, planning, and implementation in technical assistance.

In Pittsburgh, Pennsylvania, the PRISM model (Pittsburgh Research-Based Instructional Supervisory Model) was developed by the Instructional Leadership Committee for the specific purposes of improving instruction and instructional leadership in the school district. According to Marshall (1982), the PRISM model is a staff development process that is based upon research which reflected five essential components of staff development programs. The five components utilized in the planning and implementation phases of supervisory staff development included presentation of theory, modeling or demonstration, practice under simulated conditions, structured feedback and coaching for application. The district staff development team also developed a program evaluation that was to be completed by the participants and was included as a component of a needs assessment process.

In Kentucky, school improvement efforts are being facilitated by the provision of technical assistance. In an effort to change the role of the state education agency, Kentucky has tried to decentralize its operations and is

attempting to provide more assistance to local education agencies as opposed to serving primarily in a regulatory capacity (Lally, 1991). According to a report by Steffy (1992), Kentucky's initiatives were due in part to the necessity of intervening in the operation of local education agencies who failed established standards of operation. The placement of school systems in the failing category (Phase III of the Kentucky Educational Improvement Act, 1978) required state education agency officials to take on many decision-making responsibilities which were taken away from the Phase III systems. Steffy suggested that the legal, technical, and political implication of state intervention resulted in the Kentucky Department of Education serving in advisory, approving, and technical assistance capacities.

In New York State, educational improvement efforts are being facilitated at the local school district level by BOCES (Board of Cooperative Educational Services) according to a report by Adams & Ambrosie (1987). The BOCES was developed in the 1940's as a result of legislation designed to assist school systems with services they may not ordinarily be able to afford (Smith, 1992). Services offered by BOCES include, but are not limited to instructional support services, adult and continuing education, special education, computer and communications services, business administration, and school and

professional development (New York State BOCES Staff Directory, 1992). There are forty-one individual BOCES in the state of New York. Each BOCES is assigned to serve school systems in a specific region of the state. There are five school systems in the state, which are around the urban centers of New York City, that operate independent of a BOCES due to their self-supporting ability.

A final staff development trend includes the collaboration of school districts, agencies, institutions, or a combination of the three. This form of collaboration has been generally defined by Fletcher and Cole (1991) as the formal organization between agencies, school districts, (and other institutions) to facilitate the implementation of a desired program by cooperatively addressing financial and resource considerations. Interdistrict coordination has been recognized at least since the 1950's. However, recent school reform efforts in a time of financial constraints has rejuvenated interest in its usefulness (Carlson & Awkerman, 1991). An example of collaboration for the purposes of teacher staff development was identified in Mississippi in the late 1980's. In collaboration with the Mississippi State Department of Education, local education agencies and institutions of higher education partnerships were created that served as a staff development model for teacher utilization (Schnur, et. al, 1986). Through the interaction

of the various institutions and agencies, teacher staff development and school improvement efforts were mutually enhanced.

The trends and models presented varied in their organizational designs, but the implications for communication of their intent and process should be obvious. The trends or models in Vermont, Oregon, Texas, Maryland, and Pittsburg, Pennsylvania, all clearly established the importance of utilizing specified planning, implementation, and an evaluation process in their staff development programs.

Summary

The establishment of the Regional Education Program in the 1970's was a result of the findings of the Governor's Study Commission on the Public School System of North Carolina in 1968. The regional decentralization of the Department of Public Instruction served as the basis upon which the present Technical Assistance Program began. Initiated by the State Superintendent in 1990, the plan for technical assistance was announced in what was known as the "Twenty Point Plan for Reshaping Education". The six technical assistance centers that resulted from the State Superintendent's plan served as a base for a consultant staff that focused upon LEAs in their region who demonstrated the greatest needs specific to state

accreditation guidelines. According to the Director of the Technical Assistance Program, the future of technical assistance will be based upon customer driven service to all LEAs and not just those who are on the state low performing/warning list.

The major function of the Technical Assistance Center is provision of staff development and consultation services. This chapter highlighted literature and research on what constitutes effective staff development practice. The major variables exposed in the research included elements of organization, communication, planning, implementation, and evaluation which were deemed essential in the delivery of staff development activities. The research also indicated that there were issues apparent in adult education which required attention to the characteristics of the adult learner and pedagogical considerations for adult educators.

The consultants based at the Technical Assistance Centers work independently of, and in conjunction with various types of consultants while facilitating the needs of LEAs. Four types of consultants and a process of consultation were identified in the chapter. This chapter concluded with selected examples of trends and models of staff development in the United States. Each trend or model was characterized by parameters or processes of what its designers considered to be elements of effective staff

development. In every case, at least one or more elements of organization, communication, planning, implementation, and/or evaluation was recognized as essential to staff development.

CHAPTER 3

DESIGN AND METHODOLOGY

Purpose of the Study

Through an evaluation process, this researcher analyzed the effectiveness of the staff development activities of the Northeast Technical Assistance Center. The evaluation process focused specifically on the staff development activities conducted by the consultants of the Northeast Technical Assistance Center. Intervention effectiveness was estimated utilizing quantitative and qualitative data gathered from stakeholders and analysis of documents.

Focus of the Study

Because the primary activity of the Northeast Technical Assistance Center involves staff development, this aspect as it relates to the Department of Public Instruction and the local education agency stakeholders was analytically examined. The stakeholders included the Department of Public Instruction, the Local Education Agency stakeholders which include the Chairman of the Northeast Region Superintendents' Council, and the teachers, principals, supervisors, and superintendents of the six systems that were placed on the North Carolina State Accreditation Warning List for the 1991-1992 school year.

Study Variables

There were five variables examined through the use of surveys, interviews, and records analysis. They were: 1)

Organization, 2) Communication, 3) Planning, Implementation, and 5) Evaluation. Each variable was examined in relation to the staff development activities of the Northeast Technical Assistance Center. The variables were identified through a review of the literature available on staff development and the North Carolina Technical Assistance Program (See Chapter 2).

Population and Data Collection

The stakeholders of the Northeast Technical Assistance Center were assigned questions relative to their role in the past, present, and future operation of the Regional Centers/Technical Assistance Centers in general and/or the Northeast Technical Assistance Center specifically. Interviews were necessary to discover the events that led to the inception of the Technical Assistance Program. Analysis of the Department of Public Instruction documents revealed eight general categories that were relative to the Technical Assistance Program. Those categories included 1) Organizational History, 2) Implementation, 3) Staffing, 4) Finance, 5) Communication, 6) Evaluation, 7) Program Survivability, and 8) Planning. The categories were derived from a study of documents that included the North Carolina General Statutes G. S. 115-C and its special provisions. Documents published by the North Carolina Department of Public Instruction included a report of the "Governor's

Study Commission on the Public School System of North Carolina" (1968), "A Brief History of the Regional Education Centers of North Carolina" (1985), "Time to Teach": Department of Public Instruction Helping School Systems Improve Education", "Q and A: Technical Assistance, A System of Organizing Results" (1991), 20 points: State Superintendent Bob Etheridge's Plan to Reshape Education (September 1990), a brochure entitled "Services of the Northeast Technical Assistance Center" (1992), a "Contract for Services" document maintained by the Northeast Technical Assistance Center, and the 1992-1993 Department of Public Instruction budget. Analysis of the 1992-1993 budget is pertinent because the staff development services rendered during that time period were based on accreditation data collected during the 1991-1992 fiscal year.

The stakeholders providing background information were asked questions derived from the eight categories specific to their role in the development, implementation, and administration of the Regional Education/Technical Assistance Program. Those stakeholders were the Chairman of the Legislative Education Oversight Committee, the State Superintendent of Public Instruction, the former State Superintendent of Public Instruction, the State Director of the Technical Assistance Program and the former Director of the Migrant Education Center.

The Chairman of the Legislative Education Oversight Committee was assigned questions relative to financing, communication, and program survivability (See Appendix E). The State Superintendent of Public Instruction and the Director of the Technical Assistance Program were assigned questions relative to organizational history, implementation, staffing, financing, communication, evaluation, program survivability, and planning of the Technical Assistance Program (See Appendix F & G). The former State Superintendent of Public Instruction and the former Director of the Migrant Education Center were assigned questions relative to the organizational history of the Regional Education Center Program (See Appendix H & I).

The five research variables specific to this study, organization, communication, planning, implementation, and evaluation were used in interviews, surveys, and records analysis to collect data specific to the Northeast Technical Assistance Center. The stakeholders who were assigned interviews and/or surveys relative to the five study variables were the Director and consultants of the Northeast Technical Assistance Center, the Chairman of the Northeast Superintendents' Council, the six superintendents, the LEA supervisors that serve as NETAC contact persons, principals, assistant principals, and teachers of the randomly selected schools in the systems identified in this

study were surveyed (See Appendix J). Four hundred twenty-nine surveys from NETAC consultants, superintendents, administrators/supervisors, and teachers were returned.

Sample and Sampling Procedures

A combination of sampling strategies included purposeful sampling, as well as stratified random probability sampling. Anderson (1989) defined a sample as "...the selection of some units of a population to represent the whole aggregate". The purposeful sample included interviews from officials directly responsible for the administration of Technical Assistance Center staff development services and the consultants that provided these services.

A purposeful sample is one which is non-probabilistic, clearly defined, and is manageable in terms of collecting data (Patton, 1990). It was used as a strategy in this evaluation for purposes of comparatively analyzing responses from the larger stratified sample population in the six selected local education agencies. The population of the Technical Assistance Center surveyed was small enough for conducting a survey and an interview which allowed for open-ended responses that were qualitatively analyzed.

Stratified random probability sampling was used to obtain a representative sample of the clients of staff development activities sponsored by the Northeast Technical

Assistance Center. In a stratified sampling design, the population becomes a subset (systems that were on the state accreditation warning list during 1991-1992) of the total population (all the systems served by the Northeast Technical Assistance Center). Stratification in survey sampling "...combines the advantages of purposive (non-probabilistic) and probability together (Hedayat & Sinhal, 1991, p. 257)". The clients were randomly chosen by school from the six school systems in the northeast region that did not meet State Accreditation Standards for the 1991-1992 school year. The sites of the surveys were one elementary school, one middle/junior high school, and one high school in each of the identified local education agencies. These schools were randomly selected using a random number table (Kerlinger, 1986). Each school was assigned a number, based on alphabetical order, one through the highest number of schools of that general level in the Local Education Agency. Using the random number table, the researcher stratified schools from each level, and only one school was randomly selected from that group. In one case, a Kindergarten through eighth grade school was not differentiated by level (i.e. K-5, 6-8, 9-12). That school was assigned a number for each level (K-5, 6-8) and included in each level's sampling. Only teachers who were exposed to staff development activities conducted by the consultants of the

Northeast Technical Assistance Center were eligible to participate in the survey.

The use of a sample for surveys in this evaluation research was a result of the economic and efficient benefits associated with data gathering from large target groups (Rossi & Freeman, 1989). Rossi and Freeman (1989) pointed out that a major advantage of sampling is the rapid collection and analysis of data. This provides for assurances that the data accurately represent an up-to-date description of what is occurring. Another benefit of random sampling is cost-effectiveness (Lessler & Kalsbeek, 1992). It was determined that the most cost-effective measure was to survey one elementary school, one middle/junior high school, and one high school in each of the selected systems. Another definition provided by Moore (1991) is consistent with most definitions in that it specifies that information is obtained from a "part" or "subject" to gain information about an entire population. He uses an analogy that gives a descriptive justification for sampling when he stated "You don't have to eat the whole ox to know that the meat is tough" (p.4).

Instruments and Data Sources

Qualitative and quantitative data in the form of records analysis, surveys, and interviews provided information that determined the extent to which internal and

external stakeholders considered the staff development services and practices of the NETAC effective and preferred over other alternatives. The records analysis data extracted from records included the "Contract for Services" and "Program Services Provided" documents maintained by the NETAC.

Surveys simplify data analysis, allow for direct comparisons, and are time efficient (Patton, 1990). The survey used in this study was based on a perception scale. A perception scale was chosen because individuals base their preferences on past experiences (Kerlinger, 1986). When situations occur requiring a response, people will react in a manner consistent with those predisposed beliefs. A summated rating scale known as a Likert-type scale was used to test perceptions. The predisposed beliefs or attitudes served as an objective recordable reference for the degree of agreement or disagreement to items in the survey relative to the five study variables specific to the staff development practices of the Northeast Technical Assistance Center. In this survey, unlike some Likert-type scales, the responses were limited to forced-choice items that did not allow for neutral responses. The use of forced-choice method, forces a respondent to be discriminating in the selection of items that appear equally acceptable or unacceptable. Forced-choice items also allow for an equal

weighting of items at both ends of the response scale which provided for more specific data analysis results (Kerlinger 1986). However, Patton (1990) pointed out that the weakness of surveys lies in the impersonal nature and narrowness of responses allowed. To validate the reliability of the survey instrument, two steps were taken that included field testing and an instrument reliability test. The field tests were conducted at three schools that resembled the stratified population in geographical areas (rural and urban), level (elementary, middle, and high school), size, and exposure to staff development activities conducted by consultants of the Northeast Technical Assistance Center. To reduce procedural impediments, such as clarity or purpose, directions, questions. Lessler and Kalsbeek (1992) recommend the use of field testing and suggest that results from such will provide a solid basis for further decision-making. To assure internal consistency reliability of the survey instrument, the Cronbach's alpha procedure was applied. The Cronbach procedure was developed by Lee J. Cronbach as an internal consistency method that uses measurement data obtained during one specific time period (Jaeger, 1990).

Interviews conducted with the stakeholder target groups identified in the data matrix provided information in a more open format and significantly reduced the delimitation of

responses. One purpose of the interviews was to obtain data on the historical, professional, and political perspectives of the stakeholders in relation to the Technical Assistance Program in general and the Northeast Technical Assistance Center specifically. Interview data provide information that may not be readily apparent and expose feelings and thoughts that other data collection methods will neglect as a result of rigid designs (Patton, 1990). The interviews used in this study were developed according to the direct relationship the stakeholder had with the Technical Assistance Program in general and/or the Northeast Technical Assistance Center specifically.

To facilitate the interview data gathering, a combination of the "interview guide approach" and the "standardized open-ended interview" was utilized (Patton, 1990, p. 289). The "standardized open-ended interview" increases the comparability of responses, allows the stakeholders to familiarize themselves with the instrument, and enhances the facilitation and organization of data. If the "standardized open-ended interview" were used in isolation, the naturalness of responses and the relevance of questions and answers would have been diminished. According to Patton (1990), the "informal conversational interview" allows for a match between individuals and circumstances and allows for spontaneity of questions and answers. If the

"informal conversational interview" were used in isolation, it would have greatly diminished the comparability of responses from stakeholders.

Procedure

This study was designed to collect evaluation data on the staff development activities of the Northeast Technical Assistance Center. During the 1991-1992 school year, the consultants of the Northeast Technical Assistance Center provided priority staff development services to the six local education agencies in their region that did not meet State Accreditation Standards for the 1991-1992 school year. This resulted in their placement on the "state accreditation warning list". Therefore, an attempt was made to design and implement the research and data gathering within that year. The information that resulted from this study was presented to the Director and consultants of the Northeast Technical Assistance Center for the purpose of professional reflection, evaluation, and planning specific to their staff development services to the northeast region.

The first phase of the study began with the formation of two committees. The first committee was an East Carolina University Dissertation Committee that consisted of four doctoral level advisors. The university committee was formed based on the expertise of each individual. The areas of expertise consisted of knowledge of evaluation procedure,

qualitative and quantitative methods of analysis, the Department of Public Instruction organization, operation and history, and statutory law. Based on input and feedback on the study from the committee, a proposal for research was presented and accepted.

Following the acceptance of the proposal, an advisory committee composed of representatives of the major stakeholders of the Northeast Technical Assistance Center was formed. The members of the advisory committee consisted of the Superintendent of North Carolina Department of Public Instruction, the Director of the State Technical Assistance Program, the Director of the Northeast Technical Assistance Center, and the Chairman of the Northeast Region Superintendents' Council. Each member of the advisory committee was sent a brief description of the proposal for evaluation research and was informed via telephone and letter that feedback on research and data gathering were welcomed and encouraged.

The second phase of the study consisted of research on the Technical Assistance Program, staff development, adult learning, and the use of educational consultants. Analysis of publications produced by the Department of Public Instruction and literature searches generated five variables that were specific to the Northeast Technical Assistance Center (organization, communication, planning,

implementation, and evaluation). Other categories (organizational, historical, implementation, staffing, finance, communication, evaluation, program survivability, and planning) became apparent in the research and useful in the development of background information relative to the Technical Assistance Program in general.

Phase three of the study involved the development of data gathering instruments that included surveys, questionnaires, and checklists that provided information on the operation of the Northeast Technical Assistance Center specifically and the Technical Assistance Program in general. The primary instrument for the study consisted of a survey with the five variables serving as the parameters of the study and supported by a series of five hierarchically developed questions under each variable. The survey questions were distributed to the four university dissertation committee members and the four external advisory committee members for their input and approval. At this stage, three schools in the region were selected for field testing of the instruments. The schools selected for the field testing sample included one elementary, middle, and high school that represented similar schools in the actual sample. The non-random selection process identified schools that were rural, urban, large, small, and divided by grade levels. Principals of these schools were contacted by

letter and phone for permission to access their schools. Dates and times were arranged for administration of the survey according to established field procedures (See Appendix C). During the administration of the survey, the respondents were allowed to make comments relative to the clarity or relevance of procedures or survey questions. After the administration of the survey, the principal was debriefed for feedback on the survey and the administration process.

The field tested survey instruments were then taken to the Survey Research Lab at East Carolina University for input and analysis. The methods of analysis were predetermined by consultation with dissertation committee members and the Director of the Survey Research Lab. The results of the analysis were reviewed by the dissertation committee and the Director of the Research Lab and recommendations for the analysis of the "real data" were taken under advisement.

Once the survey questions were approved and field tested, they were arranged in such a way as to be specific to each respondent (i.e. consultant, LEA personnel). Also in this phase, the eight categorical questions relative to the background of the Technical Assistance Program were used for interview purposes. Those interviewed used the eight categorical questions including the present and former state

Superintendents, the State Director of the Technical Assistance Program, the Chairman of the Legislative Education Oversight Committee, and the former Director of the Migrant Education Center in Grifton, North Carolina.

