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ABSTRACT

This document is a monograph in a personnel development series addressing issues that are pertinent for policy-making personnel concerned with inservice personnel development of vocational/special educators. Chapter 1 addresses the state of the art in inservice education and includes a definition and information on legislative provisions, the problem of attitude, content of inservice education programs, target populations, and alternative modes of delivery. Chapter 2 on planning inservice models discusses the awareness, readiness, commitment, planning, implementation, and maintenance phases. A rationale and suggested activities are provided for each phase. A description of the specific steps to be followed in using a comprehensive planning model is listed. Chapter 3 addresses procedural concerns encountered during the implementation stage. Site selection, format, content scheduling, resource selection, and followup are discussed relative to short- and long-term inservice training approaches. Specific strategies and tenets of change agent theory to be considered in inservice education are presented. Chapter 4 offers a set of recommendations and evaluation questions that can be used to guide an evaluation of an inservice model. Specific suggestions for data collection are included for each evaluation question. (YLB)

Vocational Education for the Handicapped: Perspectives on Inservice Personnel Development

Personnel Development Series: Document 6

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FOREWORD

Over the past decade the problems and difficulties that face handicapped youth in their efforts to obtain and maintain employment have been widely documented by researchers, public policy analysts, and advocacy organizations. In the 1970s the U.S. Congress enacted several pieces of education, training, and employment legislation to focus, in part, on resolving these problems. The Education for All Handicapped Children Act of 1975, along with the Vocational Education Amendments of 1976, the Comprehensive Employment and Training Act of 1978, and several civil rights initiatives, placed priority upon assuring that handicapped youth receive appropriate vocational education programs and services. These various pieces of legislation acknowledged the concurrent need for staff development and teacher education programs to assure that effective programs and services are delivered. Within the vocational education, special education, rehabilitation, and CETA systems there are nearly a million professionals--the vast majority of whom have limited or no expertise in planning and providing comprehensive vocational programs and services for disabled youth and adults. The need for training programs to update teachers, support personnel, counselors, coordinators, and administrators is great. There is also an enormous need for training other individuals (such as employers, parents, advocates, co-workers, non-disabled peers) if youths with special needs are to be successful in their transition from school to work.

Planning and conducting effective personnel development programs that serve the career development needs of handicapped youth involves a variety of complex tasks. Developing appropriate interagency, collaborative training arrangements is essential to insure that current knowledge and expertise is

utilized from the fields of vocational education, special education, rehabilitation, career development, and employment and training. Decisions must be made relative to the specific training needs of the target audience. Frequently, the needs of inservice practitioners must be considered along with the needs of trainees who are preparing to enter the field for the first time. The question of student needs is also present. The process of providing vocational education for severely handicapped youths is, by nature of the students served and the training technology, considerably different from training mildly handicapped youth. Other critical dimensions related to the content of personnel development encompass such areas as: vocational assessment, career guidance, and evaluation of training programs. The need for and patterns of personnel certification in the field of vocational/special education is also a continuing concern for personnel development programs.

During 1980-82 the University of Illinois hosted a series of three conferences which focused upon improving personnel preparation programs in vocational/special education. These conferences were conducted as part of the Leadership Training Institute/Vocational and Special Education, which was supported by a grant from the Division of Personnel Preparation, Special Education Programs, U.S. Department of Education. As individuals responsible for personnel preparation programs in vocational/special education met and shared their experiences and concerns, a clear need emerged for a series of monographs on designing, implementing, and evaluating personnel development programs. The need to address the critical questions and identify effective policies and practices related to personnel development was obvious following the initial conference held in Champaign, Illinois in April 1980. The project staff used a small advisory group of individuals attending the conferences to outline the Perspectives monograph series. Needs assessment data

collected during and prior to the first conference was used by the group in identifying the major topics to be addressed in the series. Staff involved in the vocational/career education projects funded by the Division of Personnel Preparation were then invited to become members of the various monograph writing teams. Under the expert guidance of Dr. Janet Treichel, LTI Training and Dissemination Coordinator, the writing teams formulated their monographs to focus on such core components as: present state-of-the-art, effective policies and practices, and guidelines for personnel development programs. Dr. Treichel coordinated the planning and preparation of the series in a highly exemplary manner. Her leadership, commitment to excellence, and professional insight were valuable assets in editing this series.

The monograph topics in the Perspectives on Personnel Development series include: Special Populations/Severely and Moderately Handicapped, Certification, Program Evaluation, Effective Interagency/Interdepartmental Coordination, Inservice Personnel Development, Vocational Assessment, Preservice Personnel Preparation, and Career Development/Guidance.

We anticipate that the monographs will be useful resource documents for a variety of audiences. Teacher educators and administrators in higher education will find the series helpful in planning both preservice and inservice programs for special educators, vocational educators, counselors, educational administrators, rehabilitation specialists, and others. State education agencies involved in certification, personnel development, and program administration will find strategies, and suggestions for reviewing, evaluating, and formulating teacher training efforts in local agencies and universities. The monographs are also a rich source of ideas for parent and advocacy groups and professional associations as they seek to improve the knowledge and competence of personnel serving handicapped youth.

This series represents a significant compilation of important and timely perspectives on personn development in vocational/special education. It contains the wisdom and insight of nearly 50 leaders in the field. We feel it will be a valuable and important resource in improving the "appropriateness" of the programs and services received by the handicapped youths of our nation.

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PREFACE

The Perspectives on Personnel Development series has become a reality due to the efforts of a number of individuals. These people were highly instrumental in the development, planning, and publication phases of the monographs.

Appreciation and gratitude is extended posthumously to Margaret (Meg) Hensel. Meg was actively involved in assisting in planning for the personnel preparation conferences and the initial developmental stages for this series. We will continue to miss her enthusiasm and dedicated efforts.

The LTI is indebted to Dr. Susan Hasazi, University of Vermont; Dr. Catherine Batsche, Illinois State University; Dr. Lorella McKinney, Ohio State University; Dr. Douglas Gill and John Langone, University of Georgia; and Mr. Brian Cobb, University of Illinois at Urbana-Champaign, for their excellent work in developing this monograph. This document addresses a number of issues that are pertinent for policy-making personnel concerned with inservice personnel development.

The reviewers for the Perspectives series also made important and significant contributions. Dr. Gary Clark of the University of Kansas reviewed each monograph in the series. Dr. Clayton Omvig of the University of Kentucky and Dr. Leonard Burrello of Indiana University served as reviewers for the Perspectives on Inservice Personnel Development monograph. Their insightful comments and suggestions were very helpful in the preparation of the monograph.

Sincere appreciation is expressed to Ms. Alicia Bollman, Ms. Lilian Del Barco, and Ms. June Chambliss for their dedicated efforts and patience in providing the secretarial expertise necessary to produce this volume.

Janet Treichel, Editor
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Contents

As a result of federal initiatives and interest by professionals and consumers there has been an increase in the inservice training opportunities provided to vocational/special educators. These inservice activities have been primarily designed to ensure that students with handicapping conditions receive vocational education programs which meet their unique needs. The authors of the forthcoming chapters have attempted to document some current practices relative to planning, implementing, and evaluating inservice models in vocational/special education.

A common element in each of the chapters is the notion of maintaining a systematic, interactive approach to planning, implementation, and evaluation. This approach is needed to increase the probability that the skills, knowledge, and attitudes are first acquired during inservce activities and then utilized by the participants across a variety of educational settings.

Chapter Two, Planning Inservice Models, includes a discussion of the awareness, readiness, commitment, planning, implementation, and maintenance phases. A rationale and suggested activities are provided for each phase. Additionally, a description of the specific steps to be followed in utilizing a comprehensive planning model are listed and included:

--Stating objectives,
--Conducting needs assessment,
--Planning strategies/inservice activities,
--Identifying and selecting resources,
--Preparing leadership planners for design models, and
--Planning results

Chapter Three, Implementing Inservice Models, provides an overview of procedural concerns which should be addressed during the implementation stage. Such issues as site selection, format, content scheduling,

selection of resources, and follow up and maintenance of momentum are discussed relative to short- and long-term inservice training approaches. Specific strategies, as well as tenents of change agent theory to be considered in inservice education, are presented.

Chapter Four, Evaluating Inservice Models, offers a set of recommendations and evaluation questions which can be used to guide an evaluation effort. Specific suggestions for data collection are included for each of the evaluation questions.

The practices and procedures suggested in the monograph are based on a review of the inservice literature in regular and vocational/special education. Hopefully, the information presented will provide assistance to vocational/special educators and administrators in the design, implementation, and evaluation of inservice training programs.

Inservice Education: State of the Art

> Inservice is more like the flight of a butterfly than the path of a bullet. The butterfly directs its own flight, yet it is influenced by external forces. The butterfly corrects its course based on feedback and reaches its destination only to begin another phase of growth and a new flight.
>
> (Boldrey, 1976)

Nearly two decades have passed since Congress charged the states with the responsibility to improve vocational programs and services for handicapped persons. It is an appropriate time to assess the path that inservice education has taken and to determine if it has been more like that of a butterfly or a bullet. One certainly hears a great deal of criticism concerning "one shot" inservice sessions that leave teachers bored and unprepared to improve their skills. Yet a review of the literature of the past ten years suggests that there has been significant growth in the vocational education opportunities available to persons with handicapping conditions. Inservice education must have been a contributing factor--or has it been?

There have been a number of definitions of inservice offered in the literature. Henderson (1978) defines it simply as:

> structured activities designed, exclusively or primarily to improve professional performance. (p. 12)

The Department of Health, Education and Welfare (1965) more specifically defined inservice as:

> a program of systematic activities promoted or directed by the school system, or approved by the school system, that contributes to the professional growth and competence of staff members during the time of their service to the school system.

The concept of inservice used in this monograph is any of an array of programs developed as a result of systematic planning, delivery, and evaluation which lead to professional growth and development through the acquisition of knowledge, skills, and attitudes. Throughout this monograph "inservice programs" will include both short-term and long-term formats ranging from afternoon forums to multi-year consultation services.

Legislative Provisions

When the vocational education of handicapped students became a national priority, Congress recognized the lack of vocational personnel prepared to teach handicapped persons. As a result, P.L. 94-482, the Vocational Education Act of 1976, included a section on personnel training that was designed to improve the qualifications of persons training in vocational education programs. The regulations provided that the funds available could be used for personnel training designed to improve the quality of instruction, guidance, supervision, and administration of programs for persons with special needs.

The Education For All Handicapped Children Act, P.L. 94-142, also required states to establish a comprehensive system of personnel development. The regulations of P.L. 94-142 specified that the annual state plan must include a personnel development plan that provided a structure for personnel planning and focused on preservice and inservice training education needs. The plan was to insure that ongoing inservice training programs were made available to all personnel engaged in the education of handicapped children. The programs were to include the use of incentives that would insure participation by teachers (such as release time, payment for participation, options for academic credit, salary step credit, certification renewal, or updating professional skills). The inservice programs

were to include the involvement of local staff and the use of innc ative practices which had been found to be effective.

Shortly after P.L. 94-142 regulations came into effect, the Council for Exceptional Children (CEC) translated the requirements of the federal legislation into an administrative policy guide for vocational education of handicapped students (Davis & Ward, 1976). Due to the shortage of teachers prepared to work with handicapped students in vocational education, it was recognized that inservice education would need to be emphasized. The resulting policy development guidelines recommended that the inservice training plan should include:

--Identification of the areas in which training is needed,

--Specification of the groups requiring training,

--Description of the content and nature of training for each area of training needed,

--Description of the training to be provided,

--Specification of funding sources and time frame for the training, and

--Specification of procedures for evaluating the extent to which program objectives are met.

