This monograph discusses preparation of teachers for the educationally handicapped. It is intended to be a useful primer (containing basic definitions, conceptualizations, bibliographic references, and examples) for a newcomer to the field while also including specific formulations (positions on issues and suggestions for resolving problems) of interest or value to the professional. Organization is in three parts: teacher education in general, the educationally handicapped child, and teacher for the educationally handicapped. Chapter 1 explores issues related to planning, implementing, and evaluating teacher education programs. Chapter 2 focuses on problems related to luring, selecting, and keeping high quality personnel. Chapter 3 hypothesizes that the educationally handicapped consist of three subgroups: at one end of the continuum those who actually have major disorders interfering with learning and at the other end those whose problem stems primarily from the deficiencies of the learning environment. Chapter 4 suggests a set of sequential and hierarchical teaching strategies involving a two-step process by which teachers can identify and attempt to meet the remedial needs of youngsters in each subgroup. Chapter 5 takes the position that there is a need for the educationally handicapped specialist and suggests the appropriate range of his duties. Chapter 6 offers opinions regarding the recruitment, preparation, and certification of teachers for the educationally handicapped. (JS)
TEACHER EDUCATION AND THE EDUCATIONALLY HANDICAPPED:
SOME BASIC ISSUES AND SOME PARTIAL ANSWERS

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Preface

This monograph was prepared as part of an ESEA, Title VI-B project co-directed by Margaret Scheffelin and Allan Simmons, EH consultants for the California State Department of Education, Division of Special Education, Bureau for Mentally Exceptional Children. The purpose of this presentation is to help clarify major issues and problems related to preparing teachers for the Educationally Handicapped.

I have tried to include enough basic definitions, conceptualizations, and bibliographic references and enough detailed examples to make this monograph a useful primer for the reader who is just becoming acquainted with the area of teacher education. At the same time, however, I have set forth specific positions on many of the issues and have offered suggestions and views regarding how some problems might be resolved; it is hoped that these specific formulations will be of interest and perhaps of value to the professional whose experiences have taken him beyond the primer level. In addition, as a resource for any individual who is interested in this topic, I have included relevant examples of current activity and thought as reported in recent publications, and I have taken this opportunity to share, in advance of publication some ideas derived from the present research and training activities in which I am involved.

Because of the nature of the Title VI-B project, if I attempted to list all those persons who have contributed in one way or another to the development of this manuscript, I would certainly fail to acknowledge someone. Therefore, I will simply take this chance to thank, once again, everyone who helped.

Howard Adelman
July 1970
TEACHER EDUCATION AND THE EDUCATIONALLY HANDICAPPED: SOME BASIC ISSUES AND SOME PARTIAL ANSWERS

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INTRODUCTION

In California, an increasing number of pupils are being labeled "Educationally Handicapped", and an increasing number of districts and counties are implementing programs for such youngsters. As of June, 1970, out of 5,000,000 pupils enrolled in the State's public schools, 43,000 are being served by special programs for the Educationally Handicapped, and within many districts and counties such programs are becoming more and more differentiated, e.g., using resource teachers, special classes, home instruction. It is this reality which has raised such specific questions as:

Who is qualified to teach the youngsters who are enrolled in such programs?

What, how, and where should teachers for the Educationally Handicapped programs be taught?

Should there be a special credential for such teachers?

This monograph encompasses these and other questions relevant to teacher education and the Educationally Handicapped. However, it would be both naive and inappropriate to approach these questions as if they were entirely new and unique, for they are only specialized versions of more basic concerns which have long confronted those responsible for teacher education in America. Figure 1 summarizes these basic concerns which, broadly and practically stated, are:

What should be the role (nature and scope) of formal education in America today and what changes should be considered for the future?

What and how should we teach in the public schools?

How can we best recruit, educate, and retain the high-level of personnel necessary for ensuring high quality education?

It is clear that these questions are so closely interwoven that the manner in which any one is answered has profound implications for the others. It should also be recognized that, as a result of the increasing emphasis on students with "special" needs, each of these concerns has two focal points which must be dealt with sequentially. The first centers on these three basic questions as they relate to the majority (general) population; the second centers on modifications, additions and/or exceptions which must be made with reference to "exceptional" individuals.

Ideally, a complete discussion of the topic, "Teacher Education and the Educationally Handicapped", would explore systematically each of these basic concerns. Such a comprehensive presentation has been adjudged to be beyond the scope of this monograph. It is felt, however, that a reasonable and useful understanding of this topic can be accrued from a clarification of:
Fig. 1. Basic concerns confronting the American System of Public Education
(1) the general issues and problems* which are most directly related to the recruitment, education, and retention of high-quality educational personnel,

(2) the instructional needs of Educationally Handicapped pupils,

(3) some of the most basic issues and problems which have arisen specifically with reference to the recruitment, education, and retention of teachers for the Educationally Handicapped.

The following discussion represents an attempt at such a clarification, and it is hoped that, in some way, the presentation will facilitate efforts to improve the educational opportunities of youngsters who are labeled Educationally Handicapped.

This monograph is divided into three parts.** The first (chapter 1 and 2) encompasses a brief general discussion of teacher education programs with a view to clarifying basic issues and problems which confront any individual who is interested in improving teacher education. The second part (chapters 3 and 4) presents this writer's views regarding the pupils in Educationally Handicapped Minors Programs and their instructional needs. The third part (chapters 5 and 6) focuses on issues and problems which have arisen specifically with reference to the recruitment, education, and retention of teachers for the Educationally Handicapped.

*In the following discussion, the term concern is used to delineate a broad area of focus; the term issue is used to delineate a sub-area over which there is theoretical and/or procedural disagreement; and the term problem is used to delineate a sub-area over which there is no disagreement, but there is difficulty in formulating an appropriate solution.

**The introduction to each part contains a brief abstract summarizing the goals and content of the chapters to be found in that section of the monograph.
PART I: TEACHER EDUCATION--A BRIEF GENERAL DISCUSSION*

The history of teacher education in this country reflects a constant searching for qualitative instruction in pedagogy. The unsuccessful nature of this search is clearly reflected in the majority of the statements made in the 1960's regarding the status of teacher education. For example, as Sterling M. McMurrin, former United States Commissioner of Education, stated in 1963:

...our average citizen has taken it for granted that teaching, especially in the secondary and elementary schools, is a profession entirely appropriate for persons of second or third-rate ability. We have all to commonly, therefore, proceeded to provide them with second- or third-rate educations and pay them third- or fourth-rate salaries.

And in the mid-1960's, Don Davies, then Executive Secretary for the NEA's National Commission on Teacher Education and Profession Standards, gave an equally bleak appraisal to a group of teacher educators:

Teacher education is the slum of American education. It is a slum because it is characterized by neglect, poverty, isolation, alienation, exploitation, lack of status, and insecurity. Teacher education is in trouble, just as slums are in trouble, because not enough influential institutions or agencies or individuals take it seriously or care enough about it to take positive action. The scholars don't; the state legislatures don't; the teachers' organizations don't; the Office of Education doesn't. Our society simply has not yet been willing to devote adequate intellectual and monetary resources to the task of developing a high-quality personnel for our schools (as quoted in Davies, 1968).

*There are numerous books, monographs, and articles dealing with teacher education. For a documentary history up to 1966, see Borrowman (1965). Further historical perspective and a contemporary view of major programs, issues, and trends may be derived from: (1) the three reports of the NEA's National Commission on Teacher Education and Professional Standards which are based on the 1958, 1959, and 1960 national conferences sponsored by the Commission; (2) the books prepared by Stiles, 1957; Stiles et al., 1960; Sarason et al., 1962; Koerner, 1963; Conant, 1963, 1964; Dorros, 1968; Smith, et al., 1969; Stone 1968, 1969; Weiss, 1969; and (3) a sampling of recent articles in the Journal of Teacher Education. In addition, of special contemporary relevance is the March, 1970, issue of Educational Leadership, the theme of which is "Teacher Education: Instrument for Change."
During this last decade, however, perhaps the most heard single voice has been that of James Bryant Conant. The extensive and heated controversy which Conant's (1963) "famous twenty-seven" recommendations stimulated has helped to make the statements of McMurrin and Davies less true in 1970 than they were in 1965. In the last few years there has been more interest and less neglect. And there has been some action, such as the nine projects supported by the U.S. Office of Education, Bureau of Research which have suggested models for elementary teacher education programs;* in addition, there has been the passage of the Education Professions Development Act of 1967. The basic problem remains, however; we are still not "...developing a high-quality personnel for our schools", and this lamentable state of affairs will likely continue for some time to come.

Why?

The temptation is to lay the entire blame on the various socio-political and ideological forces which play such a potent role in shaping education in America today. However, as a review of the literature suggests, a significant part of the problem drives from the fact that most teacher education programs have not been clearly conceptualized and the basic concerns, issues, and problems which permeate such programs have not been critically analyzed. Therefore, in the first two chapters, the goal is to bring the basic issues and problems into focus and to offer some related thoughts.

Chapter 1 explores four major issues related to the planning, implementation, and evaluation of teacher education programs. These issues are: (1) What basic guidelines and major long range goals should shape formal programs for educating teachers? (2) What should be the content of the pre- and in-service phases, respectively? (3) How can this content be taught purposively and appropriately? (4) How should the nature and worth of teacher education programs be evaluated? In discussing these questions, four basic propositions are formulated, major programmatic goals are summarized, the major types and areas of instructional content and the major process components are conceptualized, and finally, a framework for understanding the process of evaluating teacher education programs is suggested.

Chapter 2 focuses on problems related to luring, selecting, and keeping high-quality personnel and discusses these problems within the context of three overlapping topics: (1) the public image of the education system, (2) the criteria for admission into teacher education programs and into the profession, and (3) the working conditions experienced by those professionals.

*The reports of these nine projects are of great value to anyone who is concerned with teacher education. As examples, see Allen and Cooper (1968), Johnson, Shearron, and Stauffer (1968), Joyce (1968), Southworth (1968), and Sowards (1968). "A reader's Guide to the Comprehensive Models for Preparing Elementary Teachers" is available through the ERIC Clearinghouse on Teacher Education. It should be emphasized that these models have generated and will continue to generate a great deal of activity (e.g., see Clarke, 1969). In addition, it may be noted that Engbretson (1969) has analyzed and evaluated the original eighty proposals (from which the nine funded models were selected); of particular value in this report is the discussion of program components and the bibliography.
who work in public schools. Specifically, with reference to the first two topics, the discussion explores the vicious cycle that perpetuates education's negative image, the deficiencies of current approaches to delineating the characteristics of effective teachers, and the deficiencies of current admission criteria. With reference to working conditions, it is emphasized that members of the education professions have not been educated and treated as professionals and that this lack of professional recognition probably is a critical factor deterring the recruitment and retention of high-level people. Specific factors related to contemporary working conditions which are discussed are the nature of in-service programs and on-the-job support (including differentiated staffing), and current salary policies.
Chapter 1

BASIC ISSUES RELATED TO PLANNING, IMPLEMENTING, AND EVALUATING TEACHER EDUCATION PROGRAMS*

Most teacher education programs are infinitely criticizable. For example, the academic and practical coursework required of teachers-in-training rarely is more than superficially coordinated and integrated, generally ignores individual differences among program participants, and not infrequently makes conflicting and/or excessive demand.** In too many instances, there is no apparent unifying conceptual framework upon which the teacher education program is based. Instructional objectives for a particular course may be so global that the curriculum guidelines amount to no more than "This class is to learn how to develop instructicnal programs in language arts and reading." Instructors and supervisors typically are unfamiliar with what their colleagues are teaching and many individuals seem to teach whatever they feel is important at the moment, often without regard for a student's current level of sophistication. Little effort usually is directed at clarifying and integrating systematically and, where possible sequentially, the role of critical cognitive, affective, and motivational variables which permeate the content of what is taught in almost every course in the program. Thus, teachers-in-training find themselves in the ironic situation of attempting to learn how to develop effective educational systems while participating in a system which provides the poorest of models.

As suggested in the introduction, it is tempting to lay the entire blame for this state of affairs on such factors as the lack of adequate financial and/or institutional support. However, it is clear that a good part of the problem stems from the fact that too many professionals have made little or no effort to clarify and resolve the basic issues and problems related to the planning, implementation, and evaluation of the teacher education programs in which they are involved.

The purpose of this chapter is to bring four of the most basic of these issues into focus. The four issues are:

(1) What basic guidelines and major long range goals should shape formal programs for educating teachers?

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*Part of this chapter is based on a previous journal article (Adelman, 1970) and a Group Report based on a two-day conference at the Advanced Institute for Leadership Personnel in Learning Disabilities held at Tuscon (Adelman, et. al., 1965

**These deficiencies, of course, are not unique to teacher education; the same criticisms also apply to programs designed to prepare persons for other professions, e.g., clinical psychology.
(2) What should be the content of the pre- and in-service phases, respectively?

(3) How can this content be taught purposively and appropriately?

(4) How should the nature and worth of teacher education programs be evaluated?

While these questions have been stated in a way which reflect practical needs, it is emphasized that a wide variety of conceptual and philosophical issues and problems are encompassed as well.

Guidelines and Goals

Available program descriptions convey the distinct impression that most teacher education programs are Topsy revisited, i.e., they weren't planned, they just grew. Many programs appear to have no other guidelines than the recognition that certain courses must be offered so that an individual may receive a state-mandated credential, certificate or license.

Proposition: Because an explicit statement of program guidelines which could be summarized and presented here could not be found, the following four propositions are suggested as a basis for discussion.