The fourth phase of the study consisted of contacting the superintendents of each LEA that was to be included in the study. Permission to interview each superintendent and access their system was granted. The initial communications consisted of a letter describing the study and a follow-up phone call to receive permission to access the system. Following the granting of permission, one elementary, middle/junior high school, and high school was selected from each LEA utilizing a random number table. Subsequently, each school principal was notified by letter of the intent of the study and asked permission to administer a survey in his/her school. A follow-up letter was sent to the principal with a time-table for survey distribution and a list of field procedures for administration. The survey packets for each school were sent with a letter providing a brief description of the study, field procedures for survey distribution, one survey for each teacher, and a self-addressed stamped envelope to facilitate the return of the surveys. Simultaneously, each LEA supervisor who served as the system contact supervisor to the NETAC was sent a similar description of the study, procedures for completing

the survey, a survey, and a self-addressed, stamped envelope. Following the distribution of the school and supervisor surveys, each superintendent was contacted by phone to set up a telephone interview time. Prior to the interview, each superintendent was mailed a copy of the survey to be used as an interview reference. When the survey interview was conducted, each superintendent responded numerically to the survey items and was given an opportunity to provide a narrative comment for each item. The researcher recorded the numerical and narrative responses on an identical survey form. Upon completion and receipt of all surveys, they were promptly delivered to the Survey Research Laboratory for computer analysis.

Phase five of the study involved survey interviews with the consultants and the Director of the Northeast Technical Assistance Center. A letter was sent to the Director requesting permission to interview and survey available consultants on-site. Permission was granted and the Director informed the consultants of the date and time of the interviews. Consultants not available for on-site survey interviews were contacted and interviewed by phone.

Phase six consisted of contacting the Chairman of the Northeast Region Superintendents' Council by phone and letter to set up and complete a survey interview.

Phase seven consisted of having all quantitative data computer analyzed and qualitative data summarized. Quantitative data were analyzed and presented in case form and histograms. Qualitative data were summarized and presented along with the quantitative data that were specific to a respective variable or category.

Data Analysis

The use of triangulation options provided methodological combinations and multiple data sources that supported the findings of the evaluation. According to Patton (1990), the term methodological triangulation refers to the multiple methods employed when conducting a study and the term data triangulation refers to the use of multiple data sources. In referring to triangulation in their research, LeCompte, Millroy, and Preissle (1992) used the term "structured corroboration" which indicates the utilization of multiple types and sources of data in order to defend or contradict conclusions. To emphasize the importance of triangulation measures in evaluation responses, Shadish, Cook, and Leviton (1991) suggested that multiple methodologies will decrease the chance of error in data collection and synthesis. The use of triangulation options decreased the chance of research bias and increased the accuracy and generalizability of the evaluation results (Katzner, Cook, & Crouch, 1991).

Qualitative data were collected to support quantitative findings. Multiple data sources included survey and/or interviews of administrators of Technical Assistance Programs, consultants of the Northeast Technical Assistance Center, the Chairman of the Northeast Region Superintendents' Council, the six Superintendents of the identified systems, supervisors serving as NETAC contact persons, principals/assistant principals, and teachers of the randomly selected schools from the specified systems.

The data that were derived from documents and analyzed included the North Carolina General Statutes 115-C, specific to the establishment of Regional Education Training Centers which served as the model for regionally-based education consulting centers across the state. Other documents included those from the Department of Public Instruction specific to the Technical Assistance Program and the operation of individual centers and the Northeast Technical Assistance Center. The documents were summarized and analyzed as they specifically related to the five study variables. A checklist composed of the study variables served as the analysis guide. The 1992-1993 Department of Public Instruction Technical Assistance Program and the Northeast Technical Assistance Center budgets have been provided through an interview with the Director of the North Carolina Technical Assistance Program.

The qualitative data collected are presented in narrative form. The use of naturalistic inquiry provided the flexibility of obtaining qualitative data from the stakeholders without a delimitation of responses. Those responses were based on experiences related to the background categories or the study variables specific to the staff development activities sponsored by the NETAC. The use of open-ended responses allowed the stakeholders to provide meaningful responses that may not have been categorically classified. The quantitative data derived from the surveys were used to confirm or deny that the staff development activities sponsored by the NETAC were effective according to the stakeholders.

The survey data were analyzed by study variables, primary area of responsibility, grade levels, and number of years in the education profession. The data were also grouped into four categories to allow for a comparative analysis of survey responses. The four categories of survey respondents were 1) NETAC Personnel, 2) Superintendents of the identified systems, 3) Administrative/Supervisory, and 4) Teachers. The comparative analysis consisted of quantitative displays utilizing histograms and brief narrative descriptions.

The quantitative data are presented in a combination of case method and statistical analysis. Descriptive

statistics included tables consisting of percentages of mean survey responses. Graphically depicting data allows the stakeholders to observe numerical comparisons, relationships and/or discrepancies in the findings. The use of histograms provided graphic representations of the frequency of percentage responses per variable by surveyed stakeholders. The differentiated groups (i.e. grade level taught, years in education, etc.) that responded to the variable questions were tested utilizing the statistical analysis of variance. According to Kerlinger (1986) an analysis of variance is basically "...a method of identifying, breaking down, and testing for statistical significance variances that come from different sources of variation" (p. 135). An F-ratio was computed that summarized the variation among sample mean averages, compared to the variation among subsample means within the samples.

The groups are differentiated by years in the education profession, grade level, and position or subject taught. Graphically depicting data allows the stakeholders to observe numerical comparisons, relationships and/or discrepancies in the findings.

To facilitate the input and analysis of quantitative data, a contract was developed between the researcher and the Survey Research Laboratory, a component of East Carolina University's Regional Development Center. The Survey

Research Laboratory is a full-service survey facility that provides a comprehensive system for educational and public service survey research and demographic data analysis. The statistical software package for data analysis is SPSS in conjunction with the Harvard graphics package. The Director of the Survey Research Laboratory also served as a consultant to the study.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This study was designed to assess the effectiveness of the staff development activities of the Northeast Technical Assistance Center (NETAC) through the use of qualitative and quantitative measures. The organization of this chapter is based on the five variables of the study--organization, communication, planning, implementation, and evaluation. The researcher addressed each variable with data collected through surveys, interviews, and records analysis. Survey and interview data came from four groups of stakeholders--the director and consultants of the NETAC, superintendents (including an interview with the Chairman of the Northeast Superintendents' Council), administrators and supervisors of LEAs, and teachers.

The data from the 4-point Likert type survey were analyzed with the Statistical Package for the Social Sciences (SPSS). SPSS involved the use of descriptive statistics to produce mean scores on the survey questions and analysis of variance to determine the significance of differences among subgroups within the three classifications of the sample--primary responsibility area for all respondents, grade level for teachers, and years in the education profession for teachers. The use of means in describing the analyzed data increased the clarity of the

voluminous data. Based on the 4-point Likert-Scale used in this survey (4=great, 3=moderate, 2=small, 1=not at all), the researcher determined that effectiveness was based on a score of 2.5 to 4.0. Scores of 2.4 to 1 were considered to represent ineffectiveness.

The data from teachers were presented in two classifications: grade levels, i.e., elementary, middle, and high school, and years in the profession, i.e., 0-3, 4-10, 11-20, and over 20 years. The mean scores and F-test scores for all three classifications were presented in the chapter.

Analysis of respondent distribution for the survey indicated a return of NETAC consultants, N=13, superintendents, N=6, administrators/supervisors, N=13, and teachers, N=397, for a total of 429 respondents. Interview information was provided by NETAC consultants, the Chairman of the Northeast Superintendents' Council and superintendents of the identified sample systems.

A comparative analysis of the four major stakeholder groups is presented at the conclusion of each variable summary. The four groups of stakeholders consisted of the Director and consultants of the Northeast Technical Assistance Center, superintendents, administrators/supervisors (principals, assistant principals, and LEA supervisors serving as NETAC contact persons), and teachers.

Histograms represented the percentage of stakeholders responding to the effectiveness of the five variables.

Data Analysis by Variable

Organizational Effectiveness

Question 1. To what degree do the LEAs understand the mission of the NETAC?

Survey data. The sample population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that the mission was understood by the LEAs to a moderate degree (See Table 4.1). A mean score of 2.8 supported this finding. Subsamples consisting of NETAC consultants, superintendents, administrators/supervisors and teachers also supported this finding. The F-test revealed that the differences among the four groups were not statistically significant ($p = 0.41$).

Table 4.1

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.0	3.17	2.92	2.78	2.8

The survey population consisting of respondents from the "Grade Levels" category collectively responded that the mission was understood by the LEAs to a moderate degree. A mean score of 2.78 supported this finding (See Table 4.2). Subsamples consisting of grades pre-kindergarten through

five, six through eight, and grades nine through twelve also supported this finding. The F-test revealed that the differences among the three groups were statistically significant at a 0.01 level. The highest mean, 2.9, was from grades six through eight and the lowest mean, 2.61, was from grades nine through twelve.

Table 4.2

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.84	2.9	2.61	2.78

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that the mission was understood by the LEAs to a moderate degree (See Table 4.3). A mean score of 2.78 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven to twenty years, and over twenty years also supported this

Table 4.3

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.61	2.60	2.86	2.99	2.78

finding. The F-test revealed that the differences among the four groups were not statistically significant ($p = 0.91$).

Interview data. The NETAC consultants responded to the question of LEAs' understanding the mission of the NETAC by stating that administrators understand the mission more than teachers. The intense focus on the warning status LEAs was stated as a factor in understanding the mission. One response indicated that the "...needs and interests of the LEAs outweigh their need to understand the mission."

The Chairman of the Northeast Region Superintendents' Council responded that he had a "fairly good" understanding of the NETAC mission and also felt that superintendents and principals did as well.

One superintendent responded to the question of LEAs' understanding the mission of the NETAC by stating that the mission needs to be clarified.

Analysis of documents. Document analysis indicated a Department of Public Instruction document entitled "Q and A", Technical Assistance: A System of Organizing for Results" (1991) which, among other information, described the mission of technical assistance centers. This was the only document that addressed the mission of the technical assistance center. One NETAC brochure described its mission.

Synthesis of data. Statistical data indicated that the identified LEAs understood the mission of the Northeast Technical Assistance Center. Interview data indicated that superintendents and administrators/supervisors understood the mission more than teachers, but that this situation will improve over time. Document analysis indicated two brochures specific to the mission. One was published and distributed by the Department of Public Instruction in Raleigh, North Carolina and the other was developed and distributed by the NETAC.

Question 2. To what degree do the staff development services of the Northeast Technical Assistance Center impact positively on student achievement?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that NETAC staff development services impact positively on student achievement to a moderate degree (See Table 4.4). A mean score of 2.75 supported this finding. Subsamples of this population

Table 4.4

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.42	3.0	3.0	2.72	2.75

consisting of NETAC consultants, superintendents, administrators/supervisors and teachers also supported this finding. The F-test revealed that differences among the four groups were statistically significant at a .02 level. The highest mean, 3.42, was from the NETAC consultants and the lowest mean, 2.72 was from the teachers.

The survey population consisting of the "Grade Levels" category collectively responded that the NETAC staff development services impacted positively on student achievement to a moderate degree (See Table 4.5). A mean score of 2.71 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five, grades six through eight, and grades nine through twelve also supported this finding. The F-test revealed that the differences among the three groups were statistically significant at a 0.02 level. The highest mean, 2.81, was from grades six through eight and the lowest mean, 2.56, was from grades nine through twelve.

Table 4.5

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.78	2.81	2.56	2.71

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that the NETAC staff development services impacted positively on student achievement to moderate degree (See Table 4.6). A mean score of 2.73 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven to twenty years, and over twenty years, also supported this finding. The F-test revealed that the differences among the four groups were statistically significant at a 0.01 level. The highest mean, 2.91, was from over twenty years and the lowest mean, 2.53, was from four to ten years.

Table 4.6

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.72	2.53	2.74	2.91	2.73

Interview data. The LEAs are showing a gradual increase in student achievement. The achievement is "greater in some areas than others." The NETAC "...had a good year..." and the "LEAs in general and all the way to the teacher level are beginning to see the big picture." A consultant responded that improvement will continue to be seen and "...time is needed to establish (the NETAC)

reputation and trust." The consultant emphasized the fact that three systems on the warning status list were removed was proof that the staff development services of the NETAC had a positive impact on student achievement.

He responded that NETAC staff development services impact "considerably" on student achievement "...particularly specific subject areas."

Synthesis of data. Statistical data generally indicated that the staff development services of the Northeast Technical Assistance Center impacted positively on student achievement. Interview data indicated that the removal of three LEAs from state accreditation warning list during the 1992-1993 school year was proof that NETAC staff development services impacted positively on student achievement.

Question 3. To what degree is the Northeast Technical Assistance Center staffed adequately to meet the professional needs of the teachers and administrators in the LEAs?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that the Center is staffed adequately to a moderate degree (See Table 4.7). A mean score of 2.74 supported this finding. Subsamples of this population consisting of superintendents, administrators/

supervisors, and teachers, also supported this finding. However, a subsample consisting of NETAC consultants did not support this finding. The F-test revealed that the differences among the four groups were statistically significant at a 0.00 level. The highest mean, 2.82, was from administrators/supervisors and the lowest mean, 1.75, was from NETAC consultants.

Table 4.7

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
1.75	2.67	2.82	2.77	2.74

The survey population consisting of respondents from the "Grade Levels" category collectively responded that the center is staffed adequately to a moderate degree (See Table 4.8). A mean score of 2.79 supported this finding.

Subsamples of this population consisting of grades pre-kindergarten through five, grades six through eight, and

Table 4.8

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.94	2.89	2.56	2.79

grades nine through twelve also supported this finding. The F-test revealed that the differences among the three groups were statistically significant at a 0.00 level. The highest mean, 2.94, was from grades pre-kindergarten through five and the lowest mean, 2.56 was from grades nine through twelve.

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that the center is staffed adequately to a moderate degree (See Table 4.9). A mean score of 2.79 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven to twenty years, and over twenty years also supported this finding. The F-test revealed that the differences among the four groups were statistically significant at a 0.01 level. The highest mean, 2.93, was from over twenty years and the lowest mean, 2.71, was from zero to three years.

Table 4.9

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.71	2.75	2.74	2.93	2.79

Interview data. In response to the question of adequate staffing to meet LEA professional needs, consultants

comments included "...the types of consultants at the center were adequate, but just not enough." One consultant responded that the center is staffed to only three-fourths of what it should be and a technology person is needed. Another consultant responded that it was staffed adequately to meet the needs of the three remaining LEAs on the warning status list, but it could not adequately serve all the needs of the LEAs in the Northeast Region. The small number of NETAC staff contributed to a "lack of a consistent pool all the time."

One superintendent responded that there was a need for "special program" personnel. Another superintendent responded that the NETAC staffing shortage was a result of a lack of funding and this had an impact on its ability to meet the professional needs of the LEAs.

Synthesis of data. Statistical data generally indicated that the Northeast Technical Assistance Center was staffed adequately to meet the professional needs of the teachers and administrators in the LEAs identified in this study. However, a subsample consisting of NETAC consultants did not support this finding. Interview data indicated that staffing is a problem in terms of number of consultants. The lack of consultants in special education and technology was cited as a problem and limited funding was indicated as the cause. Interview data also indicated that as currently

staffed, the NETAC cannot adequately service all the LEAs in the region.

Question 4. To what degree will the current priority focus on the warning status LEAs help them reach state accreditation standards?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that the current priority focus would help the warning status LEAs reach state accreditation standards to a moderate degree (See Table 4.10). A mean score of 2.84 supported this finding. Subsamples consisting of NETAC consultants, superintendents, administrators/supervisors, and teachers also supported this finding. However, a subsample consisting of NETAC consultants supported this finding to a great degree. The F-test revealed differences among the four groups significant at a 0.01 level. The highest mean, 3.54, was from NETAC consultants and the lowest mean, 2.82, was from teachers.

Table 4.10

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.54	3.0	2.92	2.82	2.84

The survey population consisting of respondents from the "Grade Levels" category collectively responded that the current priority focus would help the warning status LEAs reach state accreditation standards to a moderate degree (See Table 4.11). A mean score of 2.8 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five, grades six through eight, and grades nine through twelve, also supported this finding. The F-test revealed that the differences among the three groups were statistically significant at a 0.00 level. The highest mean, 2.96, was from grades six through eight and the lowest mean, 2.6, was from grades nine through twelve.

Table 4.11

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.87	2.96	2.6	2.8

The survey population consisting of respondents from the "Number of Years In Education" category collectively responded that the current priority focus would help the warning status LEAs reach state accreditation standards to moderate degree (See Table 4.12). A mean score of 2.83 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven

to twenty years, and over twenty years also supported this finding. The F-test revealed that the differences among the four groups were not statistically significant ($p = 0.19$).

Table 4.12

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.81	2.77	2.77	2.98	2.83

Interview data. Responses included the fact that three LEAs came off that list this year. Another consultant responded that the structure for services had changed since 1991-1992 and that teams were assigned to LEAs. Other consultants stated that improvements toward or attainment of state accreditation status would be more evident next year because of reorganization.

The Chairman of the Northeast Superintendents' Council continued by stating that the current priority focus "...should help..." the six LEAs reach accreditation standards based on the "...degree and number of activities."

One superintendent responded that to help the LEAs reach state accreditation standards, the NETAC needs to "...stick to a schedule, ...they are spread too thin."

Analysis of documents. Another document analyzed specific to the "Organization" variable included a state

accreditation report of schools on the failing/warning status list. This document revealed that three school systems in the northeast region were removed from the failing/warning status list.

Synthesis of data. Statistical and interview data indicated that the current priority focus on the systems that were placed on the warning list would help them reach state accreditation standards. Document analysis indicated that three LEAs in the northeast region who were on the state accreditation warning list were removed.

Question 5. To what degree are the staff development services offered by the NETAC preferable over private, university, or collegial consultants?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that the staff development services offered by the NETAC are preferable over the other types of consultants to a moderate degree (See Table 4.13). A mean score of 2.81 supported this finding. Subsamples of Table 4.13

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.42	2.67	2.92	2.79	2.81

this population consisting of NETAC consultants, superintendents, administrators/supervisors, and teachers also supported this finding. The F-test revealed that the differences among the four groups were not statistically significant ($p = 0.09$).

The survey population consisting of respondents from the "Grade Levels" category collectively responded that the staff development services offered by the NETAC are preferable over the other types of consultants to a moderate degree (See Table 4.14). A mean score of 2.77 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five, grades six through eight, and grades nine through twelve also supported this finding. The F-test revealed that differences among these three groups were statistically significant at a 0.01 level. The highest mean, 2.94, was from grades six through eight and the lowest mean, 2.6, was from grades nine through twelve.

Table 4.14

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.79	2.94	2.6	2.77

The survey population consisting of respondents from the "Number of Years in Education" category, collectively responded that the staff development services of the NETAC are preferable over private, university, or collegial consultants to a moderate degree (See Table 4.15). A mean score of 2.81 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven to twenty years, and over twenty years also supported this finding. The F-test revealed that differences among the four groups were not statistically significant ($p = 0.19$).