With regard to the qualifications of staff, the CEC noted that special educators had traditionally been allowed to teach prevocational and work experience programs without any specific vocational education preparation. Likewise, vocational educators had been relatively free to teach handicapped students without any specific special education preparation. Therefore, the CEC policy guidelines recommended that local education agencies require special education teachers to gain occupational experience and training and that vocational teachers be required to obtain experience and training relative to working with handicapped individuals. This same concern was

expressed by the National Association of State Boards of Education in a 1979 report entitled Vocational Education of Handicapped Youth: A State of the Art (Howard, 1980). The challenge presented to the State Boards of Education was to provide meaningful inservice training to special and vocational educators to aid them in providing vocational programs to handicapped students.

The State of the Art

What has been the impact of federal legislation on inservice education programs? There is no doubt that the quality of inservice options has increased. The 1979 and 1980 Reports to Congress on the progress of P.L. 94-142 indicated that the states had launched major training and dissemination efforts to ensure that the least restrictive environment concept would become a reality. Data contained in these reports supported the fact that vocational educators had been included in inservice programs. But the report also indicated that the personnel training programs underway, even though significant, may still be inadequate to meet the needs in the field.

A report of the National Education Association (NEA, 1978) noted that current teacher training programs were entirely inadequate to prepare classroom teachers to work effectively with handicapped children and to prepare both special and regular teachers to relate effectively and supportively to each other. The NEA panel was convinced that no single factor was of greater importance to the successful implementation of P.L. 94-142 than the appropriate education of the staff members. But little effective inservice was found by the NEA review panel. The type of inservice most prevalent was the type teachers considered least helpful: the fragmented

single-instance meetings with little continuity and with a low level of involvement by teachers.

In an Iowa survey conducted by Greenwood and Morley (1978), vocational teachers were found to have little or no background that would aid them in better serving special needs students. Seventy percent of the respondents indicated that they had completed no formal training related to special needs students and only 14.5 percent reported that they had participated in some inservice courses or workshops. According to Meers and Conaway (1979), the vocational teachers' lack of preparation has possibly been the major factor contributing to the low priority given to including handicapped students in vocational education programs. Meers and Conaway did not suggest that vocational teachers needed to develop all of the skills and expertise required of special educators. However, they did suggest that teacher preparation efforts should give priority to assisting vocational teachers to actively participate in the educational planning team and should prepare them to identify and locate necessary resources and support services.

It would be misleading to infer that all inservice education programs have been totally ineffective. As was stated earlier, many exemplary practices do exist. These programs have done much to dissipate the fears of educators who are working with special needs students. For example, a systematic approach to inservice was developed by Phelps (1975). His manual, entitled Instructional Development For Special Needs Learners: An Inservice Resource Guide, consisted of seven modules designed to acquaint occupational and special educators with a systematic process of providing cooperative instructional arrangements for special needs learners. A self-directed needs assessment was included so teachers could select the

modules or the activities appropriate to their needs. Ideally, the inservice activities would be completed jointly by a special educator and a vocational educator so that each professional could communicate their particular expertise and concerns.

A review of the research was conducted by Wentling and Phelps (1980). Their review produced several projects that had contributed to the inservice needs of the field. Some of these projects will be briefly described. Fowler and Schwartz (1976) developed a set of self-instructional booklets for changing the attitudes and procedures of educators and administrators with regard to integrating handicapped students into vocational education programs. Hughes (1976) completed a project in North Carolina identifying the needs and barriers to mainstreaming as expressed by occupational education personnel. A set of policy recommendations was formulated. Dahl, Appleby, and Lipe (1976) prepared a practical guidebook for vocational educators to assist them in identifying and overcoming the barriers to mainstreaming. Rice (1978) engaged in the development and validation of a planning process for improving the accessibility to vocational education programs and facilities for handicapped persons at the local education agency level. A training package, including a media presentation for local administrators, was also developed. Pope and Kienast (1978) completed a project to improve the vocational delivery system for handicapped individuals. The project identified those competencies required of vocational educators to instruct handicapped learners.

A professional development program for vocational educators of mentally retarded students was developed by Hull and Halloran (1974). The project focused on a preservice and inservice training program to prepare teachers in vocational and practical arts education for educable mentally

retarded students. Finally, Regan and Deshler (1980) designed a vocational education inservice training project (VEIT) to prepare vocational educators to provide effective learning environments for special needs learners within the regular vocational education setting. As a result of this two year activity, the authors were able to document programming improvements and attitudinal change.

The Problem of Attitude

In a 1973 Olympus Research Corporation study, state and local administrators cited the lack of trained staff and the reluctance of instructors in regular classes to accept the handicapped as the major constraints limiting the expansion of vocational education programs for the handicapped. The attitude of teachers toward the handicapped was also identified as a barrier by Greenwood and Morley (1976). Evidence collected from an Iowa survey indicated that approximately one-third of the state's vocational teachers did not support the concept of integrating handicapped learners into "regular" classes. The attitude of the teacher was thought to be a key factor in whether or not a teacher would accommodate special students in the regular class. Overcoming the apprehensions, fears, and misunderstandings of what is required to teach a more diverse student population was thought to be the first and most critical step toward a solution to the problem by Greenwood and Morley.

There is some evidence to suggest that the problem of teacher attitudes may be improving. According to the 1980 Report to Congress on P.L. 94-142, teacher anxieties were found to lessen as the implementation of P.L. 94-142 progressed. A study of 456 vocational educators in Mississippi indicated that the teachers, in fact, did not have negative attitudes toward the handicapped (Moorman, 1980). The major difficulty

cited by Moorman was not negative attitudes, but a lack of information on the part of the vocational educator. No statistical relationship was established between vocational educator attitudes toward the handicapped and their perceptions of their degree of preparation for instructing the handicapped. Further, the majority of teachers surveyed (68 percent) had had no formal coursework and 71 percent had never even attended a workshop dealing with handicapped individuals. The author concluded that the lack of information presented more of a barrier to successful integration of the handicapped than did negative attitudes.

The Content of Inservice Education Programs for Handicapped Learners

Several topics have emerged as necessary components of the inservice program in special needs vocational education. For example, in a survey of vocational educators in Iowa, inservice topics requested by instructors included techniques for identifying and assessing student needs, strategies for individualizing instruction, and procedures for acquiring up-to-date knowledge of available resources and support services (Greenwood & Morley, 1978). In addition to inservice education, the instructors indicated that additional staff resources (i.e., aides, tutors, resource teachers, and counselors) and additional planning time were needed for program improvement and implementation.

Several surveys have identified the IEP as one of the major problems encountered in implementing P.L. 94-142 (McKinney & Seay, 1979). Probably the most critical issue concerning the IEP was found to be the lack of vocational education personnel who had the knowledge and competence necessary to (a) identify, assess, and interpret learners' special needs; (b) develop, implement, monitor, and evaluate the IEP, and (c) effectively involve a team which included parents in developing the IEP. A crucial

aspect of this problem was the fact that little is known about the time, effort, and competencies required of vocational education personnel in order to successfully perform tasks related to the IEP. The 1980 Report to Congress concerning the implementation of P.L. 94-142 concurred that a major issue that had surfaced concerning the provision of related services was the fact that certain services, such as pre-vocational and vocational education, were infrequently specified in the IEP.

Additional topics that have been suggested for inservice programs include: (a) attitude development of staff and students; (b) techniques designed to maximize student behavior in the classroom and on-the-job; (c) procedures for articulating and coordinating in-school resources; (d) procedures for modifying curriculum, equipment and teaching materials; and (e) services to enhance job placement, school-to-work transition, job maintenance, and interdisciplinary services.

Target Populations

While most of the literature has focused on the need to provide inservice for vocational teachers and for special education teachers, there are several other groups that have been identified as needing additional inservice opportunities.

Administrators

In 1973, the Olympus Research Corporation conducted an assessment of the monies targeted for vocational education of the handicapped. A major finding of the study was that the set-aside funding had resulted in vocational education projects for the handicapped that would not have occurred had there not been such legislation. However, many of the weaknesses identified in the study were administrative in nature and were

thought to be partly due to inexperience on the part of vocational education administrators who had never before been given the responsibility of providing educational services for handicapped individuals.

Since 1973, other studies have supported the need for inservice education for administrators. For example, 80 percent of Mississippi administrators responding to a survey reported that they had had no formal training in the education of the handicapped (Moorman, 1980). Likewise the President's Committee On Employment of the Handicapped (Hippolitus et al., 1979) cited the administrator problem as a major barrier to successful integration of students in vocational education. The Committee described the problem as a lack of awareness by policy makers and program administrators regarding the true career potential of disabled individuals.

Advisory Councils and Employer Groups

Although advisory councils are mandated by both P.L. 94-142 and P.L. 94-482, there has been little provision for the training of advisory council members regarding the least restrictive environment in vocational education (Razeghi, 1981). Whereas major consumer organizations provide "advocacy training," it has rarely been focused on educational advocacy. Razeghi suggested that inservice education of advisory council members could help them serve as role models for handicapped and non-handicapped individuals on the council, in the schools, and in the community. A two-year project had been undertaken by the American Coalition of Citizens with Disabilities to address the inservice needs of the advisory council members.

Non-Handicapped Peers

An important attitudinal barrier described by The President's Committee On Employment of the Handicapped (Hippolitus et al., 1979) was the lack of understanding of handicapped students by their non-handicapped peers. The non-handicapped classmates were often reported to be unsupportive and antagonistic toward the handicapped student. The recommended solution of educating the non-handicapped peers placed this responsibility with the classroom teacher. This recommendation points to the need to provide inservice education for teachers so they will be able to provide experiences appropriate for the students' own "inservice" program.

Alternative Modes of Delivery

There is a tendency in the literature to equate inservice education with the word "workshop." As will be discussed further in the monograph, the workshop is only one of many different methods of delivering inservice education. Formats for the inservice programs can range from short-term methods such as the forum, the symposium, or the conference, to more long-term methods such as the workshop, the full-length course, or ongoing consultation. The design of inservice programs will vary depending upon the requirements and needs of the inservice recipient and the availability of resources to meet those needs. Some activities which may accompany both short- and long-term inservice programs include newsletters, observations of exemplary programs and practices, team teaching, media presentations, and practicum experiences. If one views inservice from within the conceptual framework of personnel development, a variety of resources and alternative delivery strategies can be utilized to improve staff capacity to respond to student needs.

It is unfortunate that the latter concept of personnel development remains underutilized. There is growing competition for control of staff development functions among the primary providers: (a) professional organizations, (b) state education agencies, (c) colleges and universities, (d) private consulting firms, and (e) local school districts. It is doubtful that many of these agencies recognize or would admit to such competition. However, the fragmented, duplicative attempts at staff development by each of the agencies implies a lack of coordinated, communicated effort. This fragmentation appears to stem from issues of territoriality, power politics, and resistance to change (Adamson, Smith, & Renz, 1977). It was suggested that effective inservice education would depend on the capacity of education agencies, colleges, universities, and professional organizations to collaborate in this area of potentially mutual enterprise. But significant changes need to be accomplished in the ways each of the providers interact with one another and with the community.

Summary and Conclusions

The literature has revealed a high level of activity related to the inservice education opportunities in vocational education of the handicapped. Unfortunately, most of the studies have dealt with activities conducted in only one state. The inservice needs of each state will obviously vary depending on the level of service provision that has been developed within the state. Whereas there have been some activities developed at the federal level, the impact data from these projects are not yet available. Therefore, it is difficult to develop a state of the art paper that can present a nationwide perspective. However, from data that are available several conclusions can be drawn:

1. The level of inservice activity has increased as a result of the legislative and social priority given to the vocational education of the handicapped.

