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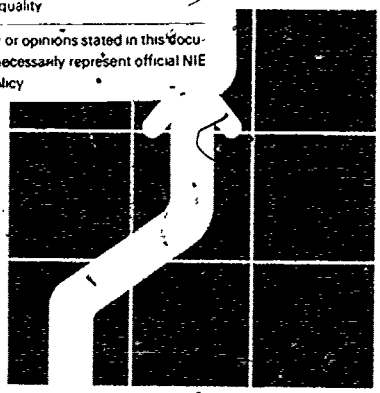
ABSTRACT

The manual is intended to aid programs funded by the Handicapped Children's Early Education Program (HCEEP) in designing and implementing staff development programs. Section I presents a working definition of staff development and outlines the preliminary steps necessary before a program is designed and administered. The section delineates the relationship between project goals and staff development goals. Also, a synopsis of goal types and management structures is presented. The next section outlines the components of the needs assessment phase. The methods of assessing staff needs are discussed, and assessment instruments are examined. Section III describes how identified staff needs are translated into long and short term objectives, and how activities are designed and implemented to satisfy those objectives. The choices available to the planner when matching program activities with specific training objectives are outlined. Described in the last section is the design of an evaluation plan for a staff development program. Evaluation formats to aid in deciding whether the program has satisfied staff needs and if alternative or additional activities need to be considered are discussed. Appendixes include a staff development checklist, a volunteer observation form, a teacher observation form, a general needs assessment form, a form for the participant's evaluation of inservice, the HCEEP orientation conference questionnaire, a self assessment inventory, and examples of objectives, activities, and evaluation of an outreach inservice training project. (DB)



Staff Development: A Systematic Process

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INTRODUCTION

The principal goal of model demonstration projects funded by the Handicapped Children's Early Education Program (HCEEP) is the development of innovative educational programs for young handicapped children and their families. The process of developing and implementing new educational models invariably makes demands on the skills and knowledge of a project staff, necessitating training so that staff members can understand and perform their responsibilities in a demanding and changing educational environment. As a response to this need for training, staff development has been designated as one of the five major components* of all HCEEP model demonstration projects.

All too frequently, staff development is not accorded the importance it deserves, nor are staff development programs highly regarded within the field of education. The poor conception of this important component arises from the failure of many staff development endeavors and the dearth of tangible information on how to implement a successful program. Furthermore, staff development is often a misused and misinterpreted term. While it is understandable that there is no universally accepted, workable definition which is applicable across educational, industrial, medical and business settings, within the HCEEP network the lack of a tangible definition of staff development and a concordant method for implementing staff development activities has been a manifest omission. As a response to this need, this monograph aspires to provide HCEEP demonstration projects with a basic understanding of what staff development is, to provide a description of the elements in a staff development cycle and to assist programs in designing effective and comprehensive staff development programs.

This monograph is designed to be a working guide for projects who are designing and implementing staff development programs. It has four sections which correspond to the major phases in a staff development program.

Section I presents a working definition of staff development and outlines the preliminary steps which must be taken before a program is designed and administered. This section delineates the relationship between project goals and the goals of the staff development program. In addition, a synopsis of goal types and management structures are presented and discussed.

Section II outlines the components of the needs assessment phase. The methods for assessing staff needs are discussed, and assessment instruments are examined. Section II provides the necessary information to answer the question: "What inservice education is needed, by whom, to what extent, when and by what format?" (Marrs, 1981, p. 4).

Section III describes how identified staff needs are translated into long- and short-term objectives, and how activities are designed and implemented to satisfy those objectives. Section III outlines the choices available to the staff development planner when matching program activities with specific training objectives.

Section IV describes the design of an evaluation plan for a staff development program. Evaluation formats are discussed to aid the planner in deciding whether the program has satisfied staff needs and if alternative or additional activities need to be administered.

*The five components of HCEEP demonstration projects are: Staff Development; Services to Children; Services to Parents; Administration and Management; Demonstration, Dissemination and Continuation.

SECTION I

FOUNDATIONS FOR A SUCCESSFUL STAFF DEVELOPMENT PROGRAM

The importance of staff development for model demonstration programs is self-evident. Common sense dictates that if an innovative method of intervention or a new service-delivery model is designed, staff members will need training to understand and perform their job responsibilities. The need for training is ongoing, as model projects are expected to move through a cycle of developmental phases. Each new phase will require more staff skills and, likewise, additional training. Staff development, in addition to providing a means for training staff, will also lay the groundwork for the demonstration/dissemination component of a model program when project staff teach other programs to replicate their model in another location. And finally, a successful staff development program can be considered a replicable element of an educational model.

Any effective staff development program for an HCEEP project must meet three types of goals: those of the fiscal agency or institution where the project is housed, those of the project itself and the personal and career goals of individual employees. In order to design a program capable of the difficult task of meeting these three types of goals, it is necessary first to arrive at a clear and comprehensive definition of staff development.

Staff Development Defined*

Arends, Hersh and Turner (1980) state that "more productive staff development begins with the recognition that the concept is complex" (p. 1). Current dissatisfaction with staff development practices is related both to the difficulty of reducing the complex process of developing an individual's skills to simple elements and the lack of a specific definition of the term which is applicable across multiple settings. That staff development is indeed complex is not questioned, but many HCEEP projects have developed excellent programs. And for the HCEEP network it is necessary to define staff development in a way that is broad enough to allow for individual differences in HCEEP projects and narrow enough to provide necessary structure. To satisfy these requirements, staff development is defined as a systematic process for planning and implementing directed change to improve behaviors and performances in order to meet the needs of individual staff members in concert with the philosophy and goals of the organization. Staff development, depending on particular project goals, may encompass more than is stated in the definition, but it may not encompass less.

The clearest understanding of staff development is provided by examining the definition in detail. The term systematic process implies that staff development is more than an activity or series of activities. It is an ongoing series of logical, sequential components that are carried out in a cyclical manner, including planning, implementation and evaluation. Staff development programs are intended to result in some type of change or growth; directed change indicates that the expected nature of that change will be specified prior to the implementation of an activity. The last part of the definition relates to the philosophy and goals of the organization which will dictate the direction that resultant changes or growth should take.

Broadly speaking, there are three types of growth associated with staff development (Joyce, Howey & Yarger, 1976). The first is "the development of a human being whose growth

*Throughout this monograph, staff development and inservice training are considered interchangeable terms.

potentially enriches his/her relationships to children and the kinds of instruction he or she is able to give" (p. 4). The second type of growth is referred to as "the improvement of the educator's competence to carry out a particular role" (p. 4). The third type of growth refers to "training to better enable the educator to implement curricular and instructional reform decided on by the persons responsible for the shape of the school in which the educator works" (p. 4). Staff development should encompass all three types of growth but includes restrictions. A staff development program must accommodate both the needs of individuals and the needs of the organization. To separate one from the other negates the purpose of the program.

Demonstration Project Foundations

A successful staff development program, like a successful demonstration project, depends on clear goals and a well-defined management structure. The achievement of these two elements may, in a sense, be viewed as the first steps in a staff development plan.

Project Goals. In clarifying a project's goals, it is important to keep several things in mind. All HCEEP projects must respond to numerous goals and objectives. If the project is well defined, the goals of the host agency, individual staff and those of the project should be concordant; and a singular staff development activity may satisfy all three requirements. General project goals will provide a structure for deciding on specific goals for the staff development program. But a project's goals will change over time. Each project has a life cycle; i.e., planning, model development, operation refinement, dissemination and replication. Goals which are applicable to the project at inception may be quickly met and no longer apply to the future functioning of the project. During each of these phases, staff will be expected to perform tasks for which they may not have been prepared in their preservice or pre-employment training. Provisions need to be made to inform staff of these changes and to provide on-the-job training for developing the specific skills needed to perform these tasks. Over the life of the project, original goals may be deleted, expanded or modified and new goals added, based on the project's operational experience.

When developing specific project goals, a strong case may be made for involving staff members in the process of goal refinement and objective development. Every member of a staff will bring into this decision-making process various structural and individual resources. Within any organization, information regarding process and function is differentially available, based on an individual's structural placement within that organization. In addition to these structural resources, each staff member possesses individual resources which may include skills, knowledge, expertise, values and past experiences that may add to the store of information from which decisions may be made. At a minimum, it is important that each staff member be aware of the goals, purposes and requirements of the project and his or her individual responsibilities toward attaining them.

Project Management. There are a number of management systems used by human service agencies, such as Critical Path Management (Horowitz, 1967), Management by Objectives (Reddin, 1971), Program Evaluation Review Technique (Horowitz, 1967) and the Discrepancy Evaluation Model (Yavorsky, 1978). None are good or bad per se, other than in the context of the organization and the function that the management system is expected to perform.

The key elements of any management system, as far as staff development is concerned, include the clear delineation of roles and responsibilities and an understanding by project staff of the decision-making style of the organization. When establishing a management system, it is essential to develop explicit job descriptions for each member of a staff. These should include all the activities an individual within a given role is expected to perform and should indicate the

desired outcome of those activities. The job descriptions may be negotiated with existing staff members or simply assigned. Clearly stated job descriptions, along with clear project goals, are important foundations of a staff development program.

The basic components of the management system should include:

- A statement of philosophy that expresses the basic beliefs and rationale for the operation of the agency.
- Goals that represent the annual outcomes to which the agency aspires.
- Objectives that define specific outputs, have timelines, and measure the progress in achieving the goals.
- Activities reflecting specific behaviors that are assigned to individual staff members that must be accomplished in order to meet the stated objectives.