1. Teacher education programs should offer a detailed, coordinated curriculum involving academic, observational, and participatory experience through which an individual can proceed in an appropriately patterned and sequenced fashion.

2. Such a curriculum should be conceptualized as involving two major phases and three processes. The two phases are: (a) the pre-service phase— which encompasses that period of formal preparation prior to being employed and/or adjudged as minimally qualified for a particular role and function; and (b) the in-service phase—which encompasses all subsequent formal teacher education related to that role and function.* The three processes are: (a) a training process, which is designed to facilitate mastery of the craft (and "art") of a particular role and function; (b) a delimited educative process, designed to facilitate acquisition of a broad and deep understanding of the knowledge and research tools upon which the positive growth of formal education in this country depends; and (c) a general educative process, usually referred to as a "general and liberal education", which should be at least equivalent to that experienced by

*It should be noted that a teacher who is preparing for another role in the educational system, e.g., as an administrator, might be involved both in a pre-service and an in-service program simultaneously. That is, he might be participating in an in-service program to improve his competency as a teacher and in a pre-service program to prepare for the administrative role.
persons preparing for other professions.*

3. Such a curriculum should reflect a positive commitment to meeting the needs of the pupil population to be served, the needs of the enrolled participants,** the needs of the field of education, and the needs of society.

4. The needs of the program participants should be recognized as being both personal and professional, and the program should facilitate development in both areas.

These propositions, obviously, represent no more than an extremely general set of beliefs and assumptions (and truisms?), but at least they offer a visible and viable foundation upon which a teacher education program could be shaped.

Goals. An adequate frame of reference for program planning consists not only of guidelines but of long range goals (as differentiated from the immediate program objectives). In contrast to the absence of clearly stated guidelines, the major long range goals of teacher education programs have been more explicitly stated. Broadly presented, those goals which are professionally relevant emphasize the need to provide each participant with the opportunity (a) to acquire the minimal competencies which are needed for effective on-the-job functioning, (b) to continue to develop towards a high-level of professional competency, and (c) to learn to appreciate and accept the full responsibility of his professional role. Stated differently, the goals recognize the need to develop professionals who have the knowledge and skills which will allow them, and the attitudes which will encourage them, to contribute to service and research activities and, more generally, to efforts designed to clarify the appropriate role of formal education in American society. Such service and research activities are viewed as including: (a) those which have a direct impact on improving the educational opportunities of all younsters, e.g., teaching, training, consultation, (b) those which are designed to evaluate this impact, (c) those which help to increase the overall understanding of the instructional and learning processes and (d) those which help to clarify the impact of formal education on the development and behavior of individuals and society.

Thus, the goals, like the guidelines, may be seen to be general but helpful indicators of the appropriate nature and scope of formal teacher education programs. Together, these particular guidelines and goals emphasize that the person who enrolls in such a program is not just to be trained for technical competency but is to be educated as a member of society and as a professional who has a unique role to play in that society. Such guidelines and goals are ambitious. Hopefully, these guidelines and goals are not unrealistic, for if they are, it is probably also unrealistic to expect the

*Teachers-in-training usually are involved in all three processes simultaneously.

**Throughout this paper the term "participant" will be used to describe any individual who is enrolled in a program of pre- or in-service teacher education. The majority of such participants are enrolled, of course, to meet needs related to their role as classroom teachers, but as used here, the term usually will encompass those who are pursuing instructional, supervisory, and administrative programs.
graduates of teacher education programs to function as professionals.

Content

As used here, content refers to that knowledge which is included in the curriculum of teacher education programs. Such content is both general and specific, as well as technical and conceptual (encompassing the cognitive, affective, and psychomotor domains). The general nature and scope of this content is determined not only by the formulated guidelines and goals, but by the interaction of a complex set of forces—political, economic, educational, psychological, philosophical, and so forth. That is to say, the final frame of reference which determines a program's content will have evolved from a series of compromises, many of which unfortunately have a negative impact on the program's quality.

Guided by such a frame of reference, the program's specific content is derived from the accumulated theoretical and practical knowledge regarding:

1. growth and development (with emphasis on the pertinent facets of sensory, perceptual, motoric linguistic, cognitive, social and emotional development.
2. learning and performance;
3. motivation;
4. instructional content and process;
5. assessment and research processes;
6. intrasystem ecology (Note: This term is used to encompass what is known about the importance of and how to interact with and utilize others within the context of the school system);
7. extrasystem ecology (Note: This term is used to encompass what is known about the importance of and how to interact with and utilize others outside the school system); and
8. the growing discipline of Education.

Major Types and Areas of Instructional Concern. Such knowledge may be organized in a variety of ways to facilitate curriculum planning and implementation. Figure 2 and Table 1 present one attempt at categorization. As may be seen, the curriculum is conceptualized in terms of major types and areas of instructional concern likely to be found in teacher education programs. The five areas—assessment, program planning and implementation, consultation, supervision, research—are chosen because they appear to represent the major
Fig. 2. Types and areas of instructional concern in teacher education programs.
Table 1

Five Areas of Instructional Concern in Teacher Education Program: Definitions, Long Range Goals, and Primary Competencies

ASSESSMENT

I. Definition
Assessment may be viewed as a process by which an individual attempts to understand himself and other individuals in order to describe, predict, explain, and make decisions.

II. Long Range Goal.
The individual should develop an understanding of the uses, limitations, and abuses of assessment, including the ability to employ and interpret relevant formal and informal assessment procedures and to derive implications from assessments made by others.*

III. Primary Competencies
Observational and "testing" ability.
(i.e., knowledge regarding the importance of and how to gather, systematically and in situ, information relevant to one’s own effectiveness and to a particular pupil's general behavior and academic functioning).**

Interpretative ability
(i.e., knowledge regarding how to analyze and evaluate systematically the meaning of observational and test data).***

*The reason for teaching the teacher to be able to derive implications from assessments made by others is that many school counselors, psychologists, and physicians report findings without clarifying the implications for school practices. Therefore, the teacher should be equipped to interpret some of these findings even though he may not have been taught how to administer a particular assessment procedures, e.g., intelligence tests. It is recognized, of course, that some procedures are only appropriately interpreted by the professionals who administer them.

**Such ability should include the competencies required for determining (a) the appropriate level for instructional focus (see Figure 3), (b) what specifically should be taught at that level, and (c) what out-of-the-classroom steps should be taken to facilitate learning and performance.

***The instructional implications one derives from such data are dependent, of course, on one's knowledge of what is involved in school-related learning and performance, e.g., understanding the prerequisites a youngster must acquire before he can function effectively in learning a particular school subject.
I. Definition
Program planning and implementation may be viewed as a process by which an individual purposively and appropriately utilizes available resources, especially people and materials.

II. Long Range Goal
The individual should develop the ability to formulate, initiate, and/or participate in activities, in and out of the school setting, which purposively and appropriately facilitate learning for each pupil.

III. Primary Competencies

Basic instructional ability
(i.e., knowledge regarding the importance of and how to personalize classroom instruction to allow for the wide range of developmental, motivational, and performance differences which exist in every classroom).*

Curriculum ability
(i.e., knowledge regarding the importance of and how to develop, select, adapt, apply, and evaluate the impact and role of methods and materials which are relevant to mastery of basic learning and performance skills and for sensory, perceptual, motoric, cognitive, language, social, and emotional growth and development).

Classroom management ability
(i.e., knowledge regarding the importance of and how to structure a classroom of students in a way which is compatible [does not conflict] with the fostering of each youngster's desire and ability to learn and perform and the ability to detect current and potential behavior problems and correct, compensate for, and/or tolerate such deviations).

Interpersonal ability
(i.e., knowledge regarding the importance of and how to interact effectively with pertinent others, both in and out of school).**

Self-corrective ability
(i.e., knowledge regarding the importance of and how to gather and utilize evaluative feedback [assessment information] to enhance personal and professional effectiveness).

*It should be remembered that the focus here is on the competencies needed for dealing with the majority population; the competencies required for coping with "exceptional" individuals are discussed in a later chapter.

**Besides the obvious interactions with pupils, the interpersonal interactions within the school system may be viewed as occurring on three levels, i.e., interactions between an individual and (1) those who are in positions above him (e.g., supervisors, administrators), (2) those in positions comparable to his (e.g., other teachers, counselors, consultants), and (3) those who are in training or have para-professional positions (e.g., aides). The major interpersonal interactions outside the school system which are involved directly with instruction, of course, are seen as centering around family members and other professionals (e.g., physicians, psychologists).
CONSULTATION

I. Definition
Consultation may be viewed as a process by which an individual attempts to assist a colleague's efforts to assess and solve a problem purposively and appropriately.

II. Long Range Goal
The individual should increase his breadth and depth of knowledge and skill with reference to assessment and program planning and implementation.*

III. Primary Competencies
No substantively new competencies are needed—only an increase in the level of competencies already listed.

*Success in this area is viewed as being positively correlated with the individual's depth and breadth of knowledge and skill in these areas, especially with reference to interpersonal ability since a consultant must be able to interact in a non-threatening, task-oriented, and task-productive manner.

SUPERVISION

I. Definition
Supervision may be viewed as a process by which an individual critically analyzes, evaluates, and guides programs and personnel in order to facilitate the improvement of the programs for which he is responsible.

II. Long Range Goal
The individual should increase his breadth and depth of knowledge and skill in the areas of assessment, program planning, and consultation. (Some supervisory positions require administrative functions; in such instances, programs should allow for the development of such skills.)

III. Primary Competencies
No substantively new competencies are needed—only an increase in the level of the competencies already listed. (Except in those instances where specific administrative duties, e.g., budget preparation, are part of the supervisor's functions.)
Table 1 (con't)

RESEARCH

I. Definition
Research may be viewed as a process by which new facts are discovered and accepted conclusions are supported, rejected, and/or revised.

II. Long Range Goal
The individual should develop the ability to be a critical consumer and a responsible and effective producer of research.

III. Primary Competencies
Consumer ability
(i.e., knowledge regarding the importance of and how to evaluate research findings which have implications for one's work.)

Participant ability
(i.e., knowledge regarding the importance of and how to assist and/or initiate school-related studies.)
Fig. 3. Types and levels of instructional concern in public school classrooms.
activities discussed at some time during a teacher education program.* The "types"—behaviors and skills, content and concepts, awareness and attitudes—are an attempt to emphasize that the term "knowledge" and use of "knowledge and skills" together are not sufficient in describing the impact of participation in a teacher education program. Attitudes are shaped, overtly or tacitly, and, hopefully, a general awareness of areas is developed even when in-depth learning is not possible.** In the following discussion, then, it should be noted that the terms "knowledge", "knowledge and skills", and "competency" will be used interchangeably, and the assumption will be that the three types of instructional concern indicated in Figure 2 are involved whether purposively planned or not. It should also be emphasized that the curriculum for the pre-service phase of teacher education cannot and does not attempt to encompass the entire body of knowledge represented in Figure 2 and Table 1. In fact, it is obvious that only a relatively small portion of such a body of knowledge can be taught during the pre-service program, especially if theory and practice are to be integrated and assimilated. Therefore, the primary objective of pre-service instruction must be restricted to developing the minimal body of knowledge and skills (competencies) needed for on-the-job success.

Minimal Competencies. The nature and scope of the minimal competencies which are needed in schools are viewed as varying, qualitatively and quantitatively, with regard to type of pupil population served and the type of professional role and function which an individual has been assigned (see Figure 4). With specific reference to teacher education, minimal competencies can be categorized for several levels of functioning. The first level encompasses the minimal core of competencies required for performing one's role in a classroom which does not contain youngsters who manifest severe learning and performance handicaps, i.e., regular classrooms. This core should include the competencies required to deal with many of the population variations related to age, socio-economic, geographic and ethnic status. Essentially, the instructional objectives at this level are to develop a delimited set of competencies drawn from the areas of assessment and program planning and implementation. Each subsequent variation in the teacher's role and function and/or population served is viewed as requiring additional pre-service education so that he can acquire the additional knowledge, i.e., minimal competencies, which will enable successful

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*These five areas are not viewed as being a strict hierarchy. Rather, assessment and program planning and implementation are seen as being of concern concomitantly and as preceding preparation focusing on consultation which, in turn, is seen as providing a good basis for preparation focusing on supervision; research is viewed as "spiraling" throughout the program.

**Obviously, the three "types" are comparable to the psychomotor, cognitive, and affective domains; however, until the educational objectives of teacher education programs are more carefully delineated, it seems inappropriate to use this classification scheme which has been adopted by Bloom, et al., (1956) and Krathwohl, et al., (1964).
Variations in population

The pupils encountered may differ with regard to:

1. "Functional" characteristics which have resulted in placement in a special program, e.g., mentally retarded; emotionally disturbed
2. Age, e.g., preschool; elementary; higher education
3. Socio-economic, geographic, and/or ethnic status, e.g., lower income; rural; Mexican-American
4. Number involved; e.g., small group; large class

Variations in role

Positions may change as reflected by the following titles:

1. Aide or Assistant
2. Teacher, e.g., elementary; secondary; reading; history; foreign language
3. Specialist, e.g., for the mentally retarded; for the emotionally disturbed
4. Counselor
5. Consultant
6. Supervisor
7. Administrator

Responsibility can be categorized as follows:

1. Direct service to pupils, e.g., instruction; counseling
2. Pre- and in-service and parent education, e.g., demonstration; consultation
3. Empirical investigation, e.g., helping to resolve basic educational issues

Fig. 4. Key variables which indicate the nature and scope of the minimal competencies which should be acquired in pre-service education programs.
functioning. For example, additional minimal competencies are needed if the teacher is to function in a classroom which contains youngsters who manifest severe learning and behavior problems or if the teacher is to consult with and supervise others in the school. Additional pre-service education might involve strengthening already acquired abilities and/or acquiring new competencies drawn from the same and/or new areas.