2. Numerous exemplary inservice programs and projects have been developed.

3. Unfortunately, these "best" practices have not yet been incorporated into the major delivery systems and much of the inservice efforts have continued to be a "kind of massive spectator sport." (NEA, 1978)

4. Not all target populations have been reached by inservice education activities.

5. Not all states have proceeded with the same intensity toward the inservice problem and some states are at a beginning level, at best.

6. The inservice opportunities described in the literature tend to be aimed toward the awareness/orientation level and few studies indicated significant changes in teacher behavior or in the effect that inservice had on teaching practice.

The ultimate question that needs to be asked concerns the impact that inservice activities will have on successful integration of handicapped learners in vocational education programs and their eventual employability. The 1980 Report to Congress dealt with this question for education services in general. The report indicated that the difficulty of serving handicapped students in the least restrictive environment was dependent upon the extent of inservice preparation given to teachers the special education resources made available to teachers, and the degree to which the teacher individualized instruction for the non-handicapped children in the classroom. The difficulties for the classroom teacher were found to clearly increase if these elements were missing.

The remaining chapters in this monograph will describe issues and practices involved in systematically developing, implementing, and evaluating inservice models. Hopefully these models will lead the reader to design inservice activities that are more like that of the butterfly and less like that of the bullet.

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Planning Inservice Models

Systematic planning is a necessary component of all inservice education experiences and models. The need and rationale for effective planning of inservice education models are not unlike the need and rationale for planning travel to another continent or planet. The trip-tik alone is not sufficient; a guide or plan to accompany the trip-tik is also important. Without planning, traveling to a destination with only a map suggests a journey to the moon without making preparations for the trip. In these days of economic and educational accountability, planning carefully before taking our educational journeys becomes especially important.

Inservice education planning must be orchestrated with the needs and interests of professionals within the organizations or working environments. The challenge in planning, therefore, is to build flowing, ongoing inservice models which assist those in school systems and programs in the appraisal of current information and the utilization of best practices. As a result of implementing a systematically planned inservice education model, individual staff members can experience enriched professional lives, growth, and competency. Professional growth of faculty can improve the organization which in turn can initiate positive change in education. The premise of planning addressed in this chapter, therefore, focuses on (a) meeting the needs of individual staff members, recognizing that individuals are different and unique; and (b) developing inservice experiences systematically as an ongoing process rather than responding to isolated or singular events and needs as they arrive.

Inservice education is viewed in many different ways. How inservice education is viewed affects its design, delivery, and assessment. It is recognized that delivery of inservice design must address a range of possible needs among large and small school districts in urban and rural settings with varied resources and support available. It is also important to clarify basic assumptions which underly the delivery modes presented for guiding local planning of inservice education programs. The following beliefs have been synthesized from the literature to describe practices underlying proposed planning for inservice organizational frameworks:

--To engage in professional education careers and to be informed and effective throughout those careers, all school personnel should be involved in inservice experiences on a continuing basis.

--To plan for improved educational practice, educational inservice programs must provide sufficient time for systematic, long-range change.

--Inservice education planning should focus on the improvement of staff performance of professional responsibilities; staff improvement should, in turn, have influence on the quality of instruction for youth and adults.

--Inservice experiences should be planned and structured to reduce threat or anxiety of failure among participants; a condition or fear of judgment by colleagues often present among practitioners.

--Varied levels of professional competencies are represented among school personnel; therefore, planning for inservice education must emphasize individualization of instruction.

--Cooperative or team planning for inservice experiences by the participants increases the likelihood that participants are open to learning and applying what is planned.

--Inservice planning should provide for a learning environment conducive to trust, respect for the individual, and open communication among participants.

--Resources to plan and support inservice education programs must be committed by local school districts.

--Participation of the administrator in the planning of inservice experiences increases the probability of the administrator's commitment to successful implementation of the inservice plans.

The assumptions or beliefs above provide a basis for the discussion of planning for inservice which follows. If one agrees with these beliefs, then the inservice approaches planned will seem feasible. If one believes that inservice education is needed only to treat deficiencies or that it is planned wholly by the administrator or supervisor, then the planning approaches described will not be satisfactory or adequate.

Design Procedures

Planning for inservice model development includes the following related phases: awareness, readiness, commitment, planning, implementation, and maintenance (assurance that when change in performance is operational it will continue). Although these phases are discrete and seemingly sequential, they also overlap one another in the inservice development cycle. The emphasis of each in the inservice cycle varies. For example, readiness and planning are emphasized in the first phases of inservice experiences; readiness and planning occur also in later phases of the cycle but to a lesser degree.

Awareness

This phase occurs either formally or informally; it is recognition by two or more persons of the organization (school, university, or community level) that there is a particular need (e.g., providing for mainstreaming of handicapped students in vocational education programs; gaining the knowledge and understanding to provide appropriate supportive services to handicapped students enrolled in vocational education; ability to apply information regarding the capabilities of handicapped persons to their vocational skill development; or valuing assistance available from special educators to vocational teachers of handicapped students for gaining specific skills, knowledge, or attitudes). Through recognition and discussion of a need or problem, planning for addressing a recognized need should evolve. Planners or coordinators of planning should be alert to individuals or groups who identify needs or problems; they should capitalize on the awareness and sensitivity evidenced by inviting the assistance of these individuals in planning for resolution of the problem or for meeting the recognized need.

A formal or systematic approach for planning for awareness should include involvement of personnel in such activities as a problem census, an interest inventory, self-assessment, and planning conferences for self-improvement. Awareness can be developed further by encouraging personnel to investigate and study areas of high priority and of individual interest. Providing time for colleagues to share recently acquired knowledge or skills helps to build leadership and develop interest and respect among others.

Readiness

Readiness for planning for a school or university climate which supports change in professional behavior and improvement of practices, organization, and programs is an essential phase and a frequently forgotten step in designing effective inservice education. It is in this phase of the planning process that broad-based involvement and cooperation of educational personnel and community persons and leaders are developed to create a school or university climate conducive to change and improvement. Involvement of administrators; staff; school board members; trustees; parents; students; employers in business, industry, and government; community agency personnel supporting handicapped persons in education and employment; and labor representatives should occur in the planning of inservice experiences to implement change and improvement of educational opportunities and delivery. Cooperative participation in planning for inservice builds understanding of needs and decisions made for meeting those needs; at the same time, public understanding and support are developed and enlisted to assist in planning for change and improvement.

To organize school-community persons and to mobilize their support for change and improvement requires leadership and initiative on the part of key educational administrative personnel or supervisory, resource personnel who are committed to creating a dynamic educational climate for cooperative, team-planning. Administrative and leadership personnel must

--Communicate and demonstrate their commitment to sincere and genuine expectation of direct and/or representative participation of school-community persons in planning at all levels;

--Establish the practice of clear and open communications;

--Develop an atmosphere of trust among individuals across staff and administrative levels;

--Create a climate among all personnel to value and respect peer differences; and

--Initiate and structure varied opportunities for school-community persons to know one another well and understand individual values and positions.

Within such an environment and atmosphere, educators discover that their work involves many mutual concerns and interests which can be addressed cooperatively on a shared basis. A readiness to solve problems, establish common expectations and goals, desire to change individual behaviors, engage in new group behaviors and professional roles, develop and build cooperative working relationships among school-community persons, and establish long-range objectives and plans sets the stage for constructive, unified efforts for planning effective inservice experiences.

Planning the readiness phase should result in the following elements (ASCD, 1981):

--A written set of inservice goals (desired changes in professional behaviors) that the faculty of a school helps select, understands, and is committed to implement;

--A description of the specific programs and practices selected to achieve these goals;

--A broad, very general four-to-five year plan for implementing the desired change in the on-going program;

--Collection of evaluation data to determine the extent to which the goals, programs, practices, and general plan are understood and supported; and

--Collection of data pior to, during, and after this readiness phase to assess the school climate (p. 66)

Overall leadership for developing readiness for comprehensive planning should come from central administration in cooperation with the director or principal of the school. It is the responsibility of central administration to identify and make known to appropriate persons the parameters within which the cooperative planning of instructors; parents or spouses; community agencies; employers of business, industry, and government; supervisors; counselors; and students may occur. During the readiness phase, information related to key legislation such as the obligation to provide for a free public education, a least restrictive educational environment, accessibility of vocational education programs to handicapped persons, and reasonable accommodation for employment should be provided. Any local policies which may give guidance to those involved in planning for readiness for specific inservice planning should be clarified and made public at this time.

Commitment

Once a general plan for inservice readiness has been developed and faculty and administration have contributed to that planning by jointly defining how current practices will be improved, the beginnings of personnel and organizational commitment are initiated. Commitment to improvement and change is further developed as the participant base is extended and involved in planning and implementation. Planning for implementation of readiness experiences should include small group conferences involving teachers, principals, directors, deans, parents, employers, counselors, rehabilitation counselors, and other community resource persons as appropriate. Orientation to general information needed by school personnel,

employers, students, and parents will serve as a basis for readiness experiences. A variety of structured readiness experiences can be delivered in many different forms, such as forums, symposia, workshops, coursework, and/or consultation. Well-planned readiness activities developed to address the general goals identified for change and improvement should focus on issues and concerns, such as developing rapport among all staff; improving communications; developing problem-solving skills; and analyzing school-community, student-teacher, and parent-student relationships. General plans for change are reached by consensus of participants. If well-planned inservice activities which have common expectations for improvement and growth of persons participating are established, as well as an educational climate conducive to implementing the planned activities, then a commitment to general and ongoing professional development has been achieved.

Planning

Essential elements of the comprehensive planning phase include: (a) stating objectives emanating from the goals developed in the readiness phase, (b) planning for and conducting a needs assessment, (c) planning appropriate inservice experiences which serve as the vehicle for meeting the objectives as stated and prioritized, (d) identifying resources needed for planned inservice experiences, and (e) developing a tentative inservice design or model for implementation. A decision must be made early in planning the inservice activities regarding "who" is to be involved in "what" role of planning and implementation.

It is recognized that not everyone can be involved in every step of the planning process; therefore, it is important to plan for representation

of each classification and role of staff in overall planning. It also is very important that each participant be involved in planning for inservice at one or more steps of the process. Involvement in planning for the learning experience has been demonstrated through research to be directly related to the success and effectiveness of implementing what has been learned.

Comprehensive Planning

Inservice approaches or models utilized frequently for planning and implementation include forums, symposia, conferences, workshops, courses, and consultation. Forums, symposia, and conferences are usually short in duration, ranging from one to three days in the case of the forum or symposium and a few hours to one to three days for a conference. Often longer-term, planned, inservice sessions are delivered in the formats of workshops, courses, or consultation. Selection of the alternative models utilized in inservice planning is based upon purpose and length of time required for reaching objectives. Purposes of each approach are described as follows.

--Forum - public meeting or lecture involving discussion

--Symposium - formal meeting in which several specialists deliver short addresses on a topic or series of related topics

--Conference - representative assembly or administrative organization

--Workshop - intensive educational program for a relatively small group emphasizing problem solving

--Coursework - series of lectures or other matter dealing with a specific subject or content

--Consultation - provision of technical assistance by a person(s) with specific expertise; or deliberation among professionals.

These categories of inservice programs will be used throughout the monograph to provide a framework for planning, implementing, and evaluating inservice activities.