(NASDSE, 1979, p. 7)

Staff Development Program Foundations

Before planning the actual staff development program, two key preliminary decisions must be made. A management structure for the program must be selected; responsibility for directing staff development must be assigned. Second, the goal types of the program must be identified.

Management Options. Planning of a staff development program involves selecting a program's management structure. Three management options exist for staff development programs:

Option I: Agency administrator
Option II: A staff development specialist
Option III: A committee composed of various members of the agency staff

Each option has advantages and disadvantages which should be weighed when determining the most appropriate management system for a particular project.

Option I. Most projects in the HCEEP network rely on the project director or coordinator to design and implement the staff development program. Presumably, these administrators are well acquainted with the project's goals and management system and have considerable knowledge of the individual members of the project staff. In addition, these administrators are probably invested with the authority to initiate the staff development program. Two major drawbacks to this approach include time constraints and possible lack of staff involvement. The project administrator may be so burdened with responsibility that adequate time is not available to assume full responsibility for an entire staff development program. Moreover, when the responsibility for staff development rests solely with the project administrator, the subsequent staff development program may be viewed as arbitrary, or it may lack a broad base of support, thus resulting in staff indifference rather than staff commitment.

Option II. A staff development specialist may be a staff member who has been assigned staff development as a sole responsibility, or it may be an external consultant who has been contracted to perform this function. The potential advantages of using a specialist in this position include adequate time and expertise. In addition, the staff may view such a specialist as being more objective than the project administrator. The disadvantages may include increased cost and the danger (particularly in the case of an external consultant) of lack of

adequate familiarity with the goals and inner workings of the project and with individual staff members.

Option III. The major advantage of using a representative committee to design and implement the staff development program is that the broad-based staff input may result in greater support and commitment of individual staff members. The disadvantages are those that always exist when working in a committee. Planning may take considerably more time, and the fragmentation of authority may be detrimental to the resultant program. To be successful, this approach must have the support of the project administrator, and the committee must be alloted adequate time and resources to complete its task.

Goal Types. Staff development programs generally focus on one of four types of goals:

> Program Restructuring: An inservice program intended to restructure the ongoing program and calling for major role changes on the part of personnel. It also has implications for organizational change.
> Program Modification: Calls for substantial role changes on the part of personnel, although less radical than Program Restructuring. There are usually few, if any, major organizational changes inherent in program modification.
> Program/Skill Development: Alters the program or aids personnel in developing new skills or improving existing ones. It typically requires little if any alteration of either roles or organizational structure.
> Exploratory: The intent of staff development may be to explore new approaches. The resultant program is flexible, with a great deal of variation in quality. (Yarger et al., 1977, p. 14)

Within HCEEP demonstration projects, all four of the above goal types may be applicable to a staff development program. Because projects are responsible for developing educational models, however, the most appropriate goal type will be based on that model's developmental state. For example, in any well-developed demonstration model, inservice training with a program/skill development goal is always appropriate for new staff. In most model programs, there is a relatively standard, systematic approach to intervention, and new staff will need training in this approach. When a well-developed model undergoes change in any aspect of its approach, program restructuring or program modification will be the appropriate goal of its staff development program. To some degree, an exploratory inservice program is appropriate within the HCEEP network at all phases, since model development and refinement are inherent in the goals of each project. When the exploratory inservice approach is used in the early stages of model development, it is important that strict time limitations be imposed for this exploration, or the model may never become fully developed. Care needs to be exercised with the exploratory approach in fully-developed models as well. Staff members engaged in exploratory inservice training will probably be exposed to ideologies or techniques that are incompatible with the model. While the model may legitimately change as a result of this, that change cannot be allowed to occur randomly, but needs to occur in a systematic and controlled manner.

SECTION II

DESIGNING AND ADMINISTERING

STAFF NEEDS ASSESSMENTS

The process of assessing staff development needs is the determinative step of a productive staff development program. While the preliminary planning stages--clarifying a project's goals, delineating a project's management system and establishing a management structure for the staff development program--set the groundwork for a successful program, assessing staff needs carries the process into its formative stage. How effective the program is and how useful it will be to overall project development is dependent on an accurate needs assessment.

The general purpose of a needs assessment is to identify current staff performance levels or practices. Kauffman (1972) defined the needs assessment process as a discrepancy analysis, where "need" is identified as the discrepancy between the program standard and current practice. The goals and objectives derived from the initial preplanning stages for staff development will serve as the program standard against which actual performance (assessed performance levels) will be measured. Too frequently, staff development activities have been designed and implemented on the whim of an administrator, someone's guess as to what is needed or because it sounded like a good idea (Wieck, 1979). According to Kaufman's definition (which we have adopted) any activity intended to be part of the staff development process must be based on staff development needs that have been identified through discrepancy analysis procedures.

A carefully designed and systematic needs assessment process will yield data that provide direction for the remainder of the staff development program. The discrepancies identified as a result of the needs assessment are translated by staff development planners into behavioral objectives. Staff development activities are then designed and implemented to meet these objectives. An accurate needs assessment will assist planners in designing activities targeted specifically to meet a designated need.

To insure that staff development activities are based on actual staff needs and, furthermore, that there is a matching of the assessment instrument to a particular objective, three major steps must be taken. These steps offer standard methodologies for staff assessment and provide alternative choices for designing and administering the staff needs assessment. The three major steps in designing an effective, comprehensive needs assessment are:

- Specification of content
- Selection of needs assessment instrument
- Administering the needs assessment

Specification of Content

During the preliminary planning for staff development, project goals and objectives were delineated, role descriptions were developed for each staff position and the overall goals for the staff development program were specified. Developing the content of a needs assessment begins with listing a project's goals. These goals can be broken into numerous objectives, then

into initial or ongoing tasks to accomplish those objectives. A project's goals, for example, may be to provide young, developmentally delayed children with individualized programming using a specialized technique developed by the project. From this goal, several tasks are readily apparent: the child must be assessed, an Individual Educational Program (IEP) must be developed and instructional activities must be planned or selected and then implemented. The generation of a detailed, complete list of tasks necessary to meet project objectives will provide further specification of the content to be addressed by a needs assessment.

There are several methods for generating lists of tasks. Each staff member may individually list the tasks performed within the scope of his or her job. If an external consultant is used, he or she usually interviews each staff member to determine the breakdown of tasks within the project. However they are obtained, the individual lists are then combined into a single list of tasks for each job within the project. The major advantage of generating these lists individually is that staff members may more freely express themselves.

The list of tasks may also be generated in groups led by a facilitator. In the group process, the staff members brainstorm and list each task. At the end of the brainstorming session, the group consolidates the list. Tasks that are the same but have been worded differently are treated as one task. Irrelevant tasks are discarded and separate tasks that have been combined into one statement are specified individually. The major advantage of this type of group process is that it stimulates thinking, thus resulting in a more comprehensive listing. Very often, hearing another person's contribution may result in several other people examining aspects of a job they would otherwise have overlooked.

The individual and group processes may also be combined. Individuals first develop a list of tasks which is then used as a starting point for the group process. The primary advantage of this combined approach is that it may save time.

When a substantial list has been generated, the tasks can be grouped by category. Three categories frequently identified by HCEEP projects relate to skills, attitudes and knowledge required to perform the task. Additional categories usually follow a program's components, i.e., child assessment, working with parents, intervention and treatment, interpersonal skills, administrative tasks, etc. Bishop (1976) describes seven general categories that may be useful and applicable to HCEEP demonstration projects: information, content/skill, competencies, resources and their use, organization, attitudes and process (p. 29-31). Categories selected must be relevant to project activities as the purpose of this categorization is to reduce the lists of tasks into discrete, manageable units.

When the list of tasks has been generated and categorized, it is reviewed by all staff members, who may make further additions or deletions. Since the object of this endeavor is to compile the most complete and accurate list possible, the review is essential. It is also good policy to have the staff review the list periodically so it remains current. Job functions change over time, and these changes must be reflected in the list. When the staff reach a consensus on the list, each categorized task needs to be examined. The performance of these tasks requires various informational, technical and interpersonal skills. The knowledge and skill required for each task needs to be identified and, to the greatest extent possible, qualified and quantified. When this point is reached, decisions may be made regarding the selection of the most appropriate instruments for the needs assessment.

Selection of Needs Assessment Instruments*

There is a correspondence between the skill, knowledge or attitude addressed by the needs assessment and the most appropriate assessment instrument. There are numerous assessment formats available, and each project should review them to choose the most appropriate one for a project's needs. The most commonly used are variations of a questionnaire format or observational techniques.

Questionnaire A questionnaire is the most common instrument used for conducting a needs assessment and can take several forms. A simple checklist questionnaire is illustrated in Figure 1.

Figure 1

Check those areas in which you feel the need for further training.

A. Child Assessment

_____1. Administering, scoring and interpreting the Bayley Scales of Infant Development.

_____2. Administering, scoring and interpreting the Portage Checklist.

_____3. Writing reports summarizing assessment results.

_____4. Informing parents of the results of the assessments.

A format like Figure 1 is quick and easy to administer and tabulate. Its major drawback is that before the gathered information can be used for staff development planning, the tasks within the general areas must be clarified, sometimes a rather extensive task in itself. A follow-up interview, however, should help clarify needs. For example, if the Bayley Scales item was checked, the interviewer would ask if training was needed in administration, scoring and/or interpretation. An additional problem of the checklist questionnaire is its inability to indicate priorities for the identified needs.