Table 4.15

Mean Scores of Years in Education

<u>0-3</u>	<u>4-10</u>	<u>11-20</u>	<u>+20</u>	<u>AVG. MEAN</u>
2.67	2.73	2.78	3.0	2.81

Interview Data. In response to the question of preference of technical assistance services over other services, consultants generally agreed that LEA needs were situation specific and some external staff development services may be more appropriate. One consultant responded that "...there has to be a cooperative effort between all, including the community and the organization." Another consultant generally agreed, but added that outside agencies

"...can't analyze the needs of LEAs like the T.A.C. can and that staff development by the T.A.C. is based on those needs."

In addition, the Chairman stated that the staff development services were preferable over other private, university, or collegial consultants because of the "expense" involved with external consultant services and because the "...TAC should be more aware of the needs of an LEA, and be a part of the overall system."

One superintendent responded that NETAC did a good job with the number of staff it had.

Synthesis of data. Data indicated that the staff development services offered by the NETAC were preferable based on consultant knowledge of LEA needs and the costs associated with other types of consultants.

Summary of Organizational Effectiveness

Cronbach's alpha internal consistency reliability coefficient for the "Organizational" variable was 0.80. This statistic shows how well the survey questions fit together with scores above 0.70 demonstrating a high consistency level.

In a comparative analysis of stakeholder group responses to the "Organizational" variable, Figure 4.1 revealed that the majority of each sample considered the "organization" of the Northeast Technical Assistance Center

to be effective for the delivery of staff development (See Appendix K).

Communication Effectiveness

Question 1. To what degree is there an open, two-way channel of communication between the LEAs and the NETAC?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that there is an open, two-way channel of communication between the LEAs and the NETAC to a moderate degree (See Table 4.16). A mean score of 2.88 supported this finding. Subsamples of this population consisting of NETAC consultants, superintendents, administrators/supervisors, and teachers also supported this finding. The F-test revealed that differences among the four groups were not statistically significant ($p = 0.46$).

Table 4.16

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.15	3.17	3.09	2.87	2.88

The survey population consisting of respondents from the "Grade Levels" category collectively responded that there is an open, two-way channel of communication between the LEAs and the NETAC to a moderate degree (See Table 4.17). A mean score of 2.86 supported this finding.

Subsamples of this population consisting of grades pre-kindergarten through five, six through eight, and grades nine through twelve also supported this finding. The F-test revealed that the differences among the three groups were statistically significant at a 0.04 level. The highest mean, 3.01, was from grades six through eight and the lowest mean, 2.73, was from grades nine through twelve.

Table 4.17

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.84	3.01	2.73	2.86

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that there is an open, two-way channel of communication between the LEAs and the NETAC to a moderate degree (See Table 4.18). A mean score of 2.89 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven to twenty years, and over twenty years supported this finding. The F-test revealed that these differences among the four groups were statistically significant at a 0.05 level. The highest mean, 3.09, was from over twenty years and the lowest mean, 2.72, was from four to ten years.

Table 4.18

Mean Scores of Years in Education

<u>0-3</u>	<u>4-10</u>	<u>11-20</u>	<u>+20</u>	<u>AVG. MEAN</u>
2.79	2.72	2.89	3.09	2.89

Interview data. A NETAC consultant responded to the question of an open, two-way channel of communication between the NETAC and the LEAs by stating that "...there is more contact between the central office than local schools." One consultant responded that this can be attributed to the LEAs functioning under the regional center model where only central office personnel can contact the center. The consultant added that there was a breakdown in communication between the central office and the local schools." The Chairman of the Superintendents' Council responded that communication between the LEAs and the NETAC was good. One superintendent responded that "...planning and communication go hand-in-hand and there is a great deal of communication." Another superintendent indicated that there "...seemed to be agendas..." by the NETAC that he "...was not clear on."

Analysis of documents. There were fourteen documents in a central file at the NETAC consisting of letters, notes, and informational documents specific to internal (N=2) and

external (N=12) communications. The researcher observed that the NETAC consultants also maintained individual files documenting interaction with the LEAs. The "Northeast Technical Assistance Center Agreement for Services" were developed annually and the "Documentation of Service Delivery" reports were developed to document interaction between the NETACs and the central office of an LEA. However, there was no indication that the "Documentation of Service Delivery" documents were sent to the LEAs.

Synthesis of data. Statistical data indicated that there is an open, two-way channel of communication between LEAs and the NETAC. However, interview data indicated that there is a communication impediment between central offices and local schools. One superintendent stated that the NETAC had "agendas" that he "...was not clear on." Document analysis consisted of a central communication file and individual consultant files and support the perception of limited communication.

Question 2. To what degree are the LEA personnel aware of the staff development and consultant services offered by the NETAC?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that LEA personnel are aware of the staff development and consultant services offered by

the NETAC to a moderate degree (See Table 4.19). A mean of 2.68 supported this finding. Subsamples of this population consisting of NETAC consultants, superintendents, administrators/supervisors, and teachers supported this finding. A subsample consisting of superintendents supported the question to a great degree based on their mean score. The F-test revealed that these differences among the four groups were statistically significant at a 0.00 level. The highest mean, 3.5, was from the superintendents and the lowest mean, 2.63, was from the teachers.

Table 4.19

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.38	3.5	3.3	2.63	2.68

The survey population consisting of respondents from the "Grade Levels" category collectively responded that they are aware of the staff development and consultant services offered by the NETAC to a moderate degree (See Table 4.20). A mean of 2.62 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five, grades six through eight, and grades nine through twelve also supported this finding. The F-test revealed that these differences among the groups were not statistically significant ($p = 0.34$).

Table 4.20

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.6	2.72	2.55	2.62

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that they are aware of the staff development and consultant services offered by the NETAC to a moderate degree (See Table 4.21). A mean score of 2.66 supported this finding. Subsamples of this population consisting of four to ten years, eleven to twenty years, and over twenty years, also supported this finding. However, a subsample consisting of zero to three years supported the question only to a small degree. The F-test revealed that differences among the four groups were statistically significant at a 0.00 level. The highest mean, 2.99, was from over twenty years and the lowest mean, 2.29 was from Table 4.21

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.29	2.51	2.69	2.99	2.66

zero to three years in education.

Interview data. In response to the question of LEA personnel being aware of NETAC staff development services, one consultant responded that it depends on the system. Another consultant responded that information does not always get to the teachers and the process was more effective if information is sent to the principals. The final response to this question by a consultant was that there tends to be a great awareness of NETAC services at the county office, moderate at the principal's level, and small at the teacher's level. The Chairman of the Superintendents' Council stated that there was more of an awareness at the supervisory level (i.e. principals and superintendents) than the teacher level.

Analysis of documents. Document analysis indicated two brochures specific to the staff development and consultant services offered by the NETAC. The two documents were "Q and A, Technical Assistance: A System of Organizing for Results" (1991) and "Services of the Northeast Technical Assistance Center." Direct observation verified the distribution of these two documents.

Synthesis of data. Statistical data indicated that LEA personnel were aware of the staff development and consultant services offered by the NETAC. Interview data indicated that awareness levels varied from system to system.

Question 3. To what degree are LEA personnel aware of the process for contacting the NETAC for staff development services?

Survey data. The survey population consisting of the "Primary Area of Responsibility" category collectively responded that LEA personnel were aware of the process for contacting the NETAC for staff development services to a moderate degree (See Table 4.22). A mean score of 2.56 supported this finding. Subsamples of this population consisting of NETAC consultants, administrators/supervisors, and teachers supported this finding. However, a subsample consisting of superintendents supported this question to a great degree. The F-test revealed that the differences among the four groups were statistically significant at a 0.00 level. The highest mean, 3.67, was from the superintendents and the lowest mean, 2.5, was from the teachers.

Table 4.22

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.38	3.67	3.3	2.5	2.56

The survey population consisting of respondents from the "Grade Levels" category collectively responded that they were aware of the process for contacting the NETAC for staff

development services to a small degree (See Table 4.23). A mean score of 2.49 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five, and grades nine through twelve also supported this finding. However, a subsample consisting of grades six through eight supported this question to a moderate degree. The F-test revealed that the differences among the three groups were not statistically significant ($p = 0.97$).

Table 4.23

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.47	2.5	2.5	2.49

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that they were aware of the process of contacting the NETAC for staff development services to a moderate degree (See Table 4.24). A mean score of 2.54 supported this finding. Subsamples of this population consisting of eleven to twenty years and over twenty years also supported this finding. However, subsamples consisting of zero to three years and four to ten years supported the question to a small degree. The F-test revealed that differences among the four groups were statistically significant at a 0.00

level. The highest mean, 2.9 was from over twenty years and the lowest mean, 2.28, was from zero to three years.

Table 4.24

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.28	2.35	2.51	2.9	2.54

Interview data. In response to the question of awareness of the process for contacting the NETAC for staff development services, the responding consultants agreed that there was a communication gap between the county office and the local schools. One consultant responded that the awareness was better this year than last year. A superintendent responded that there were "...scheduling conflicts with eighteen system..." being served.

Analysis of documents. The "Services of the Northeast Technical Assistance Center" document contained telephone and facsimile numbers, as well as an address to facilitate contacts from the LEAs.

Synthesis of data. Statistical data from the "Primary Area of Responsibility" and "Number of Years Education" categories indicated that they were aware of the process for contacting the NETAC for staff development services. However, subsamples 0 through 3 years and 4 through 10 years

from the "Number of Years in Education" category contradicted this finding. The "Grade Levels" category included the subsamples grades pre-kindergarten through five also contradicted this finding. Interview data once again cited a gap between central offices and the schools. Document analysis indicated a brochure specific to NETAC staff development service which included telephone and facsimile numbers and the center's address.

Question 4. To what degree do LEAs make their personnel aware on a regular basis of staff development opportunities offered by the NETAC?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that LEAs made their personnel aware on a regular basis of staff development opportunities offered by the NETAC to moderate degree (See Table 4.25). A mean of 2.76 supported this finding. Subsamples of this population consisting of NETAC consultants, superintendents, administrators/supervisors, and teachers supported this finding. However, a subsample consisting of NETAC consultants supported this question to a great degree. The F-test revealed that the differences among the four groups were statistically significant at a 0.00 level. The highest mean, 3.67, was from NETAC consultants and the lowest mean, 2.72, was from teachers.

Table 4.25

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.67	3.0	3.2	2.72	2.76

The survey population consisting of respondents from the "Grade Levels" category collectively responded that the LEAs made their personnel aware on a regular basis of staff development opportunities offered by the NETAC to a moderate degree (See Table 4.26). A mean of 2.71 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five, grades six through eight, and grades nine through twelve also supported this finding. The F-test revealed that these differences among the four groups were statistically significant at a 0.01 level. The highest mean, 2.85, was from grades six through eight and the lowest mean, 2.5, was from grades nine through twelve.

Table 4.26

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.79	2.85	2.5	2.71

The survey population consisting of respondents from the "Number of Years" category collectively responded that the LEAs made their personnel aware on a regular basis of staff development opportunities offered by the NETAC to a moderate degree (See Table 4.27). A mean score of 2.75 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven to twenty years, and over twenty years also supported this finding. The F-test revealed that the differences among the four groups were not statistically significant ($p = 0.56$).

Table 4.27

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.71	2.73	2.7	2.86	2.75

Interview data. In response to the question of LEA personnel being made aware of staff development opportunities offered by the NETAC, one consultant responded that notices are sent to county offices and schools the majority of the time, but sometimes it was necessary to go through channels. Other consultants responded that the superintendents' council was used for communication, but that whatever method existed, the information still "...may not be passed down to the schools." The Chairman of the

Superintendents' Council stated that the awareness could be to a "medium plus degree."

Synthesis of data. Statistical data indicated that LEAs informed their personnel on a regular basis of staff development opportunities by the NETAC. Interview data indicated that awareness of staff development opportunities was greater at the central offices and the administrative/supervisory level than at the teacher level. Interview data also indicated that Superintendents' Council was used as a means for communicating staff development, but regardless of the means, impediments were still cited between the central office and the teachers.

Question 5. To what degree are the current methods of communication between the LEAs and the NETAC effective?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that the current methods of communication between the LEAs and the NETAC were effective to a moderate degree (See Table 4.28). A mean score of 2.69 supported this finding. Subsamples of this population consisting of NETAC consultants, superintendents, administrators/supervisors, and teachers also supported this finding. The F-test revealed that these differences were not statistically significant ($p = 0.21$).

Table 4.28

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.0	3.0	3.1	2.66	2.69

The survey population consisting of respondents from the "Grade Levels" category collectively responded that the current methods of communication between the LEAs and NETAC are effective to a moderate degree (See Table 4.29). A mean score of 2.65 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five, and grades six through eight also supported this finding. However, a subsample from grades nine through twelve supported this question to a small degree. The F-test revealed that the differences among the three groups were statistically significant at a 0.00 level. The highest mean, 2.77, was from grades pre-kindergarten through five, and the lowest mean, 2.45, was from grades nine through

Table 4.29

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.77	2.76	2.45	2.65

twelve.

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that the current methods of communication between LEAs and the NETAC were effective to a moderate degree (See Table 4.30). A mean score of 2.69 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, and eleven to twenty years also supported this finding. The F-test revealed that the differences among the four groups were not statistically significant ($p = 0.58$).

Table 4.30

Mean Scores of Years in Education

<u>0-3</u>	<u>4-10</u>	<u>11-20</u>	<u>+20</u>	<u>AVG. MEAN</u>
2.67	2.62	2.67	2.79	2.69

Interview data. In response to the question of current methods of communication between the LEAs and the NETAC (letters, telephone calls, in person) being effective, the consultants agreed that it was effective between the NETAC and the county office, but there "...tends to be a breakdown between the county office and the local schools. The consultants also agreed that the communication "...process would be much more effective if teachers were contacted

directly, but this was not always practical." One consultant responded that "...some schools receive information on DPI activities before the NETAC, which has produced some embarrassing moments." The Chairman of the Superintendents' Council said that current methods of communication were effective and included memorandums, facsimiles, and phone calls.

Synthesis of data. Statistical data indicated that the current methods of communication between the LEAs and the NETAC were effective. However, in the "Grade Levels" category, the subsample of grades 9-12 contradicted this finding. Interview data once again cited the communication gap between the central office and the local schools indicated that direct teacher contact by the NETAC would be more effective, but it is not always practical. Document analysis indicated that a central file was maintained that contained the "Northeast Technical Assistance Center Agreement for Services" and "Documentation of Service Delivery" documents. The individual NETAC consultants maintained documentation of interaction with LEAs, but a collective file for the center contained a small number of documents specific to the communication variable. There was no clear indication that a copy of the "Documentation of Service Delivery" reports were sent to the LEAs.

Summary of Communication Effectiveness

Cronbach's alpha internal consistency reliability coefficient for the "Communication" variable was .88. This statistic shows how well the survey questions fit together with scores above 0.70 demonstrating a high consistency level.

In a comparative analysis of stakeholder group responses to the "Communication" variable, Figure 4.2 revealed that the majority of each sample considered "communication" between the Northeast Technical Assistance Center and the local education agencies to be effective (See Appendix L).

Planning Effectiveness

Question 1. To what degree are the staff development services provided to LEAs by the NETAC collaboratively planned?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that the staff development services provided to the LEAs by the NETAC are collaboratively planned to a moderate degree (See Table 4.31). A mean score of 2.79 supported this finding. Subsamples of this population consisting of NETAC consultants, administrators/supervisors, and teachers also supported this finding. However, a subsample consisting of

superintendents supported this question to a great degree. The F-test revealed that differences among the four groups were statistically significant at a 0.00 level. The highest mean, 3.83, was from the superintendents and the lowest mean, 2.67, came from administrators/supervisors.

Table 4.31

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.31	3.83	2.67	2.77	2.79

The survey population consisting of respondents from the "Grade Level" category collectively responded that the staff development services provided to LEAs by the NETAC were collaboratively planned to a moderate degree (See Table 4.32). A mean score of 2.75 supported this finding. Subsamples of this population consisting of pre-kindergarten through five, grades six through eight, and grade nine through twelve also supported this finding. The F-test revealed that the differences among the three groups were statistically significant at a 0.04 level. The highest mean, 2.84, was from grades six through eight and the lowest mean, 2.6, was from grades nine through twelve.

Table 4.32

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.83	2.84	2.6	2.75

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that staff development services provided to the LEAs by the NETAC were collaboratively planned to a moderate degree (See Table 4.33). A mean score of 2.77 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven to twenty years, and over twenty years also supported this finding. The F-test revealed that the differences among the four groups were not statistically significant ($p = 0.17$).

Table 4.33

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.81	2.65	2.71	2.91	2.77

Interview data. In response to the question of staff development services provided to the LEAs by the NETAC being collaboratively planned, a NETAC consultant responded that

planning took place with actual teachers and it should be "bottom up" and include students. Another consultant responded that next year, more planning will be done collaboratively. The Chairman of the Superintendents' Council responded that a "...good deal..." of planning is accomplished "...through the Superintendents' Council."

Analysis of documents. An analysis of the "Northeast Technical Assistance Center Agreement for Services" document revealed that collaborative plans were developed indicating LEA needs, objectives, strategies-tasks-activities, and who (LEA, TAC, other) would provide the services. The "Northeast Technical Assistance Center Documentation of Service Delivery" form included documentation of planning activities engaged in by the consultants.

Synthesis of data. Statistical data indicated that the staff development service provided by the NETAC to the LEAs were collaboratively planned. Interview data indicated that planning was accomplished through the Superintendents' Council and with the central office staff more so than with teachers. However, some planning with teachers had occurred. Document analysis indicated that the "Northeast Technical Assistance Center Agreement for Services" was developed collaboratively and the "Northeast Technical Assistance Center Documentation of Service Delivery" document indicated planning activities had been undertaken.

Question 2. To what degree do consultants of the NETAC work cooperatively with teachers and administrators to share concerns, find solutions, and model strategies that will increase the probability of improved student learning?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that the consultants of the NETAC work cooperatively with teachers and administrators to share concerns, find solutions, and model strategies that would increase the probability of improved student learning to a moderate degree (See Table 4.34). A mean score of 2.96 supported this finding. Subsamples of this population consisting of superintendents, administrators/supervisors, and teachers also supported this finding. However, a subsample consisting of NETAC consultants supported this question to a great degree. The F-test revealed that the differences among the four groups were statistically significant at a 0.01 level. The highest mean, 3.69, was from NETAC consultants and the lowest mean, 2.93 was from

Table 4.34

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.69	3.33	3.08	2.93	2.96

teachers.