Long-range planning usually makes use of several of the approaches described. Short-range planning may use only one approach, or at least usually no more than a couple of these approaches.

As has been explained throughout this chapter, planning is an integral part of the inservice experience; therefore, each step of planning should be individual and unique to each setting in order to meet local needs, to be meaningful to participants, and to be sustained/maintained as an ongoing process. A general discussion of the process and outcomes for each element of comprehensive planning follows.

Stating Objectives

Objectives should be clearly stated and consistent or congruent with the inservice goals outlined in the readiness phase. It is important that they address content or knowledge and understandings, teaching skills, and attitudes.

Knowledge objectives deal with the "what"--what is to be learned. For example, vocational teachers need to know the kinds of support services which may enable individual students with special needs to perform effectively. An example of two such knowledge objectives are as follows:

1. The counselor will identify supportive services available locally (school and community).
2. The teacher will select appropriate supportive service(s) to meet individual student needs.

Skill objectives are related to the teaching process, the "how to" achieve successful learning of the knowledge or content. Examples of these objectives are the following:

1. The administrator will plan for and establish community agency linkages as resources for supportive services for handicapped students.
2. The vocational teacher will serve as a team member in planning for developing individualized education programs (IEPs) for handicapped students.

Attitude objectives address the affective domain developed for bringing about change. To illustrate these objectives, the following examples are listed.

1. The teacher will plan for students to have a role in preparing for their study and learning experiences.
2. The administrator will plan for teacher involvement in planning for their inservice experiences.

Conducting Needs Assessment

The needs assessment is a means to determine the differences or discrepancies between "what is" and "what should be," often described as the difference between practice and the ideal. Several sources of indicators of teacher needs for inservice experiences are those perceived as needed by the teacher and those teacher needs identified by the supervisor or administrator. Verification of inservice needs must occur when distinct differences are identified between those outcomes the teacher feels are important and those practices the administrator believes should be improved or changed. Through questionnaire, interview, or observation

techniques, information regarding needs can be collected and verified. In some cases external evaluators may be used to clarify needs. Decisions regarding inservice needs of teachers or administrators should always involve the participants themselves in the decision making process.

Needs assessment information collected for inservice planning should also include data regarding the learning styles of the adult participants. The needs inventory or assessment can include questions related to methods of delivery preferred such as film, videotape, lecture, small group, question-answer, demonstration, role play, simulation, discussion, and the like. The needs assessment, therefore, provides planning information which is useful in determining priorities of needs and modes of delivery for inservice experiences.

Existing needs assessment approaches available for consideration, modification, and/or use include the following. They represent a variety of processes used initially to plan inservice experiences which reflect the needs of individuals or participants. Those models listed below were selected by participants of a clinic on inservice education conducted by the American Association of Colleges for Teacher Education in March, 1979 (Rubin & Hansen, 1980):

1. Oklahoma Consortium for Urban Teacher Education (OCUTE)
2. Illinois Problem Index (IPI)
3. Teacher Education Center Needs Assessment Package (TEC-NAP)
4. Clinical Inservice Model, University of Houston Teacher Corps Project
5. Multiple Source Assessment Model, Education Development Center, Jefferson County Public Schools
6. Concerns Based Adoption Model, University of Texas at Austin

7. Six-Phased Process, State University of New York at Oneonta

8. Two Models: 14-County Teacher Education Center Community; Three-Way Collaboration of University, Public School, and Community; at University of South Florida.

The preceding suggested models are described in Chapter VII of the ATE source cited. The approaches listed represent a variety of approaches in practice; however, no one model is being recommended over another. It is apparent that needs assessment is an important step in planning for inservice experiences which will lead to educational change.

Planning Strategies/Inservice Activities

Inservice methods and activities employed, regardless of choice of delivery should focus on planning varied experiences to build participant rapport, develop interaction and communication among participants, organize work responsibility for sharing among all, conduct pretest and posttest evaluations, and accommodate participant differences in interests, motivation, achievement, and learning styles. Planning methods should always provide for application/hands-on opportunities and experiences for participants.

Identifying and Selecting Resources

Familiarity with resources available for inservice planning is very important. Knowing which staff members within the school district can take leadership responsibility in inservice planning and implementation; how much school time can be used if any; whether there is budget to acquire non-district personnel, consultants, substitutes, and/or materials; the nature of local administrative support and commitment (time, personnel, materials, equipment, funds); and the available space and facilities for inservice is essential. As much as possible, inservice experiences for

participants should reflect the learning environments in which they will be expected to apply their skills and understandings.

Selection of resources should be based upon utilization of those which will enhance the inservice activity and provide a quality experience for participants. Of course, the factors of time, funds, personnel availability, commitment of space and facilities also affect which resources are ultimately used.

Preparing Leadership Planners for Model Design

Although inservice planning involves participation by all levels of staff members, there is still need for one or more persons to guide and coordinate planning and implementing the program. Establishing an advisory steering committee representative of the various types of participants to be trained can assist central administrative personnel in inservice planning and decision making. Such a committee provides an important link from central office and/or consultant coordination to faculty, support persons, community representatives, advisory committees to vocational education programs, and parents or spouses. It may be necessary initially to plan for inservice of the steering committee by an inside or outside inservice consultant. As the steering committee gains experience and direction in its role, it can gradually take a leadership role in planning. If that leadership required does not exist, then planning steps include inservice for the coordination and guidance of a steering group to develop an effective program for faculty and others.

Planning Results

As a result of involving participants in the planning of an inservice program, a written inservice plan should be designed and serve as a guide

for implementation activities. Ideally, the overall planning document will include plans for four or five years. Included in the comprehensive plan are program goals, inservice objectives, a four-to-five year sequence of planned experiences for change and improvement, detailed planning for the first year, resources to be used for inservice implementation, and evaluation of the first-year plan in preparation for detailed planning for the second year. (See Addendum A for a sample written inservice plan and Addendum B for a sample work plan for achieving a specific objective.)

Inservice education is now recognized as a necessary and ongoing growth process to follow initial certification in teaching. At one time, inservice education occurred as it was initiated by individual educators. Today it is big business and is expected to occur in most public educational settings. There is general acceptance today of the need for inservice education and for providing alternative inservice choices to persons having differing needs and abilities. The challenge is to develop quality inservice programs embodying a variety of choices and opportunities which meet common and individual staff needs; and in turn, improved instruction/programs for students. The inservice planning and implementation are enriched through cooperative relationships, realistic commitments for follow-up support, evaluation, and maintenance (Babtista & Babtista, 1980).

ADDENDUM A

Comprehensive Inservice Planning for Vocational Education for Handicapped Persons

The building administrator appoints an advisory committee at the building level for program planning to inservice personnel working with handicapped students. The committee is comprised of the staff development coordinator, the counseling coordinator, the special education supervisor, a parent, a handicapped student, an employer, and a handicapped employee (a graduate). Several evening planning sessions chaired by the administrator result in the development of overall inservice program goals. They are the following, as perceived by the committee representatives.

1. Improve staff, particularly teachers, awareness, knowledge, and understanding of the special needs of handicapped persons.
2. Establish school-community linkages for supportive services resources.
3. Develop staff competencies/skills for integrating handicapped students into regular classroom experiences, to the maximum extent possible.
4. Demonstrate the commitment to meet common and unique needs of staff.
5. Evaluate inservice experiences planned and implemented.

Participatory planning must be initiated through the leadership of the administrator, the director of personnel development, and the advisory steering committee. The components comprising the inservice plan include goals, objectives, strategies, resources needed, participants, delivery model, time suggested for each segment of the inservice plan, and leadership responsibility. Addendum B provides a sample work plan for achieving goal number 1.

Addendum B
Inservice Program Workplan (Sample for Goal #1)

Program Goals	Objectives Tasks	Strategies/Activities	Needed Resources	Participants	Delivery Model	Length of Time	Leadership Responsibility
1 0 Improve among staff the awareness know ledge and understanding of the special needs of handicapped persons	1 1 Identify problems issues needs and concerns of participants	1 1 1 Establish openness and respect for ideas/discussion 1 1 2 Conduct a problem census 1 1 3 Conduct a needs assessment 1 1 4 Organize/analyze information from 1 1 2 and 1 1 3	1 1 1 Space with 1 1 4 small tables and chairs for small group arrangements chalk board for problem/issue identification needs assessment questionnaire form for recording of information	1 1 1 1 1 4 small groups of 4 to 6 at each table with a mixture of professional roles at each table—teachers (vocational special regular) counselors central office staff advisory committee members	1 1 1 1 1 4 Conference	Two hours—extension of regular one hour staff meeting after school	Building principal—Greetings/Purpose of Meeting Director of Staff Development and Steering Committee
	1 2 Develop series of inservice sessions Awareness/sensitivity to needs of handicapped persons	1 2 1 Plan session content outlines based upon needs identified 1 2 2 Plan objectives/agendas for each of three sessions Example Legislation for the Handicap Era–Rights and Responsibilities—Lecture and sensitivity training Example How To Be You—Lecture and demonstration Example Employer Student Employee Expectations Panel and Group Analysis	1 2 1 Space with 1 2 2 tables arranged in quadrangle—review of outline recording of suggestions on chart divide total group into three groups — each plans objectives agendas and program for one each of the sessions Table for panel with microphones respondents to panel	1 2 1 1 2 2 Teachers counselors administrative staff advisory committee members employers students employees other community agency persons	1 2 1 1 2 2 Workshop Conference Conference	Two hours One hour Two hours	Director of Staff Development Director of Staff Development Advisory Steering Committee
	1 3 Plan inservice forum capabilities of handicapped persons	1 3 1 Convene steering committee to plan lecture series re capabilities 1 3 2 Plan for responses to each session of forum by a handicapped person (employer employee student)	1 3 1 1 3 2 Meeting room planning chart telephoning of selected persons for forum	1 3 1 1 3 2 Teachers counselors administrative staff advisory committee members parents students community public	1 3 1 1 3 2 Forum	One day	Administration Steering Committee and Director of Staff Development

References

Babtista, M., & Babtista, Jr., H. P. Staff development for a large school district. ATE staff development and educational change. Reston, Virginia: Association of Teacher Educators, 1980.

Rubin, L., & Hansen, J. H. Assessing needs and prioritizing goals. ATE staff development and educational change. Reston, Virginia: Association of Teacher Educators, 1980.

Staff development/organization development. Alexandria, Virginia: ASCD Yearbook Committee, 1981.

Implementing Inservice Models

There can be little doubt that inservice education has become a popular vehicle for disseminating information, teaching methods, and materials t practitioners who develop vocational programs for handicapped learners (Meers, 1977). By effectively utilizing the inservice format, university personnel, administrators, and appropriate others can assist the interdisciplinary team in designing and implementing program options that will meet the students' individual needs. Unfortunately, inservice education often is considered ineffective and fails to meet its objectives (Agne & Ducharme, 1978; Hanserman, 1978). Hentschel (1977) states that there has been little change in the format of inservice education from the early 1900s to the present. There has traditionally been a paucity of empirical evidence that supports the positive effects inservice programs may have on educational practices or teacher-behaviors (Devore, 1971; Hentschel, 1977; Rubin, 1969). Therefore, a paradox exists within the field of inservice education. On the one hand, the procedure to disseminate valuable information to teachers is available. On the other hand, the process to effectively and efficiently implement that vehicle is apparently in its infancy stages.