The same items listed in Figure 1 could be used in a discrepancy model (NASDSE, 1979) like Figure 2. In this instance respondents are asked to score each item twice, once indicating the level of skill or knowledge required to perform the task and once indicating their existing skill or knowledge level.

*Appendices A through D offer examples of commonly used needs assessment instruments.

Figure 2

Using the following scale, indicate for each item the level of skill or knowledge required for your job performance in the first column and the existing level in the second column.

1 = none 2 = minimal 3 = moderate 4 = considerable 5 = extensive

A. Child Assessment	Required	Existing	Discrepancy
1. Administering, scoring and interpreting the Bayley Scales of Infant Development.			
2. Administering, scoring and interpreting the Portage Checklist.			
3. Writing reports summarizing assessment results.			
4. Informing parents of the assessment results.			

By subtracting the existing level from the required level, a discrepancy score can be obtained. The larger the discrepancy, the greater the need. A questionnaire like this is best used in conjunction with an interview to further define identified needs.

Another form of questionnaire is open-ended (Figure 3). Open-ended questionnaires do not limit the range of responses, nor do they slant or bias responses. Nevertheless, the time required of a respondent in completing an open-ended questionnaire is a major drawback. Furthermore, while the open-ended format does not limit the range of responses, it may not provide enough structure to elicit the information sought. In addition, the information gained may be difficult to interpret. Open-ended questionnaires are most appropriately used with face-to-face interviews and/or more structured questionnaires.

Figure 3

Child Assessment

1. Please list any assessment instruments that you feel in need of further training in their administration, scoring, etc.

   A.

   B.

   C.

2. Do you have any concerns with your skills in interpreting assessment results? (Explain)

3. List any other concerns you may have in the area of child assessment or any training you feel you need.

Observation Another approach to conducting a needs assessment is peer or supervisor observation. Properly designed and implemented, this technique offers greater objectivity and may provide more detailed data than a questionnaire. Improperly used, however, it can be a threatening, detrimental device.

Observation is only appropriate when the following conditions are met:

- Behaviors are clearly defined
- Behaviors to be measured are observable
- Criteria exist for each behavior
- Inter-rater reliability is obtained on each measure

A staff member's skill in administering and scoring most standardized child assessment instruments is usually easy to assess by observation. A simple checklist (Figure 4) is easily constructed.

Figure 4

Behavior Observed	Test Item Number									
	1	2	3	4	5	6	7	8	9	10
Item administered according to directions										
Item consequated according to directions										
Response recorded accurately										

In this example, the four conditions for using observation are met. Standardized procedures for test administration clearly define observable behaviors and state criterion levels for each. Inter-rater reliability is obtained by using a second observer 100% of the time or for a random sample of at least 20% of all observations and figuring the percent of agreement.

$$\text{inter-rater reliability} = \frac{\text{number of agreements}}{\text{number of agreements + the number of disagreements}} \times 100$$

Another set of tasks that lends itself well to observational assessment may be part of a program's intervention technique. For example, an HCEEP project that works with an autistic-like population has established a clearly defined procedure for dealing with the stereotypic behavior prevalent in that population. Within five seconds of the initiation of stereotypic behavior, the teacher is expected to interrupt the behavior by first applying a mildly adversive stimulus (loud hand-clap, saying "stop," etc.) and then initiating a program of movement with which the child has previously been successful. The program may consist of sitting, standing, jumping and clapping on command and is conducted two to three times in rapid succession. The child is then brought back to an activity similar to the one in which he or she was engaged prior to the onset of the stereotypic behavior. This technique is easily observable and may be measured using a form similar to the one shown in Figure 5.

Figure 5

Instructions: This form is to be used for a 30-minute interval. Designate each observed behavior in the appropriate row with a hash mark.

Number of initiations of stereotypic behavior
Number of interventions within the 5-second interval
Number of interventions with an appropriate mild adversive
Number of appropriate movement programs initiated
Number of re-entries into appropriate activities

In this example, the project has clearly defined the behaviors to be observed in both the teacher and the child. The criteria is clearly stated: intervention must occur within five seconds of the initiation of stereotypic behavior. Inter-rater reliability is easily obtained using the aforementioned procedure.

The appropriate administration of a well-designed observation instrument can yield specific measurement of certain skills. In the development of a model program, this approach to assessing the skills of staff has an additional advantage. For example, if a specific intervention technique is the foundation or an essential element of the model, a highly objective observation instrument allows for the measurement of the intervention delivery. Individual teaching behaviors and styles have compounded the difficulty of data collection when attempting to compare the effectiveness of two or more intervention techniques. While the use of this objective measurement does not eliminate individual differences, it does serve to qualify and quantify the intervention method and greatly aid replication efforts. Used on a periodic basis, it allows for controlled modification in the model and reduces the possibility of random variation.

Administering the Needs Assessment

In some cases, the instruments selected for assessing staff needs will determine how the assessment is best administered. However, in most circumstances, the staff development planner has several choices. Needs assessments can be administered in the form of self-assessments, peer assessments, external assessments or some combination of these. Each has advantages and disadvantages that should be considered when selecting the type or combination of types most appropriate for a specific project.

Self-Assessment In self-assessment, as the term implies, the individual conducts his or her own needs assessment. Self-assessments generally involve the use of a questionnaire. An advantage of self-administered assessment is that it allows for a maximum of privacy and may therefore encourage more straightforward responses (Miller & Verduin, 1979). This may lead to a more accurate identification of needs, thereby providing a better foundation for the staff development program. In addition, self-assessment may make a staff member feel more actively involved in the entire staff development process.

Self-assessments, however, also have limitations. First, some people, as a result of years of supervision and evaluation are reluctant to perform self-assessments (Miller & Verduin, 1979). Moreover, many individuals when scoring a self-assessment questionnaire, tend to rate the needs of their peers rather than their own. This projection is most likely to occur when the needs assessment instrument is simplistic and vague, when, for example, it lists only a variety of topical interest areas and asks the respondent to indicate his or her areas of needs. If an individual's primary area of need is not listed and the individual does not perceive the areas listed as even moderately important, he or she is likely to think something like this: "I don't really need any of this, but from what I've seen of the rest of the staff, training is really needed in THIS area." Another way individuals misrepresent their needs is to check those areas in vogue at the time, with little regard to whether or not training is really needed in that area.

A third limitation, possibly the most serious because it is difficult to discern, is that self-appraisal may be inaccurate because the individual may not understand the skill being measured. This shortcoming comes to light if the assessment is readministered after training has occurred. If skills scored at the mastery level during the first administration are scored as "need assistance" during the second, one of two things is probably true: either the individual did not see these skill areas as a high priority need during the first scoring, or he or she did not understand the level of skill required until receiving training in another area. The discrepancy could simply be a function of time--the skill had not been needed up to that point in time (e.g., writing year-end reports), or the individual needed to learn a foundation skill before recognizing a lack in the secondary skill area.

Overall, self-administered assessments offer an individual the greatest opportunity for self-reflection and actualization, but when used in exclusion of other types of administration, self-assessment may lack the desired objectivity.

Peer Assessment Co-workers generally design and administer peer assessments. Their major advantage is that if well constructed and administered, peer assessments are likely to be more objective and accurate than self-assessment. For example, when measuring a teacher's ability to reinforce child behavior according to a specified schedule, a peer trained in observational data collection will obtain more accurate data than will the teacher performing a self-assessment. There are two reasons for this: it would be difficult for the teacher to record a high-frequency behavior while in the process of emitting it, and a peer, being uninvolved with the teaching session, could observe with greater detachment. On the other hand, the peer assessment can be ineffective if the instrument used is overly subjective. Peer assessments are

usually conducted by observation, and observational forms generally require the observer to record behaviors at specific intervals or to note specific behaviors (Miller and Verduin, 1979).

Assessments conducted by supervisors may also be considered a variety of peer assessment. Because someone with greater authority administers the assessment, it may be viewed as an evaluation of performance rather than an assessment of need. A staff member might be understandably reluctant to expose areas of need to the individual who is also responsible for future promotions and raising (or lowering) one's salary.

External Assessment An individual or group of individuals not directly associated with the organization administers external assessments. The two major advantages of external assessments are objectivity and prestige. If an external consultant with extensive knowledge of the overall program administers the assessment, the result could be a more objective assessment than possible with either self- or peer assessment. In addition, the external assessment may be viewed, by individuals both within and outside of the organization, as being more prestigious and therefore may have greater impact. This is generally true if the external consultant is well known and widely respected in the field.

The drawbacks to using an external consultant are the expense and the difficulty of finding a consultant who is familiar with the organization and who possesses all the necessary evaluative skills. Possibly the greatest shortcoming of the external assessment is that it tends to be something that is done "to" rather than "with" a staff. The commitment and involvement of the entire staff is critical to the success of an external assessment. If the staff feels little or no involvement with the assessment process and does not view the external consultant with a good deal of professional respect, the most objective assessment will carry little weight.

Combined Approaches to Administration In many cases, some combination of self-, peer and external administration of needs assessment may be the best approach. If time permits, the use of more than one administrative approach provides the opportunity to access more information and to minimize the drawbacks of any single approach. For example, in measuring a teacher's skill at reinforcing behavior, it is possible to use both peer and self-assessment. By videotaping a teaching session and then having both the teacher and a peer record data using an observation instrument, it is possible to actively involve the teacher in his or her own assessment, to provide a greater degree of objectivity than self-assessment alone and to create a situation for obtaining inter-rater reliability.