Ideally, by the end of the pre-service phase of teacher education an individual has acquired the minimal competencies needed for successful on-the-job performance. Therefore, the primary purpose of the in-service phase is to increase an individual's breadth and depth of knowledge and thus his competency with reference to a current professional role and function and population served. The ultimate goal, of course, is to achieve the highest level of professional standards possible.

With reference to program content, then, it seems reasonable to suggest that the potential benefits to be derived from an awareness of operationally defined competencies are numerous. Unfortunately, no one has specified in very great detail either the minimal competencies needed for success in a given role and function or the additional competencies which must be acquired to achieve a high-level of professional standards. Until someone does the type of job analysis which truly assesses what is required for successful performance of various school roles and functions and with differing populations, a list of operationally defined competencies will not be forthcoming.* And, therefore,

*A related problem which has not been widely discussed is that in planning teacher education programs it would be appropriate to consider what is required for success in the program itself. It may be that in planning such programs we set up irrelevant barriers by requiring competencies which are necessary only for succeeding in the teacher education pre-service program, i.e., competencies which are not required for success in the field. Thus, a job analysis of what is required for success in the teacher education program itself is also needed in order to (1) reform the curriculum, (2) improve selection procedures, and (3) plan early corrective action to help students develop needed competencies before being required to perform at a level where the lack of such competencies would be troublesome.

It should be noted that some attempts are being made to deal with the problem of specifying needed competencies. For example, the program description for the St. Scholastica teacher education program, Project Criterion, indicates that there is a major emphasis on developing professional competency through carefully stated performance objectives "which describe learning in terms of measurable behavior." Also, in a recent article, Allen and Krasno (1968) state that the University of Massachusetts' program includes "...identifying specific performance criteria based on task analysis of teacher training. At the same time, instrumentation is being developed for assessing each trainee's progress at multiple points in the program."

In the same article, Allen and Krasno suggest a general hierarchy of teaching competencies. They state that: "(1) mastery of content knowledge produces subject matter competency: (2) mastery of content knowledge plus behavioral skills produce presentation competency; (3) mastery of content knowledge plus behavioral skills plus humanistic skills produce professional decision-making competency." These writers recognize that performance criteria must be established in each of these three areas in order to structure the over-all teacher education program content.
efforts to plan systematic and coordinated pre- and in-service programs of teacher education will continue to be handicapped, as will be efforts to evaluate comprehensively the impact of such programs.

Process

In addition to deciding which competencies are to provide the focal point for a formal teacher education program, there is also the concern regarding how this content is to be taught purposively and appropriately. This, of course, is a matter of finding the process by which a program participant can best learn the knowledge he needs. (The appropriate process obviously will fit one or more of the three broad overlapping processes proposed in the section on guidelines and goals, i.e., it will be a training process, a delimited educative process, and/or a general educative process.) Since the specific characteristics of such a process will vary with reference to the way in which the major components of the teacher education program are combined, the emphasis here is on clarifying those major components which can be varied differentially during the pre- and in-service phases.

Major Components. The major components may be categorized as:

(1) formal academic experience;

(2) practical experiences;

(3) "informal" experiences.

It should be noted that such components are not necessarily to be viewed as tied to formal course, unit, and hour requirements.

More specifically, these components are viewed as follows:

(1) formal academic experiences. This includes lectures, seminars, taped presentations, individual study courses, and related readings. During the pre-service phase, almost all these experiences are guided by institutions of higher education; during the in-service phase, however, in addition to university and college sponsored activities, many lectures, conferences, and special study institutes are offered by school districts, county offices, and state departments; professional and parent organizations; and private enterprise. Generally, it is agreed that such experiences should be patterned and sequenced with each other and with practical experiences so that needed knowledge and skill may be acquired systematically.

(2) practical experiences. Both actual and simulated observational and participatory experiences are encompassed here including student-teaching, internships, micro-labs, and so forth. During the pre-service phase, almost all such experiences occur as part of a specific course, practice-teaching assignment, or an internship program; as with the academic experiences, however, practical experiences which are part of formal in-service teacher education programs are shaped by a wide variety of individuals and groups. Ideally, practical experiences provide the opportunity for an individual to see master demonstrations and to have appropriate supervised practice in order to facilitate the acquisition of relevant competencies. Such experiences (a) may range from brief visitations in a variety of settings to extended placement in a single setting and (b) may be related to service,
training, and/or research activities. Obviously it is desirable for such practical experiences to be structured in a way which facilitates a participant's efforts to learn, and, in this connection, procedures which enable a person to focus systematically are helpful, e.g., guidelines pointing out how, where, when, why, who, and what. Finally, it should be noted that in addition to indicating needed competencies, the key variables enumerated in Figure 4 also reflect the critical factors which can be varied in shaping relevant practical experiences.

(3) "informal" experiences. Although not always discussed as such, meetings and other types of group experiences have become another major component of teacher education programs; this component encompasses experiences ranging from informational meetings to encounter groups. Ideally, such experiences are designed to facilitate professional and personal development and growth through the increased awareness and understanding which is felt to be a product of a greater interchange among program participants and/or between participants and their instructors and supervisors.

Process-Related Problems. A great many problems related to these individual components could be discussed. However, the overriding problems are viewed as the failure to accommodate individual differences, the lack of coordination and integration and the related problems concerning who does have and who should have primary responsibility for program planning and implementation.

With reference to individual differences, it is incongruous that the content of teacher education programs should emphasize the importance of personalizing instruction, while the process of teacher education so frequently fails to reflect more than a verbal concern for the differences among program participants. Even if one assumes that developmental differences will be of negligible importance and ignores the importance of motivational factors, it is obvious that program participants will differ in terms of immediate performance abilities, particularly with reference to the rate at which they become proficient in meeting specific performance criteria. And, clearly, the problem of accommodating such differences in pace is compounded in programs which incorporate the major process components into a rigid formal course, unit, and hour format.*

Another major problem stems from the fact that the components of teacher education programs rarely are coordinated and integrated into a systematic and cohesive process, i.e., few programs have even attempted

*See Southworth (1968) for discussion of the University of Pittsburgh's model for instructing teachers "...using the same principles and practices of individualizing instruction that the teacher will subsequently use in instructing pupils."

Also see Rezmierski (1970) for a recent account of how an educational training program at the University of Michigan has dealt with the problem of accommodating individual differences.
significant coordination and integration within the pre-service or in-service phases and/or between these two phases. Most commonly, the different experiences are initiated haphazardly, with little awareness of what competencies a participant has already acquired and with little, if any, coordination with other concurrent or future activities or with other program components.

The problem of coordination and integration is closely related to the issue of who should have primary responsibility for the planning and implementation of a particular teacher education program. Should this responsibility be centered in the institutions of higher education? Should it be school-district centered? Should it be shared between the two and, if so, in what proportions and how? Should the institution take primary responsibility for the pre-service phase and the district take responsibility for in-service and, if so, who should be responsible for the needed coordination and integration between the two phases of the program? The problem here, however, is not so much that there is an issue; the problem is that the issue generally is being ignored. It seems reasonable to suggest that the appropriate answer to who should have primary responsibility likely will differ for different localities. Therefore, the major problem is to interest the appropriate individuals in making the effort to resolve this issue in their particular locality.

*It should be noted that the issue and problem being discussed is one of responsibility, not just cooperation. There are many examples of school-college collaboration in teacher education, e.g., see E. Brooks Smith et al., (eds.) Partnership in Teacher Education. Washington, D.C.: American Association of Colleges for Teacher Education and Association for Student Teaching, 1967.

As a specific instance of such cooperation and coordination and its impact, the University of Massachusetts again offers a notable example. Allen and Krasno (1968) point out that the School of Education faculty uses teacher education as the core upon which the entire School of Education's program is based. "Thus, teacher education is influencing and shaping all other aspects of the School rather than being shaped by them, as has been the case in the past." They go on to state that "a closely knit relationship between pre-and in-service is being attempted, i.e., "The resources of the University, both technological (such as videotape) and human (such as supervision) are to be made available systematically not only to graduates, but to any teacher in the area."

**Attempts to solve this problem are reflected in the various models which are being suggested as viable alternatives to current teacher education programs. As examples: see Stone (1969) for a discussion of the Education Professions Institute (EPI) model which he proposes as a separate agency of higher education specifically devoted to providing professional training for teachers-to-be, teacher aides, associate teachers, intern teachers, regular teachers, master teachers, and teachers of teachers; also see Collins (1970) for a discussion of the Teacher Education Center concept which he feels may lead to greater coordination and integration of teacher education programs and more careful delineation and acceptance of responsibility for such programs. (He points to other possible implications of the Center concept including some which are related to a number of the problems discussed throughout this paper.)
Although a general discussion of the problems which are unique to the individual program components is not being offered here, one problem related to the practical experience component should be discussed because of its special significance in teacher education. It is not uncommon for those experiences which involve supervised participation to be likened to an apprenticeship, and it well may be that an apprenticeship model is an appropriate process-model for this facet of teacher education programs. However, it seems reasonable to point out that most supervised practice which occurs in teacher education programs rarely resembles a comprehensive apprenticeship process since one of the most important aspects of the apprenticeship model generally is missing. This aspect is the opportunity (a) to observe the "master" perform his craft, (b) to have supervised practice with regard to what was learned, and then, (c) to observe some more, and so forth in cyclical fashion until the level of minimal competency is reached and assured. Indeed, it is one of the great ironies of teacher education that during pre-service programs participants so rarely have the opportunity to watch a "master" perform for a protracted period of time. For example, in practice-teaching the student often is required to assume responsibility for the entire operation of the class by the second week of the assignment and from that point on only has verbatim exchanges with the supervising teacher. As a consequence, many teachers have served their "apprenticeship" without having had the valuable experience of seeing their supervising teacher perform over a period of several weeks, i.e., they were deprived of the chance to see a good model of teaching.* And, of course, once a teacher accepts a full time position, there are few opportunities for observing a colleague perform for any length of time. Thus, it seems likely that many teachers have not truly served an apprenticeship, and it is interesting to speculate as to the impact this has had on their performance.

In this connection, it might be worth investigating the value of an appropriately implemented apprenticeship model. This could be accomplished by comparing a group of teachers who are trained without the type of comprehensive apprenticeship experience described above with a matched group whose training does include (but is not limited to) such a comprehensive apprenticeship.

It seems clear that those problems which have been discussed in this and the preceding sections are conceptual and practical, are widespread, and are remediable. What is needed is greater interest in the form of rational

*It is unclear whether or not some internship programs have overcome this problem.
and empirical activity.*

Evaluation

Until recently, the question of how to evaluate, systematically and comprehensively, the nature and worth of teacher education programs generally was ignored. Currently, it is one of the most discussed and least understood issues in the field of teacher education. For this reason, this section encompasses an attempt to present a brief conceptual framework for understanding what is meant by the term evaluation and what is involved in evaluating programs in particular.

Stake and Denny (1969) have expressed the goal of program evaluation as follows: "Evaluation is not a search for cause and effect, an inventory of present status, or a prediction of future success. It is something of all of these but only as they contribute to understanding substance, function, and worth."**

*Schalock (1969) reports on a project which provides an example of an attempt to deal comprehensively and systematically with many of the content and process related problems which have been discussed so far in this monograph. In Oregon, a consortium of colleges and schools has evolved the Comfield (Competency based, field centered) model teacher education program. Schalock states: "The model derives from the primary assumption that prospective teachers should be able to demonstrate prior to certification the functions that they are expected to be able to perform after certification..." Four other assumptions which underlie the model are: (a) that the teachers be able to demonstrate the ability for independent, self directed learning and adaptability to new situations; (b) that teacher education be personally relevant, i.e., accommodate to individual differences in rate, style, objectives, etc.; (c) that teacher education "...be responsive to the needs of a pluralistic society by preparing prospective teachers to function within a wide range of social contexts;" and (d) that to accomplish a genuine responsiveness to society, teachers must be able to function in a broad range of local educational programs and therefore, teacher education "...must provide for community participation in its own definition and operation." Also see Wolfe (1969) for reference to a number of other innovative projects.

**For purposes of this monograph, evaluation is distinguished from assessment, with the former term used to refer to the process by which attempts are made to understand programs in order to describe, predict, explain, and make decisions, e.g., determining the overall impact and value of a teacher education program or of a specific teacher's program. In contrast, assessment has been defined in Table 1 as a process by which an individual attempts to understand himself and other individuals in order to describe, predict, explain, and make decisions, e.g., assessing a pupil or a teacher assessing himself.
Most writers in this area have made a distinction between evaluation and research as related to educational programs, and the distinction has been conceptualized in a number of ways. In general, evaluation may be viewed as any process by which information is gathered about a specific program; often such information is non-generalizable because of the lack of appropriate standards by which appropriate relative and/or absolute comparisons might be made. In contrast, educational research which focuses on program evaluation may be viewed as a process by which information is systematically gathered using carefully controlled procedures and appropriate comparisons, thereby producing information which may have widespread implications. McIntyre, Meierhenry, Hoffman, Baldwin, and Fredericks (1969) distinguish between evaluation and research as related to education programs by conceptualizing the two as on a continuum with informal evaluations at one end and highly controlled comprehensive research efforts at the other end.