The result is that inservice education is currently at a critical crossroads. With additional strains placed on the system by the current state of the economy, the possibility exists that professionals may find themselves in the position of "throwing the baby out with the bath water." The implications concerning the state of the art clearly point out that efforts must be made to enable inservice programs to become effective tools

for disseminating knowledge. Presented in this chapter will be a discussion of some preferred procedures and processes in the implementation of inservice education. These practices have been identified in the literature as being characteristic of successful inservice programs. The reader is cautioned, however, to note that the success of such characteristics is dependent upon any number of variables associated with inservice interventions. Therefore, in the final analysis, a program evaluating quantifiable changes in observable participant behaviors is needed to judge whether implemented practices were successful in specific settings.

Procedures

This section of the chapter is designed to focus on some general procedures associated with the implementation of inservice models. In order to establish a framework for the discussion, inservice models will be divided into two broad based categories: short-term inservice and long-term inservice. The selection of either the short- or long-term approach is obviously dependent upon a needs assessment that precedes the actual involvement of participants.

Short-Term Inservice Considerations

For the purposes of this chapter, short-term refers to three basic types of inservice models: (a) the forum, (b) the symposium, and (c) the conference. Each of these three basic types of inservice models will be examined in regard to six procedural concerns: site selection, format, content, scheduling, selection of resources (both human and material), and follow-up and maintenance of momentum generated through the type of inservice model being discussed.

Webster defines forum as a public meeting or lecture involving discussion. In an inservice sense, then, forum generally refers to a limited event that does not usually encompass more than one day. The forum can constitute an effective vehicle for dispensing specific information and soliciting feedback on that information in a cost-effective manner.

Since the forum is somewhat limited by both scope and time, site selection becomes a very important factor. For example, it would be beneficial, if not necessary, to centrally locate or regionalize the forum. In this way, participants are not overly burdened by travel restrictions, and are able to express their opinions in a locally familiar environment. Similarly, the format of the forum should be tightly structured and directed towards the dissemination of critical information, allowing for discussion in terms of clarifying that information which is being disseminated. A handy rule of thumb in developing a forum might be to provide a clear and concise delivery of critical information early in the session, thereby allowing the remainder of the forum to be aimed at the application of critical information to forum participants.

The content of the forum is largely determined by the need to share specific information that may require some interpretation or debate. At this point, inservice planners must decide on the appropriateness of the forum approach. Typical kinds of information that could be shared and discussed through utilization of the forum approach would include notification of a proposed change in agency regulation and/or policy, anticipated impact of the change, and acquisition of input from in-field personnel, or those whom a change in regulation and/or policy would most likely affect.

In this same vein, it is essential to schedule the forum so that maximum coverage can be realized. Scheduling a forum at a time when potential participant involvement is questionable might be a convenient way to

circumvent a controversial topic, but it will probably produce a limited response to the issue at hand. Therefore, the significant factor in scheduling the forum appears to be in the area of participant involvement. The utilization of resources, both human and material, is another procedural concern. In the area of human resources, the presentation of forum content should include those persons for which participant feedback is most beneficial (i.e., those in a decision making capacity). Additionally, presenters should be those persons who have sufficient expertise to clearly describe and discuss forum content. Material resources should include items which will provide a tangible reference point for forum participants.

Although the maintenance of momentum generated during the forum is not really a significant factor, follow-up is. Follow-up enables the participants to conceivably see the fruits of their involvement. Consequently, the follow-up of one forum might be essential to the success of another. The forum approach is historically rooted in the democratic process. It is usually a brief encounter, but one that can be meaningful when appropriately implemented.

The symposium is another type of inservice model that can be characterized as short-term. A symposium is generally defined as a formal meeting where several specialists deliver short addresses on a single topic or related topics. This being the case, the symposium would seem to be an excellent inservice model for enhancing concept formation.

Site selection for the symposium is probably not quite as critical as it is for the forum, but nonetheless the needs of both speakers and participants should be carefully considered. Preferably, a site that can easily accommodate the travel concerns and comfort of both speakers and participants should be selected. In conjunction with the site selection factor the

format of the symposium is another implementation issue. The symposium format may include an opening statement specifying the purpose of the gathering along with an appropriate introduction of each speaker. Since concept formation is sometimes difficult for an audience from a physical as well as mental basis, a reasonable number of breaks may need to be integrated into the format. Furthermore, this will provide the opportunity for the participants to assimilate much of the information that is being provided.

The major portion of the content of the symposium will be provided by the selected speakers. However, the content will become more relevant to participants if the symposium topic is clearly understood before hand by everyone involved. In many cases, the symposium can be followed by discussion groups or socials so that participants have the opportunity to interact with speakers in a less formal setting. In these less formal settings, concept formation or ideas presented by speakers at the symposium can be enhanced.

The scheduling of the symposium must consider two basic issues: the availability of desired speakers, and the availability of an appropriate audience. The coordination of these two issues will help make for a potentially enlightening experience. Oftentimes symposium speakers are asked to present a paper. The collection of these papers will form the bulk of the material resources as a result of the symposium. Obviously, the speakers constitute the human resource factor.

Distribution of papers presented at the symposium provides a logical follow-up mechanism. As such, the names and addresses of symposium participants will need to be gathered prior to their leaving the symposium site. The maintenance of momentum generated during the symposium may

need to be closely monitored by inservice workshop planners. Perhaps the development of concept realization activities, or the development of a local task force on implementation will prove beneficial. One important consideration in this regard is time. If too much time elapses between the symposium and the initiation of related practices, a great deal of the enthusiasm spawned at the symposium may dissipate.

A third type of short-term inservice vehicle is the conference, which constitutes a representative assembly or administrative organization. For inservice purposes, this translates to a gathering of professionals or persons with a similar background and a common purpose. Usually, the conference is composed of a rather large group. As such, adequate facilities and accommodations should be considered in site selection. The format of the conference is very similar to that of the symposium with the exception that information on a variety of subjects will be presented. In that sense, then, the conference can be viewed as a series of symposiums.

The content of the conference is generally determined by the perceived needs of the association or group that is represented. In scheduling, sessions of general interest as well as rotating sessions of specitic interest are typical content delivery mechanisms. Human resources are usually in the form of persons "on the program," and material resources are usually handouts that conferees may take with them from the session they choose to attend.

Since the conference is indicative of an endeavor of some magnitude, it is difficult to provide a great deal of follow-up, except through association or group publications. Many associations provide a pre-conference and post-conference related publication, either through a journal or newsletter form. This is also the way in which many groups attempt to build and maintain conference related momentum.

The implementation concerns of the short-term inservice models just described are simply guidelines that may be followed in the utilization of either the forum, symposium, or conference-type approach. If inservice providers are familiar with some of the logistics associated with each type of inservice model, then the needs of the population being served may be more adequately met. In addition, interdisciplinary collaboration between vocational education, special education, and vocational rehabilitation inservice planners must be a model demonstrating cooperative working relationships if they expect similar kinds of activities to be reflected in the field.

Long-Term Inservice Considerations

In the context of this chapter, long-term inservice refers to three basic models that differ significantly from those under the general heading of short-term inservice and include: (a) the workshop, (b) coursework, and (c) consultation. To maintain the continuity of this discussion, these inservice models will be examined in light of the same six procedural concerns that governed the overview of the short-term inservice delivery system: site selection, format, content, scheduling, selection of resources (both human and material), and follow-up and maintenance of momentum generated during the type of inservice model being discussed.

The workshop-type approach is defined as an intensive program for a relatively small group that emphasizes problem-solving and translating educational principles into practice. Given this definition, it is easy to see why the workshop has become a highly visible inservice model. Site selection for the workshop must consider at least two important factors: participant convenience, and the ability of the site to complement workshop objectives in the form of supplemental locations. For example, if one of

the workshop objectives is to introduce special education personnel to the field of vocational education, it would be necessary for the workshop site to be located near a vocational education facility so that the vocational education experience can be seen first hand. Consideration of a factor such as this in the site selection process will enable the workshop to translate principles into practice.

The format of the workshop is generally based on defining an overall workshop goal, and then developing a set of sequential instructional objectives. The instructional objectives are then divided into workshop activities and provide major teaching blocks for the workshop. The related activities for each instructional objective, then, are designed to enhance the content presented in the objective, as well as being determined by a pre-workshop needs assessment. The needs assessment will help define the wokshop goal and subsequent objectives. The definition of objectives will, in turn, help define the related activities. The key point seems to be in the problem solving aspect of instruction. It is for this reason that the designation and implementation of appropriate activities is an important consideration. In the presentation of workshop content, inservice planners can actually demonstrate the behaviors that are desirable for participants to exhibit once the workshop has concluded.

When workshops are extended for more than one week and participants are away from home, there seems to be a "lull" in the sessions somewhere around the midpoint. Workshop planners may need to: (a) avoid scheduling critical content near the midpoint of the workshop, and (b) provide for recreational or social type activities that will help reduce some of the feelings of "when will this ever end." Examples of some other scheduling techniques might be to provide for an extended weekend by

ending the sessions at noon on Friday and commencing at noon on the following Monday. This may allow participants to obtain a full weekend at home. Needless to say, it may be wise to schedule review sessions for either Friday morning or Monday afternoon.

Selecting both human and material resources should be directed towards enhancing the content of the workshop. Inappropriate selection of either may serve to stall any progress being made. Stalling the progress of the workshop may result in losing precious time trying to regain continuity and flow. A positive step would be to identify speakers or other resource personnel and preview all materials prior to beginning the workshop. Many times the results of the workshop are directly proportional to the amount of effort that preceded them.

The true test of workshop effectiveness may lie in the extent to which educational practices presented in the workshop are actually implemented by participants at the conclusion of the workshop. With that thought in mind, workshop follow-up should seek to make a determination in that regard. The maintenance of momentum generated during the workshop may be dependent upon at least two items: (a) the feeling of camaraderie that is developed during the workshop experience, and (b) the concluding atmosphere that terminates the workshop. There are several techniques that can be used concerning these two items. First of all, participants must be "sold" on the idea that what they are doing has some real meaning. This "sales pitch" by the workshop leaders is explaining the rationale of the workshop. Secondly, the workshop should be pragmatically oriented. In-field personnel have a tendency sometimes to only be interested in those things that have immediate payoff. Third, the development of a somewhat non-pressurized environment tends to alleviate some of the anxieties that will hamper the learning process.

The coursework inservice model consists of a series of related lectures on specific subject matter for credit or non-credit in a traditional educational setting. Usually sponsored by an educational institution, coursework site selection is generally predetermined. Format, content, scheduling, and resources are similarly determined by course outlines that are developed and approved prior to the beginning of the coursework. However, many of the same concerns that impact on the workshop-type inservice models impact on coursework, particularly in terms of presentation of materials and the development of goals, objectives, activities, and the utilization of human and material resources.

Since coursework is not usually as intensive as the workshop, the follow-up and consequently the maintenance of momentum factors that surround the coursework are somewhat diminished. If the coursework is offered on a credit basis, the motivation usually involves the pursuit of a degree or certificate. Coursework offered on a non-credit basis will generally need to have some motivational factors built in to offset the concrete reinforcement of a grade. As such, many of the techniques discussed in regard to the workshop can be utilized.

The final long-term inservice model is the consultation approach. Actually, consultation could also be categorized as short-term inservice. Consultation can be defined as the provision of technical assistance by someone with specific expertise or deliberation between professions. In the sense that consultation is deliberation between professionals, which implies on-going, long-term inservice might be an appropriate characterization. Consultation generally takes place upon request in an established setting, such as a classroom, office, or conference room. It usually involves a limited number of individuals. Therefore, site selection is not a

critical concern. However, in deliberations between professionals from varying backgrounds, a neutral site may facilitate working relationships. The format of the consultation-type inservice model is oftentimes very specific, and geared towards the alleviation of a particular problem (i.e., the provision of technical assistance). In any case, the content of the session is greatly dependent upon (a) the expertise of the consultant, and (b) the nature and extent of the problem in question. The nature and extent of the problem may require a number of consultations, which has some implications for scheduling.