Establishing Procedures to Determine Assessment Validity

Kaufman (1972) states that "no needs determination is final and complete; we must realize that any statement of needs is in fact tentative, and we should constantly question the validity of our needs statement" (p. 29). Since the entire needs assessment process is intended to provide an accurate identification of needs, it is essential that the validity of the process be examined. The staff development planner may go about this in a number of ways; one of the simplest methods is to ask staff members to evaluate the degree to which they feel the assessment accurately identified their needs. Another method involves examining the identified needs, the subsequent training and training objectives, and readministering the assessment. This method primarily examines the effectiveness of training but can provide information about the assessment as well.

Evaluation of the staff development process and its various components is dealt with at length in Section IV, so the detail in this section need not be great. It should be emphasized here, however, that a commitment to the examination and re-examination of the effectiveness of any staff development process is of critical importance. The information gained as a result

of such examination is vital to insuring the success of staff development endeavors. Evaluation is never done simply for the sake of collecting data or writing reports. Its function is to provide decision-makers with information that can be used responsibly to improve staff performance.

Review of Needs Assessment Instruments

For the reader's reference, several needs assessment instruments are appended. These are provided not as models, but as examples of instruments currently in use by HCEEP projects. They provide an assortment of the types discussed in this section. A review of these instruments may provide useful ideas on developing instruments for use in other programs.

Appendix A provides an example of an instrument that uses a discrepancy score. The instrument is completed independently by both the staff member and his or her supervisor. A comparison is made of the two assessments and consensus is reached by the two parties on the priority of identified needs and on the methods to be used to meet those needs. This instrument is administered at several intervals throughout the school year.

Appendices B and C are observation instruments used with project volunteers and teachers respectively. Observers are trained in the use of the instruments and inter-rater reliability is obtained. Both instruments contain checklists where the observer marks whether or not an activity occurred. They also require the recording of specific data that provide information about the quantity and type of various interactions during the specified time period. These observation forms are used both when initially training a person for the specific role and on a periodic basis after training to insure the maintenance of skills.

Appendix D is an example of an instrument that provides general and specific checklists as well as open-ended responses. The categories used in the instrument serve to structure and focus responses in specific areas. The instrument was designed to be self-administered.

SECTION III

DESIGNING AND IMPLEMENTING STAFF DEVELOPMENT ACTIVITIES

Upon the completion of the needs assessment process, it is assumed that through the use of various instruments, observations and personal interviews, staff needs have been identified. The program planner is now ready to design and implement the staff development program.

Developing Training Objectives

A number of staff development program planners proceed directly from the needs assessment phase to designing staff development activities. Nevertheless, while planners should initiate staff development activities soon after identifying needs, five important steps must be taken before designing these activities appropriately. These steps are essential to insure that staff development objectives correspond to the planned activities. These steps are:

- Clarification of each identified need
- Identification of the learning domain addressed
- Definition of the competency required
- Designation of specific training objectives
- Establishing priorities for training

Clarification of Need. Training is only one of a number of potential solutions to staff needs. Mager and Pipe (1970) emphasize the importance of carefully analyzing identified discrepancies prior to developing training or inservice programs in order to assess whether training is called for. Training is appropriate if individuals have never mastered the skill in question. A number of reasons other than lack of training exist for the inability to perform particular tasks. Some of these include: lack of opportunity to practice a skill, lack of motivation or rewarding consequences for performing the skill, unidentified obstacles to performance. Before determining that training is the appropriate solution to an apparent need, staff development planners must carefully analyze each need.

Identification of Learning Domain. Learning can occur in three primary domains: cognitive, motoric and affective (see Note 1). In any staff development program, it is expected that learning will occur in one of these three domains. Cognitive learning is that which results in change in knowledge. Motoric learning produces a change in technical or interpersonal skills. Affective learning refers to an attitudinal change. When a staff development need has been identified, it is necessary to determine in which learning domain the change needs to occur. The staff development activities required to produce change in each of the three domains differ widely; therefore, the domain must be identified prior to the design of activities. When it has been determined that the intended change will be primarily a skill, a level of knowledge or an attitude, it is necessary to define the required competency.

Defining the Necessary Competency. This step involves translating the identified need into a behavioral objective. When this step is completed, there will exist a specific competency, written in behavioral terms, that not only clearly defines the skill, knowledge or attitude needed, but also specifies the degree of required competency. This objective will provide the focus for the ensuing staff development activities and the means for evaluating the effectiveness of staff development endeavors. The literature has indicated that success in staff

development programs "tends to increase as the objective of the program is increasingly more precisely specified" (Nicholsen & Joyce, 1976, p. 21).

Designing Specific Training Objectives. In cases where the competency is broad, although stated in precise behavioral terms, it may be necessary to break the objective into smaller units. Task analysis is the process used here. The objectives are reduced to a set of smaller objectives (which may or may not be sequential), the sum of which encompasses the original ones. The purpose of reducing the original objective to a set of smaller objectives is to assist the staff development planner in selecting appropriate activities to meet the objectives. When a primary objective has a number of secondary objectives that lead to the attainment of the whole, a single activity will seldom suffice. Each secondary objective may require a different type of activity. Translating statements of need into definitive training objectives is critical to the success of a staff development program. Without these objectives, "staff development tends to lack necessary substance and merely focuses on delivery and means" (Miller & Verduin, 1979, p. 65). The clarity of the objectives enhances the quality of the decision-making involved in devising specific staff development activities.

When the staff development objectives have been clearly stated, one final step remains before selecting or designing training activities; the objectives need to be arranged in order of priority.

Establishing Priorities. Time, money and personnel resources are seldom unlimited, therefore, to conduct a staff development program and insure maximum impact, consideration needs to be given to what is most needed, by whom and when. The prioritizing of training objectives is based on project goals and objectives, administrative preference, the preference of individual staff members and the chronological and sequential nature of many tasks in any project. Several examples may clarify the process of priority ranking.

If staff members express a need for training in the use of a number of different child assessment instruments, but the program administrator has decided that only two instruments will be used, training in the use of other instruments becomes a much lower priority. If need for training is indicated in interpreting assessment information and developing individual educational programs, the former would be of higher priority since the ability to interpret is a prerequisite to the development of an IEP. If training is needed in preparing budgets, and the budgets are done in the spring, steps must be taken to insure that the training will occur just prior to the development of budgets, not six months earlier or two weeks later.

The following example will illustrate the entire process.

> A project staff has identified needs in the areas of collecting data on a regular basis to show behavioral change in children and in conducting periodic visits to the child's home.
>
> 1. Clarification of need. After informally interviewing the staff, it was discovered that the problem with periodic home visitation was not a lack of training but a lack of time for scheduling. This was turned over to the project administrator for resolution. Data collection, on the other hand, was identified as a training need because the staff simply did not know how to collect appropriate data.

2. Identification of the learning domain. It was determined that this need involved a specific skill and thus fell within the motoric domain.

3. Defining the necessary competency. A goal of this project was to teach children to exhibit social behaviors that are appropriate in a regular preschool program. In order to work toward this goal, teachers needed to be able to identify inappropriate behaviors, teach appropriate behaviors and measure the children's progress.

The competency required in the area of measurement was to demonstrate the ability to collect weekly data on the social behavior programs that have been developed for each child, using the method that is appropriate to each specific behavior.

4. Designing specific training objectives. Because the competency objective involved several methods of data collection, it was necessary to write a specific training objective for each method. They were:

- Teachers will demonstrate the ability to collect frequency data on an ongoing basis for behaviors that are discrete units occurring less than 20 times a day.

- Teachers will demonstrate the ability to collect frequency data using a time sampling technique for behaviors that are discrete units and occur more than 20 times a day.

- Teachers will demonstrate the ability to collect duration data for those behaviors that are not discrete units and occur for long periods of time.

5. Establishing priorities. Behavior management was a central element of the program's intervention model. Because the collection of data was seen as integral to the successful functioning of the model, this need was given a top priority.

Selecting Appropriate Activities.

When the five preliminary steps have been completed, the process of planning activities may begin. It is important during this process to consider the following: the learner, the availability of resources and matching activities to the intended outcome of the staff development program.

The Learner. Every staff member will enter the staff development program with a different set of needs, expectations, experiences, attitudes and learning styles, but training sessions and workshops continue to be conducted for large, diverse audiences. If a majority of staff indicate a need in a specific area; training is often conducted for the entire staff. Wieck (1979) states that "Diverse audiences ruin even the best training sessions because presenters must aim the training at the middle levels of the group" (p. 7). When selecting methods for staff development it is important to realize that a single delivery mode cannot possibly produce identical changes for all of the participants.

The literature on adult learning includes research, not only about diversity, but about commonalities as well. The staff development planner needs, at a minimum, cursory exposure

to this literature if staff development systems are to meet the needs of adults. Knowles (1978) makes five assumptions about the commonalities of adult learners: 1) Adults are motivated to learn from experiential cues; 2) Adult orientation to learning is life-centered; 3) Adults learn best through experiential modes; 4) Adults need to be self-directing; 5) Individual differences increase with age (p. 31). Hickey (See Note 1) has outlined characteristics of adult learning that additionally emphasize adult individuality: the importance of experience, the need for active learner involvement and the importance of basing training on actual need. In addition, Hickey addresses the relationship of attitudinal changes to adult learning propensities, proposing a direct correlation between the manner of presenting educational materials and the implications for the learning potential of the adult learner.