Perhaps the greatest value of the distinction between program evaluation and research is not so much that it clarifies the conceptual difference between the two but that it clarifies the limitations of many current evaluative efforts. Ideally, all programs should be comprehensively evaluated using a research design which allows for absolute and/or relative comparisons with appropriate standards. Such formal and systematic evaluations would provide both useful feedback for a specific program and generalizable information which would be of value to others and, therefore, are viewed as indispensable in efforts to deal with the basic issues confronting teacher education.

Stake's General Framework for Evaluating Educational Programs. Since the emphasis in this section is on clarifying, conceptually, the various facets which should be considered in efforts to evaluate current teacher education programs, it will be helpful to begin with the general conceptual framework for evaluating educational programs which has been formulated by Robert Stake (1967).*

In brief, Stake emphasizes that "the two basic acts of evaluation" are description and judgment, and both are needed if programs are to be understood (see Figure 5). In addition, his conceptualization clarifies that, if a program is to be fully described and judged, there must be data (a) for assessing the functional contingencies between antecedent conditions, transactions, and outcomes, (b) for assessing the congruence between what is intended and what occurs, and (c) for making absolute comparisons based on standards of excellence and/or relative comparisons of two

*Stake's article should be read in its entirety by anyone who is concerned with evaluating educational programs on any level. Of additional relevance are: the series of reports published by the UCLA Center for the Study of Evaluation on Instructional Programs and by the UCLA Center for the Study of Evaluation; the discussion of the National Assessment of Educational Progress presented in Capsule (1970) (This issue also contains a list of references directly related to such assessment.); and finally, there is the recent major volume on educational evaluation edited by Tyler (1969).
A layout of statements and data to be collected by the evaluator of an educational program.

Fig. 5. Stake's conceptual framework for program evaluation.
or more programs. Obviously, such a matrix of data would provide much of
the information needed for describing, demonstrating the effectiveness of,
and improving a program's basic guidelines and goals, content and process,
as well as for making general decisions about such programs.

Evaluating Teacher Education Programs. It is clear that Stake's framework
has direct application in efforts to evaluate teacher education programs.
Such evaluation, however, encompasses not only the direct application of
the framework to the teacher education program, but also to the various
district and school specific programs in which the teacher education program's
participants and graduates are involved. Thus, for example, data need to
be gathered regarding the impact on the teachers-in-training (such as their
ability to plan and implement a reading lesson), on the students with whom
they work (such as whether the students learn the reading skills included
in the lesson), and on the district and school programs in which these teachers
are employed (such as whether there is change in basic policies regarding
reading methods and materials).

An additional complexity centers around the dimension of time. It
is evident that all formal educational programs are lengthy and that educa-
tional programming is most appropriately patterned and sequenced with reference
to long range goals rather than immediate instructional objectives. Indeed,
the most relevant criterion for evaluating a program's success is the long
range impact, and it should be recognized that the use of immediate objectives
as criteria may be misleading. For example, the positive or negative impact
of something learned today may only be reflected at a later time; in addition,
the fact that something is not learned at a particular moment is not tantamount
to saying that it should have been learned at that moment, for it well may be
that it will be more easily mastered at a subsequent time. Thus, in view of
such temporal factors, it is evident that the differences between two groups
of individuals from different teacher education programs may not be apparent
at the conclusion of their respective programs but may be very evident two
years later.

Another need is for evaluating not only the congruence between what
is intended and what occurs, but also for assessing possible major side
effects. For example, most programs do not have well delineated objectives
in the affective domain, and therefore, two programs which produce professionals
of equal ability with reference to the performance criteria may produce
individuals with very different attitudes regarding the field of Education.
Further complications arise from the impact of individual differences vari-
able. For example, a procedure may prove to be more effective for an indivi-
dual with a certain pattern of personality characteristics than for an individ-
dual with a different pattern.

And, of course, there is the important dimension of economic support
(time, staff, space, etc.) required to bring about particular effects. For
example, the accomplishments of a new procedure must be evaluated with refer-
ce to cost factors in order to determine its feasibility for large scale
implementation.
Finally, since all teacher education programs need to be improved, the programs should be evaluated with reference to the degree to which evaluative feedback is used systematically to improve various aspects of the program, e.g., content and process.

Problems. Besides the very real practical problems related to attitudes toward and the financial costs of comprehensive program evaluation, there are a number of conceptual and technical problems, i.e., problems related to what should be measured and how to measure it.

One of the most critical problems is connected to the previously discussed problem of stating specific competencies which are to be developed by the teacher education program. Without clearly stated behavioral objectives, those responsible for evaluating the program will be seriously handicapped in their efforts in (a) establishing appropriate priorities regarding what is to be assessed, (b) assessing the congruence between what is intended and what occurs (c) assessing possible side effects, and so forth.

Another critical problem is that appropriate measures and procedures for evaluating some very important aspects of teacher education programs are just not available. This fact alone has made it impossible, to date, to even contemplate fully evaluating an educational program.

Perhaps the unhappiest problem of all, however, results from the fact that the resolution of the above problems will require considerable time and resources. Thus, too many programs will continue to be evaluated inappropriate, or will not be evaluated at all. And there are many individuals who would prefer to see no evaluation rather than an incomplete assessment which may be misinterpreted, especially since there are many instances where program evaluation procedures and data have been misused and abused. However, it would be well for such individuals to remember that such misuse and abuse does not invalidate the importance and usefulness of evaluation. It should be clear that much of the criticism which has been directed at the inadequacy (unreliability, invalidity) of current measures, "...and the unfairness of decisions based on them, represents a localizing in the tool of the blame for the lack of clarity which characterizes the thinking of citizens of this democratic society, for it is the citizenry who determine the values and policies which direct the use of the society's technical methods. In fact, it has been pointed out by many writers that the test instruments which have been developed to date are themselves primarily a reflection of the values and policies of this society" (Adelman, Zimmerman, and Sperber, 1969).

In summary, then, it is emphasized that evaluation is both appropriate and necessary if we are to have dynamic high-quality educational programs, and in view of the consequences of not evaluating such programs, it would

*It has been suggested that test authors have tended to create measures for those personality dimensions, motives, behaviors and attitudes which our society values and rewards.
seem incumbent on critics of evaluative efforts to join those educationists and psychologists who, as individuals and through their professional organizations, are conscientiously attempting to deal with the real problems which exist in this area.
Chapter 2

MAJOR PROBLEMS RELATED TO RECRUITING, ADMITTING, AND MAINTAINING PERSONNEL

In the preceding chapter, the primary focus has been on exploring four questions directly related to improving the quality of teacher education programs. Another factor which can help to improve such programs is for the field of education to attract, admit, and retain an increasing number of high-caliber instructors and students.

With reference to luring, selecting, and keeping high-quality individuals, there are a large variety of problems which have been discussed over the years, e.g., the negative status of teacher education programs and of teaching as a career; the irrelevant barriers which have been established for admission to pre-service programs and to the education professions;* the lack of purposively planned and implemented in-service programs, the lack of differentiated staffing patterns; the inadequacy of current salary policies; and so forth. In the following discussion, such problems will be touched upon briefly within the context of three overlapping topics: the public image of the educational system in this country; the criteria for admission into teacher education programs and into the profession; and the working conditions experienced by those professionals who work in the public schools.

Education's Image

There is no question but that the educational system in this country could use a good public relations man. Too many people have little good to say about schools or about individuals who seek careers in the education professions. The reasons for this situation are many--some of which are justified, some of which are not. However, whatever the reasons, it seems likely that this negative image has not aided in efforts to recruit and maintain high quality personnel.

The following extracts from Koerner's The Miseducation of American Teachers, (1963), are offered as pertinent examples of the type of negative appraisals which have been made and which both reflect and influence public opinion.

"Professional education suffers very greatly from a lack of congruence between actual performance of its gradu-

*The term "education professions" is used to encompass the various roles in the field, e.g., teachers, counselors, administrators, professors, of education, and so forth.
ates and the training programs through which they are put. There is what can only be called an appalling lack of evidence to support the wisdom of this or that kind of professional training for teaching."

"Education as an academic discipline has poor credentials. Relying on other fields, especially psychology, for its principal substance, it has not yet developed a corpus of knowledge and technique of sufficient scope and power to warrant the field's being given full academic status."

"As is true of many other fields, one of the greatest obstacles to reform in Education is administrative inertia. Having grown into an immense academic industry with a top-heavy bureaucracy, and thus with a giant complex of jobs, power and vested interests to protect, Education has been stuck in dead center a long time. Educational administrators look with the same misgivings as those in other areas on the innovator, or on any radical departure from the status quo; in Education, in contrast to other fields, there are as yet insufficient forces to oppose the policy of stagnation."

"...the inferior intellectual quality of the Education faculty is the fundamental limitation of the field, and will remain so...for some time to come. ...there is still a strong strain of anti-intellectualism that runs through the typical Education staff, despite their increasingly frequent apostrophes to academic quality. Until the question of the preparation and the intellectual qualifications of faculty members is faced head-on in Education, the prospects for basic reform are not bright."

"Likewise, the academic caliber of students in Education remains a problem, as it always has."

"Course work in Education deserves its ill-repute. It is most often puerile, repetitious, dull and ambiguous--incontestably."

In similar fashion, teachers and public school programs have been criticized for their shortcomings and failures (Holt, 1964; Kozol, 1967).

In all, Education's image is an unfortunate one which needs to be changed if high caliber individuals are to be attracted to and remain in the field. However, it would be unrealistic to think that this negative image will be changed on a large scale basis in the near future, especially since the relatively small number of highly qualified individuals in the field is a major factor perpetuating Education's negative reputation. A "vicious cycle" obviously exists, and little effort seems to be being
made to alter the situation.*

Admission Criteria

Bluntly stated, the major concern here is: Who should be let in and who should be kept out of the education professions? This concern is closely connected to the question: What are the important characteristics which result in one person being successful and another being unsuccessful in the education professions?

Characteristics of Effective Teachers. The concern regarding such characteristics has led to many studies focusing on teacher traits and effectiveness in the hope of finding criteria which would be pertinent to selection and training. Unfortunately, as major reviewers of the literature in this area have reported, such research "...has not yielded meaningful, measurable criteria around which the majority of the nation's educators can rally..." (Mitzel, 1960; also see Gage, 1963; Biddle and Ellena, 1964). Nevertheless, statements are continuously made regarding the attributes of effective teachers. Such statements are usually broad and all encompassing, e.g., "teachers ought to be bright, well-balanced, well-educated people who like youngsters and who are interested in intellectual and cultural matters." (Koerner, 1963).

Another example is offered by the NEA's National Commission on Teacher Education and Professional Standards (1963) which states that individuals should meet high standards of intelligence, academic achievement, physical stamina and health, emotional stability, moral and ethical fitness, knowledge of correct spoken and written English, and ability to work with others. A more descriptive but still general set of attributes is suggested by Smith et al. (1969).

"If a student is to be prepared for the evolving world, then an essential attribute of the effective teacher is awareness of the realities of that world. ...the teacher must be able to structure and supervise situations where men can engage in useful activities...the teacher must

*One procedure which may have a positive impact, both on the quality of public school instruction and on the quality and quantity of recruits, is the currently expanding use of older students as classroom aides and as tutors for younger students. If such experiences prove to be effective and rewarding to all concerned, participating students well may be attracted to the idea of teaching despite the field's reputation; in addition, teachers may find their pupils learning more and their own jobs easier. Such outcomes are clearly desirable and may prove helpful in improving Education's image. It is to be hoped that evaluation of the impact of such activities will be forthcoming, for, if this is a beneficial procedure, greater efforts can be expended to provide opportunities for early exposure to and involvement in teaching. In addition to the above procedure, it will be evident that the ideas which are presented in subsequent sections should also have an impact on recruiting and maintaining high-quality individuals, thereby resulting in qualitative improvements throughout the system which, in turn, should help to break the vicious cycle that perpetuates Education's negative image.
have the skill to bring persons of different races and classes together and to keep the communication process going until differences are resolved...the teacher must be well versed in history...art and music...The effective teacher must be prepared to negotiate interpersonal contracts with students. The effective teacher is a person the students trust. Only a student can discover if the teacher is trustworthy. Therefore, in the training and the evaluation of the trainee's performance, his pupils should be used as a source of data. The teacher must share valuable knowledge and experience...he must show the student that what he has to offer is valuable...(and) must have that which he is asked to share...The teacher must know how to communicate to broad segments of society...The teacher must be able to understand the student's world."

With reference to this last point, the writers are particularly concerned about class, race, and ethnic prejudices and conclude that, "No teacher with such prejudices and no teacher training institution which contributes to the development of such prejudice can claim to be doing its job."

In contrast, the assumptions and descriptions which arise from empirical studies tend to be more systematically stated (but, so far, have not proven to be any more helpful in establishing admission criteria.) For example, in a study of the relationship between teacher personality and teaching effectiveness, McClain (1968) points out that it is important to deal with "(1)...personality as a complex, multidimensional factor..., (2)...differences in personality characteristics of elementary and secondary teachers, and (3)...personality factors related to sex differences." He reasons that "a teacher may be high on certain of the relevant measures but not all and still be a good teacher because particular strengths may compensate for particular weaknesses.*

Current Criteria. Since selection criteria for determining who is admitted to preparation programs and to accredited professional standing generally have been formulated without appropriate empirical support, it must be recognized that current procedures may be invalid indicators of subsequent success. In the field of Education, selection and admission procedures have been criticized as being inadequate, inappropriate, and/or an irresponsible deterrent, i.e., inadequate--when they are set too low; inappropriate--when they are judged to be irrelevant; and/or an irresponsible deterrent--when the judged irrelevance tends to turn away and thereby exclude individuals who are potentially able. Depending on the criticism, it is usually pointed out either that (a) manpower demands have reached crisis proportions at least in some areas, and therefore, if standards are set too high, the manpower supply might be reduced to the point where critical positions remain

*(See next page for footnote.)
unfilled; or (b) the criteria chosen represent the most reasonable compromise between the need for standards and the costs of more relevant screening and selection; the resultant negative impact on quality and any discrimination against individuals are viewed as unfortunate by-products of such a compromise.