There can be both formal and informal consultations. A formal consultation may involve the hiring or utilization of a person outside the immediate environment with highly developed skills in a given area. An informal consultation may involve the discussion and sharing of ideas by persons inside the immediate environment. The scheduling of formal consultations is mostly in keeping with the availability of the consultant; whereas, the informal consultation is based upon the mutual convenience of participating professionals. Since the consultation model does not usually involve a large number of persons, scheduling is not frequently a major concern. Certainly in the consultation model, the use of human resources is clear. Material resources, however, can augment the consultation by providing a direct reference to the information that has been shared. In this way, the consultant's expertise becomes more substantial.

Follow-up of the consultation is founded in the notion of implementing or carrying out the suggestions derived through deliberation. The maintenance of momentum generated through the consultation approach to inservice seems to be dependent upon the nature and long-range involvement of the consultant(s). While most of the other inservice models discussed in this

portion of the chapter deal with a fairly large number of persons, the consultation model differs in that initially, relatively small numbers of persons are involved at one time. Of course, the consultation model has the potential to eventually affect large numbers of persons over time.

The procedures surrounding inservice model implementation are merely a prelude to the process-oriented concerns that also affect inservice model implementation. The remainder of this chapter will be directed towards outlining some practical techniques for implementing more effective and efficient inservice delivery models.

Process

Hentschel (1977) has written a comprehensive article applying some tenets of change agent theory to inservice education. These principles are valuable for all inservice delivery professionals and will be the foundation for this section of the chapter. The process for inservice education, according to Hentschel, can be viewed in terms of a conceptual framework that allows professionals to effectively provide inservice interventions. A conceptual framework for inservice intervention includes a number of preferred practices that a change agent or inservice provider can incorporate into the program. These practices are designed to increase the probability of success for the inservice. For example, Hentschel (1977) points out that the chances for inservice program success are enhanced when the implementor can "create a more favorable attitude toward change in the client system" (p. 104).

Since the inception of legislative mandates outlining a free and appropriate public education for the handicapped, there have been numerous rhetorical pleas concerning the rights of this population. One can witness any number of "awareness type" inservice sessions that strive to convince

interdisciplinary personnel of the merit of vocational education program options for handicapped learners. Recent Office for Civil Rights data, however, suggest that even considering many of the legal mandates enacted in the 70s, there has been little significant change in the enrollment figures of vocational education classes and the handicapped population. If these data are an accurate indication of current practice, inservice educators must address or at least encourage activities that facilitate innovations among the persons responsible for developing programs for this population. For instance, many times professionals find it easier to interact with members of their respective disciplines simply because they have more in common, and in general, it's a socially secure situation. Recognizing this problem, some inservice educators arrange cross-training workshops where interdisciplinary personnel attend the same sessions; the theory being that proximity initiates and enhances cooperation. In many cases, though, the threat of entering unfamiliar territory may override any actual cooperative planning and implementation when the participants return to their individual situations. What the inservice trainers can do to avoid this situation is structure inservice so that cooperative disciplines are required to work together on field-based projects such as completing a community needs assessment either prior to, during, or after the inservice. Additional activities might include attending and presenting at conferences as a team, and jointly visiting model cooperative efforts, as well as other result oriented endeavors.

Another tenet of the conceptual framework of inservice discussed by Hentschel involves the positive aspects that are gained by participants outlining their own perceived needs. When an inservice intervention is based on needs identified by the inservice educator or administrator, there

is less chance that the intervention will successfully impact on participants' behaviors. Inservice efforts directed toward needs expressly identified by the target population have a better chance of being successful (Lawrence, 1974). Based on change agent theory, this conceptual issue appears to be logical, and in fact, is accepted as principle by many educators. The problem, however, may be that, in practice, this principle is not always a guideline for implementation. There are situations where university faculty and local school administration meet and decide that the interdiciplinary personnel in a given district need inservice programs that will allow them to be exposed to the various issues of vocational education for handicapped learners. Implications of Hentschel's work would indicate that such a process may only be minimally successful. A more effective system may exist if teams of vocational education, special education, and vocational rehabilitation personnel are formed prior to inservice implementation with the expressed purpose of identifying their needs, developing appropriate program objectives, and suggesting possible inservice providers and activities. A system such as this is more likely to be effective for two reasons. First, it allows the consumer to be involved in planning and implementation from the outset. Secondly, those participating in team planning for inservice programs begin to become acquainted personally, and with each others' discipline in a non-directed and informal atmosphere that is difficult to simulate in an instructional setting. Therefore, the opportunity to work cooperatively as a team prior to inservice programs is an added benefit.

Hentschel (1977) presents a third tenet of inservice education that supports the theory of continual change agent support. That is, the traditonal one-shot inservice intervention does not appear to provide lasting

change much above the level of awareness concerning specific conceptual issues. This tenet supports the implementation of inservice programs that allow for long lasting contact between the inservice provider and the consumer. Change agents or inservice providers that remain in contact with the consumer over time have the opportunity to assist in the various stages of the inservice implementation process.

Ample evidence exists in the behavioral literature to support three levels in the learning process: skill acquisition, skill maintenance, and skill generalization. Inservice activities that are always presented in a single format or are presented exclusively over short periods of time can only allow the consumer to reach the skill acquisition stage. Therefore, an important implication of the specific change agent theory being discussed here is clear; effective inservice programs pass through a series of stages over a long period of time. These stages lead the consumer to not only acquire new skills, but also to maintain and eventually generalize those skills to other situations. For example, an inservice program may be designed to develop competencies in a group of participants that are needed for designing cooperative vocational programming for handicapped learners. Initial sessions with the teams of vocational and special educators and vocational rehabilitation personnel would allow the inservice provider to present information concerning topical areas such as assessing learner needs, curriculum modification, classroom intervention, and program options, etc. During these skill acquisition sessions, the vocational education, special education, and vocational rehabilitation teams have the opportunity to learn techniques for appropriate programming as well as practice these skills under simulated conditions. To end the process at this point would serve only to prove that attitudes were possibly changed

and/or knowledge level skills were affected as demonstrated by paper and pencil tests. The inservice provider would never be sure that when the participants returned to their respective situations, their day-to-day performance was changed in any way.

To remediate the difficulty cited above, a long-term commitment is needed by the change agent. That is, planning "booster shot" sessions and implementing them in target areas. The "booster shot" sessions enable the participants to maintain the skills learned in the didactic phase through guided practice monitored by the inservice provider. To that end, a variety of inservice models can be utilized. In addition, the provider can assist the team in generalizing learned skills to other students, curricular areas, etc. The consumer must perceive a real commitment, via the deeds of the inservice provider, before a planned change in teacher behavior can be realized.

Finally, inservice planners must be cognizant of basic reinforcement theory when developing programs for participants. The reality of the knowledge obtained from the study of behavior principles dictates that individuals must be aware of how a change in their behavior will in some way benefit them. Therefore, change agents must plan a reinforcement system that will meet participant need at two levels.

Initially, an effective inservice educator will demonstrate to the consumer how the content of the inservice program in question will benefit them. A mistake may be made early if efforts are made to convince consumers with implied threats. There are times when inservice providers will attempt to coerce participants into vocational programming for the handicapped simply because it is "the law." Demonstrating to participants specific ways in which vocational programming for the handicapped can

become reality such as curriculum modification techniques, IEP implementation strategies, and fostering reciprocal relationships may have significantly more impact.

A second level of reinforcement that a change agent should plan for involves devising a series of secondary reinforcers that can be implemented wit.. consumers. This reinforcement phase is important, especially in light of the fact that under the present contractual system in public schools, merit rewards are not always feasible. Reinforcers such as praise and recognition become the tools for use by the change agent (Hentschel, 1977). Hentschel identifies a powerful secondary reinforcer available in school settings, that is often overlooked or underused, and that is administrative approval. Inservice providers need to work concurrently with administrators in inservice sessions to not only provide the necessary financial and conceptual support for participants, but also to provide the frequent secondary praise and recognition that may reward participants for their efforts.

The present section has discussed some of the more preferred techniques for implementing effective inservice. Although these considerations are vital, the process of effective change agentry does not stop here. To increase the probability that the inservice program will impact on behavior, change agents must also consider what teaching strategies will be implemented to assist the target population in learning new skills.

Strategies for Implementing Inservice Programs

When reviewing the literature on inservice education, an apparent lack of emphasis exists on defining what specific techniques were used to disseminate information. Specifically, there is comparatively little information concerning the exact strategies that were used to "teach" the skills to

inservice participants. For example, inservice educators may point out that precision teaching techniques and direct measurement monitoring devices are essential tools for teaching vocationally related skills to handicapped learners. Yet, how often are the uses of these techniques demonstrated in implementing inservice programs? This question may be better answered by briefly describing specific methods for intervention.

Included within a precision teaching approach are specific behaviors that have been used extensively for teaching handicapped learners: verbal instructions, modeling, prompts, guidance, and subsequently some form of consequence. An inspection of a variety of inservice interventions will identify that a large majority of inservice presentations result in verbal instructions. The forum of symposium model, although traditional, does not necessarily have a lasting effect on participants once they return to their natural environment.

Instead, a combination of techniques may have a more observable effect (Langone, 1980). Assume there is a problem faced by an interdisciplinary team regarding instruction of a mentally handicapped learner obtaining specific skills in a brick masonry cluster. A preferred technique would allow an inservice educator to model, in conjunction with verbal directions, the types of instructional skills that the participants should exhibit. In addition, working closely with the interdisciplinary team, the inservice provider can use techniques such as prompts and, in some cases, manual guidance to accentuate specific points they wish to incorporate into the participants' repertoires.

Finally, the use of reinforcers for teacher change has been discussed elsewhere in this chapter. However, the application of consequences to this area expands the tools that an inservice educator has available. When

inservice providers are engaged in assisting participants to develop new skills or generalize learned skills to other areas, the opportunity is available to redirect errors with a positive consequence. If an inservice participant is inappropriately applying a particular learning procedure with a student, the use of precision teaching techniques can mold behaviors by pointing out possible consequences and then demonstrating more appropriate options.

One final point should be made that relates to direct measurement of behavior. Monitoring behaviors, whether student or teacher behaviors, is an important component of any inservice program. Both formative and summative evaluations are vital for establishing program accountability and will be discussed in the final chapter of this monograph; however, the importance of behavior monitoring has implications for inservice intervention. Defining and measuring target teacher behaviors that the inservice program will address provides valuable feedback to teachers concerning the progress they are making during the course of the intervention. A systematic evaluation eliminates much of the guesswork that still exists in inservice training as to the exact inservice goals and objectives or planned changes that are being addressed (Langone, 1980).

Summary

The implementation of inservice models regarding the occupational preparation of handicapped learners can be divided into two major segments: procedures and process. The procedures section of this chapter deals with six major inservice models. Furthermore, the six major inservice models have been subdivided for discussion purposes into short-term inservice and long-term inservice. The forum, symposium, and conferences are included in the short-term inservice approach. The workshop,

coursework, and consultation comprise the long-term inservice approach. Each of these inservice types are examined in terms of six procedural concerns: site selection, format, content scheduling, selection of resources (both human and material), and follow-up and maintenance of momentum generated through the type of inservice model being reviewed.