The survey population consisting of respondents from the "Grade Levels" category cooperatively responded that consultants of the NETAC work cooperatively with teachers and administrators to share concerns, find solutions, and model strategies that would increase the probability of improved student learning to a moderate degree (See Table 4.35). A mean score of 2.93 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five, grades six through eight, and grades nine through twelve also supported this finding. The F-test revealed that the differences among the three groups were statistically significant at a 0.01 level. The highest mean, 3.04, was from pre-kindergarten through five and the lowest mean, 2.75, was from grades nine through twelve.

Table 4.35

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
3.04	3.02	2.75	2.93

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that consultants of the NETAC work cooperatively with teachers and administrators to share concerns, find

solutions, and model strategies that would increase the probability of improved student learning to a moderate degree (See Table 4.36). A mean score of 2.94 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven to twenty years, and over twenty years supported this finding. The F-test revealed that the differences among the four groups were not statistically significant ($p = 0.46$).

Table 4.36

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.9	2.83	3.0	2.99	2.94

Interview data. In response to the question of consultants of the NETAC working cooperatively with teachers and administrators to share concerns, find solutions, and model strategies that will increase the probability of increased student learning, several consultants stated that they "...spend much time communicating with administrators and teachers." Another consultant responded that planning should be collaborative and administrators should provide support for teachers in the planning process. One consultant responded that teachers were beginning to sense the pressure associated with end-of-grade test and therefore

were more receptive to NETAC services. The Chairman of the Superintendents' Council stated that it was being accomplished at "...a high level." One superintendent responded that the NETAC is "...not tolerant of cultural diversity and school systems that fall into the lower 25 percent and do not understand the barriers... (i.e., low income, problems recruiting and retaining teachers)." Another superintendent stated "[t]hat is the most deficient item." This superintendent continued by stating that the NETAC appeared to be more interested in providing staff development activities which the consultants have been trained in instead of what his system needed.

Synthesis of data. Statistical data indicated that consultants of the NETAC worked cooperatively with teachers and administrators to share concerns, find solutions, and model strategies that would increase the probability of improved student learning. Interview data indicated that time is spent communicating with administrators and teachers for purposes of planning. A reason cited for this acceptance of collaborative planning by teachers was the pressure they felt as the result of end-of-grade testing. However, two out of the six superintendents contradicted this finding. One superintendent stated that planning for staff development services has not taken into consideration problems associated with the school systems in the lower

25%. The specific problems stated were cultural diversity, low income, and teacher recruitment and retention. The other superintendent stated that staff development planning was not as collaborative as it should be and NETAC activities were more oriented to the skills of the consultants than to the needs of this system.

Question 3. To what degree are the NETAC staff development plans for LEAs outcome-based?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that the NETAC staff development plans for LEAs were outcome-based to a moderate degree (See Table 4.37). A mean score of 2.84 supported this finding. Subsamples of this population consisting of NETAC consultants, superintendents, administrators/supervisors, and teachers supported this finding. The F-test revealed that differences among the four groups were statistically significant at a 0.01 level. The highest mean, 3.54, was from NETAC consultants and the lowest mean, 2.73 was from superintendents.

Table 4.37

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.54	3.2	2.73	2.82	2.84

The survey population consisting of respondents from the "Grade Levels" category collectively responded that the NETAC staff development plans for the LEAs were outcome-based to a moderate degree (See Table 4.38). A mean score of 2.82 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five, grades six through eight, and grades nine through twelve supported this finding. The F-test revealed that the differences among the four groups were statistically significant at a 0.04 level. The highest mean, 2.96, was from grades six through eight and the lowest mean, 2.7, was from grades nine through twelve.

Table 4.38

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.81	2.96	2.7	2.82

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that the NETAC staff development plans for LEAs were outcome-based to a moderate degree (See Table 4.39). A mean score of 2.84 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven to twenty years, and over twenty years

supported this finding. The F-test revealed that the differences among the four groups were not statistically significant ($p = 0.59$).

Table 4.39

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.76	2.86	2.79	2.92	2.84

Interview data. In response to the question of NETAC staff development plans being outcome-based, a consultant stated that staff development plans were geared toward specific results. One consultant stated that "...sometimes staff development is done even though consultants don't consider it necessary, but it's done to accommodate them (LEAs)." The Chairman of the Superintendents' Council stated that the "...only measure is feedback from LEAs and test scores." One interim superintendent stated that he had not seen any plans for his system.

Synthesis of data. Statistical data indicated that the NETAC staff development plans for LEA are outcome-based. Interview data indicated that in general, staff development plans are geared toward specific results. However, contradictory interview data also showed that some activities were not considered necessary by the consultants,

but were done to accommodate LEA requests. An interim superintendent stated that he had not seen the NETAC staff development plans for his system.

Question 4. To what degree do LEA personnel have an opportunity to provide input into the staff development services offered by the NETAC?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that LEA personnel had an opportunity to provide input into the staff development services offered by the NETAC to a moderate degree (See Table 4.40). A mean score of 2.65 supported this finding. Subsamples of this population consisting of superintendents, administrators/supervisors, and teachers also supported this finding. However, a subsample consisting of NETAC consultants supported this question to a great degree. The F-test revealed that the differences among the four groups were statistically significant at a 0.00 level. The highest mean, 3.77, was from NETAC consultants and the lowest mean, Table 4.40

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.77	3.33	2.82	2.6	2.65

2.6, was from teachers.

The survey population consisting of respondents from the "Grade Levels" category collectively responded that LEA personnel had an opportunity to provide input into the staff development services offered by the NETAC to a moderate degree (See Table 4.41). A mean of 2.6 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five and grades six through eight also supported this finding. However, a subsample consisting of grades nine through twelve did not support this finding. The F-test revealed that the differences among the three groups were not statistically significant ($p = 0.17$).

Table 4.41

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.66	2.68	2.47	2.6

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that LEA personnel had an opportunity to provide input into the staff development services offered by the NETAC to a moderate degree (See Table 4.42). A mean of 2.62 supported this finding. Subsamples of this population consisting of zero to three years, eleven to twenty years,

and over twenty years also supported this finding. However, a subsample consisting of grades four through ten did not support this finding. The F-test revealed that the differences among the four groups were not statistically significant ($p = 0.07$).

Table 4.42

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.6	2.38	2.65	2.77	2.62

Interview data. In response to the LEA personnel having an opportunity to provide input into the staff development services offered by the NETAC, a consultant responded that county office personnel have more of an opportunity to provide input than teachers. The Chairman replied ...that "there is a lot of input."

Synthesis of data. Statistical data indicated that LEA personnel have an opportunity to provide input into the staff development services offered by the NETAC. Interview data indicated that the Chairman of the Northeast Region Superintendents' Council also supported this finding. However statistical data indicated that the "Grade Level" category subsample of personnel in grades 9-12 and the

"Number of Years in Education" category subsample of personnel with 4-10 years contradicted this finding.

Question 5. To what degree do objectives of the NETAC staff development align with LEA instructional needs?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that objectives of NETAC staff development were aligned with LEAs instructional needs to a moderate degree (See Table 4.43). A mean score of 2.86 supported this finding. Subsamples of this population consisting of superintendents, administrators/supervisors, and teachers also supported this finding. However, a subsample consisting of NETAC consultants supported this question to a great degree. The F-test revealed that the differences among the four groups were statistically different at a 0.01 level. The highest mean, 3.58 was from NETAC consultants and the lowest mean, 2.82, was from teachers.

Table 4.43

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.58	3.17	3.18	2.82	2.86

The survey population consisting of respondents from the "Grade Levels" category collectively responded that objectives of NETAC staff development were aligned with LEA instructional needs to a moderate degree (See Table 4.44). A mean score of 2.82 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five, grades six through eight, and grades nine through twelve also supported this finding. The F-test revealed that differences among the three groups were statistically significant at a 0.00 level. The highest mean, 2.96, was from grades six through eight, and the lowest mean, 2.59, was from grades nine through twelve.

Table 4.44

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.92	2.96	2.59	2.82

The survey population consisting of respondents from the "Number of Years in Education" category responded that objectives of NETAC staff development were aligned with LEA instructional needs to a moderate degree (See Table 4.45). A mean score of 2.83 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven to twenty years, and over twenty years

supported this finding. The F-test revealed that the differences among the four groups were not statistically different ($p = 0.09$).

Table 4.45

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.83	2.65	2.84	2.99	2.83

Interview Data. In response to the question of objectives of NETAC staff development aligning with LEA needs, a consultant responded affirmatively. Another consultant responded that NETAC consultants want "...to go beyond what LEAs perceive as their needs, but LEAs have to be ready (i.e. curriculum)." The Chairman of the Superintendents' Council stated that objectives are "closely aligned" with LEA needs. Several superintendents reported that all LEA needs cannot be met and a lack of funding was cited as a reason.

Synthesis of data. Statistical data indicated that objectives of NETAC staff development aligned with LEA instructional needs. Interview data indicated that staff development objectives were closely aligned, but all the needs could not be met as a result of a lack of funding. Document analysis indicated that the "Northeast Technical

Assistance Center Agreement for Services" and the "Documentation of Services Delivery" reports facilitated planning activities.

Summary of Planning Effectiveness

Cronbach's alpha internal consistency reliability coefficient for the "Planning" variable was 0.87. This statistic shows how well the survey questions fit together with scores above 0.70 demonstrating a high consistency level.

In a comparative analysis of stakeholder group responses to the "Planning" variable, Figure 4.3 revealed that the majority of each sample considered the Northeast Technical Assistance Center's current methods of planning staff development activities to be effective (See Appendix M).

Implementation Effectiveness

Question 1. To what degree will the staff development activities sponsored by the NETAC have a positive effect on student achievement?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that the staff development activities sponsored by the NETAC would have a positive effect on student achievement to a moderate degree (See Table 4.46). A mean score of 2.89 supported this finding.

Subsamples of this population consisting of NETAC consultants, superintendents, administrators/supervisors, and teachers also supported this finding. The F-test revealed that differences among the four groups were statistically significant at a 0.02 level. The highest mean, 3.46, was from NETAC consultants and the lowest mean, 2.85, was from teachers.

Table 4.46

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.46	3.4	3.18	2.85	2.89

The survey population consisting of respondents from the "Grade Levels" category collectively responded that staff development activities sponsored by the NETAC would have a positive effect on student achievement to a moderate degree (See Table 4.47). A mean score of 2.84 supported this finding. Subsamples of this population consisting of

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.93	2.99	2.63	2.84

grades pre-kindergarten through five, grades six through eight, and grades nine through twelve also supported this finding. The F-test revealed that the differences among these three groups were statistically significant at a 0.00 level. The highest mean, 2.99, was from grades six through eight and the lowest mean, 2.63, was from grades nine through twelve.

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that the staff development activities sponsored by the NETAC would have a positive effect on student achievement to a moderate degree (See Table 4.48). A mean of 2.86 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, and eleven to twenty years also supported this finding. The F-test revealed that differences among the four groups were not statistically significant ($p = 0.09$).

Table 4.48

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.75	2.73	2.88	3.02	2.86

Interview data. Two NETAC consultants responded to the question of staff development activities sponsored by NETAC

as having a positive effect on student achievement by stating that there was proof of a positive effect because three systems had been removed from the warning list.

The Chairman of the Superintendents' Council responded that implementation of staff development activities by the NETAC was effective to a "high degree." The Chairman further stated that the NETAC "...can zero in on..." what LEAs want. However, the Chairman concluded by stating that the value of NETAC "...depends on the quality of individual consultants and most of his experiences have been positive."

In response to questions specific to the "implementation" variable, one superintendent stated that they "[d]o a good job with the number of staff..." the NETAC has. An interim superintendent responded to this variable by stating that he had not attended any NETAC-sponsored activities.

Analysis of documents. The "Northeast Technical Assistance Center Agreement for Services" document specified what implementation strategies would be used and who (LEA, NETAC, other) would implement them. The "Northeast Technical Assistance Center Documentation of Service Delivery" document contained information specific to who requested, coordinated, and implemented the service(s). It also contained information specific to dates the services rendered and provided a service summary which included

planning, audience, number of participants, length, etc.

Synthesis of data. Statistical data indicated that the staff development activities of the NETAC had a positive affect on student achievement. Interview data indicated that the three LEAs in the region which were on the state accreditation warning list were removed was proof that the NETAC staff development activities positively affected student achievement. The Chairman of the Superintendents' Council responded that the staff development activities' effect on student achievement was to a "high degree." One superintendent responded that the NETAC does a good job with the number of consultants they have. However, an interim superintendent mentioned never attending any staff development activities.

Question 2. To what degree are the professional needs of the participants met at NETAC-sponsored activities?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that the professional needs of the participants were met at NETAC-sponsored activities to a moderate degree (See Table 4.49). A mean score of 2.89 supported this finding. Subsamples of this population consisting of NETAC consultants, superintendents, administrators/supervisors, and teachers also supported this finding. The F-test revealed that the differences among the

four groups were statistically significant at a 0.03 level. The highest mean, 3.46, was from the NETAC consultants and the lowest mean, 2.86, was from the teachers.

Table 4.49

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.46	3.2	3.18	2.86	2.89

The survey population consisting of respondents from the "Grade Levels" category collectively responded that the professional needs of the participants were met at NETAC-sponsored activities to a moderate degree (See Table 4.50). A mean of 2.86 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five, grades six through eight, and grades nine through twelve also supported this finding. The F-test revealed that the differences among these three groups were statistically significant to a 0.02 level. The highest

Table 4.50

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.94	2.97	2.69	2.86

mean, 2.97 was from grades six through eight and the lowest, 2.69, was from grades nine through twelve.

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that the professional needs of the participants were met at the NETAC-sponsored activities to a moderate degree (See Table 4.51). A mean of 2.87 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, and eleven to twenty years also supported this finding. The F-test revealed that differences among the four groups were statistically significant at a 0.05 level. The highest mean, 3.05, was from over twenty years and the lowest mean, 2.73, was from four to ten years.

Table 4.51

Mean Scores of Years in Education

<u>0-3</u>	<u>4-10</u>	<u>11-20</u>	<u>+20</u>	<u>AVG. MEAN</u>
2.75	2.73	2.87	3.05	2.87

Interview data. In response to the question of professional needs of the participants being met at NETAC-sponsored activities, one consultant stated that these activities were organized and the strategies and materials utilized provided an opportunity for participants who share

similar jobs to network. One consultant stated that requests were taken from LEAs.

Synthesis of data. Statistical data indicated that the professional needs of the participants were effectively met at NETAC-sponsored staff development activities. Interview data indicated that one consultant stated that there was an opportunity for participants with similar jobs to network and another consultant responded that activities requested by the LEAs were an indication of professional need.

Question 3. To what degree are the NETAC consultants of NETAC-sponsored staff development activities well-prepared?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that the consultants of NETAC-sponsored staff development activities were well-prepared to a moderate degree (See Table 4.52). A mean score of 3.16 supported this finding. Subsamples of this population consisting of NETAC consultants, superintendents, Table 4.52

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.62	3.2	3.36	3.13	3.16

administrators/supervisors, and teachers also supported this finding. The F-test revealed that the differences among the four groups were not statistically significant ($p=0.14$).

The survey population consisting of respondents from the "Grade Levels" category collectively responded that the consultants of NETAC-sponsored staff development activities were well-prepared to a moderate degree (See Table 4.53). A mean score of 3.14 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five, grades six through eight, and grades nine through twelve also supported this finding. The F-test revealed that differences among the three groups were statistically significant at a 0.04 level. The highest mean, 3.26, was from grades six through eight and the lowest mean, 3.02, was from grades nine through twelve.

Table 4.53

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
3.15	3.26	3.02	3.14

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that the consultants of NETAC-sponsored staff development activities were well-prepared to a moderate

degree (See Table 4.54). A mean of 3.15 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven to twenty years, and over twenty years also supported this finding. The F-test revealed that differences among the four groups were not statistically significant ($p = 0.40$).

Table 4.54

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
3.24	3.03	3.16	3.19	3.15

Interview data. In response to the question of consultants of NETAC-sponsored staff development activities being well-prepared, one consultant stated that because of tight schedules, staff cannot plan collaboratively or collegially. Another consultant responded that in order for teacher-on-loan consultants to be well-prepared, the program needs to operate on a two-year cycle as opposed to the present, one-year cycle. Another consultant responded that much personal time was used for preparing staff development activities.

Synthesis of data. Statistical data indicated that the consultants of NETAC-sponsored staff development activities were well-prepared. Interview data indicated that tight

schedules do not allow for collaborative or collegial planning. In addition, much personal time was devoted to planning of staff development activities. Interview data also indicated that in order for the teacher-on-loan consultants to be well-prepared, the program needs to operate on a two year cycle. The Chairman of the Superintendents' Council indicated that the value of the NETAC was dependent upon the quality of individual consultants.

Question 4. To what degree do the NETAC consultants display an expertise in the subject matter they present?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that NETAC consultants display an expertise in the subject matter they presented to a moderate degree (See Table 4.55). A mean score of 3.26 supported this finding. Subsamples of this population consisting of NETAC consultants, superintendents, administrators/supervisors, and teachers also supported this

Table 4.55

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.77	3.4	3.36	3.24	3.26

finding. The F-test revealed that differences among these four groups were not statistically significant ($p = 0.10$).

The survey population consisting of respondents from the "Grade Levels" category collectively responded that NETAC consultants displayed an expertise in the subject matter they present to a moderate degree (See Table 4.56). A mean score of 3.24 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five, grades six through eight, and grades nine through twelve also supported this finding. The F-test revealed that differences among these three groups were statistically significant at a 0.05 level. The highest mean, 3.37, was from grades six through eight and the lowest mean, 3.1, was from grades nine through twelve.

Table 4.56

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
3.22	3.37	3.14	3.24

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that NETAC consultants displayed an expertise in the subject matter they present to a moderate degree (See Table 4.57). A mean score of 3.26 supported this finding.

Subsamples of this population consisting of zero to three years, four to ten year, eleven to twenty years, and over twenty years also supported this finding. The F-test revealed that differences among the four groups were not statistically significant ($p = 0.67$).

Table 4.57

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
3.25	3.18	3.31	3.24	3.26

Interview data. In response to the question of consultants displaying an expertise in the subject matter they present, one consultant stated that consultants have had training on implementing various staff development activities, and it will get better. A final response to this question by a consultant revealed that there was a desire for more staff development for consultants that was proactive rather than reactive, keeping them up to date on the latest trends. This consultant also expressed his desire to use more electronic media and then to see the development of an on going, overall plan for staff development for all technical assistance consultants, but realized financial constraints. There was also a desire by

this consultant to see more personnel in specific areas rather than just adding "general" personnel.