The need for designing activities that meet individual needs as well as the needs of the organization is widely accepted (Nicholson & Joyce, 1976). Although this is decidedly difficult given the fiscal and time constraints of most programs, clearly defined objectives and creative instructional activities can overcome this difficulty. By specifically delineating needs and involving the staff in the planning of staff development activities, it is possible to provide learners with a sense of ownership towards the education process, and simultaneously, to acknowledge the obvious limitations of personalized training for each staff member.

Availability of Resources. Staff development planners need to identify all available resources prior to implementing activities. Resources that need to be considered include time, money, space, materials and personnel. Accurate, complete identification and careful consideration of all resources can result in increased effectiveness of any staff development program.

The timing and location of staff development activities should be geared to the individuals involved. While weekends and after-work hours are tempting to planners, these time periods are not usually favored by the members of a project staff. Release time during regular working hours can often be arranged by using substitutes or personnel who are not participating in the staff development activity. The location for staff development activities should be convenient for participants, and the space should be appropriate for the scheduled activity. For example, participants may best observe and practice intervention techniques in an actual classroom, while viewing films or videotaped programs requires comfortable seating and an area free from distractions.

Typically, money for staff development activities is very limited. To gain the most from limited resources, the staff development planner will have to weigh carefully the desired outcome against the proposed method of achieving the staff development objective. In addition, the staff development planner should explore possibilities for collaborative efforts with other area programs. It may be possible to jointly sponsor an activity or to arrange an agreement whereby staff members from one project are permitted to attend appropriate activities sponsored by another agency.

The identification of material and personnel resources is frequently overlooked in staff development planning. Materials of little or no cost can be found in public and university libraries, community agencies serving similar populations and on the shelves of project staff members. Since a wealth of materials currently exists, it is cost-effective to spend time locating them prior to initiating a costly and time-consuming effort to develop appropriate materials. The same is true for personnel resources; efforts to locate trainers should begin with the identification of skills and expertise within a project's staff. A teacher skilled in test administration may be used to train other teachers. This is certainly less expensive and may be more appropriate than bringing in a consultant or sending staff to an outside training program.

Devoting sufficient time and energy to the identification of available resources can significantly increase the available options for staff development activities. Increasing the

available options will result in a greater potential for success as well as a greater opportunity for individualizing programs.

Matching Activities to the Intended Outcome. Staff development activities are intended to effect changes in skill, knowledge or attitude of individual participants. For an activity to produce the desired outcome, it must be well matched with the objective. Different training needs will require different types of activities. Increasing an individual's knowledge in a given area can be accomplished by lectures, selected reading, programmed instruction and observation. Changes in skill would suggest an opportunity for the individual to practice the skill. To illustrate the match between objective and activity, several activities and their likely outcomes will be described.

A lecture or selected reading on behavior modification techniques will likely result in increased knowledge of those techniques. It is possible that increased knowledge of the techniques may change attitudes about the effectiveness or ineffectiveness of their use. It is far less likely that these activities will result in changes in an individual's skill at using behavior modification techniques.

Videotapes or live demonstrations of behavior modification techniques can increase knowledge if they are accompanied by explanation. Observing the techniques in use may be more effective at producing attitudinal change than attending a lecture, and there is more likelihood that skill level will change.

Demonstrating behavior modification techniques, having participants practice the skill and then critiquing their efforts, is possibly the most effective means of producing change in an individual's skill. This activity may also result in attitudinal change and increased knowledge, but it may be more involved and time-consuming than is necessary for that result.

Careful consideration of the desired outcome as well as knowledge of individual learning styles and preferences will increase the likelihood of selecting appropriate activities.

Types of Staff Development Activities

The list of possible activities for meeting staff development objectives is limited only by the scope of one's imagination. Rather than attempt the impossible task of listing infinite types of staff development activities, a number will be reviewed to provide the reader with examples of the diversity in these activities.

Professional Reading. The provision of readily available written materials can be economical in terms of both time and money. If staff development is aimed at a change in knowledge, benefit can be derived from the development of a good professional library. Staff members may more readily select this activity if some direction is provided regarding the availability of materials.

Staff-to-staff Instruction. Members of a staff who are skilled in a given area may provide training to other staff members who need to develop skills in that area. The arrangements for this type of activity are extremely flexible. Training may be provided individually or in small groups, in the classroom or an office, during the school day or over coffee.

Staff Exchanges or Visits. Exchanges may be made with other programs to provide needed staff development. This can take the form of directed observation, the exchange of information or direct instruction. This activity lends itself to a reciprocal agreement.

Programmed Instruction. These teacher training packages are self-administered and the individual may set his or her own working pace. Programs may be purchased commercially or be project-developed. The format may be written, audiovisual or computerized.

Consultation. Calling in an expert consultant can be an effective activity mode. Nicholson and Joyce (1976) indicate that this mode is most productive if it is decentralized and individualized; that is, if it is requested by the teacher, meets the teacher's expressed need and occurs at the school during school hours.

Workshop. A workshop generally consists of a number of staff people working in conjunction with a leader as resource person to solve a specific problem or achieve a specific goal (e.g., to develop assessment procedures). The workshop can be a very potent activity mode if the purpose is well-defined, the participants accept this strategy and a good match has been made among participants, resource personnel and intent (content).

Coursework, Lectures and Conferences. These have been recognized as appropriate staff development activities; their major drawback is lack of control over content. If a class, lecture or conference does not relate directly to the defined needs of individuals and the organization, much of the value as a staff development activity is lost.

Attributes of Successful Staff Development Activities

Nicholson and Joyce (1976) list a number of attributes which pertain to implementing the appropriate activity for an identified audience. These include:

1. Individualized programs are more likely to accomplish their objectives than programs that have the same activities for all participants. Individualization, furthermore, should be understood not to be limited to variations merely in pace and sequence of materials.

2. Programs in which teachers take some active role (e.g., generating a set of instructional materials) are more likely to be successful than those in which teachers are limited to a passive or receptive role.

3. Programs based on a demonstration of materials or technique, combined with a supervised trial and followed by some form of feedback are more likely to be successful than those in which information or instructions are learned and stored for future application.

4. Programs in which teachers provide mutual assistance are more likely to be successful than those in which teachers work entirely on their own.

5. Programs occurring as part of an overall staff development plan or general effort of the school are more likely to be successful than one-shot efforts.

6. Programs of emergent design, in which teachers themselves choose at least some of the goals and activities, are more likely to be successful than programs which are entirely preplanned.

7. Programs which are self-initiated and self-designed tend to have a high rate of success. (p. 22)

Inclusions of as many of these attributes as possible in any activity may increase the likelihood of that activity's success.

SECTION IV

EVALUATION OF STAFF DEVELOPMENT

The preceeding sections have discussed the development of objectives for staff development programs and described activities to meet those objectives. The final component of a staff development program is evaluation. Once needs have been carefully analyzed and prioritized, and appropriate training activities have been selected and carried out, the process of evaluation begins. Its purpose is to measure whether staff development objectives have been met.

The primary audience for evaluation data are the project adminstrator and staff members. But evaluation data from a staff development program may be useful to the project officers at Special Education Programs (SEP) (formerly the Office of Special Education) and other agencies or projects interested in adapting the HCEEP model staff development procedure. To meet the needs of all audiences, five levels of evaluation should be considered. They are:

1. The degree of satisfaction which the staff member (trainee) has in the training received.
2. The degree of knowledge, skills or attitude change acquired by the staff member during training.
3. The degree to which the staff member in his or her natural setting applies the skill or knowledge acquired.
4. The amount of child change achieved as a result of implementing the procedures learned by the staff.
5. The degree of maintenance of staff skills over time.

These five levels constitute the evaluation plan for staff development activities. Each will be discussed below in greater detail.

Level One: Evaluation of trainee satisfaction

The kind of evaluation most often found in staff development training is trainee satisfaction. Usually, satisfaction data is collected by using a questionnaire or survey that asks the trainee: Are you pleased with the type of training that you received? Was the subject matter appropriate? Was it well presented? Did it satisfy some of your needs? A number of examples of such questionnaires are available. Alvir (1976) developed evaluation packets for teacher inservice workshops via participant evaluation and observer evaluation. Appendix E is an example. The HCEEP Orientation Conference in which all new project directors participate in the late summer or early fall has an evaluation system which also focuses primarily on participant (trainee) satisfaction (Appendix F).

Evaluation of trainee satisfaction is important because it concentrates on the trainee's perception of whether or not his or her needs are being met. The whole process of the staff development program started with a statement of needs--those of the staff members and the administrators; this kind of evaluation focuses on those needs. Similar kinds of questionnaires

can be given to an administrator to determine whether or not he or she perceives that the training is meeting staff needs.

Level Two: The Acquisition of Skills, Knowledge or Attitude Change During Training

The second level of evaluation is a determination of whether the staff person acquires skills, knowledge or attitude change during staff development training. A number of techniques are possible here, though pre and posttest measures are frequently used. For instance, at an inservice workshop on language programs for mentally retarded preschoolers, the workshop coordinator may give a pretest on the knowledge of the characteristics of different language programs prior to an inservice workshop for teachers. The coordinator will then give the same test at the conclusion of that workshop to determine whether the trainees have acquired knowledge about the content of the various programs.

Other kinds of inservice training place the trainee in a performance situation where he or she must teach a child a certain skill using a specified methodology. Through a system of feedback to the trainee as the teaching occurs, the trainee's performance changes during the workshop. Observational data are taken during the first performance of the trainee and then during later performances to demonstrate change in the performance which resulted from the training.