Current admission criteria, then probably should not be viewed as admission standards but as compromises which have been judged necessary by one or another group.** Since most of these compromises contribute to the establishment and maintenance of low standards for personnel in the education professions, it seems clear that the assumptions upon which such compromises are based should be investigated empirically. And in the absence of empirical data, common sense should prevail in judging the validity of such assumptions.

Teacher Certification: A Critical Example. To clarify further some of the problems and to share some thoughts and ideas regarding admission procedures, this section focuses on the critical area of teacher certification with specific reference to obvious deficiencies and possible remedial action.

*In his own efforts in this area, McClain utilized Cattell's Sixteen Personality Factor (P.F.) Questionnaire which encompasses the following bipolar items:

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<thead>
<tr>
<th>Factor</th>
<th>Low Score</th>
<th>High Score</th>
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<tr>
<td>A</td>
<td>Reserved</td>
<td>vs. Outgoing, warm-hearted</td>
</tr>
<tr>
<td>B</td>
<td>Less Intelligent</td>
<td>vs. More Intelligent</td>
</tr>
<tr>
<td>C</td>
<td>Affected by feelings</td>
<td>vs. Emotionally stable</td>
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<td>E</td>
<td>Humble</td>
<td>vs. Assertive</td>
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<td>F</td>
<td>Sober</td>
<td>vs. Happy-go-lucky</td>
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<td>G</td>
<td>Expedient</td>
<td>vs. Conscientious</td>
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<td>H</td>
<td>Shy</td>
<td>vs. Venturesome</td>
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<td>Tough-minded</td>
<td>vs. Tender-minded</td>
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<td>vs. Experimenting</td>
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<td>Q2</td>
<td>Group-dependent</td>
<td>vs. Self-sufficient</td>
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<tr>
<td>Q3</td>
<td>Undisciplined self-conflict</td>
<td>vs. Controlled</td>
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<td>Q4</td>
<td>Relaxed</td>
<td>vs. Tense</td>
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While the results of this study are interesting, the specifics are not important to the present discussion; in general, however, the findings may be interpreted as suggesting that eventually work based upon such an instrument as the P. F. Questionnaire and related specification equations may produce a set of satisfactory criteria for guiding and selecting personnel.

**Among the most frequent compromises are: (a) the establishment of a grade average of "C" as the sufficient admission and/or retention criteria for many teacher-training programs; (b) the requirement of no more than possession of a bachelor's degree by too many graduate program; (c) the accumulation of time and units as sufficient for most certification processes; (d) the liberal granting of provisional and/or restricted credentials.
The stated rationale for teacher credentials, certificates, and licenses is to guarantee that only qualified individuals are allowed to assume professional roles and functions in the public schools. In practice, however, certification procedures not only have not provided such a guarantee but probably have turned many competent people away from a career in education. It seems reasonable to suggest that this situation has arisen because current certification requirements are not tied closely enough to performance criteria—and for good cause, i.e., the minimal competencies which are required for on-the-job success have not been well delineated. As Allen and Wagschall (1969) state, "no one yet has any idea of the criteria of performance (as opposed to 'units' of any given course) that a person ought to meet in order to be a successful teacher at any level or in any subject matter field." Thus, current credentialing procedures which establish time and units as requirements are at best a guarantee that an individual has completed such requirements and at worst they are a barrier to competent individuals who have not accumulated the appropriate units. Clearly, if the true goal is to guarantee that an individual can do the job successfully, then qualifying procedures should assess not time and units, but actual competency, i.e., knowledge and skills.*

The problem here lies in developing practical procedures for assessing actual competency. One such procedure might involve a comprehensive on-the-job evaluation of what an individual knows and can do effectively before a credential or license is issued. Such a procedure is not as impractical as it may seem at first glance. From the standpoint of immediate practice, all that might be involved, in essence, is a shift in the responsibility for judging the individual's qualifications, e.g., from a credentials analyst clerk in a State Department of Education to the joint action of the appropriate professionals in the institutions of higher education and the school districts. That is, in such situations, it would be possible to empower a school district to employ any graduate of a professionally accredited pre-service program with the stipulation that the individual would have to meet the district's accredited minimal standards within a given period of time in order to be licensed for that role and function and thus be allowed to continue to teach. (The State could issue the certificate on the recommendation of the district and could maintain quality control through professional accreditation committees which would review the pre-service programs and the school-district's minimal competency standards. And, hopefully, the quality of accreditation procedures would improve as basic issues are resolved, i.e., such as those related to

*It should be noted that, in addition to screening out applicants who are unquestionably of poor quality, the information acquired from admission procedures which attempt to assess actual competencies also can be used to improve the competencies of those who with further education should be and those who already are good candidates for a teacher education program or a professional position. That is, such information can be used by pre- and in-service program planners and instructors as guidelines for improving and/or developing needed competencies before requiring an individual to perform at a level where the lack of competency would be troublesome. In this way, the profession can recruit and maintain the best of those individuals who are of a high caliber but who must still develop in order to meet established criteria, as well as those who already qualify by such standards.
content, process, and evaluation discussed in chapter 1.*) Less satisfactorily, verbal (written and/or oral) and performance tests could be developed to assess knowledge and skill. However, it should be recognized that the awarding of certificates based on such test data does not represent a guarantee of teaching competency but a prediction of competency. And since the accuracy of such a prediction is a function of the reliability and validity of the test, it should be noted that predictive accuracy will probably decrease (a) the less the test situation approximates the teaching situation and (b) the less comprehensively the test samples an individual's knowledge and skill with reference to his teaching impact.

In summary, then, this discussion emphasizes the problems related to and the value accrued from properly established and employed selection procedures. It should be evident that the problems in this area are intimately related to the previously discussed need for clarifying minimal competencies and professional standards. Only after such competencies and standards are delineated will it be possible to establish appropriate criteria for assessing performance abilities for purposes of prediction, evaluation, and/or program planning.

Working Conditions

Few fields are free to personnel complaints regarding working conditions. Consequently, it is difficult to make a differential assessment regarding how critical the complaints in any one field are with reference to attracting and maintaining high-quality personnel. In Education, what does seem clear is that, while most school district personnel do have professional roles and functions, such personnel, generally, have not been educated and treated as professionals. And this lack of professional recognition probably is critical with reference to recruitment and retention of high-level people.

For example, it is difficult to imagine that many individuals who can qualify for any of a variety of high-level careers would choose a position in a field where there is little opportunity for: (a) comprehensive (and necessary) in-service education, (b) interaction with exciting and dynamic colleagues, (c) visible status among colleagues and in the community, (d) participation in establishing policies related to the criteria for admission of new colleagues and in decision-making regarding one's own roles, functions, and working conditions, (e) advancement in stature and salary based on excellence of performance and contribution, (f) experiencing feelings of accomplishment and self-worth with reference to one's everyday on-the-job functioning, and so forth. Indeed, it is surprising that any "bright, well-balanced, well-educated" person would choose such a career. Yet, these are the conditions which would appear simultaneously to be the cause and the effect of teachers not being treated as professionals.

*It is recognized that some states now issue a teaching credential upon the recommendation of an institution of higher education which has a program approved by the state board of education.
The question, then, is: How can these working conditions be altered?

Among the factors related to working conditions which seem particularly important in recruiting and retaining high-level personnel are the nature of in-service programs and on-the-job support, including differentiated staffing patterns, and the current policies related to salaries.* Therefore, the question of how to improve current working conditions is explored within the context of these topics.

In-service. The inadequate nature of current in-service programs has already been touched upon. In view of the fact that no pre-service teacher education program claims to produce on the average, more than minimally competent professionals, enrollment in a comprehensive in-service program is a necessity for the beginner. For example, any beginning teacher is confronted with a variety of classroom- (and extra-classroom) related problems, many of which are beyond his competency to handle, initially; therefore, it is evident that on-the-job education and training are needed. Unfortunately, for the most part such support just does not exist due to the fact that neither the supervisory staff nor more experienced colleagues are readily accessible and formal in-service programs generally are inadequate.

It should be noted that besides not providing such on-the-job support, most schools assign beginners at least as much responsibility as is assigned experienced staff and in some cases even more. Thus, for example, it is not uncommon for a new teacher to have one of the least desirable and most difficult classroom assignments and a variety of extra-classroom duties such as hall, playground, or luncheon supervision.

Efforts to alter such conditions include: (1) assigning beginners to less demanding (and less critical) classroom situations, thereby reducing the amount of immediate in-service education and support which such individuals require, (2) reducing the extra-classroom demands on beginners, (3) initiating systematic (integrated and coordinated) in-service programs for all personnel which are keyed to level of experience and current needs, and (4) changing current staffing patterns to facilitate the utilization of staff whose experiences and/or special competencies make them invaluable in-service educators. The first three points are either self-evident or have been discussed in earlier sections; the idea of differentiated staffing patterns deserves further discussion.

Differentiated Staffing. One of the last areas in the education professions to initiate differentiated staffing patterns has been teaching. In most schools, teachers are called upon to do everything from being a monitor and

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*For a broader discussion, see The Teacher Dropout, edited by Stinnett (1970). This is the report of a symposium sponsored by the Phi Delta Kappa Commission on Strengthening the Teaching Profession, in cooperation with the NEA National Commission on Teacher Education and Professional Standards.
a clerk to being a master instructor. However, the value of differentiated roles increasingly is being recognized, and new positions are appearing as is reflected by the existence of teacher aides and technologists, of assistant, associate, and master teachers, and of a wide variety of specialists. (In addition to making horizontal and vertical role and function distinctions [including those between professional and non- and/or para-professional], it is important, of course, to recognize and reward qualitative differentiations among the staff.)

With reference to improving working conditions, differentiated staffing has allowed for more efficient, effective, and satisfying use (a) of all teachers by utilizing auxilliary personnel for those tasks which do not require the competency of a certified teacher and (b) of those teachers whose experience and/or special competencies make them effective team-teachers and invaluable resources in providing in-service education and on-the-job support for other personnel. For example, volunteer and paid aides have been used by now in many schools to cope with a wide variety of clerical and monitorial duties, and there are a number of innovative programs designed to explore more systematic uses of experienced and specialized teaching personnel in in-service programs. One such program, in which this writer is involved, uses the classrooms of three teachers in a given school as the focal point of in-service education for that school. Rather than presenting new ideas and procedures through a lecture and work-shop format, in-depth in-service efforts are being directed at these three teachers. Their classrooms, then, have become concrete and always available demonstrations of desirable procedures which are to be shared with the rest of the school's personnel. Thus, these three teachers are playing a new role and performing an important function in these schools. They are contributing not only to their own students' growth but to their colleagues and through them potentially to the growth of all the youngsters in the school. It should be noted that the principals of schools where such demonstration classrooms have been developed have found it both feasible and productive to have staff members take responsibility for each other's classes for sufficient periods of time to allow any teacher to go to the demonstration rooms and learn new procedures. However, if aides or assistants were available, such released time for in-service education would be even more feasible.

In addition to improving the current working situation, it should be noted that differential staffing patterns eventually may aid in coping with the manpower shortage (1) as a result of increased recruitment, not only of those who view such staffing patterns as an improvement in working conditions, but of those who enter the field at a simple level, e.g., as aides; and (2) due to a better deployment of resources. As Smith et al., (1969) point out: "There is no shortage of raw manpower but a shortage of trained personnel." Thus, it may be that, as auxilliary personnel are used to cope with tasks currently, but needlessly, performed by teachers, and as teachers' roles and functions are reconceptualized, the number of teachers needed per school will decrease.
Differentiated Salary Policies. Probably, the most critical and powerful factor influencing the recruitment and retention of high-quality personnel to a field are the financial incentives, in general, and salaries, in particular.* In Education, the concern is not so much over starting salaries since they are often competitive; "the real trouble is at the top, where salaries are not competitive...and where capable people find their greatest deterrence from entering or remaining" in the field (Koerner, 1963). As a result, what is becoming increasingly recommended is the removal of present salary ceilings and the establishment of some sort of incentive principle, i.e., establishment of a policy of increases based on criteria which reflect not only role and function, but quality of performance and contribution. The problem, of course, is in specifying such criteria--which returns the discussion to the previous issues and problems related to specifying minimal competencies and professional standards and the evaluation of educational programs.

In summary, then, it is emphasized that the issues and problems related to improving the quality of teacher education are complexly interrelated but relatively clear. It should also be emphasized that these issues and problems are the same whether the focus is on preparing personnel for general or special education populations. The question now arises as to what additional issues and problems must be clarified with reference to the recruitment, education, and retention of personnel for the Educationally Handicapped. However, before this question can be answered intelligently, it is necessary to clarify the nature and scope of the pupil population which is referred to as Educationally Handicapped and to conceptualize the specific instructional needs of this population. Therefore, Part II is devoted to a discussion of the nature of the heterogeneity which exists in the EH population and the implications of this heterogeneity for classroom instruction.