Synthesis of data. Statistical data indicated that the consultants displayed an expertise in the subject matter they presented. Interview data indicated the high degree of training the consultants had received specific to staff development for LEAs. However, the need for more consultants in specific areas, proactive staff development for consultants, and an overall plan for consultant staff development was cited.

Question 5. To what degree are the cognitive approaches to staff development used by the NETAC consultants conducive to adult learning?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" collectively responded that cognitive approaches to staff development used by NETAC consultants were conducive to adult learning to a moderate degree (See Table 4.58). A mean score of 3.08 supported this finding. Subsamples of Table 4.58

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.54	3.2	3.18	3.06	3.08

this population consisting of superintendents, administrators/supervisors, and teachers also supported this finding. The F-test revealed that differences among the four groups were not statistically significant ($p = 0.20$).

The survey population consisting of respondents from the "Grade Levels" category collectively responded that cognitive approaches to staff development conducted by the NETAC consultants were conducive to adult learning to a moderate degree (See Table 4.59). A mean score of 3.08 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five, grades six through eight, and grades nine through twelve also supported this finding. The F-test revealed that differences among the three groups were not statistically significant ($p = 0.24$).

Table 4.59

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
3.1	3.15	2.98	3.08

The survey population consisting of respondents from the "Number of Years in Education" category responded that cognitive approaches to staff development used by the NETAC consultants were conducive to adult learning to a moderate

degree (See Table 4.60). A mean score of 3.08 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven to twenty years and over twenty years also supported this finding. The F-test revealed that differences among the four groups were not statistically significant ($p = 0.58$).

Table 4.60

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
3.03	3.03	3.07	3.18	3.08

Interview Data. In response to the cognitive approaches to staff development used by NETAC consultants being conducive to adult learning, one consultant responded that staff need more training in adult learning. Another consultant stated that they try to employ androgogy (i.e. instructional strategies for adults), but often resort to pedagogy. Finally, a consultant observed that implementing 3PM to 5PM workshops was highly ineffective despite utilizing cognitive approaches appropriate for adults.

Synthesis of data. Statistical data indicated that the cognitive approaches to staff development used by the NETAC consultants were conducive to adult learning. Interview data indicated a desire by the consultants for more training

in adult learning and the concern felt by the consultants over workshops conducted between 3PM and 5PM. One consultant considered the 3PM to 5PM workshop ineffective despite utilizing cognitive approach appropriate for adults. Document analysis indicated that the "Northeast Technical Assistance Center Agreement for Services" document specified implementation strategies and cited the responsible agencies for implementation. The "Northeast Technical Assistance Center Documentation for Service Delivery" document specified information as to who requested, coordinated, and implemented activities. It also provided a services summary which included planning, audience, number of participants, and length of activities. The two reports facilitated implementation of staff development activities.

Summary of Implementation Effectiveness

Cronbach's alpha internal consistency reliability coefficient for the "Implementation" variable was .92. This statistic shows how well the survey questions fit together with scores above 0.70 demonstrating a high consistency level.

In a comparative analysis of stakeholder group responses to the "Implementation" variable, Figure 4.4 revealed that the majority of each sample considered the implementation of staff development activities by the

consultants of the Northeast Technical Assistance Center to be effective (See Appendix N).

Evaluation Effectiveness

Question 1. To what degree are the current methods of evaluating staff development activities and programs sponsored by the NETAC effective?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that current methods of evaluating staff development activities and programs sponsored by the NETAC were effective to a moderate degree (See Table 4.61). A mean score of 2.69 supported this finding. Subsamples of this population consisting of NETAC consultants, superintendents, administrators/supervisors, and teachers also supported this finding. The F-test revealed that differences among the four groups were not statistically significant ($p = 0.67$).

Table 4.61

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
2.69	2.67	3.0	2.69	2.69

The survey population consisting of respondents from the "Grade Levels" category collectively responded that

current methods of evaluating staff development activities and programs sponsored by the NETAC were effective to a moderate degree (See Table 4.62). A mean score of 2.66 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five, grades six through eight, and grades nine through twelve also supported this finding. The F-test revealed that differences among the three groups were statistically significant at a 0.03 level. The highest mean, 2.75, was from grades pre-kindergarten through five and the lowest mean, 2.51, was from grades nine through twelve.

Table 4.62

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.75	2.73	2.51	2.66

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that the current methods of evaluating staff development activities and programs sponsored by the NETAC were effective to a moderate degree (See Table 4.63). A mean score of 2.7 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven to twenty years, and over twenty years

also supported this finding. The F-test revealed that the differences among the four groups were not statistically significant ($p = 0.26$).

Table 4.63

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.66	2.62	2.67	2.83	2.7

Interview data. A NETAC consultant responding to the question of current methods of evaluating staff development activities and programs sponsored by the NETAC's being effective stated that it was based on test data, while another consultant responded that "...using test scores for evaluation is inadequate and does not reflect actual input by the NETAC." The Chairman of the Superintendents' Council responded that the current methods of evaluating staff development activities and programs sponsored by the NETAC were fairly effective. One superintendent responded that current methods of evaluating staff development activities and programs sponsored by the NETAC that "[t]hey do [and] it they don't do it, it is hit or miss."

Synthesis of data. Statistical data indicated that the current methods were considered effective when the specific question was asked in the survey. Interview data indicated

that one consultant considered the use of test data as an evaluation while another consultant stated that test data does not reflect actual NETAC input. However, one superintendent stated the staff development evaluation by NETAC consultants was not consistent. The only official evaluation document consisted of the Performance Management System form which was used to evaluate the individual performance of the NETAC staff.

Question 2. To what degree are staff development evaluations used for future planning by the NETAC?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that staff development evaluations were used for future planning by the NETAC to a moderate degree (See Table 4.64). A mean score of 2.67 supported this finding. Subsamples of this population consisting of NETAC consultants, administrators/supervisors, and teachers also supported this finding. However, a subsample consisting of superintendents did not

Table 4.64

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.42	2.33	2.9	2.65	2.67

support this finding. The F-test revealed that differences among the four groups were statistically significant at a 0.02 level. The highest mean, 3.42, was from NETAC consultants and the lowest mean, 2.33, was from superintendents.

The survey population consisting of respondents from the "Grade Levels" category collectively responded that staff development evaluations were used for future planning by the NETAC to a moderate degree (Table 4.65). A mean score of 2.65 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through five, grades six through eight, and grades nine through twelve also supported this finding. The F-test revealed that differences among the three groups were not statistically significant ($p = 0.15$).

Table 4.65

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.74	2.69	2.52	2.65

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that staff development evaluations were used for future planning by the NETAC to a moderate degree (See Table

4.66). A mean score of 2.66 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven to twenty years, and over twenty years also supported this finding. The F-test revealed that differences among the four groups were not statistically significant ($p = 0.67$).

Table 4.66

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.67	2.59	2.63	2.75	2.66

Synthesis of data. Statistical data indicated that staff development evaluations were used for future planning by the LEAs. However, in the category of "Primary Area of Responsibility", the subsample of superintendents did not support this finding. There was no interview data available to support or contradict this finding.

Question 3. To what degree do the NETAC consultant staff development presenters evaluate their activities?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that NETAC consultant staff development presenters evaluated their activities to a moderate degree (See Table 4.67). A mean score of 2.85

supported this finding. A subsample of this population consisting of superintendents and teachers also supported this finding. Subsamples of this population consisting of NETAC consultants, superintendents, administrators/supervisors, and teachers also supported this finding. The F-test revealed that differences among the four groups were not statistically significant ($p = 0.06$).

Table 4.67

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.38	2.5	3.0	2.83	2.85

The survey population consisting of respondents from the "Grade Levels" category collectively responded that NETAC consultant staff development presenters evaluate their activities to a moderate degree (See Table 4.68). A mean score of 2.82 supported this finding. Subsamples of this population consisting of grades pre-kindergarten through

Table 4.68

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.89	2.97	2.62	2.82

five, grades six through eight, and grades nine through twelve also supported this finding. The F-test revealed that differences among the three groups were statistically significant at a 0.00 level. The highest mean, 2.97, was from six through eight and the lowest mean, 2.62, was from grades nine through twelve.

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that NETAC consultant staff development presenters evaluated their activities to a moderate degree (See Table 4.69). A mean score of 2.82 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven to twenty years, and over twenty years also supported this finding. The F-test revealed that differences among the four groups were not statistically significant ($p = 0.11$).

Table 4.69

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.62	2.74	2.89	2.91	2.82

Interview data. In response to the question of consultant staff development presenters evaluating their activities, one consultant stated that there was

"...variation among staff." The Chairman of the Superintendents' Council stated that the consultants "...generally pass out sheets and have to follow-up..." on the results.

Analysis of documents. There was no evidence of standard evaluation documents consistently maintained and kept in a central file. The only official document specific to evaluation consisted of the Performance Management System which was utilized to evaluate technical assistant personnel performance. The central file was void of any staff development activity evaluations.

Synthesis of data. Statistical data indicated that the consultant staff development presenters evaluated their activities. Interview data indicated that there was variation among the staff. A search for documents specific to staff development activity evaluations in the central file indicated a void in this area.

Question 4. To what degree are needs assessment conducted prior to NETAC staff development activities?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that needs assessments were conducted prior to NETAC staff development activities to a moderate degree (See Table 4.70). A mean score of 2.7 supported this finding. Subsamples of this population

consisting of superintendents, administrators/supervisors, and teachers also supported this finding. However, a subsample consisting of NETAC consultants supported this question to a great degree. The F-test revealed that differences among the four groups were statistically significant at a 0.00 level. The highest mean, 3.69, was from NETAC consultants and the lowest mean, 2.66, was from teachers.

Table 4.70

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.69	2.83	2.9	2.66	2.7

The survey population consisting of respondents from the "Grade Levels" category collectively responded that needs assessments were conducted prior to NETAC staff development activities to a moderate degree (See Table 4.71). A mean score of 2.66 supported this finding.

Table 4.71

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.67	2.71	2.59	2.66

Subsamples of this population consisting of grades pre-kindergarten through five, grades six through eight, and grades nine through twelve also supported this finding. The F-test revealed that differences among the three groups were not statistically significant ($p = 0.55$).

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that needs assessments were conducted prior to NETAC-sponsored staff development activities to a moderate degree (See Table 4.72). A mean score of 2.68 supported this finding. Subsamples of this population consisting of zero to three years, four to ten years, eleven to twenty years, and over twenty years also supported this finding. However, a subsample consisting of zero to three years supported this question to a small degree. The F-test revealed that differences among the four groups were statistically significant at a 0.02 level. The highest mean, 2.88, was from over twenty years and the lowest mean, Table 4.72

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.45	2.64	2.65	2.88	2.68

2.45, was from zero to three years.

Interview data. In response to needs assessments being conducted prior to staff development activities, two consultants generally responded that assessments were conducted formally and informally through observations and talking with LEA personnel. Two other consultants responded that needs assessments were conducted utilizing analyzed test data as performance indicators. One of these consultants stated that they "...need to find out what people are concerned about." The Chairman of the Superintendents' Council responded that it depended on "...how well you define what you want."

Synthesis of data. Statistical data generally indicated that needs assessments were conducted prior to staff development activities. However, the "Number of Years in Education" category subsample consisting of 0-3 years contradicted this finding. Interview data indicated that various needs assessments were conducted and included formal methods such as analyzing test data and performance indicators, and informal methods such as observations and discussions with LEA personnel.

Question 5. To what degree do LEAs conduct evaluations of the staff development activities presented by the NETAC?

Survey data. The survey population consisting of respondents from the "Primary Area of Responsibility" category collectively responded that LEAs conducted

evaluations of the staff development activities presented by the NETAC to a moderate degree (See Table 4.73). A mean score of 2.52 supported this finding. Subsamples of this population consisting of NETAC consultants, superintendents, administrators/supervisors, and teachers also supported this finding. The F-test revealed that differences among the four groups were not statistically significant ($p = 0.27$).

Table 4.73

Mean Scores of Primary Area of Responsibility

NETAC	SUPT.	ADMIN./SUP.	TEACHERS	AVG. MEAN
3.0	2.5	2.8	2.5	2.52

The survey population consisting of respondents from the "Grade Levels" category collectively responded that LEAs conducted evaluations of the staff development activities presented by the NETAC to a small degree (See Table 4.74). A mean score of 2.49 supported this finding. Subsamples of this population consisting of grades pre-kindergarten

Table 4.74

Mean Scores of Grade Levels

PRE-K TO 5	6 TO 8	9 TO 12	AVG. MEAN
2.45	2.58	2.42	2.49

through five and grades nine through twelve also supported this finding. However, a subsample consisting of grades six through eight supported this question to a moderate degree. The F-test revealed that differences among the four groups were not statistically significant ($p = 0.36$).

The survey population consisting of respondents from the "Number of Years in Education" category collectively responded that LEAs conducted evaluations of the staff development activities presented by the NETAC to a moderate degree (See Table 4.75). A mean score of 2.51 supported this finding. Subsamples of this population consisting of eleven to twenty years and over twenty years also supported this finding. However, subsamples consisting of zero to three years and four to ten years supported the question to a small degree. The F-test revealed that differences among the four groups were statistically significant at a 0.03 level. The highest mean, 2.68, was from over twenty years

Table 4.75

Mean Scores of Years in Education

0-3	4-10	11-20	+20	AVG. MEAN
2.24	2.42	2.55	2.68	2.51

and the lowest mean, 2.24, was from zero to three years.

Interview Data. In response to the question of LEAs conducting evaluations of the staff development activities presented by the NETAC, one consultant responded that there were no formal LEA evaluations and the "...NETAC should not be evaluated by the school systems." This consultant stated that a degree of trust was built into the process. Other consultants responded that the LEAs formally and informally evaluated the NETAC through talking. A superintendent responded that "no one had ever invited his system to do so."

Synthesis of data. Statistical data generally indicated that LEAs conducted evaluations of staff development activities presented by the NETAC. However, the "Grade Levels" category did not support this finding with the exception of grades 6-8. The "Number of Years in Education" category subsamples 0-3 years and 4-10 years also did not support this finding. Interview data indicated that there are not any formal methods used by the LEAs to evaluate staff development activities conducted by the NETAC. One superintendent stated that until now, he had never been given the opportunity to do so. Analysis of documents indicated that there was no clear evidence of standardized evaluation documents being maintained in a central file.

Summary of Evaluation Effectiveness

Cronbach's alpha internal consistency reliability coefficient for the "Evaluation" variable was 0.88. This statistic shows how well the survey questions fit together with scores above 0.70 demonstrating a high consistency level.

In a comparative analysis of stakeholder group responses to the "Evaluation" variable, Figure 4.5 revealed that the majority of each sample considered the staff development activities presented by the consultants of the Northeast Technical Assistance Center to be evaluated effectively (See Appendix O).

Discussion

According to the data collected and analyzed in this research, the current organization of the Northeast Technical Assistance Center was effective for the delivery of staff development. However, of all major stakeholder groups, teachers understood the mission the least. In response to the survey question specific to mission, the F-test revealed significant differences within the "Primary Area of Responsibility" category. In response to the survey question specific to student achievement, the F-test revealed significant differences within the "Primary Area of Responsibility", "Grade Levels", and the "Years in Education" categories. In response to the survey question

specific to staffing, the F-test revealed significant differences within the "Primary Area of Responsibility", "Grade Levels", and "Years in Education" categories. In response to the survey question specific to state accreditation, the F-test revealed significant differences within the "Primary Area of Responsibility" and "Grade Levels" categories. In response to the survey question specific to the preference of NETAC services, the F-test revealed significant differences within the "Grade Levels" category. In interviews with State Superintendent Bob Etheridge and Technical Assistance Program Director Bill Church, they stated that the transition from Regional Centers to a technical assistance approach was necessitated by school improvement and reform efforts. State legislation relative to the designation of low-performing/warning status LEAs, and the accountability prompted a focus on student achievement. Regional centers were transformed into technical assistance centers and staffs were trained and organized with student achievement as the primary focus. When the technical assistance concept was implemented, the LEAs demonstrating the greatest instructional and academic needs became targets for instructional specialists providing technical assistance.

The initial staff allotments in the 1990-1991 school year proved to be inadequate and in March 1993, the

Department of Public Instruction announced that a group of Raleigh-based department staff, consisting of 70 to 80 people would be decentralized and sent to six technical assistance centers which were strategically placed throughout the state. Additional staff support had been provided by a "Teacher-on-Loan" program that operated on a one-year cycle. The loan program consisted of selecting a predetermined number of teachers in each region, based on the needs of the region, and provided them with training to serve as a consultant at a technical assistance center. Funding for the center varies, but each center has a base budget which is at a level consistent with the number of warning/low performing LEAs in its region. The two sources of funding included state allocations and federal Chapter II money. The budgetary differential between the highest funded technical assistance center and the lowest is approximately \$35,000.

The technical assistance program's survival, as it is presently organized, will be based upon two factors. The first factor, according to the State Superintendent, will depend upon the ability of the centers to assist LEAs with improved outcomes for students. The second factor, according to the Director of the Technical Assistance Program, will depend upon the ability of the centers to adapt to a customer-driven model that provides services that

are consistent with the needs of the LEAs. It is imperative then that an effort be made to assist teachers with understanding the mission of the technical assistance program. Familiarization with the consultants and staff development services of the Northeast Technical Assistance Center is a necessity for the stakeholders if improvement is to occur (Heron & Harris, 1987, and Knoff, 1988).

In the United States, the current trends and models represented various methods of organizing for staff development. Examples included integrated services, such as in Mississippi and Vermont. Some states have established guidelines and policies to formalize the staff development process, such as in Kansas and Oregon. Other states have established models for the delivery of staff development, such as Kentucky, Maryland, New York, Texas, and Pennsylvania.

Data collected and analyzed in this research, specific to communication indicated that the current methods were generally effective. However, personnel with 0 to 10 years experience and in grades 9 through 12 contradicted this indication. In response to the survey question specific to an open, two-way channel of communication, the F-test revealed significant differences within the "Grade Levels" and "Years in Education" categories. In response to the survey question specific to an awareness of services, the F-

test revealed significant differences within the "Primary Area of Responsibility" and "Years in Education" categories. In response to the survey question specific to contacting the NETAC, the F-test revealed significant differences within the "Primary Area of Responsibility" and "Years in Education" categories. In response to the survey question specific to LEA personnel being made aware of staff development opportunities, the F-test revealed significant differences within the "Primary Area of Responsibility" and "Grade Levels" categories. In response to the survey question specific the current methods of communication, the F-test revealed significant differences within the "Grade Levels" category. The State Superintendent said that the communication aspect of the technical assistance program was a developmental process and there were specific personnel appointments made to enhance the communication process. The technical assistance program Director indicated that two-way communication delivery systems had been established to facilitate the process. The established communication process made use of the Department of Public Instruction cabinet and Superintendent Advisory Councils for dissemination and receipt of information. The Director does admit that there is still room for improvement in this area. Communication has also been facilitated by brochures that were published by the Department of Public Instruction and

the Northeast Technical Assistance Center outlining the mission, operation, and services of the centers.