The same kind of observations or data can be used for on-the-job training where a supervisor and the staff person agree that a certain interaction skill needs to be acquired by the staff member. The supervisor takes some baseline data on the performance of the staff person, shares that baseline data with the staff person and then instructs that staff person through a process of feedback on how to change his or her behavior. After subsequent measurements are taken, the evaluation of staff performance is achieved.

In this second level of evaluation, some kind of pre and postmeasure is necessary to demonstrate that learning occurred during the inservice training. A postmeasure alone is a weaker form of evaluation, but it may suffice if no pretest can be taken. Although a postmeasure can demonstrate that a person does have specified skills at the end of an inservice training session, a postmeasure alone does not demonstrate that the person acquired these skills or knowledges as a result of the training. While the workshop objectives may appear to have been met, there is no clear evidence that the workshop effected those objectives. Causal relationships cannot be demonstrated without both pre and postmeasures.

Level Three: Application of Learned Skills and Knowledge

The third level of staff development evaluation focuses on the implementation of the acquired skills in the staff person's natural environment. While there is no easy way to measure this skill implementation, the surest way is direct observation of the trainee on the job. This can easily be demonstrated in those cases where the supervisor is providing the immediate inservice training to the staff member. In the case where the supervisor took a pretest measure or initially observed the staff person, provided inservice training and then saw that the staff person had acquired the skills, the supervisor now need only make periodic observations to determine that the staff person is using those skills on a routine basis in the work environment. In lieu of the supervisor providing the observation, Project KIDS, for example, provides a self-assessment inventory for their staff. The directions for conducting the self-assessment and an example of one of the 20 competency areas in the inventory are shown in Appendix G.

In those instances where a staff person is trained in another setting and has demonstrated during the training that he or she acquired the specified skills, the evaluation of whether those skills are implemented in the trainee's work environment is more complex. Usually it requires the trainer to visit the work environment, make observations of the trainee and determine, through those observations, whether the trainee is implementing the training and performing at a specified criterion level. This kind of evaluation is expensive, time-consuming and very seldom conducted as a result of a staff development workshop. Occasionally, a supervisor and the trainee may attend the same workshop, enabling the supervisor to observe the staff person's performance, and determine whether he or she is applying the newly learned skills. The expense and time involved, however, often prohibits such joint attendance.

Many use either phone or mail questionnaires to determine if trainees implement a specific practice in their work environment after a training session. This type of questionnaire, however, is at best an unreliable measure. One can assume that trainees who respond will inevitably be those who have implemented the measures, although a small number of those who are discontent with the training will indicate that they did not utilize the new skills. Those who do not respond probably are not implementing procedures. Therefore, the data that are gathered through a questionnaire are generally skewed to the positive side, and its reliability is questionable.

An example of a follow-up to inservice training of teachers is contained in Appendix H; a sample of objectives that are used by an early childhood Outreach Project to train other teachers in the project's techniques. Notice that objectives and criterion levels have been specified. This data is gathered by observation in the trainee's home environment.

Level Four: Effects on Children

The fourth level of evaluation focuses on the effects of the staff development training on the children served. Child-change data is the most difficult and expensive to acquire. It can be acquired locally at one site by comparing the pre and posttest scores of children prior to staff training with those following staff training. Comparison of this data should indicate child change. The problem that most projects have with this data is, of course, the small number of children involved. This factor should not dissuade the project from making the attempt to gather this data as child-change data is perhaps the most powerful demonstration of the effectiveness of an inservice training program for staff development.

The literature in the behavior management area contains more examples of child-change data than that in any other curricular area. For instance, Gladstone and Sherman (1975) demonstrated that retarded children acquired skills after high school trainees, who were their volunteer teachers, were taught certain teaching techniques. McKeown, Adams and Forchad (1975) demonstrated a reduction in disruptive behavior in classrooms where teachers were taught behavior modification techniques. Burg, Reid and Lattimore (1979) increased interactions between direct care staff and profoundly retarded persons in a state residential facility as a result of instruction and monitoring by supervisors. Examples of other types of training generally focus on systems such as the Englemen DISTAR system which has gathered data systematically through their follow-through program to demonstrate that their procedures produced change in children. Another example is the kind of data which was validated at the Joint Dissemination and Review Panel for the Inservice Training Project of Teaching Research (a division of Oregon State System of Higher Education). These data demonstrated that children who were trained in classrooms of teachers trained by Teaching Research made significantly higher gains after training than before (Fredericks, Baldwin, Moore, Templeman & Anderson, 1980).

Level Five: The Maintenance of Staff Skills

The fifth level of evaluation pertains to the maintenance of learned skills, attitudes or knowledge over time. Griffin (1978) emphasized the need for this kind of ongoing evaluation. It is important for two reasons: Staff development implies growth, and this in turn requires the continual building and maintaining of a staff member's personal development. In addition, an HCEEP project, because it is a model, is expected to be copied by others. Thus, there is a requirement that once the model is ready to be replicated, the staff are functioning at a high level of performance, thereby presenting a highly functioning model. Ongoing evaluation must include some type of observation system administered either by the staff or by supervisory personnel. Griffin indicates the possible need for many people being involved in this kind of evaluation.

Occasionally, aspects of an ongoing observation system can be self-administered, but even self-administered instruments should be monitored and checked by supervisors. An example of the self-monitoring technique is the instance where a staff requirement is that a preschool classroom teacher complete 80% of the individual programs scheduled for each child on a daily basis. The teacher can monitor his or her own performance by noting the number of programs required and the number administered, computing the percentage of completed programs, and thereby checking on his or her own job performance. Another example is the nurse in an intensive care unit who has been trained to interact with a child in a certain way and on a certain daily frequency. The nurse can self-monitor the frequency and whether or not he or she has accomplished the particular requirements of the job.

The quality of the interaction over time between the nurse and the child, however, may be better monitored by a third-party observer. Quality of interaction is one of the most important criteria for assessing the performance of staff who must interact with children. There are certain ways to hold infants, certain ways to cue children to perform certain tasks and certain techniques for responding to children. Each of these behaviors can be observed by a supervisor who then can conclude whether the staff member is achieving the specified criterion for performing the particular behavior over an extended time period.

Evaluation of the maintenance of skills must be as structured as other kinds of evaluation. For instance, one HCEEP project requires that the teacher in a classroom formally observe the teaching assistant once every two weeks to examine the way in which he or she is interacting with the children in a group situation. There are certain requirements and criterion levels for cueing, rotating attention and providing feedback to the children. If the teaching assistant is not meeting these requirements at the appropriate levels, the teacher must immediately intervene and administer on-the-spot inservice training, followed by more frequent observations. If the teaching assistant is meeting the criterion levels of performance, the teacher should give him or her positive feedback.

Houts and Scott (1973) emphasize the importance of an ongoing evaluation system which focuses on the good performance, not the deficits of the staff. Such an approach to evaluation will engender staff support of the system. A general format for an evaluation system focusing on the maintenance of staff performance is summarized in the following six steps: 1) precise definition of staff performance requirements, 2) an observation of instruction, 3) a schedule of observations, 4) criterion levels of performance, 5) a plan for remediation if performance is below criterion levels, 6) emphasis on the positive aspects of performance.

APPENDIX A

Project TRACE
Staff Development Checklist

Please give consideration to each skill listed. In the column marked "R," please indicate the degree of competence you feel is required of that skill for your position. Rank from 0 to 5 (with 0 being none to 5 being considerable). In the column marked "A," please indicate the degree of competence you feel you have achieved in that area (also from 0 to 5). Column D will reflect the difference between the required and achieved columns. Supervisors will also complete one form for each staff member, and together the priorities will be determined.

R - Required skill for position
A - Achieved level of performance by individual
D - Discrepancy between R and A--or further development needed

	R	A	D
Data Collection			
Project TRACE Staff shall:			
1. Identify staff target behaviors and skills	____	____	____
2. Select appropriate methods for collection of data (i.e., standardized tests, informal tests, observation, frequency, time sample)	____	____	____
3. Collect data in an organized manner	____	____	____
4. Interpret results of data to parents and staff	____	____	____
IEP			
Project TRACE Staff shall:			
1. Demonstrate knowledge of P.L. 94-142 and pertinent district procedures pertaining to IEP development	____	____	____
2. Establish student's present level of functioning	____	____	____
3. Write measurable long-term goals for student	____	____	____
4. Write measurable short-term objectives for student	____	____	____
5. Explain in clear and concise terms the child's progress using data for support	____	____	____
6. Encourage involvement of parents in IEP process	____	____	____
Daily Lesson Plan			
Project TRACE Staff shall:			
1. Plan daily activities for children	____	____	____
2. Select units of study, activities and materials appropriate to child's needs	____	____	____
3. Exhibit familiarity with and ability to use instructional materials	____	____	____
4. Demonstrate ability to individualize materials and activities	____	____	____

APPENDIX A (Continued)

	R	A	D
5. Mainstream students and coordinate activities with regular classes	____	____	____
6. Coordinate activities with special services	____	____	____
7. Use a variety of grouping methods	____	____	____
8. Prepare plans for substitute teacher	____	____	____

Behavior Management

Project TRACE Staff shall:

1. Exhibit knowledge of and proficiency in the use of the following behavior management techniques:			
a. Rewards	____	____	____
b. Punishment/time out	____	____	____
c. Reinforcement schedules	____	____	____
d. Group techniques	____	____	____
e. Consistency	____	____	____
f. Shaping/chaining	____	____	____
g. Premack principle	____	____	____
h. Modeling	____	____	____
i. Charting behaviors	____	____	____
2. Target specific behaviors	____	____	____
3. Demonstrate ability at task analysis	____	____	____
4. Select appropriate management techniques	____	____	____
5. Implement appropriate behavior management techniques	____	____	____
6. Train others in the use of behavior management techniques	____	____	____