*The subject of financial incentives is a complex one, ranging from concerns regarding opportunity for advancement to the value of various fringe benefits. The focus here is restricted to salaries since this topic provides a sufficient example of the current conditions and needed changes.
PART II: THE EDUCATIONALLY HANDICAPPED CHILD: SOME THOUGHTS REGARDING 
WHO HE IS, WHY HE IS, AND WHAT TO DO ABOUT HIM*

In recent years, a great number of youngsters with learning and/or 
behavior problems have been grouped under one (or more) of three labels: 
Learning Disabled (LD), Emotionally Disturbed (ED), Educationally Handi-
capped (EH). As more and more youngsters have been so-labeled, there has 
been an increasing demand for teachers who have the knowledge and skills 
to cope positively with the problems manifested by these children. Con-
comitantly, there has been a plethora of books, monographs, articles, and 
papers which provide varying conceptual and practical views of etiology, diag-
nosis, assessment, and remediation, and these varying viewpoints have led 
to considerable debate over labels, definitions, and procedures.**

In the California public schools, the debate over terminology has 
been resolved in favor of the label, Educationally Handicapped, and a 
specific definition has been incorporated into the legislation mandating 
EH programs (see footnote p. 39). It is generally recognized, however, 
that the pupil population subsumed under this label is not homogeneous 
and that the legal definition is not intended to clarify, and has little 
value in clarifying the instructional needs of this population.

As a result, most professionals who are concerned with planning 
and implementing well-conceived programs for preparing personnel to teach 
such youngsters still must resolve two basic issues:

(1) What is the nature and scope of the heterogeneity which exists 
in the EH population?

(2) What are the implications of this heterogeneity with reference 
to classroom practices?

Chapters 3 and 4 present a conceptualization which is intended to help 
clarify these issues.

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*This title was used originally in this writer's Keynote address to 
the Fourth Annual Phi Delta Kappa Conference for the Educationally Handi-
capped at the University of Redlands, March, 1970. The views discussed in 
chapters 3 and 4 were presented at that time and will appear in articles 
entitled "The Not-So-Specific Learning Disability Population:...", Exceptional Children (in press), and in a two part adaptation entitled "Children 
with Learning Problems:...", Academic Therapy (in press).

**Most textbooks in the area provide ample references. For example, 
see Hewett, 1968; McCarthy & McCarthy, 1969; Myers & Hammill, 1969; also 
see articles by Kass, 1969; and Maietta, 1969.
In Chapter 3, the position is taken that a given youngster's success or failure in school is a function of the interaction between his strengths, weaknesses, and limitations and the specific classroom situational factors he encounters. On this basis, it is hypothesized that the Educationally Handicapped population consists of three major subgroups of youngsters with learning problems. These subgroups include, at one end of the continuum, those youngsters who actually have major disorders interfering with learning and, at the other end of the continuum, those whose problem stems primarily from the deficiencies of the learning environment; the third group encompasses those youngsters with minor disorders who, under appropriate circumstances, are able to compensate for such disorders.

In Chapter 4, a set of sequential and hierarchical teaching strategies are suggested involving a two step process by which teachers can identify and attempt to meet the remedial needs of the youngsters in each of these three major subgroups. Finally, there is a brief reanalysis of the role played by specialized teaching techniques and materials in correcting such learning problems.
Chapter 3

HETEROGENEITY IN THE EH POPULATION

Despite all that has been written about the Learning Disabled (LD), Emotionally Disturbed (ED), and Educationally Handicapped (EH) groups,* neither the nature nor the implications of the heterogeneity which exists in these populations have been widely discussed in the literature. In particular, little has been written about the likelihood that, in practice,

*Currently, at least as applied to youngsters in public school programs, (relatively few children are so-diagnosed prior to school entrance) the terms Specific Learning Disabled, Emotionally Disturbed, and Educationally Handicapped have been defined as follows:

The definition formulated by the National Advisory Committee on Handicapped Children identified children with Specific Learning Disabilities "as those who have a disorder in one or more of the basic psychological processes involved in understanding or in using language (spoken or written), which disorder may manifest itself in an imperfect ability to listen, think, read, write, spell, or do mathematical calculations. These disorders include such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia." The number of youngsters who fit this definition has been conservatively estimated as ranging from 1 to 3 percent of the school population or roughly 500,000 to 1,500,000 students.

While Seriously Emotionally Disturbed Children have been defined in a variety of ways, all definitions tend to characterize such children as manifesting moderate to severe maladaptive behaviors with reference to the society in which they live. The components of such definitions usually include references to hyperactivity or withdrawn behavior, emotional lability, oversensitivity to stimuli, short attention span, difficulties in interpersonal relationships such as tendencies toward fighting and other active or passive aggressive actions, and underachievement; such behaviors, of course, are seen as resulting from severe emotional rather than neurological impairment. The number of youngsters in this category has been estimated, variously, from 0.5 percent to 10 percent of the school age population.

As described in the California Administrative Code, Title 5, Section 3230, an Educationally Handicapped minor "...has marked learning or behavior disorders, or both, associated with a neurological handicap or emotional disturbance. His disorder shall not be attributable to mental retardation. The learning or behavior disorders shall be manifest, in part, by specific learning disability. Such learning disabilities may include, but are not limited to, perceptual handicaps, minimal cerebral dysfunction, dyslexia, dyscalculia, dysgraphia, school phobia, hyperkinesis or impulsivity." In California, approximately 43,000 children or 8/10ths of 1 percent of the public school population were enrolled in EH programs in 1969-70.
these three categories include not only youngsters who actually have major disorders which interfere with their learning, but also youngsters whose learning and behavioral problems stem primarily from the deficiencies of the learning environment in which they are enrolled. The purpose of this chapter is (a) to discuss an interactional view of factors which determine school success and failure and (b) to relate this model to the heterogeneity which exists in the EH population.

An Interactional View of School Success and Failure

At present, the majority of youngsters who come to be diagnosed as LD, ED, and/or EH have already experienced some degree of failure in their efforts to perform as requested in the classroom. It is well documented that such failure produces effects which can confound efforts to diagnose, reliably and validly, the cause of the problem. Thus, it seems likely that many youngsters who are diagnosed as LD, ED, and/or EH are so-labeled on the basis of inferences derived from data which are of questionable "postdictive" validity. In fact, it may be that such youngsters are so-labeled primarily on the basis of assessment data which reflect little more than the effects of the school failure.

Despite the lack of reliable and valid etiological data, many professionals have tended to act as if all youngsters who are labeled as LD, ED, and/or EH are handicapped by an internal disorder which has caused the learning and/or behavioral problem. Unfortunately, this emphasis on the "disordered child" has tended to restrict the range of efforts designed to enhance our knowledge regarding the etiology, diagnosis, remediation, and prevention of school learning and behavioral problems.

There is a viable alternative to this "disordered child" model. This alternative view emphasizes the dynamic nature of the process by which school skills are acquired. Thus, the model stresses that a given youngster's success or failure in school is a function of the interaction between his strengths, weaknesses, and limitations and the specific classroom situational factors he encounters including individual differences among teachers and differing approaches to instruction. Stated differently, with specific reference to children who manifest school learning and/or behavioral problems, this interactional model suggests that such problems result not only from the characteristics of the youngster, but also from the characteristics of the classroom situation to which he is assigned.

Key Characteristics of the Youngster and the Classroom

Throughout the following discussion, there is frequent reference to the characteristics of the youngster and of the program in which he is required to perform. Therefore, there is a need to be more explicit as to just which characteristics are of major relevance.

The important characteristics of the youngster are conceptualized as his behaviors, skills, interests and needs as manifested in the school situation.
In addition, of course, it is recognized that all youngsters differ from each other in terms of: (a) development—in sensory, perceptual, motoric, linguistic, cognitive, social and emotional areas; (b) motivation—defined in this instance as the degree to which a youngster views a specific classroom activity or task as meaningful, interesting, worth the effort, and attainable through an appropriate amount of effort; and (c) performance—emphasizing rate, style, extent, and quality as the major variables.

The important characteristics of the classroom situation include the personnel, goals, procedures and materials which are employed in the school's efforts to provide effective and efficient instruction. Of particular relevance for the following discussion, these situational variables are seen as combining differentially to produce classrooms which vary critically in terms of the degree to which the program: (a) allows for the wide range of developmental, motivational, and performance differences which exist in every classroom; (b) is compatible (does not conflict) with the fostering of each youngster's desire to learn and perform; and (c) is designed to detect current and potential problem students and is able to correct, compensate for, and/or tolerate such deviant youngsters. This dimension may be conceptualized as the degree to which the program is personalized.*

**Formal Hypotheses and Implications**

The nature of the interaction of the child and program characteristics, then, is seen as the major determinant of school success or failure. The hypothesized relationship between these two sets of characteristics and school success and failure can be stated formally as follows: the greater the congruity between a youngster's characteristics and the characteristics of the program in which he is required to perform, the greater the likelihood of school success; conversely, the greater the discrepancy between the child's characteristics and the program characteristics, the greater the likelihood of poor school performance.

This hypothesis suggests that there are children whose school difficulties are due primarily to the fact that their classroom programs are not effectively personalized to accommodate individual differences. Therefore, as a corollary, it is hypothesized that the greater the teacher's ability in personalizing instruction, the fewer will be the number of children in his classroom who exhibit learning and/or behavior problems; conversely, the

*Classrooms which are personalized usually have a wide variety of "centers" designed to foster and stimulate interest in learning; the teacher in such a classroom typically emphasizes individualized programs for each youngster, rather than a three group, basal text oriented approach to instruction, and, in general, he attempts to minimize failure experiences, as well as tedious and boring activities.

It is recognized that many professionals do not feel that such personalized programs can be developed in regular classroom programs which enroll 35-40 students. Therefore, it is worth noting that this writer is involved with a project which has and is currently training teachers of culturally disadvantaged youngsters so that they are able to successfully personalize classroom programs containing such large numbers of youngsters.
poorer the teacher's ability in personalizing instruction, the greater will be the number of children with such problems. An unknown number of these learning problem youngsters are diagnosed as Learning Disabled, Emotionally Disturbed, or Educationally Handicapped at some point in their schooling. However, with the increasing interest in these areas, it seems probable that the number of youngsters assigned to one (or more) of these categories is increasing.

More specifically, it is hypothesized that there are at least three types of youngsters with problems within each category. There are youngsters who do not have internal disorders, but who simply do not function well in non-personalized instructional programs; and youngsters who do have minor disorders, but who, under appropriate circumstances, are able to compensate for such disorders in performing and learning school tasks, e.g., if the instructional process is appropriately motivating.* Finally, there are youngsters who do have major disorders which predispose them to school difficulties. For purposes of this discussion, the non-disordered children are referred to as Type I learning problems; the children with minor disorders are referred to as Type II learning problems; and youngsters with major disorders, i.e., those with Specific Learning Disabilities and/or Serious Emotional Disturbance, are referred to as Type III learning problems.

In contrast to this view, the majority of states with public school programs for the Learning Disabled and Emotionally Disturbed having established two discrete categories, tend to assume implicitly that each group consists of a different and relatively homogeneous populations, while a few states, such as California, encompass both LD and ED youngsters under the rubric Educationally Handicapped and tend not to differentiate among youngsters once they are assigned this label. Figure 6 summarizes three views of the LD, ED, and EH populations. As may be seen, the view being hypothesized here suggests that the majority of such youngsters are Type I and II learning problems and that only a small percentage are actually Specific Learning Disability and Seriously Emotionally Disturbed youngsters. In this connection, it may be that a more fruitful use of the label, Educationally Handicapped, would be to employ this term for Type I and II problems and reserve the categories Specific Learning Disability and Seriously Emotionally Disturbed for Type III problems.

(The question regarding what the actual percentages are for these three types of learning problems is an intriguing one. From personal experience, the Type III group appears to be only about 10 to 15 percent of the total group currently labeled as LD, ED, and/or EH; it is recognized,}

*The issue of compensatory mechanisms has not been well studied, but there are many examples of highly motivated individuals who have overcome severe handicaps in their efforts to understand and to communicate with others.
1a. Majority view--Learning disabled and Emotionally Disturbed students are categorized as separate populations.

1b. Minority view--Learning Disability and Emotionally Disturbed students are grouped together and categorized as Educationally Handicapped.

1c. Hypothesized view--The Learning Disability and Emotionally Disturbed populations are seen as overlapping and as consisting of three major subgroups of youngsters with learning problems.

Type I---No disorder (problem results primarily from the deficiencies of the learning environment).
Type II--Minor disorder (problem results from deficiencies in both the child and the learning environment).
Type III--Major disorder (problem results from the child's deficits and/or disturbance, i.e., a Specific Learning Disability (SLD) or Serious Emotional Disturbance (SED).)

Fig. 6. Three views of the Learning Disability, Emotionally Disturbed, and Educationally Handicapped populations.
however, that without empirical data, such an estimate is easily challenged.)

Summarizing to this point, what these hypotheses and inferences suggest is: (1) that the populations currently labeled as LD, ED, and EH each consist of at least three major subgroups of youngsters with learning and/or behavioral problems, ranging from those youngsters whose problem seems to stem primarily from the deficiencies of the learning environment to those who actually have major disorders interfering with school learning and/or performance; and (2) that there is a significant relationship between teachers' ability to personalize instruction and the type and relative proportion of such problem youngsters likely to be found in their classrooms. Specifically, it is suggested that the more able the teacher with reference to personalizing the classroom, the fewer the Type I and II learning problem youngsters who will be found in her classroom (see Figure 7).
Teachers' ability to personalize the classroom program

Type I—No disorder (problem results primarily from the deficiencies of the learning environment)

Type II—Minor disorder (problem results from deficiencies in both the child and the learning environment)

Type III—Major disorder (problem results primarily from the child's deficits)

Fig. 7. The hypothesized relationship between teachers' ability to personalize the classroom program and the type and relative proportion of learning problem youngsters likely to be found in the classroom.
Chapter 4
REMEDIATION AND PREVENTION

The view of the nature of the heterogeneity which exists in the LD, ED, and EH populations which has been described in the preceding chapter has specific implications for classroom efforts focusing on the diagnosis, remediation, and prevention of school problems. Based on this view, specific teaching strategies for diagnosing andremedying the general types of learning problems described above have been conceptualized and are presented in this chapter (see Figure 8).