This research indicated a gap in communication that existed somewhere between central offices and local schools. A review of the literature indicated the importance of administrative initiatives and communication in the staff development process. Open communication facilitates taking into consideration the needs and competing interests of the stakeholders for purposes of planning, implementing, and evaluating the staff development process (Hanson, 1991). Administrative support requires an environment conducive to collaboration which in turn, fosters trust, communication and opportunities for professional growth and organizational renewal (Schiffer, 1980).

Every aspect of school life is affected by communication and an administrator's ability to communicate effectively is directly related to his/her success (Hoy & Miskel, 1987). Effective communication also positively impacts the productivity and attitudes of both faculty and students (Lunenburg & Ornstein, 1991). In the consultation process, communication is critical for the collaborative determination of needs and expectations (Heron & Harris, 1987). The model of technical assistance that was identified in Maryland was the focus of a 1987 study involving data collection from state and local education agencies and

concluded with a recommendation that emphasized the necessity of communication in the delivery of staff development (Roberts, 1987).

This study indicated that the current methods of planning staff development by the consultants of the Northeast Technical Assistance Center are generally effective. However, certain stakeholders indicated that the planning process was not completely collaborative and as a result some stakeholder needs were not addressed. In response to the survey question specific to collaborative planning, the F-test revealed significant differences within the "Primary Area of Responsibility" and "Grade Levels" categories. In response to the survey question specific to working cooperatively with teachers and administrators, the F-test revealed significant differences within the "Primary Area of Responsibility" and "Grade Levels" categories. In response to the survey question specific to plans being outcome-based, the F-test revealed significant differences within the "Primary Area of Responsibility" and "Grade Levels" categories. In response to the survey question specific to providing input into staff development services, the F-test revealed significant differences within the "Primary Area of Responsibility" category. In response to the survey question specific to staff development aligning with LEA instructional needs, the F-test revealed

significant differences within the "Primary Area of Responsibility" and "Grade Levels" categories. The importance of planning was recognized early in the development of the State Technical Assistance Program. The State Superintendent and the Technical Assistance Program Director realized the value of planning for the purposes of focusing on student achievement and delivering technical assistance to the LEAs. Collaborative planning was emphasized so as to make sure staff development services were consistent with LEA needs. Staff development planning activities should focus on the political, personal, and organizational needs of LEAs (Schiffer, 1980). Successful models of staff development included needs assessments and or the use of evaluations in the planning process (eg. Medved, 1986; Daresh, 1987; and McLaughlin & Pfeiffer, 1988). The literature also indicated that administrative initiatives in staff development would require a consideration of the needs and interests of personnel in the planning of staff development activities (Hanson, 1991). Collaborative staff development planning allows a principal to examine the culture of a school and utilizes professional reflective evaluations to plan staff development that will reflect the true needs of staff (Leithwood, 1990). Planning, in the developmental consultation approach, is proactive and specifies intended outcomes for students. This long range

approach to planning has implications for technical assistance that are consistent with the focus on student achievement. Specific references to planning are clearly evident in Oregon's Department of Public Education's staff development policy guidelines (1988), Texas' model of technical assistance (1988), Kansas' In-Service Education Opportunities Act (1988), Maryland's School Improvement Through Instructional Processes-SITIP (1987), and Pittsburgh's Research-Based Instructional Supervisory Model (1982).

The effectiveness of the consultants of the Northeast Technical Assistance Center in implementing staff development was consistently rated high according to the stakeholders identified in this study. In response to the survey question specific to activities positively affecting student achievement, the F-test revealed significant differences within the "Primary Area of Responsibility" and "Grade Levels". In response to the survey question specific to professional needs being met during staff development, the F-test revealed significant differences within the "Primary Area of Responsibility", "Grade Levels", and "Years in Education" categories. In response to the survey question specific to NETAC consultants being well-prepared, the F-test revealed significant differences within the "Grade Levels" category. In response to the survey question

specific to consultants displaying an expertise in subject matter, the F-test revealed significant differences within the "Grade Levels" category. Resource constraints did not significantly diminish the effectiveness of the implementation of staff development for the purpose of positively impacting student achievement. When the Technical Assistance Program began, there were challenges that existed on a large scale that consultants now routinely face in the implementation of staff development activities. According to the State Superintendent, the challenges existed in the form of disparity of needs among LEAs and human and financial resource constraints. The Director of the Technical Assistance Program cited state legislative actions that determined that the major focus for staff development implementation would occur in low-performance/warning status LEAs.

The implementation of staff development included taking into consideration the needs of the adult learner and associated teaching "methodology" (see e.g. Schiffer, 1980; Howey & Vaughan, 1983). The needs included the consideration of the unique characteristics of the adult learner. A review of the literature indicated lists of characteristics of adults that should be considered in the adult education process and generally included factors such as age, interests, life experiences, and purposes for

continuing their education (see e.g. Smith, 1982; Brookfield, 1986; Knox, 1986; Rogers, 1986; and van der Kamp, 1992). The methodology involved in the teaching of adults should include a constructivist approach (see e.g. Schubert, 1986; Bhola, 1989; Mezirow, 1991; Reid, Hresko, & Swanson, 1991). The constructivist orientation relies on and integrates the experiences of the learner in the learning process. The integration of critical thinking skills into the staff development environment facilitated an exploration of alternative ways of thinking and acting (Brookfield, 1987).

Administrators have a critical role in the implementation of staff development. This research indicated that staff development services were implemented that were not consistent with the needs of LEAs. Administrators should take the initiative to assure that the needs and competing interests of the stakeholders are considered when implementing staff development programs (Hanson, 1991). Administrators should assure that the organization recognizes the value of their personnel by continually providing professional staff development training (Harris & Dawes, 1988).

Related staff development functions requiring the support of administrators included follow-up practice,

coaching, and peer support in the event of problems when new skills are implemented (Rodriquez & Johnstone, 1986).

During the consultation process, consultants are encouraged to work personally with teachers, provide observations, modeling, staff development services, and evaluations (Heron & Harris, 1987).

The importance of implementation is also highlighted in the Vermont Consulting Teacher Program (1982), Oregon's Department of Public Education staff development policy guidelines (1988), Texas' model of technical assistance (1988), Kansas' In-Service Education Opportunities Act (1987), Maryland's SITIP program (1987), and Pittsburgh's PRISM program (1982).

The current methods of evaluating staff development activities sponsored by the Northeast Technical Assistance Center were generally considered to be effective. However, personnel with 0 to 3 years experience in the education profession indicated that needs assessments were not conducted prior to staff development activities. Personnel in grades pre-kindergarten through twelve admitted that LEAs did not evaluate staff development activities presented by the Northeast Technical Assistance Center. In response to the survey question specific to the current methods of evaluating staff development activities, the F-test revealed significant differences within the "Grade Levels" category.

In response to the survey question specific to the use of staff development evaluations for future planning by LEAs, the F-test revealed significant differences within "Primary Area of Responsibility" category. In response to the survey question specific to consultants evaluating their staff development activities, the F-test revealed significant differences within the "Grade Levels" category. In response to the survey question specific to needs assessments being conducted, the F-test revealed significant differences within the "Primary Area of Responsibility" and "Years in Education" categories. In response to the survey question specific to LEAs conducting evaluations of NETAC staff development activities, the F-test revealed significant differences within the "Years in Education" category.

The State Superintendent indicated that individual consultant and unit evaluation plans existed. He stated that these evaluations were directly related to the consultants' area of responsibility. The Technical Assistance Program Director stated that individual evaluations were used, but there was still room for improvement. The Director also indicated the need for total program evaluation. The Chairman of the Legislative Education Oversight Committee expressed his desire for more accountability, not just with the technical assistance program, but also with all educational programs which could

be achieved through an evaluation process. In the implementation of staff development activities, evaluations have been cited as a valuable tool for obtaining feedback from stakeholders (Schiffer, 1980). Administrative initiatives in staff development included support for evaluation to assure that the needs and competing interests of the stakeholders had been addressed (Schiffer, 1980; Hanson, 1991). Administrators should have the responsibility of sharing information concerning evaluative efforts aimed at improving the school (Rodriguez & Johnstone, 1986). In collaboration with LEA personnel, consultants should evaluate staff development activities to determine the degree of change caused by the intervention, the specific variables associated with the change, and the overall significance of the intervention (Heron & Harris, 1987).

Trends and models of staff development in the literature highlighted the need for evaluation. They included Vermont's Consulting Teacher Program (1982) which concluded with an evaluation; Oregon's Staff Development Policy Guidelines for School Districts (1988) requiring evaluations; Texas' technical assistance approach which was cited as having the evaluation variable as part of its staff development process (Kramer & Betz, 1987); Maryland's SITIP program where technical assistants were required to evaluate

their activities (Roberts, 1987); Pittsburgh's PRISM model where a program evaluation was developed as part of the needs assessment process (Marshall, 1982).

The literature and background supported the five variables of this study which were indicated as being relative to the staff development activities of the Northeast Technical Assistance Center.

CHAPTER FIVE

SUMMARY AND CONCLUSION

This chapter is a summary of the evaluation of the staff development activities of the Northeast Technical Assistance Center. It contains a brief summary of the study, conclusions drawn from the results of the study, a discussion of the results of the study, and implications that become apparent as a result of the study.

Summary

The purpose of this study was to determine if the staff development activities of the Northeast Technical Assistance Center in Williamston, North Carolina, were effective according to the stakeholders identified in this study. The stakeholders included Northeast Technical Assistance Center consultants, superintendents, administrators/supervisors, and teachers. There were five variables pertinent to effective staff development as identified by literature review and through direct observation. The five study variables were: 1) Organization, 2) Communication, 3) Planning, 4) Implementation, and 5) Evaluation. Review of the literature, data gathering from stakeholders, and examination of documents provided information specific to the five variables for analysis of the effectiveness of the Northeast Technical Assistance Center's staff development activities.

A review of the related research and literature specific to the study variables was conducted in seven areas. The areas included the organizational history and transition to a technical assistance approach in North Carolina, staff development, adult learning, administrative initiatives in staff development, the use of consultants, the consultation process, and selected examples of trends and models of staff development in the United States.

The validity of the information gathered in this study was facilitated by triangulation (i.e., multiple data sources and multiple methods). The evaluation process consisted of data collected from Northeast Technical Assistance Center consultants, LEA central office personnel, principals, and teachers through surveys and interviews. The researcher also conducted interviews with selected former members of the North Carolina Department of Public Instruction, selected members of the Department of Public Instruction who were employed at the time of this study, the Chairman of the Legislative Education Oversight Committee, and the Chairman of the Northeast Region Superintendents' Council. The researcher also conducted a content analysis of documents.

The current organization of the Northeast Technical Assistance Center is effective for the delivery of staff development according to the identified stakeholders. The

mission appears to be less understood by teachers than NETAC consultants, superintendents, and administrators/supervisors. There is a possible link between the intense priority focus on the six LEAs on the state accreditation warning list for the 1991-1992 school year and the removal of three of these LEAs for the 1992-1993 school year. However, most consultants and some superintendents perceive that staffing inadequacies exist.

The organization of the Northeast Technical Assistance Center is critical to effective and efficient delivery of staff development services. The technical assistance concept was supported by this research and models and trends found in the literature.

The present methods of communication between the Northeast Technical Assistance Center and the local education agencies are effective. However, a communication impediment does exist between the central offices and the schools which was frequently expressed in the interviews. Subsamples of school personnel consisting years and 4-10 years in education and grade levels pre K-5 indicate a lack of awareness of the process for contacting the NETAC for staff development and consultant services. The subsample of school personnel consisting of grades 9-12 indicated that the current methods of communication were ineffective.

An effective communication process is essential for the exchange of information between the Northeast Technical Assistance Center and local education agencies. The needs and competing interests of all the Northeast Technical Assistance Center's stakeholders must be expressed in an environment that is conducive to an open, two-way channel of communication.

The current methods of planning staff development activities by the consultants of the Northeast Technical Assistance Center are effective. However, there was an indication that some needs specific to LEAs were not considered in the planning process and an interim superintendent cited his lack of knowledge of staff development plans for his system. In addition, there was an indication that the subsamples of school personnel grades 9-12 and 4-10 years in education, perceived that they did not have an opportunity to provide input into staff development services offered by the NETAC.

The planning of staff development services must be a collaborative effort between the consultants of the Northeast Technical Assistance Center and personnel on all levels of the local education agencies. Planning is essential to the staff development process as evidenced by its consistent appearance in staff development literature.

As implemented by the consultants of the Northeast Technical Assistance Center, the staff development activities are effective for positively impacting student achievement. The implementation variable received the highest and most consistent ratings from the stakeholders. The constraints of time, resources, and finances did not diminish the effectiveness of implementing staff development programs for the purpose of positively impacting student achievement, according to the stakeholders.

The implementation of staff development services is fundamental to the operation of the technical assistance concept. The literature is replete with various implementation methods, but successful staff development is directly related to administrative initiatives and consideration of participant needs.

The current methods of evaluating staff development activities sponsored by the Northeast Technical Assistance Center were generally considered effective by the stakeholders. However, there was an indication that the evaluation process was not formalized or consistent among consultants. The majority of superintendents indicated that staff development evaluations were not used for future planning. The subsample of school personnel 0-3 years in education perceived that needs assessments were not conducted prior to staff development activities. The "Grade

Levels" category and the subsamples of school personnel with 0-3 years and 4-10 years in education, perceived that the LEAs did not conduct evaluations of staff development activities sponsored by the NETAC. A superintendent indicated that his system had never been given an opportunity to evaluate NETAC staff development activities.

The evaluation of staff development activities by the stakeholders of the Northeast Technical Assistance Center is both desired and considered necessary. Literature supported the use of evaluations for the improvement of staff development delivery and as a needs assessment tool for future planning.

Conclusions

Given the evaluation of the staff development activities of the Northeast Technical Assistance Center and a review of the literature, the researcher has reached the following conclusions:

1. The staff development activities as conducted by the consultants by the Northeast Technical Assistance Center are effective according to the stakeholders identified in this study.
2. The stakeholders of the Northeast Technical Assistance Center have an uneven understanding of the mission of the center. This limited understanding affects the efficacy of the center with individual teachers.

2. The communication system between the Northeast Technical Assistance Center and local education agencies is not completely coherent and reciprocal.
3. The teachers and administrators/supervisors do not have appropriate involvement in the staff development planning process.
4. The talent and enthusiasm of the Northeast Technical Assistance Center consultants has allowed them to overcome resource and structural constraints in the effective delivery of services.
5. All of the stakeholders have been reluctant to address the issue of evaluation and to integrate evaluation into the administrative and planning process.
6. The Northeast Technical Assistance Center model can be an effective conceptualization for the implementation of planned change across local education agencies.

Recommendations

Organization

For purposes of delivering staff development to the local education agencies in the northeast region who were placed on the state accreditation warning list, the current organization of the Northeast Technical Assistance Center should be maintained.

-Consideration should be given toward increasing the number of consultants with specialties in all subject areas, especially technology and special education.

Communication

For purposes of communicating with the local education agencies in the northeast region that were placed on the state accreditation warning list, consultants should maintain the current methods.

-Consider facilitating an open, two-way channel of communication between the central office and the local schools by assisting the local education agencies in the development of a standardized communication format.

-Facilitate the communication process for creating an awareness of how to contact the Northeast Technical Assistance Center for staff development services, especially among personnel with 0 to 10 years experience in the education profession and personnel in grades pre-kindergarten through five.

-Facilitate the communication process for contacting the Northeast Technical Assistance Center for personnel in grades 9-12.

Planning

For purposes of planning staff development for the local education agencies in the northeast region that were placed on the state accreditation warning list, consultants

of the Northeast Technical Assistance Center should maintain the current methods.

- Collaboratively consider the specific needs of the local education agencies when planning staff development activities.

- Consider facilitating knowledge of collaboration of staff development plans and activities in the local education agencies in the event interim superintendents are required.

- Consider facilitating the input into staff development services offered by the Northeast Technical Assistance Center by personnel in grades 9-12 and with those having 4-10 years experience in the education profession.

Implementation

For the purpose of implementing staff development activities in order to positively impact student achievement among the local education agencies in the northeast region that were placed on the state accreditation warning list, Northeast Technical Assistance Center consultants should maintain current methods.

- Consider facilitating staff development activities by the individual consultants with increased staffing and associated financial support.

Evaluation

For the purpose of evaluating staff development activities delivered to the local education agencies in the

northeast region, consultants of the Northeast Technical Assistance Center should consider maintaining or enhancing the current methods.

- Consider developing a formal, consistent staff development evaluation process.

- Consider utilizing evaluations for collaborative planning with superintendents.

- Consider the inclusion of personnel with 0 to 3 years experience in the education profession when conducting needs assessments.

- Consider facilitating local education agency evaluations of staff development activities and assure inclusion of superintendents and personnel with 0 to 10 years experience in the education profession.

Implications for Further Research

This research on the staff development activities of the Northeast Technical Assistance Center prompted questions of the ability of the center to provide full service to all the local education agencies in the northeast region of North Carolina. As a consequence, recommendations for further research are presented.

An evaluation of the center, which includes stakeholder input from all the local education agencies in the northeast region and teacher focus groups is recommended. Further evaluations should include variables specific to student

achievement. An evaluation that includes the local education agencies, not on the state accreditation warning list will provide information on their satisfaction with the program services of the Northeast Technical Assistance Center.

A final recommendation for further research includes investigating the importance of utilizing adult learning methodology in the staff development process.