Areas of Exceptionality

Project TRACE Staff shall:

1. Demonstrate knowledge of characteristics of children with these handicapping conditions and appropriate teaching methods:			
a. Educable mentally handicapped	____	____	____
b. Emotionally disturbed	____	____	____
c. Learning disabled	____	____	____
d. Vision impaired	____	____	____
e. Hearing impaired	____	____	____
f. Speech and language impaired	____	____	____
g. Physically handicapped	____	____	____

Assessment

Project TRACE Staff will demonstrate ability to:

1. Administer standardized and informal tests	____	____	____
2. Interpret results of gathered data	____	____	____
3. Report assessment information to parents and staff	____	____	____

APPENDIX A (Continued)

	R	A	D
Relationships with Parents			
Project TRACE Staff shall:			
1. Demonstrate knowledge of initial screening procedures	____	____	____
2. Inform parents of purpose of IEP	____	____	____
3. Demonstrate knowledge of parents' rights and responsibilities	____	____	____
4. Know student orientation procedures (i.e., registration, necessary medical records, bussing, etc.)	____	____	____
5. Effectively involve parents in classroom observations and participation	____	____	____
6. Communicate effectively with parents through:			
a. Phone conversations	____	____	____
b. Written correspondence	____	____	____
c. Newsletters	____	____	____
7. Plan home visits on regularly scheduled basis	____	____	____
8. Prepare for quarterly conference with parents	____	____	____
Child Development			
Project TRACE Staff shall:			
1. Demonstrate knowledge of appropriate skill levels in the following developmental areas:			
a. Self-help	____	____	____
b. Motor			
1. Gross motor development	____	____	____
2. Fine motor development	____	____	____
c. Processing			
1. Visual processing	____	____	____
2. Auditory processing	____	____	____
d. Social and emotional development	____	____	____
e. Language development	____	____	____
f. Readiness/academic	____	____	____
Child Find			
Project TRACE Staff shall:			
1. Demonstrate ability to administer screening instruments	____	____	____
2. Evaluate and interpret result of screening procedures	____	____	____

Note: Developed by Transitional Resource Addressing Children's Education (Project TRACE), West Chicago, Illinois. Reprinted by permission.

APPENDIX B

Volunteer Observation Form

Volunteer: _____
Student: _____
Observer: _____
Time: _____ to _____

Date: _____
Program: _____
Cue (Verbal): _____
Cue (Non-Verbal): _____

Correction Procedure: _____
Criterion: _____
Behavior (Phase/Step): _____
Reinforcers: _____

1. Volunteer has correct materials
2. Materials, volunteer and data sheet in best position for presentation
3. Student in correct position

	YES	NO

CUES					CONSEQUENCES														DATA	
					Positive Reinforcers							Correction Procedures & Punishers								
Appropriate	No Cue	Weak	Change Wording	Repeated	Appropriate	No Reinforcer	Fall to Pair	Weak	Delayed (2 sec)	Inappropriate	Appropriate	No Correction/ Punisher	Delayed	Inapprop.	No	Cue	Help	Reinforcer	Recorded Correct	Recorded Incorrect
Cues: Appropriate / Total _____ equals _____ %					Consequences: Appropriate / Total _____ equals _____ %														Data: Correct / Total _____ equals _____ %	

Positive Feedback:

1.
2.
3.
4.

Recommendations for Improvement:

1.
2.
3.
4.

APPENDIX C

Teacher Observation Form
10 Minute Observation

Teacher: _____ Observer: _____ Date, Time: _____

	30 Second Time Sample								Continuous Time Sample			
	Appropriate					Inappropriate			Delivery of Consequences			
			Checking on or Observing						Appropriate		Inappropriate	
	Interacting	Modeling	W/Form	W/O Form	Administration, Scheduling, etc.	Not Attending to Priority Sit.	Other (List)	Total	Positive	Negative	Positive	Negative
Aide												
Volunteer												
Child			BEH/Test									
Total												

Teacher's Checklist: (Indicate if NA)

		Yes	No
1.	All programs scheduled to be run	___	___
2.	Volunteers kept on schedule	___	___
3.	Checks clipboards at least once per morning	___	___
4.	Adjusts schedule when necessary	___	___
5.	Available and eager to assist staff	___	___
6.	Remains composed and pleasant	___	___
7.	Circulating/Rotating attention	___	___
8.	Assists aide when table becomes crowded or behavior problems are out of control	___	___
9.	Conducts one-to-one programs if time permits	___	___
10.	Observes no more than one program unless there are problems the teacher is assisting with.	___	___

Feedback to Teacher:

1. _____
2. _____
3. _____
4. _____
5. _____

1. Time Spent Appropriately
   Criterion 80%
   $\frac{\text{\# Appropriate Marks}}{\text{Total Marks}}$
   Score _____ %

2. Appropriate Task Areas Completed
   Criterion 6 Areas
   $\frac{\text{\# Areas Completed}}{\text{\# Areas Available}}$
   Score _____ %

3. Teachers Checklist
   Criterion 80%
   $\frac{\text{\# Areas Completed}}{\text{Total Areas}}$
   Score _____ %

APPENDIX D

Name _____
Discipline _____
Site _____
Date _____

General Needs Assessment

Directions: Please check ( ) the three areas which you feel are your highest priorities for training in the area of the severely handicapped.

_____ 1. Initial assessment procedures for pupils/clients
_____ 2. Establishing instructional goals and short-term objectives
_____ 3. Planning pupil/client programs
_____ 4. Selection of program materials
_____ 5. Selection of program strategies
_____ 6. Use of ongoing measurement procedures
_____ 7. Overall evaluations of pupil/client progress (e.g., quarterly, annual)
_____ 8. How to work cooperatively with other educational professionals
_____ 9. Management of professional time
_____ 10. Inservice presentations from other professionals (e.g., OT, PT, speech therapist, social worker, nurse, psychologist, educator)
_____ 11. Identifying and locating resources
_____ 12. Training others (paraprofessionals, parents, professionals)
_____ 13. Scheduling, coordinating and managing resources
_____ 14. Designing, managing and administering special programs (e.g., infant, vocational, parent training)
_____ 15. Legal rights of the handicapped
_____ 16. Other; specify: _____
_____ 17. Other; specify: _____

Specific Needs Assessment

Directions: Please check ( ) the two areas which you feel are your highest priority areas for training under each of the following categories. Check only two in each category.

1. Initial Assessment Procedures for Pupils/Clients

_____ 1.1 Assessment instruments
_____ 1.2 Assessment techniques
_____ 1.3 Assessment rationale
_____ 1.4 Other; specify: _____

2. Establishing Instructional Goals and Short-Term Objectives

_____ 2.1 Appropriateness
_____ 2.2 Rationale
_____ 2.3 Format (how to)
_____ 2.4 Prioritizing
_____ 2.5 Other; specify: _____

3. Planning Pupil/Client Programs

_____ 3.1 Pinpointing behaviors
_____ 3.2 Task analysis
_____ 3.3 Program format (how to)
_____ 3.4 Other; specify: _____

4. Selection of Program Materials

_____ 4.1 Identifying available materials
_____ 4.2 Evaluating materials
_____ 4.3 Modifying existing materials
_____ 4.4 Other; specify: _____

5. Selection of Program Strategies

_____ 5.1 Steps in the learning process
_____ 5.2 Determining what strategies are appropriate
_____ 5.3 Behavior management
_____ 5.4 Other; specify: _____

6. Use of Ongoing Measurement Procedures

_____ 6.1 Selection of tools and procedures
_____ 6.2 Implementing measurement systems
_____ 6.3 Use of measurement information (i.e., to modify program)
_____ 6.4 Other; specify: _____

7. Overall Evaluations of Pupil/Client Progress (e.g., Quarterly, Annual)

_____ 7.1 Selection of tools and procedures
_____ 7.2 Implementing evaluation (how often)
_____ 7.3 Use of the evaluation information (e.g., future programming, grouping pupils)
_____ 7.4 Other; specify: _____

8. How to Work Cooperatively with Other Educational Professionals

_____ 8.1 Communication techniques
_____ 8.2 Roles and descriptions
_____ 8.3 Implementing a team approach to providing services to pupils
_____ 8.4 Other; specify: _____

9. Management of Professional Time

_____ 9.1 Prioritizing activities
_____ 9.2 Scheduling priorities
_____ 9.3 Coordinating schedules with other professionals
_____ 9.4 Scheduling classroom/client programs
_____ 9.5 Other; specify: _____

APPENDIX D (Continued)

10. Inservice Presentations from Other Professionals (List professionals by numbers from list below)

_____ 10.1 Assessment _____
_____ 10.2 Program planning _____
_____ 10.3 Measurement, evaluation _____
_____ 10.4 Instructional strategy _____
_____ 10.5 Resources _____

1. Teachers/Educators
2. Administrators
3. Speech Clinicians
4. Physical Therapists
5. Occupational Therapists
6. Other; specify: _____
7. Family Services/Social Workers
8. Nurses
9. Vocational Educators
10. Psychologists

11. Identifying and Locating Resources

_____ 11.1 Identifying the need for resources
_____ 11.2 Identifying community resources
_____ 11.3 Selecting appropriate resources
_____ 11.4 Other; specify: _____

12. Training Others (Paraprofessionals, Parents, Professionals)

_____ 12.1 Parents and families
_____ 12.2 Volunteers
_____ 12.3 Assistant teachers, OTs, etc.
_____ 12.4 Organize an inservice (how to)
_____ 12.5 Other; specify: _____

13. Scheduling, Coordinating and Managing Resources

_____ 13.1 Use of resource personnel in the classroom
_____ 13.2 Working in and with the community
_____ 13.3 Public relations
_____ 13.4 Parent groups
_____ 13.5 Other; specify: _____

14. Designing, Managing and Administering Special Programs

_____ 14.1 Infant programs
_____ 14.2 Vocational programs
_____ 14.3 Community living programs
_____ 14.4 Family training
_____ 14.5 Other; specify: _____

APPENDIX D (Continued)

15. Legal Rights of the Handicapped

_____ 15.1 P.L. 94-142
_____ 15.2 504
_____ 15.3 State rules and regulations
_____ 15.4 Other; specify: _____

16. Other: Refer to the general needs assessment and specify: _____

16.1 _____
16.2 _____

17. Other: Refer to the general needs assessment and specify: _____

17.1 _____
17.2 _____

Note: From Haring, N.G., & Lynch, V. (Eds.), Handbook for staff training and development. Seattle, WA: Experimental Education Unit, College of Education, Center for Inservice Training, University of Washington, 1979. (Unpublished manual.) Reprinted by permission.