Sequential and Hierarchical Teaching Strategies

Essentially, what is suggested is a two step sequential process by which the teacher (1) establishes a personalized learning environment, and then, if necessary, (2) employs up to three sequential and hierarchical remedial strategies in a sequence which is predetermined by the success or failure of each attempted strategy. That is, after the first step has been initiated, the teacher proceeds to the second step for those youngsters who continue to manifest occasional-to-chronic learning difficulty. The three sequential and hierarchical strategies which are included for possible use during this second step represent three different levels of instructional focus. Level a emphasizes maintaining the focus on basic school subjects; level b emphasizes instruction of prerequisites which are needed before school subjects can be mastered; level c attempts to deal with any pathological behaviors and/or any underlying process deficits which may interfere with school learning (see Figure 3).

It should be noted that no formal tests are employed to specify etiology or level of remedial needs; assessment procedures are employed only to determine instructional needs at a particular step and level. In effect, both the youngster's type of learning problem and the level of his remedial needs are identified only after the impact of each teaching strategy becomes apparent. It will also be noted that most LD, ED, and EH teachers already employ these three levels of action in their classrooms; however, these teachers frequently have not conceptualized their procedures as discrete strategies and often employ them in a rather random manner. In contrast, what is being suggested here is that the approaches should be employed systematically, i.e., sequentially and hierarchically. As may be seen in Figure 8, the following sequence of events is recommended.

Step 1. Those youngsters in regular classroom programs who are doing poorly (as reflected by such factors as being assigned D and/or F grades) are
Students follow a different sequence depending on whether they have occasional or chronic problems.

**Step 1**
- Remediation of interfering behaviors and/or underlying process deficits
- Needed prerequisites are (re)taught
- Basic school subject areas are (re)taught

**Level c**
- Type III learning problems

**Level b**
- Reteaching in basic school subject areas
- Needed prerequisites are (re)taught (then focus returns to Level a)

**Level a**
- Type II learning problems
- Students who learn effectively

**Step 2**
- Personalizing the learning environment
- Students who continue to have learning problems remain in the personalized environment
- Students who continue to have learning problems and/or underlying process deficits (then focus returns to Level b and then to Level a)

**Students who learn effectively**

**Type I learning problems**

**Regular classroom programs**
- Students who learn sufficiently in regular classroom programs

Fig. 8 Sequential and hierarchical teaching strategies for remedying school learning problems.
provided with a new learning environment where the program is personalized*, i.e., where individual differences in development, motivation, and performance are accommodated and fostered and where a greater degree of deviation can be tolerated and/or compensated for. The establishment of a new environment is accomplished either by altering the regular classroom program or, if necessary, by removing the youngsters to another classroom. The implementation of Step 1 should be a sufficient remedial strategy for the children who have been referred to above as Type I learning problems. (If Step I is successful, it suggests that, if the youngster had been in such an environment from the beginning of his schooling, he might not have had difficulties. Therefore, with a view to prevention, such a classroom environment might prove to be a prototype for all regular classroom programs.)**

Having established such an environment (Step 1), it should be possible then, to identify all three types of learning problem youngsters. Type I youngsters are those who are able to function effectively in the new learning environment; Type II are those who are able to function effectively in most areas of learning, but who have occasional problems, e.g., memorizing such things as the times tables or some vocabulary words; Type III youngsters are those who continue to manifest pervasive learning and/or behavior problems. Since the first step is sufficient for the Type I youngsters, the next step focuses only on Type II and III learning problems.

During the second step of the sequence, the teacher may employ up to three teaching strategies. However, the sequence and level of instructional focus of these three strategies differ for Type II and III youngsters. That is, Type II youngsters begin at Level a and Type III youngsters begin at Level c.

Sequence for Type II youngsters--When a Type II learning problem youngsters does have difficulty, the teacher must decide whether or not instruction can be delayed in that area, e.g., until a later time when learning might prove to be easier. If instruction cannot be delayed, then the next step in the sequential strategy is initiated (Step 2). The emphasis, at first, is on reteaching behaviors, skills, content and concepts related to basic school subjects (Level a); Level b instruction is initiated only if reteaching does not succeed; and Level c efforts are initiated only if

*It will be noted that the term personalized instruction is used in preference to individualized instruction. This distinction is made because so many "individualized" programs appear to be successful only in accommodating individual differences in development and performance; in contrast, to successfully personalize an instructional program requires not only effectively accommodating individual differences in development and performance, but also accommodating individual differences in motivation. An expanded discussion of personalizing classroom instruction is presented in Appendix A.

**A novel pragmatic approach to early identification is presented in Appendix B.
Level b instruction proves to be unfruitful. Thus, it may be seen that the simplest and most direct approaches are employed first and that all three levels of instruction may not be necessary in remediating the problem.

More specifically, once the teacher decides that instruction cannot be delayed, his efforts are directed toward reteaching in the area of immediate difficulty (Level a). Such reteaching is not a matter of trying more of the same, e.g., more drill. Rather, it requires the implementation of qualitatively different instructional approaches. That is, if a youngster is having difficulty with arithmetic or reading, the teacher attempts procedures which range from simply using a different kind of general explanation, technique, or material (e.g., another example or analogy; a "concrete" demonstration) to the use of specialized remedial procedures (e.g., a kinesthetic approach).

If the teacher finds reteaching in basic school subject areas (Level a) does not work, then he assesses whether the student lacks a necessary prerequisite and, if he does, the teacher attempts to correct this deficiency (Level b). For example, if a youngster is having difficulty with reading comprehension, the teacher might find that the student has little awareness of underlying concepts such as the relationship between the spoken and printed word, or the student may be deficient with regard to such basic educational skills as the ability to follow directions, answer questions and order and sequence events. If the teacher is able to detect and correct such deficiencies, then he is in an improved position with regard to remediating the original problem.

However, if this remedial effort proves to be unfruitful, the teacher proceeds to the final strategy in the sequence (Level c) which involves assessing andremedy interfering behaviors and/or underlying process deficits, e.g., behavioral, perceptual-motor, linguistic problems. (There seems to be an unfortunate tendency for some educational, medical, and psychological specialists to begin at this level when working with any child who has been categorized as a school problem.)

It should be noted that, once remediation at Level b or c is effective, there is, of course, still a need to return, sequentially, to the higher instructional levels. For example, if a student overcomes his basic problems at Level c, then the teacher is ready to reteach any necessary prerequisites which may not have been assimilated (Level b) and then to remedy the learning difficulty which originally set the entire sequence into motion (Level a).

Sequence for Type III youngsters--In contrast to the Type II learning problem, the Type III youngster is characterized as manifesting pervasive learning and/or behavioral difficulties. Thus, after the first step, the sequential strategies begin at Level c. That is, initially, efforts are made to assess and remedy interfering behaviors and/or underlying process deficits, and, as some success at this level is achieved, the sequence proceeds so that needed prerequisites and basic school subjects can be acquired. However, even with Type III learning problems, there are likely to be some areas where the disorder is not severely handicapping and where learning can proceed developmentally or, at least, where remediation can be focused more directly and simply on Level b or a. Therefore, it seems probable that these students...
can pursue learning at several levels simultaneously.*

The Role of Specialized Teaching Techniques and Materials

Thus far, the focus has been on a set of general teaching strategies which may be employed, systematically, in efforts to remedy and prevent school learning and behavioral problems. Before concluding, it seems appropriate to reflect briefly on the role played by special techniques and materials in correcting the learning problems of Type I, II, and III youngsters. Every LD, ED, and EH teacher, of course, has a "grab bag" of such specialized approaches, many of which are based on specific theoretical formulations which emphasize such ideas as stimulus bombardment or modality isolation. Since many of these remedial rationales are based on theories which view learning problems as stemming from disorders residing within the youngster, such techniques and materials and their rationales may prove to be valid for Type III and some Type II youngsters.

However, with reference to Type I and many Type II learning problems, the position taken in this monograph has been that the "disordered child" view is inappropriate. Nevertheless, such specialized techniques and materials can play an important role in the programs of such youngsters. Specifically, a variety of alternative approaches is seen as allowing the teacher to use and/or the student to find learning activities which not only are appropriate with regard to the youngster's strengths, weaknesses, and limitations, but which are novel and exciting and which have not become aversive. These activities can facilitate, simultaneously, an increase in approach and a decrease in avoidance tendencies on the part of the student (and the teacher). For such youngsters, then, the impact of a particular technique and material is not seen as dependent on the validity of the procedure's underlying rationale; rather its effectiveness is viewed as depending on how successful the approach is in helping to maintain a student's attention and interest and, in general, to facilitate learning.

To recapitulate, in chapters 3 and 4 it is emphasized that, in actual practice, the populations labeled as Learning Disabled, Emotionally Disturbed, and Educationally Handicapped have been and probably will continue for some time to be heterogeneous with regard to both etiology and appropriate remedial strategies. It should be obvious that the conceptualization which has just been presented leads to some very specific implications for the content of programs designed to prepare teachers to deal with EH youngsters, and therefore, there is no reason to belabor the point here. Instead, the discussion can now focus on clarifying some of the basic issues and problems which have arisen specifically with reference to the recruitment, education, and retention of teachers for the Educationally Handicapped.

*For purposes of closure, it should be noted that, if necessary, any youngster who has been removed from his regular classroom can be transitioned back when he is once again learning effectively (See Figure 8).
PART III: TEACHERS FOR THE EDUCATIONALLY HANDICAPPED

In recent years, there has been an increasing number of conferences and written sources specifically focusing on issues and problems related to the recruitment, education, and retention of special education personnel.*

Essentially, the issues and problems which have been raised at such conferences and in the special education literature are only specialized versions of those which have been discussed in Chapters 1 and 2 of this monograph. In fact, with particular reference to the topic, "Teacher Education and the Educationally Handicapped", the only major additional (substantively different) issue which has been raised is whether or not a "special" teacher is needed to serve the EH population. This issue is discussed in Chapter 5, and since the position which is taken is that, at present, there is a pragmatic need for such an EH specialist, Chapter 5 also offers some thoughts regarding the appropriate range of duties for such a specialist. Finally, in the last chapter, some opinions are offered regarding the recruitment, preparation, and certification of teachers for the Educationally Handicapped.

More specifically, Chapter 5 explores current views regarding the characteristics and competencies required for success as a teacher for the Educationally Handicapped. It is emphasized that while there is general agreement regarding the "specialness" of a teacher who succeeds with such youngsters, there is no consensus regarding the need for an EH specialist. Nevertheless, because it seems unreasonable to assume that, at present, regular classroom teachers will and/or are able to assume responsibility for EH pupils, the position is taken that there is a pragmatic need for an EH specialist. It is emphasized, however, that the need is for an individual whose functions encompass not only (a) direct service to pupils, but (b) pre- and in-service education, and (c) empirical investigation relevant to basic

*The following sources contain discussions which are relevant examples of the efforts which have been made to discuss training programs and/or needs in the areas of LD, ED, and EH. The list is not intended to be exhaustive; hopefully, it is representative. As examples, then, see: Mahler, 1965; Hewett, 1956; Cruickshank, Junkala, and Paul, 1968; Kass and Chalfant, 1968; Haring and Fargo, 1969; Mann, 1969; Oakland Public Schools' Handbook, 1969; Scheffelin, 1969; Smith, 1969; Tompkins, 1969; Adelman, 1970; Johnson, 1970; Rappaport, 1970; Riddle, et al., 1970. In addition, it may be noted that the Advanced Institute for Leadership Personnel in Learning Disabilities which met in Tucson in December 1969, will be publishing a report shortly focusing on the roles and functions of the LD teacher and implications for training. Finally, special note should be made of the section entitled "Professional preparation for the education of children with learning disabilities". written by N. G. Haring, W. R. Reid, and J. D. Beaver which appears in Minimal Brain Dysfunction in Children: Educational, Medical, and Health Related Services, Phase II of a Three Phase Project. Washington D.C.: U.S. Dept. of Health, Education and Welfare, 1969. (PHS Publication No. 2015.)
unresolved issues.

In Chapter 6, it is suggested that recruitment (and retention) of EH teachers can be facilitated by (a) publicizing and rewarding the "specialness" which characterizes the professional competencies and functions of such teachers, (b) instituting attractive and effective preparation programs, and (c) selecting and accepting only the better applicants. With specific reference to preparation, the inadequacies of current approaches for preparing EH teachers are discussed, and it is emphasized that the development of new teacher education programs in this area carries with it the unique opportunity and, indeed, the pressing responsibility to explore new models. In this connection, a possible model is described. Finally, it is reemphasized that a credential or license which is not based on performance criteria is a poor predictor of on-the-job competence and quality and, in this connection, an example is offered regarding how such competencies might be certified.
Chapter 5
THE EH SPECIALIST

In discussing whether or not there is a need for an EH specialist, it is reasonable to begin by exploring current views and concerns regarding the characteristics and competencies required for success as a teacher of pupils who manifest school learning and/or behavior problems.