The process for inservice implementation is presented in reference to four basic tenets of change agent theory and inservice education according to Hentschel (1977). These four tenets are: (a) There must exist in the client system a favorable attitude towards change; (b) positive aspects are gained through participants outlining their own needs; (c) effective inservice education requires continual change agent support, and (d) inservice planners must recognize the need for utilizing basic reinforcement theory. In addition to discussing each of these four tenets at some length, some strategies for implementing inservice programs were also presented.

There can be little doubt that inservice education can become an effective tool for disseminating information, teaching methods, and materials to practitioners. Through understanding of some procedures and processes that impact on the provision of inservice, the area of occupational preparation for handicapped learners can be greatly augmented. Inservice education in this regard appears to be at a critical crossroads, and the effectiveness of the implementation strategies will determine the route that is taken.

This existence of effective inservice programs will ultimately be determined by the evaluation procedures used. In this light, it will be important for professionals to work towards establishing a clear cause and effect relationship between specific implementation strategies and subsequent changes in the onsite behaviors of practitioners.

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Evaluating Inservice Models

The topic of evaluating inservice education has been widely discussed in the literature (Griffin, 1979; Henderson, 1978; Brinkerhoff, 1980; & Bishop, 1976), and numerous models have been generated for conducting evaluations of inservice programs (McCoy, Prehm, & Lampert, n.d.; Everett, 1979; Clark, Brown, & Green, 1980; & Skrtic, Clark, Begun, & Bullis, 1980). However, there is a dearth of empirically based efforts that translate these models into practice or that demonstrate systematic use of evaluating data for program change or improvement. In fact, Cline (1980) in a preliminary anlaysis of 83 or 120 federally-funded special education inservice projects concluded:

> Project evaluation components frequently demonstrate confusion on the part of grant developers with regard to purpose or focus of evaluation; although the majority make a connection between evaluation and program improvement, often the impression is left that there is greater concern for federal reporting requirements or research. (p. 7)

Part of the problem may stem from the historic tendency to equate educational evaluation with educational measurement (Cronbach, 1973). Inservice program evaluators may have found that traditional measurement designs have been inappropriate or insufficient for their evaluative needs, and hence, adopting strict quantitative methodologies may have proven frustrating and ineffectual. An interrelated problem has also been suggested in that evaluation designs which are conducted for compliance with federal or state inservice funding requirements may engender activities directly at odds with the likelihood of producing data that are highly useful for local-level programming decisions. Hayman, Rayder, Stenner,

and Madey (1979) have addressed this disparity in a construct they call the "cross-levels hypothesis." It suggests that the greater the disparity between the primary consumers of evaluation reports and the locus of source of the input data, the less useful will be the information contained in the evaluation for all of its recipients. Given this analysis, Cline's (1980) findings mentioned above are not surprising, since a high proportion of vocational/special needs inservice programs are funded by state and federal grants. Specifically, vocational/special education inservice programmers may find themselves methodologically caught between the extremes of collecting and reporting compliance-oriented data for state and federal recipients, which by its very nature may prove less and less useful for satisfying local informational needs or for demonstrating program success.

These evaluative concerns are undoubtedly exacerbated by the vastly differing inservice formats that exist. It seems clear that no single evaluative model will be appropriate for all, or even most, vocational/special education inservice programs. Rather, it may prove more beneficial to develop a set of recommendations from which program evaluators may choose to apply to their own unique needs. The following six recommendations are based on the assumption that evaluation of inservice programs is desirable and necessary, particularly in view of the importance of the vocational/special education mission and the frequency with which vocational/special education interventions utilize an inservice mode.

1. Evaluation processes and practices should be continuously formulated and operationalized along with, and as an integral part of, an inservice education program.

Bishop (1976) expressed this point well:

> Some form of evaluation begins as soon as a program or project has identity; that is, as soon as it has been decided upon as an

> organized activity. Evaluation that is functional is also continuous and proceeds in accordance with the determined personal processes, change phases, objectives at various program levels, task and product decisions, and management structures. (p. 145)

These considerations appear to be germane for both long-term and short-term modes of inservice programs addressed in the preceding chapters, and have been applied to the evaluation of projects by Skrtic, Knowlton, and Clark (1979), Hasazi (1980), Regan and Deshler (1980), and Wentling, Jensen, Russo, and Peak (1978). Although short-term inservice evaluations have traditionally relied most heavily upon summative method, it is recommended that formative modes be considered as well.

2. Evaluation processes and practices should contain both qualitative and quantitative measures, should utilize multiple measures in these regards, and should assess impact at multiple levels within educational organizations.

Quantitative measurement has been typically equated with experimental design and descriptive of inferential analyses. Qualitative measurement has been more frequently associated with naturalistic inquiry (Guba, 1978), or perhaps the more goal-free methods suggested by Scriven (1967). Patton (1980) captures the essence of the qualitative approach:

> ...the investigator is open to whatever emerges from the data, a discovery or inductive approach. Then, as inquiry reveals patterns and major dimensions of interest, the investigator will begin to focus on verifying and elucidating what appears to be emerging--a more deductive approach to data collection and analysis...As evaluative (data) is utilized...the researcher may move back to a more naturalistic approach to observe how the changes in the program unfold. (p. 46)

It is important to note that qualitative and quantitative methods are not necessarily mutually exclusive. In fact, through a combination of approaches, achievement of program outcomes can be more richly evaluated. Additionally, consideration of impact or change over a variety of audiences may need to be examined. For example, an inservice evaluator may want

to assess program impact not only on the direct program participants but on other audiences as well, such as school administrators, members of the community, and parents. Similarly, an evaluator might examine changes in policies and practices at various administrative levels in a school or school district. Finally, measures of pupil performance, relative to inservice content, may be important in order to assess the impact of training on the participants' behavior.

The methods used in an evaluation design may vary depending on the activities, goals, and duration. The more intensive an inservice program, the more opportunities that may exist for multiple measures across a variety of environments and audiences. Although it might be assumed that this recommendation is most applicable to long-term inservice programs, this is not necessarily the case, for intensity or comprehensiveness of inservice programming is not always paired with duration. For example, it is entirely plausible that policies or practices in a school district might, at several administrative levels, be affected through participation in a short-term program such as a symposium or conference.

3. Inservice program evaluators who attempt to determine accountability for effectiveness should, at a minimum, begin by utilizing a criterion-reference evaluation approach.

Fundamental evaluation questions are developed to assess the degree to which the program goals are achieved. Bishop (1976) succinctly makes this point:

> Many concepts of evaluation are possible. The intent...is...to summarize one stance: evaluation of process as it transpires, or product as it eventuates, should serve the objectives of the project rather than the demands of the evaluator or the instrumentation. (p. 145)

At first glance the development of evaluation strategies which directly assess the congruence between stated project goals and actual outcomes may seem relatively simple. However, consider the following example:

> University personnel in vocational/special needs have been contacted to conduct an inservice program for regular vocational educators on remedial reading strategies for mainstreamed, handicapped students. The intensive, one-week course content includes: the presentation of reading intervention strategies such as readability indices, pre-teaching vocabulary lists, tape-recorded texts, peer tutoring, and other strategies for teaching vocational content to students with reading difficulties. The school administrators whose teachers are attending the workshop decide to evaluate the inservice program and hire an external consultant. The consultant, in turn, noting that the course goals are to increase reading skills in students, administers a standardized pre- and post-measurement of reading achievement to all the handicapped students in these teachers' classes...

In this example, an increase in reading achievement scores was not a goal of the program, and therefore should not have been a criterion for its effect. More appropriately, the evaluator might have taken pre- and post-intervention measures on participating teachers' frequency of using remedial reading strategies with their students At another level, the evaluator might have wanted to assess change in students' abilities to answer reading-related test questions in those teachers' classrooms (Brinkerhoff, 1981).

4. Evaluators need to be considerate of participants' time and energy (Griffin, 1979). This may be accomplished through designing strategies which are innovative and dynamic.

Inservice program evaluators clearly need to recognize that teachers involved in inservice programs may not enthusiastically embrace comprehensive evaluation procedures. As Griffin (1978) put it:

> Lengthy questionnaires, afternoon or evening interviews, group reflections that follow a day of dealing with the almost countless interactions that occur in the normal classroom--each of these procedures is liable to be greeted with little enthusiasm, if not outright hostility. (p. 135-136)

An article appearing in Discrepancy Digest (1981, unauthored) suggested techniques such as unobtrusive observers, formal and informal interviews, participant logs, and participant reports. Other innovative practices in

inservice education are present in the work of Hall and Loucks (1978), Hall (1981), Dangel, Conrad, and Hopkins (1978), and Patton (1978).

5. Evaluation processes and products should be presented in a manner that is understandable by all persons for whom the data are potentially useful.

Patton (1978) addresses the issue of utility of evaluative information, from a methodological perspective. He implies that while professional evaluators and researchers in evaluation have traditionally emphasized quantitative, statistically-based techniques as preferred methodologies, these techniques are often of little use or interest to local-level school administrators. In summary, evaluation data should provide clear information to decision makers about the effectiveness of the processes and products in achieving the goals of the inservice programs.

6. Evaluators of inservice programs should attempt to include a component that is designed to formally assess the impact of the program.

Impact evaluation or assessment has been equated with evaluation research in that the dominant perspective is the treatment/control or pre-test/treatment/post-test paradigm (Bryk, 1978). As competition for dwindling resources increases, demonstration of the impact of educational programs is surely going to be required more frequently (Windle, 1979). This trend is also likely to affect evaluations of vocational/special education inservice programs. At first glance, the recommendation to include quantitative, statistically-based impact evaluations may seem at odds with the discussion above. However, this is not necessarily the case. As Bryk (1978) has noted, impact evaluations need not always contain complex, multivariate designs, although they will almost surely contain some statistical component. A thoughtful program evaluator can utilize a variety of

quantitative and qualitative data-collection techniques and develop a well designed evaluation component that may satisfy both local and non-local users of evaluative information.

Including an impact assessment within an inservice evaluation design may be necessary to demonstrate program effect over time and across a variety of settings (Smith & Caulley, 1979; Sadler, 1980; Dissemin/Action, n.d.; Boruch, Cordray, Pion, & Levitan, 1981). This approach to evaluation increases the likelihood that inservice interventions in vocational/special education will be viewed with greater credibility.

The previous six issue-oriented guidelines have focused on inservice program evaluations from a conceptual standpoint. The remainder of this chapter will focus on the questions which may be used to guide the evaluation effort, as well as methods for collecting necessary information.

Baden (1979) suggests that evaluation concerns for inservice education can be addressed through five major questions:

1. Was the content of the inservice activity informative and useful to the participant?
2. Was the presenter of the inservice activity effective?
3. Did the participants in the inservice activity exhibit the behavior change as defined by the objectives?
4. Did the participants' behavior in their classroom change as a result of the inservice activity over a period of time?
5. Did the students of the participants change as a result of the altered teachers' behavior? (p. 9-10)

Each of these evaluative questions will be discussed below and suggestions made for instrumentation to accompany each question.

1. Was the content of the inservice activity informative and useful to the participant?

Information of this sort is typically collected through administration of a questionnaire to the participants immediately following the activity or at a previously determined milestone during the activity. Structured interviews and reliably developed observation instruments can be used as well. Data retrieved through these techniques can be classified as either qualitative or quantitative, depending upon the instrumentation and procedures established to collect these data.

A third party evaluator may be utilized. Alternatively, an individual participant may supervise the administration of the evaluation, collect the completed instruments, and return the forms to the person responsible for analyzing the data (Baden, 1979). Once the data are summarized they should be reviewed by the program planners and appropriate changes made in the design and content of the future activities.