References

- Adams, C. F. & Ambrosie, F. (1987, April). Improving educational quality: A role for the regional education agency. Paper presented at the Annual Meeting of the American Educational Research Association, Washington, D. C.
- Anderson, A. J. B. (1989). Interpreting data: A first course in statistics. New York: Chapman and Hall.
- Barth, R. S. (1990). Improving schools from within: Teachers, parents, and principals can make the difference. San Francisco: Jossey-Bass.
- Bhola, H. S. (1989). World trends and issues in adult education. Great Britain: Unesco.
- Boyer, C. M. & Lewis D. R. (1985). And on the seventh day: Faculty consulting and supplemental income. ASHE-ERIC Higher Education Reports. ERIC Clearinghouse on Higher Education.
- Brookfield, S. D. (1986). Understanding and facilitating adult learning. San Francisco: Jossey-Bass.
- Brookfield, S. D. (1987). Developing critical thinkers: Challenging adults to explore alternative ways of thinking and acting. San Francisco: Jossey-Bass.
- Carlson, R. V. & Awkerman, G. (1991). Educational planning: Concepts, strategies, and practices. New York: Longman.
- Creamer, R. & Gillasp, M. (1986). Creating a climate for success: Developing a district inservice plan and making it work. Paper presented at the Annual Meeting of the National Council of States on Inservice Education (11th, Nashville, TN, November 21-25, 1986).
- Dareh, J. C. (1988, April). An assessment of alternative models for the delivery of principal inservice. Paper presented at the Annual Meeting of the American Educational Research Association. New Orleans, LA.
- Fletcher, R. & Cole, J. T. (1991, March). Factors related to the successful operation of special education interdistrict cooperatives. In: Reaching our potential: Rural education in the 90's. Conference proceedings, Rural Education Symposium. Nashville, TN.

- Goodlad, J. I. (1984). A place called school: Prospects for the future. New York: McGraw-Hill.
- Griffin, G. A. (1983). Introduction: The work of staff development. In G. A. Griffin (Ed.), Staff Development: Eighty-second Yearbook of the National Society for the Study of Education. (pp. 1-12). Chicago, IL: National Society for Study of Education.
- Hanson, E. M. (1991). Educational administration and organizational behavior. Boston: Allyn and Bacon.
- Harris, G. W. & Dawes, R. A. H. (1988). The business management and service tasks of the school principalship. Springfield: Charles C. Thomas Publishers.
- Hedayat, A., Sinhal, B. (1991). Design and inference in finite population sampling. New York: Wiley.
- Heron, T. E. & Harris, K. C. (1987). The educational consultant. Austin, TX: Pro-Ed.
- History of Regional Educational Centers in North Carolina. (1985, October). North Carolina Department of Public Instruction, Raleigh, N.C.
- Howey, K. R. & Vaughan, J. C. (1983). Current trends of staff development in G. Griffin (Ed.), Staff development: Eighty-second yearbook of the national society for the study of education. (pp. 104-105). Chicago: University of Chicago Press.
- Hoy, W. K. and Miskel, C. G. (1991). Educational administration: Theory, research, practice. New York: McGraw-Hill.
- Jaeger, R. M. (1990). Statistics: A spectator sport. (2nd ed.). Newbury Park, CA: Sage.
- Katzer, J., Cook, K., & Crouch, W. (1991). Evaluating information: a guide for users of social science research (3rd ed.). New York: McGraw-Hill.
- Kerlinger, F. N. (1986). Foundations of behavioral research (3rd ed.). Fort Worth: Holt, Rinehart, and Winston.

- Knoff, H. M. (1988). Clinical supervision, consultation, and counseling: A comparative analysis for supervisors and other educational leaders. Journal of Curriculum and Supervision, 3, 240-252.
- Knox, A. B. (1986). Helping adults learn. A guide to planning, implementing, and conducting programs. San Francisco: Jossey-Bass.
- Kramer, P. J. & Betz, L. E. (1987). Effective inservice education in Texas public schools. Research monograph East Texas School Study Council, Commerce.
- Lally, K. (1991). Changing of the old guard: States turn toward helping rather than regulating. School Administrator, 48(3) 8-12.
- LeCompte, M. D., Millroy, W. L., & Preissle, J. (1992). The handbook of qualitative research in education. San Diego: Academic Press.
- Leithwood, K. A. (1990). "The principal's role in teacher development: Changing School Culture Through Staff Development. The 1990 ASCD Yearbook. ASCD: Alexandria, VA.
- Lessler, J. T. (1992). Non-sampling error in surveys. New York: Wiley.
- Lunenburg, F. and Orstein, A. (1991) Educational administration: Concepts and practices. Belmont, CA: Wadsworth Publishing.
- Marshall, A. (1982). PRISM--Pittsburgh's researched based instructional supervisory model for staff development. In: Technical assistance for school improvement. Knowledge, use, and school improvement. Pittsburgh University: Pittsburgh, PA.
- McKernan, J. (1992, March). Research as the basis for teaching and professional development. Paper presented at the Inaugural Lecture for Lora Wilson King, Distinguished Professor and Chair of Education, East Carolina University, Greenville, North Carolina.
- McLaughlin, M. C. & Pfeifer, R. S. (1988). Teacher evaluation: Improvement accountability and effective learning. New York: Teacher College Press.

- Medved, R.M., Sarachan-Deily, A. B., Burns, J. P., Lyon, P., Grippin, P. (1986, April). Needs assessment and implementation of staff development programs in rural schools. Paper presented at the Annual Conference of the American Council on Rural Special Education (Tuscon, AZ,). ERIC.
- Mezirow, J. (1991). Transformative dimensions of adult learning. San Francisco: Jossey-Bass.
- Moore, D. S. (1991). Statistics: Concepts and controversies (3rd ed.). New York: W. H. Freeman.
- Patton, M. Q. (1990). Qualitative evaluation and research methods. Newbury Park, CA: Sage.
- Reid, D. K, Hresko, W. P, Swanson, H. L. (Eds.). (1991). Cognitive approach to learning disabilities. Austin, TX: Pro-Ed.
- Roberts, J. M. E. (1987, April). Instruction from a distance. Paper presented at the Annual Meeting of the American Educational Research Association, Washington, D. C.
- Rodriguez, S. & Johnstone, K. (1986). Staff development through a collegial support group model. In K. K. Zumwalt (Ed.), Improving teaching: 1986 ASCD yearbook (pp. 87-100), Alexandria, VA: Association for Supervision and Curriculum Development.
- Rogers, A. (1986). Teaching adults. Philadelphia: Open University Press.
- Rossi, P. H. & Freeman, H. E. (1989). Evaluation: A systematic approach. Newbury Park, CA: Sage.
- Schiffer, J. (1980). School renewal through staff development. New York: Teachers College Press.
- Schlecty, P. C. & Whitford, B. L. (1983). The organizational context of school systems and the functions of staff development. In G. A. Griffin (Ed.), Staff development: Eighty-second yearbook of the national society for the study of education, (pp. 62-91). Chicago: University of Chicago Press.

- Schnur, J. O., Ward, C. A., Caston, E. W. (1986). Mississippi's collaborative staff development for teachers. Teacher Education and Practice, 3(1), 25-32.
- Schubert, W. H. (1986). Curriculum: Perspective, paradigm, and possibility. New York: MacMillan.
- Shadish, W. R. (1991). Foundations of program evaluation. Theories of practice. Newbury Park, CA: Sage.
- Smith, E. (1992, April) [A telephone discussion with an associate in School Financial Aid, New York State Education Department].
- Smith, E. R. (Ed.) & Tyler, R. (1942). Appraising and recording student progress. New York: London, Harper, and Brothers.
- Smith, R. M. (1982). Learning how to learn: Applied theory for adults. New York: Cambridge.
- Staff development and retaining suggested personnel policy guidelines for school district. (1988). Oregon State Department of Education, Salem. May 1988.
- State plan for regional education service centers as approved by state board of education (1988). Austin: Texas Education Agency.
- Steffy, B. E. (1990, April). Dilemmas presented by state agency takeovers of local school districts. Paper presented at the Annual Meeting of the American Educational Research Association, Boston, MA.
- Technical assistance: A system of organizing for results. (1991, September). North Carolina Department of Public Instruction, Raleigh, N. C.
- Twenty points: Reshaping education. (1990, September). North Carolina Department of Public Instruction, Raleigh, N. C.
- van der Kamp, M. (1992). Effective adult learning. In A. Tuijnman & M. van der Kamp (Eds.), Learning across the lifespan: Theories, research, policies. New York: Pergamon.

APPENDIX A

NORTHEAST TECHNICAL ASSISTANCE CENTER STAFF DEVELOPMENT EVALUATION

DATA SOURCE MATRIX

<u>DATA SOURCES</u>	<u>SURVEY</u>	<u>INTERVIEW</u>	<u>RECORDS ANALYSIS</u>
LEGISLATIVE ED. OVERSIGHT COMM. CHAIRMAN		X	
N.C.G.S. 115-C			X
FORMER STATE SUPT.		X	
STATE SUPT.		X	
TECHNICAL ASST. PROGRAM-STATE DIRECTOR		X	
STATE TAP BUDGET			X
NETAC-DIRECTOR	X	X	
NETAC-CONSULTANTS	X	X	
NETAC DOCUMENTS BUDGET			X
NORTHEAST SUPT. COUNCIL-CHAIRMAN		X	
SUPT. OF SAMPLE LEAs	X	X	
ADMIN/SUPER. OF LEAs	X		
TEACHERS OF SAMPLE SCHOOLS	X		

Appendix B

Field Procedures for Interviews

1. Develop a coded list of respondents.
2. Develop a calendar/log for interview times, dates, telephone numbers(schedule).
3. Make initial contact for permission to interview.
 - a. Establish an interview date and time
 - b. Send Form
 - c. Record appointment in log
4. On day of interview:
 - a. Have a tape recorder ready with a coded tape.
 - b. Have a coded interview instrument ready.
 - c. Have pens and pencils.
 - d. Seek permission to record.
 - e. Notify interviewee that his/her name, system name, or other identifying data will not be used when the research is presented.
 - f. Ask interviewee if there are any clarifications to be made regarding the process or the instrument used.
 - g. Notify interviewee when the tape recorder is turned on or off.
 - h. Ask for any unsolicited remarks or clarifications.
 - i. Thank interviewee at the conclusion of the interview.
 - j. Secure the tape and interview instrument in the appropriate file.
5. If an interview was not conducted, call back and schedule another interview.
 - a. Repeat this process until interview is completed or until you are denied.
 - b. Efforts to make contact with an interviewee is only bound by the deadline to complete all interviews.
 - c. If interview is interrupted or terminated at any point, make a notation of interruption point and continue from that point once interview continues and/or communication is reestablished in the event you are disconnected.
6. When an interview is completed, all information will be transcribed and all respondent coded tapes will be secured.
7. The interviewer/researcher will analyze the data in narrative form.
8. The interviews, in narrative form will be integrated into the final research document.

Appendix C

Field Procedures for Surveys

1. Contact the superintendents of the six identified LEAs and inform them of the intent of the research and the proposed survey.
2. Identify the schools used and explain their random selection.
3. Ask for permission to contact the principals of each of the randomly selected schools.
4. Notify the principals of the selected schools of the intent of the research, the proposed survey, and what will be required of them.
5. Select a mutually agreeable date to conduct the survey.
6. Mail the coded surveys to each school.
7. Have the principal or designee distribute the surveys during a regularly scheduled teacher's meeting. The date of the teacher's meeting will be predetermined. Have a teacher or graduate student (not principal) collect and mail them.
8. Send a direction sheet with the survey containing the following information:
 - a. Date and time of distribution
 - b. Short explanation of intent of study
 - c. Assurances of anonymity and confidentiality
 - d. Answer every question to the best of knowledge.
 - e. Do not share responses with others.
 - f. Use pen or pencil to mark response.
 - g. Allow at least fifteen minutes for completion of survey.
 - h. Collect all surveys and place in envelope provided.
 - i. Mail surveys no later than one day after collection in stamped envelope provided.
9. Upon receipt of surveys, place each batch of surveys with school code in separate folder in filing cabinet.
10. Secure all surveys until ready to analyze the data.
11. Analyze the data according to predetermined guidelines.
12. Write up statistical results in case form and present in graphic form with charts and tables.

Appendix D
DOCUMENT ANALYSIS

Document: _____

Variables:

Organizational References or Components:

Frequency

_____	_____
_____	_____
_____	_____
_____	_____

Communication References or Components:

_____	_____
_____	_____
_____	_____
_____	_____

Planning References or Components:

_____	_____
_____	_____
_____	_____
_____	_____

Implementation References or Components:

_____	_____
_____	_____
_____	_____
_____	_____

Evaluation References or Components:

_____	_____
_____	_____
_____	_____
_____	_____

Appendix E

AN EVALUATION OF THE STAFF DEVELOPMENT ACTIVITIES OF THE
NORTHEAST TECHNICAL ASSISTANCE CENTER:
A QUESTIONNAIRE FOR THE CHAIRMAN OF THE
LEGISLATIVE EDUCATION OVERSIGHT COMMITTEE

ORGANIZATIONAL HISTORY

Can you relate any organizational history of the operation of the Regional Education Center/Technical Assistance Center as it relates to the North Carolina General Statute 115-C, Article 9, Special Education, Part 4 which addresses the legislative establishment of the Regional Education Training Centers?

IMPLEMENTATION

How and when were you made aware of the decision to convert the Regional Education Centers to Technical Assistance Centers?

FINANCING

Was the legislature involved in any special appropriations made to the Department of Public Instruction for the purpose of converting from Regional Education Centers to Technical Assistance Centers?

COMMUNICATION

How is the legislature informed of activities conducted by the Department of Public Instruction/Technical Assistance Program?

EVALUATION

What, if any methods are employed by the legislature to evaluate the Department of Public Instruction/Technical Assistance Program for purposes of accountability?

PROGRAM SURVIVABILITY

In your professional opinion, what factors will more likely effect the continuation of the Technical Assistance Program?

Appendix F

AN EVALUATION OF THE STAFF DEVELOPMENT ACTIVITIES OF THE
NORTHEAST TECHNICAL ASSISTANCE CENTER:
A QUESTIONNAIRE FOR THE NORTH CAROLINA STATE SUPERINTENDENT
OF PUBLIC INSTRUCTION

ORGANIZATIONAL HISTORY

Can you briefly relate the rationale, events, and key people involved in the transition from Regional Education Centers to the Technical Assistance Concept?

IMPLEMENTATION

Has the Technical Assistance Program been implemented as designed and if not, what are the substantive differences?

STAFFING

What factors were used to determine the necessary staffing of the Technical Assistance Program?

FINANCE

What types of budgetary decisions were made when implementing the Technical Assistance Program?

COMMUNICATION

How are decisions and activities specific to the Technical Assistance Program communicated within the Department of Public Instruction?

EVALUATION

Are there any formal or informal methods of evaluating the success of the Technical Assistance Program? If so, what are they?

PROGRAM SURVIVABILITY

As it presently exists, do you feel that the Technical Assistance Program will continue to serve as a viable means of delivering staff development to the local education agencies across the state and why do you feel as you do?

PLANNING

What planning activities are the Department of Public Instruction currently engaged that are related to the Technical Assistance Program?

COMMENTS

Would you like to make any further comments?

Appendix G

AN EVALUATION OF THE STAFF DEVELOPMENT ACTIVITIES OF THE
NORTHEAST TECHNICAL ASSISTANCE CENTER:
A QUESTIONNAIRE FOR THE DIRECTOR OF THE NORTH CAROLINA
TECHNICAL ASSISTANCE PROGRAM

ORGANIZATIONAL HISTORY

Can you briefly relate the rationale, events, and key people involved in the transition from Regional Education Centers to the Technical Assistance Concept?

IMPLEMENTATION

Has the Technical Assistance Program been implemented as originally designed and if not, what are the substantive differences?

STAFFING

What factors are used to determine the necessary staffing of the Technical Assistance Program/Centers?

FINANCE

What are the primary factors taken into consideration when devising the Technical Assistance Program and Center budgets?

COMMUNICATION

How are Technical Assistance Program decisions and activities communicated to the Department of Public Instruction and the local education agencies?

EVALUATION

What methods of evaluation are utilized to determine the efficacy of the Technical Assistance Program in general and the Centers specifically?

PROGRAM SURVIVABILITY

As it presently exists, do you feel that the Technical Assistance Program will continue to serve as a viable means of delivering staff development to the local education agencies across the state and why do you feel as you do?

PLANNING

What are the future plans for the Technical Assistance Program?

COMMENTS

Would you like to make any further comments relative to the Technical Assistance Program?

Appendix H

AN EVALUATION OF THE STAFF DEVELOPMENT ACTIVITIES OF THE
NORTHEAST TECHNICAL ASSISTANCE CENTER:
A QUESTIONNAIRE FOR THE FORMER SUPERINTENDENT OF THE
NORTH CAROLINA DEPARTMENT OF PUBLIC INSTRUCTION

ORGANIZATIONAL HISTORY OF REGIONAL EDUCATION CENTERS

1. Can you relate the events and decisions that led to the development and organization of the Regional Education Training Centers?
2. How did G.S. 115-C, Article 9, Special Education, Part 4 come into existence?
3. Who were the key people involved in the decision to enact G.S. 115-C, Article 9, Special Education, Part 4?
4. What was your role in the development of Regional Education Training Centers?
5. Can you relate any highlights of the history of the Regional Education Center Program?

Appendix I

AN EVALUATION OF THE STAFF DEVELOPMENT ACTIVITIES OF THE
NORTHEAST TECHNICAL ASSISTANCE CENTER:
A QUESTIONNAIRE FOR THE FORMER DIRECTOR OF THE
MIGRANT EDUCATION CENTER-GRIFTON, NORTH CAROLINA

ORGANIZATIONAL HISTORY OF REGIONAL EDUCATION CENTERS

1. Can you relate the events, decisions, and key people involved in the development of the Regional Education Center concept?
2. Can you relate your experience and role with the Migrant Education Center in Grifton, NC?
3. When was the Migrant Education Center founded?
4. Who was the first Director of the Migrant Education Center?
5. What was your reaction to the conversion from the Migrant Education Center to the Regional Education Center?
6. Would you like to make any further comments?

Appendix J

A SURVEY OF THE STAFF DEVELOPMENT ACTIVITIES OF THE
NORTHEAST TECHNICAL ASSISTANCE CENTER

THIS SURVEY IS ONLY INTENDED FOR INDIVIDUALS WHO HAVE BEEN INVOLVED IN ANY STAFF DEVELOPMENT ACTIVITIE(S) SPONSORED BY THE NORTHEAST TECHNICAL ASSISTANCE CENTER IN WILLIAMSTON, NORTH CAROLINA FROM 1991-PRESENT. IT IS DESIGNED TO OBTAIN INFORMATION ON THE STAFF DEVELOPMENT ACTIVITIES OF THE NORTHEAST TECHNICAL ASSISTANCE CENTER.

PLEASE RESPOND TO ALL QUESTIONS. YOUR RESPONSES WILL BE CONFIDENTIAL. DO NOT PUT YOUR NAME ON THE SURVEY. THANK YOU FOR YOUR CANDID RESPONSES!