APPENDIX E

PARTICIPANT'S EVALUATION OF INSERVICE TEACHER WORKSHOPS

Directions: 1. Identify the workshop and the dates of attendance.

Workshop: _____

Dates: _____

2. Circle YES or NO for each of the following. Comments may be added. Questions left blank, undecided or answered with both YES and NO will automatically be tabulated as NO unless explained with a comment.

1.	I was made aware of the workshop objectives before I came to the workshop.	1. YES NO
2.	The workshop objectives were clearly stated.	2. YES NO
3.	The workshop objectives were related to my teaching concerns as an occupational educator.	3. YES NO
4.	Most of this workshop centered around material that was interesting, challenging and useable.	4. YES NO
5.	The purpose and objectives of this workshop made sense to me.	5. YES NO
6.	The workshop objectives were met to a high degree.	6. YES NO
7.	This workshop should be held again with the same objectives for those of my colleagues who were unable to attend.	7. YES NO
8.	This workshop should be held again for the same participants on a more advanced level.	8. YES NO
9.	This workshop had some components which were unique or innovative.	9. YES NO
10.	Most of the scheduled workshop activities made good use of the time available.	10. YES NO
11.	Most presentations were well organized.	11. YES NO
12.	Most workshop personnel (speakers, presenters and resource persons) provided the kind of information, expertise, creativity and communication skills expected by me as a participant.	12. YES NO
13.	Most sessions offered stimulating or new material.	13. YES NO

APPENDIX E (Continued)

14.	My questions were dealt with satisfactorily.	14.	YES NO
15.	The workshop activities were appropriate for meeting the stated objectives.	15.	YES NO
16.	Instructional resources were appropriate and adequate for achievement of workshop objectives.	16.	YES NO
17.	There was evidence of good administrative practice in leadership and supervision on the part of the workshop director.	17.	YES NO
18.	Meeting room facilities were suitable.	18.	YES NO
19.	The physical environment was adequate as far as lodging, lighting, ventilation, parking, cafeteria and other such things were concerned.	19.	YES NO
20.	This workshop was a successful training experience for me.	20.	YES NO
21.	The workshop content was practical and useful in helping improve classroom instruction.	21.	YES NO
22.	Reasonable progress was made by me individually towards meeting the objectives of the workshop.	22.	YES NO
23.	I had a chance to provide feedback to the workshop staff.	23.	YES NO
24.	I had a chance to identify professional needs which I previously had ignored.	24.	YES NO
25.	This workshop had some implications for the way I teach.	25.	YES NO
26.	The things I learned at this workshop will help the students I teach this coming year.	26.	YES NO
27.	Overall, this workshop was a worthwhile and valuable experience.	27.	YES NO
28.	I am able to list specific benefits I received at this workshop.	28.	YES NO

Note: From Alvir, H. Three packets with which to evaluate teacher inservice workshops via participant evaluation and via observer evaluation. Albany, NY: Bureau of Occupational Educational Research, New York State Education Department, (Eric Document Reproduction Series No. ED 120 124.) Reprinted by permission.

APPENDIX F

Portion of HCEEP Orientation Conference Questionnaire

In the following section we want to determine the extent to which the goals of the workshop were accomplished. Rate each goal according to the following scale:

7 - Fully Accomplished
6
5
4 - Partially Accomplished
3
2
1 - Not Accomplished

		FA			PA			NA
1.	To provide information about the history and purposes of the Handicapped Children's Early Education Act.	7	6	5	4	3	2	1
2.	To provide information about the Handicapped Children's Early Education Program (HCEEP), as currently administered by SEP.	7	6	5	4	3	2	1
3.	To provide information about the components of an educational model and its development and dissemination.	7	6	5	4	3	2	1
4.	To provide information on planning, managing and evaluating an HCEEP Demonstration project.	7	6	5	4	3	2	1
5.	To provide information about federal requirements for grants funded under HCEEP.	7	6	5	4	3	2	1
6.	To provide information about the technical assistance services available to all newly funded HCEEP Demonstration projects and how those services are acquired.	7	6	5	4	3	2	1
7.	To provide an opportunity for project directors to meet their respective SEP project officers.	7	6	5	4	3	2	1
8.	To provide an opportunity for project directors to meet other directors and to share information on topics of common concern.	7	6	5	4	3	2	1

Comments on workshop objectives:

APPENDIX G

Sample of Self-Assessment Inventory from Project KIDS

Directions

1. Assess your level of mastery in each competency.
2. Review descriptions of suggested activities designed to improve level of mastery.
3. Select one activity if your level of mastery is (1), select two activities if your level of mastery is (2), and select three activities if your level of mastery is (3).

Levels of Mastery

1. I feel competent in this area.
2. I can demonstrate minimal skill in this area now.
3. I have little confidence in this area.

Example of Self-Assessment Inventory

Competency Areas	Level of Mastery	Suggested Activities
10.0 The early childhood teacher will have knowledge of the general counseling techniques to use at various stages of parent adjustment.		10.1 Read case histories and identify adjustment stages. 10.2 View videotape of parent/professional dialog. Identify adjustment stages and discuss with specialist. 10.3 View videotape of parent counseling session and critique counseling behavior. 10.4 Role play teacher/parent conference and critique techniques used by teacher. 10.5 View videotape of Robert Perske's discussion with Project KIDS parents. Discuss communication skills identified in videotape. 10.6 Read Kroth, R. L. Communicating With Parents of Exceptional Children: Improving Parent-Teacher Relationships. Denver: Love Publishing Co., 1975. The focus of this paperback book is upon the facilitation of effective parent-teacher partnerships in providing optimal services for the exceptional child. The book itself is a compilation of "techniques: to be used by teachers" (Sections I-III). 10.7 Read and discuss: "Psychological Counseling with Parents of Retarded Children" by Philip Roos in Mental Retardation, December, 1963 (p. 345-351).

Note: From the Staff development package. Project KIDS, Dallas, TX, 1977. Reprinted by permission.

APPENDIX H

Examples of Objectives, Activities and Evaluation of Follow-up of an Outreach Inservice Training Project

Objectives	Activities	Evaluation
1. Trainee will be able to conduct prescriptive programs in the areas of self-help, motor development and language.	1.1 Conduct prescriptive programs with a handicapped child in an individual instructional setting in the curricular areas of self-help, motor development and language.	1.1.1 Trainee will score 90% appropriate delivery of cues, consequences and accuracy in recording data in any one curricular area on the Teaching Research Volunteer Observation Form.
2. The trainee will pinpoint an inappropriate behavior exhibited by a handicapped child, gather baseline on that behavior and design a program to alter the specified behavior.	2.1 Conduct existing behavior programs in a group setting.	2.1.1 Participation in the aide role as described in objective #2.
	2.2 Observe a group setting and pinpoint an inappropriate behavior in measurable terms and take baseline sample of the behavior.	2.2.1 & 2.3.1 Trainee will establish a behavior intervention program to include 8 (or 80%) of the necessary items, completed appropriately.
	2.3 Design a treatment to remediate the pinpointed behavior, to include a definition, terminal objective, method of measurement, baseline program and data system.	
3. The trainee will demonstrate the ability to manage groups of children engaged in free-time or seatwork activities.	3.1 Manage a group of children at the activity center.	3.1.1 Trainee will score 85% appropriate delivery of cues and consequences on the Teaching Research Aide Observation Form.
	3.2 Conduct one behavior intervention program and record data while managing a group of children.	3.2.1 Trainee will utilize specified treatment and appropriately record data as judged by trainer.
	3.3 Conduct a stimulation program while managing a group of children, presenting stimulus item and recording child response.	3.3.1 Trainee will score 80% appropriate presentation of the stimulus and recording of responses on the Teaching Research Stimulation Checklist.

Objectives	Activities	Evaluation
4. The trainee will demonstrate the ability to manage the classroom in the role of the teacher.	4.1 Trainee will manage the classroom to include interacting with volunteers and staff, modeling programs, utilization of observation forms to evaluate volunteers and aides and general administration of classes.	4.1.1 Trainee, when in the role of teacher, will perform 6 of the described activities appropriately, as judged by the trainer, and complete 80% of items on the Teacher's Checklist on the Teaching Research Teacher Observation Form.

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