2. Was the presenter of the inservice activity effective?

Information related to the effectiveness of the presenter is collected from participants either at specified times during the activity or immediately following the activity. Issues related to the match between course objectives and course content, presenter effect and competence, instructional method, usefulness of the course information, and whether or not the participant would recommend the workshop to a colleague are often framed in a questionnaire format to be completed by the participant or through a structured interview conducted by an evaluator. Information gathered in this regard should be used by planners to make decisions about future directions for inservice activities.

3. Did the participants in the inservice activity exhibit the behavior change as defined by the objectives?

Although many evaluation experts agree that specific behavior change on the part of the inservice participants is of the utmost concern, the difficulty in obtaining such information often precludes its collection. If the goals of the inservice activity state that a participant acquire certain knowledge and/or attitudes, it is possible to utilize a number of techniques in assessing the degree to which the objectives have been obtained. Regardless of the instrumentation selected, pre- and post-measures must be administered in order to determine the relative impact of the inservice activity. Techniques such as questionnaires, structured interviews, tests, and journals may be used to assess knowledge and attitudes.

All of the suggestions made above relate to the assessment of behavior change which is measured on site, during, or directly following the inservice activity. The remaining two evaluation questions focus on behavior change that reflects generalization of knowledge and skills across various people and settings.

4. Did the participants' behavior in their classrooms change as a result of the inservice activity over a period of time?

Information relative to this question involves assessing the degree to which the participants' behavior in their classrooms reflects, in practice, the skills, knowledge, and attitudes acquired during the inservice activity. Procedures which are most often used to collect information of this sort include direct observation of participants on target behaviors by an independent observer (Lovitt, 1977), teacher/student interaction scales and observation coding systems (Morine, 1975), and self-reports through questionnaires or interviews (Henderson, 1978; & Hamilton, 1980).

Both direct observation of target behaviors and teacher/student interaction scales require trained observers in the classroom over an extended period of time prior to, during, and after the inservice activity. Although this approach has the potential for providing rich and multi-dimensional data, the resources required make it difficult to implement. To minimize the cost, both in terms of financial and human resources, evaluators may want to consider training teachers and other staff to serve as independent observers.

Self reports and questionnaires may be distributed and collected through the mail, in person, or over the telephone via an interview. If these approaches are utilized, pre-assessment measures should be administered which reflect the teacher's perceptions of his/her behavior relative to the content of the inservice activity. Identical measures should be administered approximately two to six months following the inservice activity. For example, if an inservice activity is designed to teach vocational instructors to utilize peer tutoring as an instructional strategy for handicapped students, the following question might be posed before and after the inservice activity:

> How many times this year have you used peer tutoring with handicapped students?

☐ 10 or more times ☐ 9 - 7 times ☐ 6 - 4 times ☐ 3 - 1 times ☐ never

Information collected through these procedures should again be shared with the planners to determine future activities and outcomes.

5. Did the students of the participants change as a result of altered teacher's behavior?

This is perhaps the most important and most difficult effect to measure. MacDonald (1976) has suggested that without evidence of change in student

behavior as a result of changes in teacher behavior, inservice education is not worthwhile. Brinkerhoff (1980), however, cautions evaluators that child change may not be immediately observable or identifiable. In spite of the problems inherent in assessing child change, evaluators should consider this question in their evaluation design. For an example of a longitudinal study assessing child change, see Knight, Meyers, Paolucci-Whitcomb, Hasazi, and Nevin (1981).

A further question which might be considered is "Were there any unexpected effects that occurred as a result of the inservice training program?" It is important for evaluators to be aware of changes in the larger environment which may occur as an unanticipated result of an inservice program. For example, a vocational/special education inservice activity designed around instructional practices might well result in changes in administrative policy, community involvement, or allocation of resources.

Clearly the extent to which some or all of the methods above are utilized by inservice evaluators is dependent upon the format, scope, and intensity of an inservice program. Similarly, none of the techniques will be maximally effective unless they are systematically and thoughtfully planned and implemented. Some additional examples and/or resources may be helpful to the reader in that endeavor. Bishop (1976, p. 148) has developed a framework for the process of evaluation that places the formative and summative processes of evaluation in a linear sequence (see Figure 1). Carlson (1979) has adapted a training "claims" continuum that views evaluation efforts in an incremental manner (see Figure 2). Another resource that may prove extremely useful to vocational/special needs inservice program evaluators is an Instrument Catalog that is available from the

Evaluation Training Center at Western Michigan University (Hallawell, 1981). Borus (1979) has developed an evaluation primer that may be helpful to directors of large vocational/special education inservice projects. Finally, Clark, et al. (1980), have written a manual that includes fundamental questions to be raised when evaluating inservice programs, along with suggested activities and data to collect in addressing these questions.

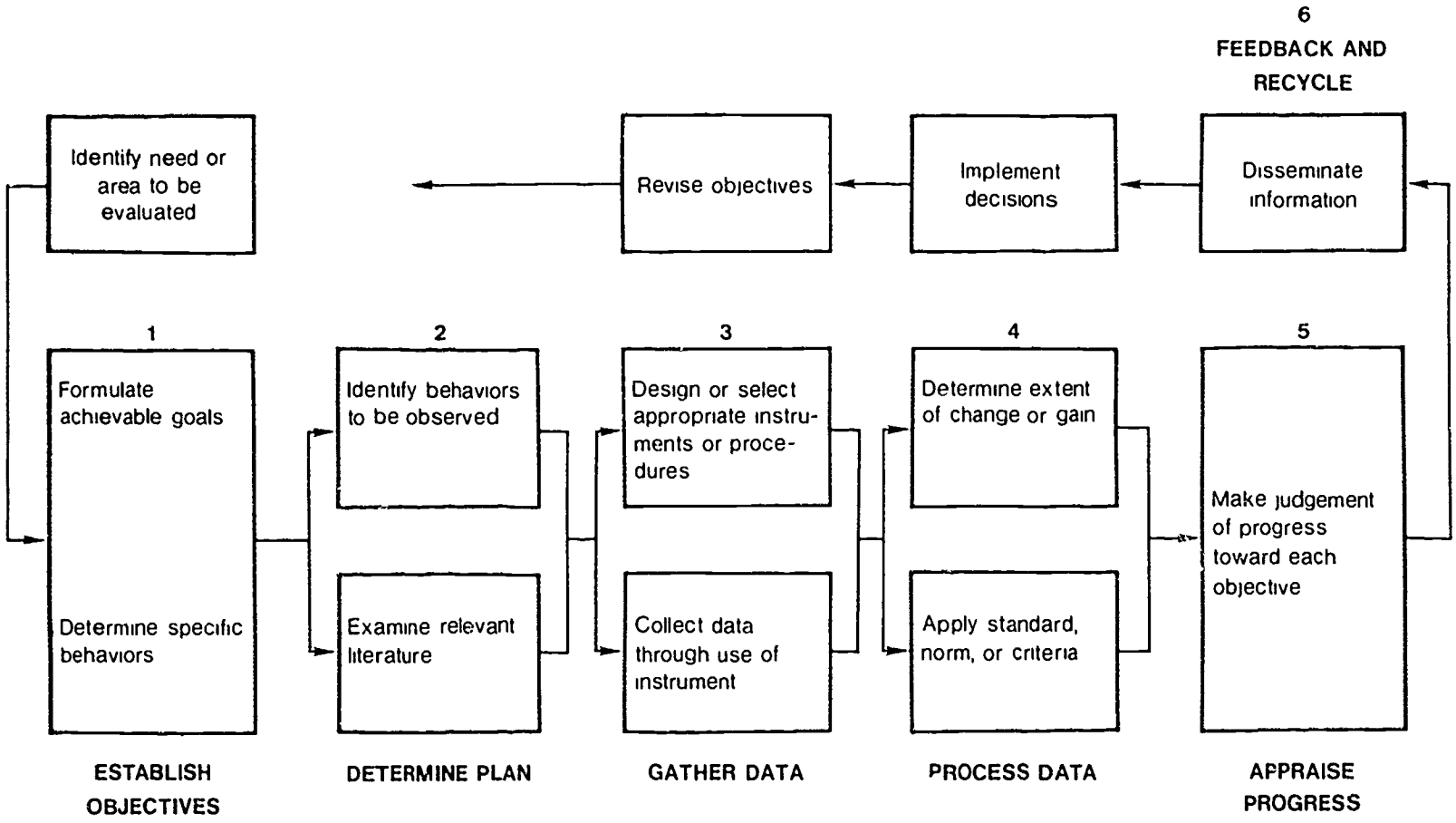
Summary

Evaluation of inservice training programs in vocational/special education is important to ensure effectiveness, efficiency, and continuity in planning and implementing such efforts. Evaluation should be viewed as an integral, ongoing component of any inservice program and should provide information which directs future activities. On a larger scale, evaluation is important to demonstrate that inservice programs serve as effective strategies for preparing teachers to better serve students with handicapping conditions in vocational settings.

Given the differing inservice training formats reported in the literature, it is difficult to suggest a single evaluation model appropriate for all programs. Instead, a set of recommendations was offered which evaluators may use selectively depending on their unique needs. Additionally, a series of evaluation questions was presented to assist program planners in translating these recommendations into practice.

Figure 1

THE PROCESS OF EVALUATION*



* Bishop L J Staff Development and Instructional Improvement Plans and Procedures Boston Allyn and Bacon, Inc , 1976

Figure 2

Impact Evaluation of Training Continuum

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Impact evaluations of training experiences are designed to demonstrate a cause and effect relationship between training received and the effect or payoff of the training experience back on-the-job. Suggested here is a continuum of related claims that could be potentially made of respective training experiences. Obviously, each calls for a greater degree of expertise, time and other resources in order to properly apply what is implied by the position on the continuum. Accordingly, this circumstance raises a cost/benefit question concerning what is desirable to invest in the evaluation of training. In other words, once a clear spectrum of choices are clearly delineated then those who play a role in determining what is desirable for payoff of an impact evaluation can indicate which of the following choices should potentially give the best return given the resources available and the needed or desired evaluative information.

Training "Claims" Continuum*

1 2 3 4 5 6 7 8 9 10
Simple Complex

1. "We held a training session(s)." (No claim made of effect.)
2. "We held a training session(s) and X people showed up." (Only claim made of who served.)
3. "We held a training session(s) for X people and they thought the workshop was 'good'." (Only claim made of program satisfaction.)
4. "We held a training session(s) and X people had Y skill when they left." (Claim made of mastery or end result, regardless of entry level skill.)
5. "We pretested X people, held a training session(s) and the people had more of Y skill when they left." (Claim made of growth.)
6. "We pretested X people, held a training session(s) and the people had more of Y skill when they left than the X people who did not go to the workshop." (Claim made of superior growth.)

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* Carlson, R. Adapted from a paper written by Steven R. Nelson, titled: ESEA Title IV-C Program Evaluation Workshop, May 28, 1979.

7. "We pretested X people using a nationally normed test, held a training session(s) and the people had more of Y skill when they left than people in the national sample." (Claim made of superior growth of relevance to others.)

8. "Same as 7, but we did another post-test later to see if the people retained and/or applied the skill." (Claim made of utility and retention.)

9. "Same as 8, but in addition to the post-test we did an on site visit to verify the application of the skill which resulted in an organizational change in such areas as policy, administrative regulations or procedures, employee performance, decision-making processes, etc." (Claim made of impact of training upon organizational processes.)

10. "Same as 9, but in addition to verification of change in organizational performance, we examined client performance data to determine any changes from before or after training session(s)." (Claim made of impact of training upon client behavior.)

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