*CIRCLE THE GRADE LEVEL(S) THAT CORRESPOND TO YOUR PRIMARY RESPONSIBILITY:

PRE-K K 1 2 3 4 5 6 7 8 9 10 11 12

*NUMBER OF YEARS IN EDUCATION: _____

*CIRCLE THE NUMBER THAT CORRESPONDS TO YOUR PRIMARY AREA OF RESPONSIBILITY:

- | | |
|-------------------------|-------------------------------|
| 1. COMMUNICATION SKILLS | 5. SCIENCE |
| 2. FINE ARTS | 6. SOCIAL STUDIES |
| 3. MATHEMATICS | 7. SPECIAL EDUCATION |
| 4. PHYSICAL EDUCATION | 8. ADMINISTRATIVE/SUPERVISORY |
| 9. OTHER: SPECIFY _____ | |

SURVEY

SCALE: 4 = TO A GREAT DEGREE
3 = TO A MODERATE DEGREE
2 = TO A SMALL DEGREE
1 = NOT AT ALL

DIRECTIONS: CIRCLE THE
NUMBER CORRESPONDING TO
YOUR CHOICE.

I. ORGANIZATIONAL

To what degree . . .	<u>GREAT</u>	<u>MODERATE</u>	<u>SMALL</u>	<u>NOT</u>
1. do you understand the mission of the NETAC?	4	3	2	1
2. do the staff development services of the Northeast Technical Assistance Center impact positively on student achievement?	4	3	2	1
3. is the Northeast Technical Assistance Center staffed adequately to meet your professional needs?	4	3	2	1
4. will the current priority focus on your system for staff development help your system reach state accreditation standards?	4	3	2	1

5. are the staff development services offered by the NETAC preferable over private, university, or collegial consultants?	4	3	2	1
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II. PLANNING

To what degree . . .	<u>GREAT</u>	<u>MODERATE</u>	<u>SMALL</u>	<u>NOT</u>
1. are the staff development services provided to your school/school system by the NETAC collaboratively planned?	4	3	2	1
2. do consultants of the NETAC work cooperatively with teachers and administrators to share concerns, find solutions, and model strategies that will increase the probability of improved student learning?	4	3	2	1
3. are the NETAC staff development plans for your school/school system outcome-based?	4	3	2	1
4. do you have an opportunity to provide input into the staff development services offered to your school/school system by the NETAC?	4	3	2	1
5. do objectives of NETAC staff development align with your instructional needs?	4	3	2	1

III. COMMUNICATION

To what degree . . .	<u>GREAT</u>	<u>MODERATE</u>	<u>SMALL</u>	<u>NOT</u>
1. is there an open, two-way channel of communication between your school/school system and the NETAC?	4	3	2	1
2. are you aware of the staff development and consultant services offered by the NETAC?	4	3	2	1
3. are you aware of the process for contacting the NETAC for staff development services?	4	3	2	1
4. does your school/school system make you aware on a regular basis of staff development opportunities offered by the NETAC?	4	3	2	1
5. are the current methods of communication between your school/school system and the NETAC effective?	4	3	2	1

IV. IMPLEMENTATION

To what degree . . .	<u>GREAT</u>	<u>MODERATE</u>	<u>SMALL</u>	<u>NOT</u>
1. will the staff development activities that you have attended sponsored by the NETAC have a positive effect on student achievement?	4	3	2	1
2. were your professional needs met at the NETAC-sponsored staff development activities you have attended?	4	3	2	1
3. did you think that the consultants of the NETAC-sponsored staff development activities you attended were well prepared?	4	3	2	1
4. did the consultant(s) display an expertise in the subject matter they were presenting?	4	3	2	1
5. were the cognitive approaches to staff development used by the NETAC consultants conducive to adult learning?	4	3	2	1

V. EVALUATION

To what degree . . .	<u>GREAT</u>	<u>MODERATE</u>	<u>SMALL</u>	<u>NOT</u>
1. are the current methods of evaluating staff development activities and programs sponsored by the NETAC effective?	4	3	2	1
2. are the staff development evaluations used for future planning by your school/school system?	4	3	2	1
3. do the consultant staff development presenters evaluate their activities?	4	3	2	1
4. are needs assessments conducted prior to staff development activities?	4	3	2	1
5. does your school/school system conduct evaluations of the staff development activities presented by the NETAC?	4	3	2	1

Appendix K

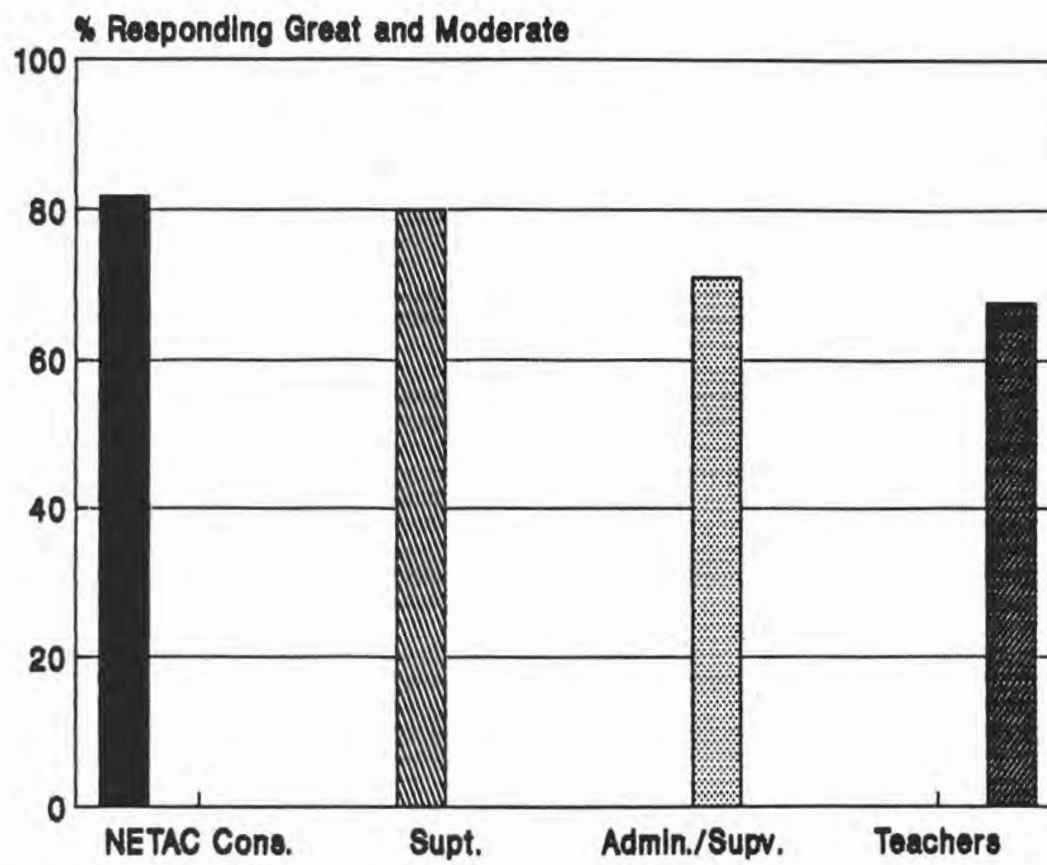


Figure 4.1 Organizational Effectiveness

Appendix L

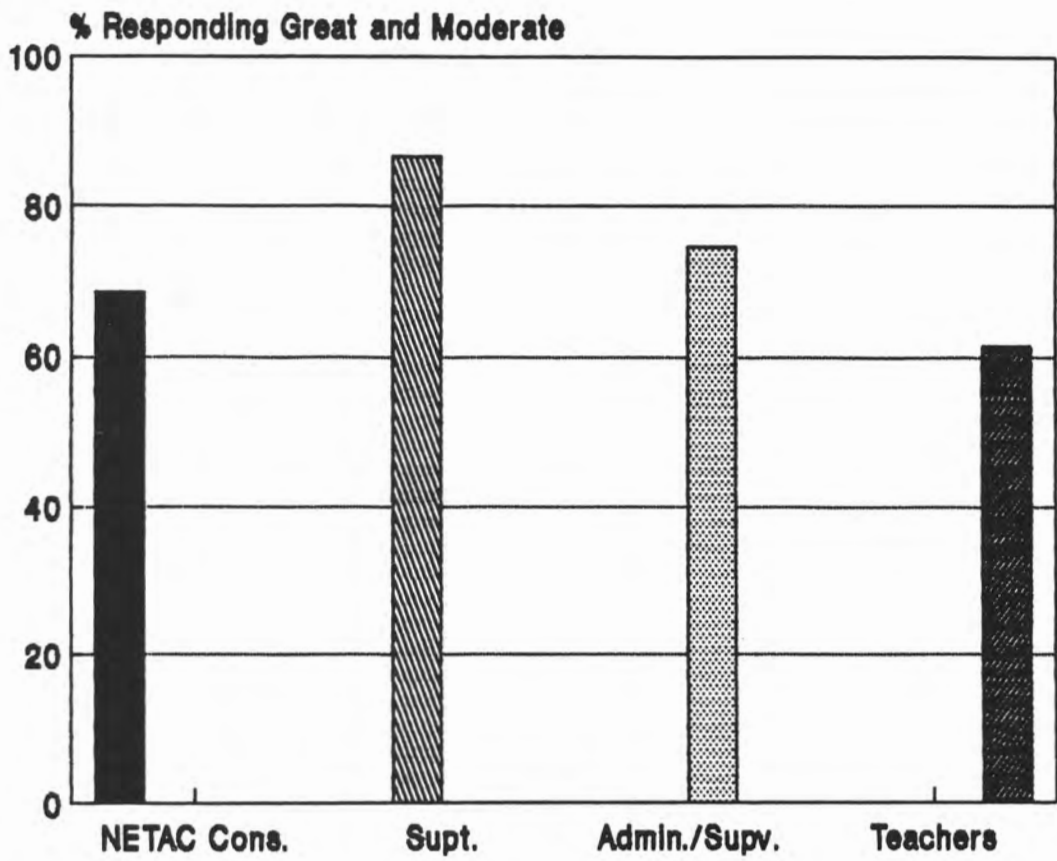


Figure 4.2 Communication Effectiveness

Appendix M

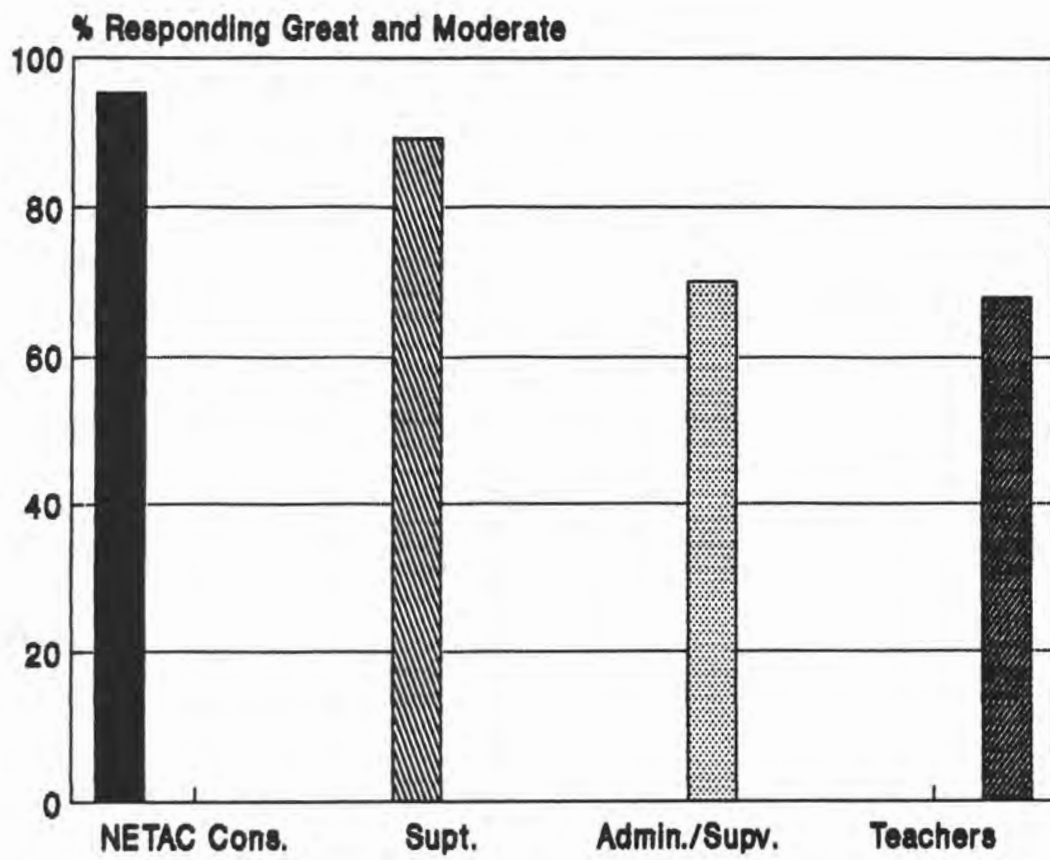
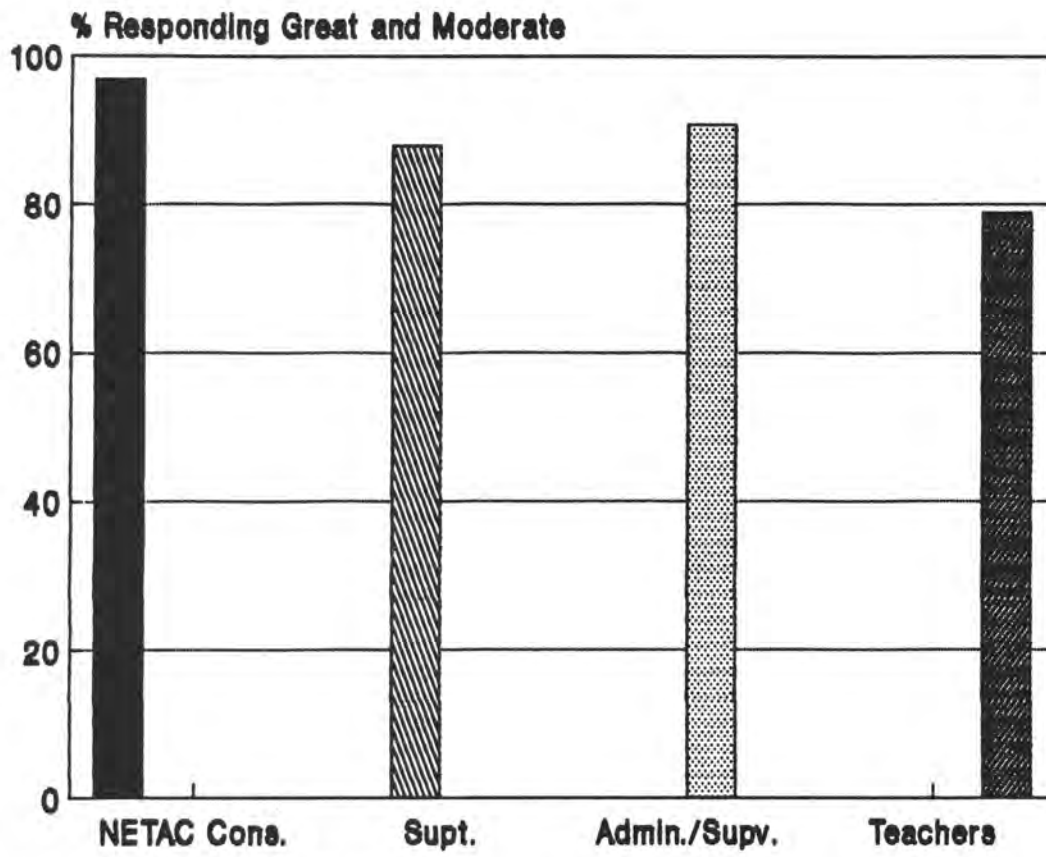


Figure 4.3 Planning Effectiveness

Appendix N

**Figure 4.4 Implementation Effectiveness**

Appendix O

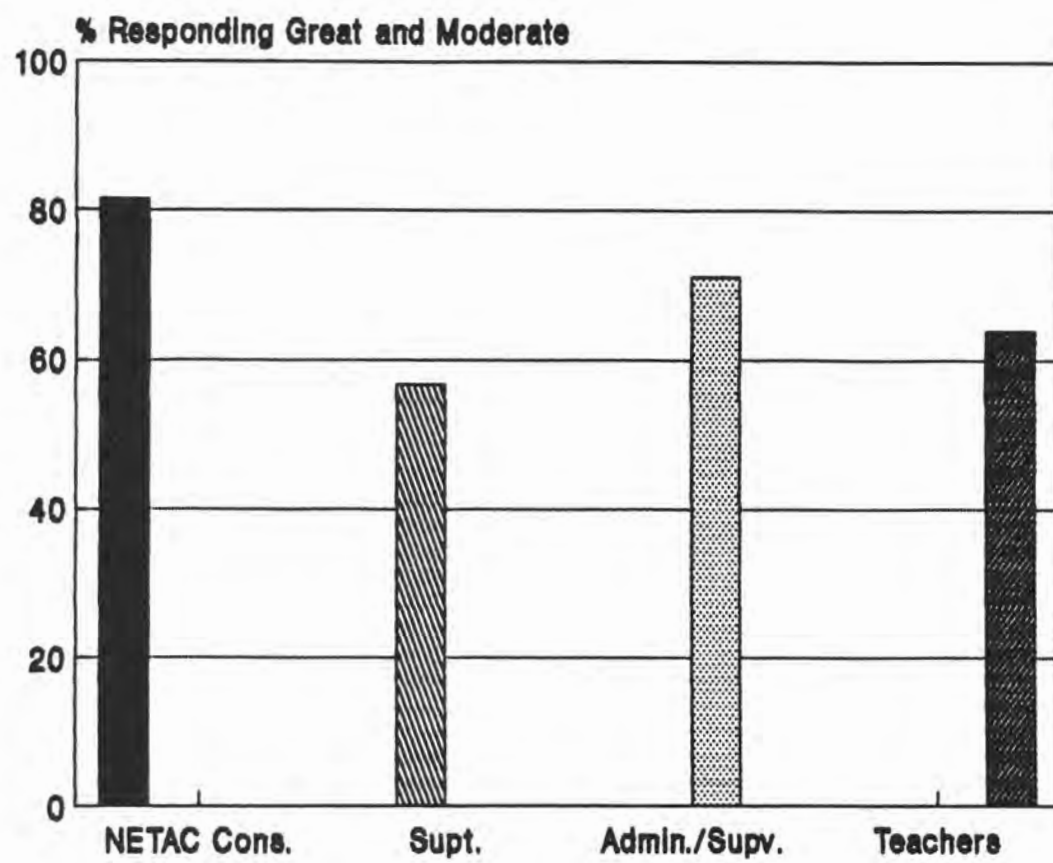


Figure 4.5 Evaluation Effectiveness