Characteristics and Competencies

Whether focusing on the Learning Disabled, the Emotionally Disturbed, or, more generally, on the Educationally Handicapped, expert opinion has emphasized the "specialness" of the personal characteristics and/or teaching competencies required of the teacher for such youngsters. In 1966, after reviewing statements by Rabinow (1955), Mackie, Kvaraceus, and Williams (1957), and Haring and Phillips (1962), Hewett compiled the following prototypical statement which encapsulates the views of these writers with reference to the characteristics of a teacher for the emotionally disturbed.

"Tender without being sentimental, tough but not callous, sensitive but not irritable, possessed by conviction, profoundly aware without loss of spontaneity, trusting in the intuitive humane responsiveness of one's self and one's colleagues, and self-actualized."

(As Hewett so aptly states, the description sounds like "an excerpt from the canonization of a saint.")

With specific reference to the Educationally Handicapped, Mahler (1965) stated:

"Successful teachers of the educationally handicapped are not just specialized teachers, but very competent regular teachers with special attributes. They have a sound knowledge of normal children and the regular curriculum which serves as a basis for adapting and developing specialized programs for specialized needs."

In addition to these general statements, there have been increasing efforts to formulate systematic conceptualizations of the competencies which may be needed in dealing with youngsters with learning and behavior problems. In his 1966 article, Hewett suggests a hierarchy of competencies for teachers of the emotionally disturbed, i.e., (starting with the most basic) objectivity, flexibility, structured, resourceful, social reinforcer, a curriculum expert, and an intellectual model. In this hierarchy may be seen a movement away from suggesting general characteristics to a formulation of more operationally...
definable competencies. For instance, curriculum expertise is described not only as "...a sound basic understanding of educational practices and techniques...", but also as "The ability to set realistic academic goals in keeping with the student's intellectual and developmental levels and to initiate appropriate developmental and remedial procedures in reading, arithmetic, and other basic skills..." While these areas of competency are still only broadly stated, they do provide a framework for delineating the needed specifics and therefore are useful in planning the curriculum of teacher education programs which prepare personnel to serve youngsters with learning and behavior problems.

As has been seen in Chapter 4, this writer's efforts to categorize the needed competencies have involved suggesting a set of sequential and hierarchical teaching strategies. Again, it may be noted that while the areas of competency are only broadly delineated, the conceptualization does provide a basis for delineating the pattern and sequence of specific competencies which should be developed in the teacher education program.

Thus, as a review of the literature suggests, there is general agreement regarding the "specialness" of a teacher who is successful when teaching youngsters who manifest school learning and behavior problems. However, this is not to say that there is consensus regarding the need to develop corps of specialists to teach such youngsters.

Why an EH Specialist?

A major question which is increasingly asked is: How do the competencies, roles and functions of one specialist (e.g., the EH specialist) differ from those of another specialist (e.g., the teacher of the Mentally Retarded)? More basically, the question asks: How different are the educational needs of the youngsters who are assigned different exceptional child labels? As an example of the professional concern over this question, the following extracts have been taken from an unofficial paper prepared by a sub-committee of members of the California Association of Professors of Special Education (CAPSE).

There is an increasing concern among many special educators relative to the validity of the categories used to describe exceptionally..., the most fundamental problem which needs clarification is the presupposition that existing categories of exceptionality have theoretical meaningfulness in and educational setting. The answer to any question to the effect that teachers with different competencies are required to teach children with different sorts of handicaps depends upon the answer to prior theoretical questions.

...Anyone who has worked with...handicapped children will readily admit that he needs to know something more than [a label] before he can start the educative process... Labeling a child...gives precious little information to the teacher. Indeed, the tendency to use [a label] as the
major descriptor of the child...is responsible for a great many unproductive educational placements.

From an operational standpoint, there is an uneasiness among some people in the profession that continuation of present trends leads to a reductio ad absurdum. There is a tendency to create a new category of exceptionality to accommodate each handicapped child whose handicap does not qualify him for service under existing headings...

Another problem...is the assumption that the knowledge and skills of the teacher of one sort of exceptional child are so unique that that teacher cannot teach a child who is described as having some other type of exceptionality. Thus, we have the EH specialist who is so highly specialized that he is excluded from working with the retarded child...

It is true that children with different handicaps have different problems; and that handicapping conditions are determined by the child's specific limitations as dictated by the relationship between his potential for behaving and the demands imposed by the environment. However, the possibility must be faced that these differences are not of sufficient magnitude (educationally speaking) as to indicate the necessity of training a variety of specialist teachers for dealing with different educational problems (Nelson, Stark, and Britton, 1970).

The position taken by CAPSE and others is an important one, and the issues raised must be and are being explored, rationally and empirically, by medical, educational, and psychological specialists and researchers.* It seems likely, however, that the current practice of establishing a specialist for each group of youngsters who are given a special education label will be changed only after it has been demonstrated that an entirely unique set of competencies is not required by the teacher of one group as contrasted with another. And, in view of the lack of clarity regarding such competencies, it seems likely that the EH youngster will not be viewed as

*Teacher education programs can contribute to the resolution of these issues by pursuing efforts to systematically delineate (a) the general core of competencies required for teaching youngsters who do not manifest severe learning and/or behavior problems, (b) the additional core of special competencies needed to cope with any child (regardless of labels) who has special problems related to school learning and performance, and then (c) the additional core of special competencies (if any) which must be mastered because of the unique characteristics of a group which has been assigned a particular label, e.g., Seriously Emotionally Disturbed (SED), Specific Learning Disabled (SLD), Educable Mentally Retarded (EMR).
the appropriate responsibility of any other special teacher, e.g., the EMR teacher. At the same time, the lack of clarity regarding needed competencies makes it seem unreasonable to expect regular classroom teachers to cope successfully with EH youngsters—and current indications are that the majority of such teachers cannot. Therefore, it would appear imperative that someone in the school be especially responsible for working towards the remediation and prevention of the problems manifested by such youngsters. And it seems clear that that "someone" needs to be "special" with reference to both personality characteristics and teacher competencies, i.e., such a teacher must possess the attributes which are required for success as a regular classroom teacher and then some. Thus, the answer to the question: "Why an EH specialist?" is "Because there is no one else in the school who is likely to focus on those youngsters who are labeled as Educationally Handicapped."

To recapitulate, the need for an EH specialist is a pragmatic need which arises from a contemporary demand for school personnel whose major concern is to help develop the most appropriate means for remedying and preventing the learning and behavioral problems manifested by youngsters labelled as EH. In addition, it should be emphasized that such specialists due to their unique position, can provide an invaluable resource in efforts designed to clarify the basic questions regarding the competencies needed by different specialists and the similarities and differences in the educational needs of children who are assigned different labels.

It is recognized that there is always the danger that such specialists will become so completely enmeshed in providing services that they have no time to help clarify basic issues. And because there are so many students to be served, current functions and procedures could easily become "standardized" and the EH specialist could easily become institutionalized. Clearly, this would be an unfortunate state of affairs. Until the basic issues discussed above are resolved, it would be helpful if everyone concerned recognized that the establishment of an EH specialist is simply an acceptance of a contemporary need, and concomitantly, it would be well if everyone's behavior reflected the view that current roles, functions, and procedures are far from ideal solutions. That is to say, the establishment of an EH specialist is clearly an interim step in efforts to deal with a complex problem, and no action should be taken which will result in premature institutionalization of this interim step. Indeed, what is proposed is that such a specialist work actively with other specialists to determine the validity and value of separate specializations.

**Functions**

The conceptualization of the need for an EH specialist which has been presented in the preceding section suggests that the functions of such a specialist encompass not only (a) direct service to pupils, but (b) pre- and in-service education, and (c) empirical investigation relevant to basic unresolved issues. The rest of this chapter is devoted to further clarification of the nature of these three functions and the need for an EH specialist to perform them.
Direct service to pupils. In this area, the specialist's major functions are essentially those related to assessment and program planning and implementation. Obviously, the specialist can provide such direct service (1) by removing youngsters to a special classroom for all or part of a day or (2) by assisting youngsters in their regular classrooms. As has been suggested, the need for a specialist to perform such functions stems from the view that the regular classroom teacher cannot provide such services due to a lack of ability, time, or both. But as has also been stated in performing direct service to pupils, the specialists often become so overburdened that they do not have time for the other functions mentioned above. This is unfortunate for, as will be seen, these other functions ultimately may result in greater dividends, i.e., may help to resolve the very problems which make direct service so large a part of the EH specialist's present job.

Pre- and in-service education. In this area, the specialist's functions may range from lecturing and consultation to in-depth training involving demonstration and supervision of performance. Such functions may be performed in a variety of settings, e.g., institutions of higher education, special workshops, special demonstration centers, a demonstration classroom in a target school, or within the classroom of any teacher who needs to acquire additional competencies. The need for a specialist to perform such functions stems from the fact that for whatever reasons, regular school personnel too frequently do not cope effectively and appropriately (and often are at a total loss as to what to do) with youngsters who manifest learning and behavior problems. As long as regular classroom teachers are unable to cope with such youngsters, it seems likely that there will be a continuing tendency to refer these pupils for special services, resulting in an increase in the number of youngsters assigned labels, and in turn, generating the need for more specialists while restricting current specialists to providing direct service to pupils. Clearly, this is an undesirable state of affairs. In contrast, if the specialists can, indeed, help regular classroom teachers to cope with such youngsters, there is the likelihood that the number of referrals will be reduced, and it is possible that a number of learning and behavior problems will be prevented.*

In general, it is emphasized that the EH specialist can perform an important function in the in-service education of regular classroom teachers. In addition, in the section on the preparation of EH specialists, it will be emphasized that current specialists could and probably should assume a major role in preparing future specialists.

Empirical investigation. The EH specialists can provide invaluable aid in efforts to resolve basic issues, including delineation of the teacher competencies needed for remediation and prevention of school learning and behavior problems. Unfortunately, few specialists appear to have the time, training, and/or inclination to assume such a function. This state of affairs probably can be corrected if the teacher education programs will focus on preparing

*With reference to pre- and in-service education functions the problem is to determine how specialists who have proven their competence can be used most effectively. A somewhat detailed example of one experimental approach to this problem is presented in Appendix C.
specialists who know the importance of, are equipped for, and desire to participate in activities designed to develop a comprehensive and meaningful body of knowledge regarding youngsters who manifest school learning and behavior problems. Clearly, empirical investigation (research) is a necessary function, and one which the EH specialist is in a unique position to help perform.
Currently, in California, any individual who possesses a valid regular or standard teaching credential may be assigned as a teacher for the Educationally Handicapped as long as the administrative head of the school district or the county superintendent judges that the teacher possesses the "specific preparation, experience, and personal attributes deemed desirable."

In this connection, in his 1965, Introduction to Educationally Handicapped Programs, Mahler suggests the following guidelines as a departure for developing local selection standards:

1. Volunteer for assignment to the educationally handicapped program.
2. Have completed at least two years of successful classroom experience with children of similar chronological age to those pupils to be taught in the specialized program.
3. Have demonstrated superior performance during previous assignments, including the areas of patience and self-control during periods of severe educational and personal stress.
4. Have demonstrated the capacity and willingness to communicate effectively with parents.
5. Have shown tolerance for a very wide range of behavioral and learning patterns.
6. Have a history of willingness to individualize instructional procedures, methods, and expectations.
7. Have displayed initiative and resourcefulness in selecting and adopting materials and methods to new situations.

In 1970, Mahler's suggested selection criteria appear to be as sound as they were five years ago; however, it also appears that too few EH teacher applicants meet such criteria. Therefore, it has become imperative that efforts be made (1) to attract more and better volunteers (from among the ranks of credentialed teachers) for assignment to EH programs and (2) to institute more, and improve existing, pre- and in-service teacher education programs designed to prepare EH personnel.

Recruitment

Factors which contribute to the recruitment problem include most of those presented in Chapter 2. To these factors it may be added that many good teachers are intimidated by the idea of working with youngsters who may have the competencies and characteristics to do an effective job.
manifest severe behavioral problems. Also with reference to Chapter 2, it may be inferred that, if the goal is to attract (and retain) more and better teachers, it would be helpful if the image and working conditions of EH teachers were improved. In this connection, the "specialness" which characterizes the professional competency and functions of such teachers needs to be publicized and rewarded. Clearly, a properly prepared and utilized EH teacher is a valuable professional who performs in situations which are more demanding than current salary policies would suggest. That is, the role of the EH teacher is one where salaries need to be based on a policy which reflects the nature of the individual's worth with reference to functions and contributions. It seems evident that if the financial incentives were greater more individuals would be interested in becoming (and remaining) EH teachers.

Another way in which the image and working conditions of the EH teacher might be improved is to institute attractive and effective preparation programs. Since so many teacher education programs have a negative image, the opportunity to participate in a potent, novel and/or well-conceived program might have considerable prestige and incentive value.*

The goal of recruitment, of course, is not simply to attract increasing numbers. As teachers come to view the position of the EH teacher as an attractive one, it seems reasonable to anticipate that the increasing number of applicants will contain many high-caliber individuals. At that point, if a selection process can be instituted which effectively identifies the better applicants and then only such applicants are accepted, it will become even more meaningful and prestigious to be selected as an EH teacher, and this should also aid recruitment (and retention), i.e., when only the "special" can participate, it seems reasonable to anticipate that it will become much more desirable to participate.

Preparation

In discussing the general content and process of the EH preparation program, the broad categorizations and conceptualizations of teacher education presented in Chapter 1 are in no way altered, and, unfortunately, neither are the problems. That is, (1) the focus is still on the same major types and areas of instruction, and the problem is still that the minimal competencies needed for success in any given function have not been specified in very great detail; and (2) the major components of such EH teacher education programs are the same as for "general" programs, as is also the need to allow for individual differences, and the problems of coordination and integration and determining responsibility for program planning and implementation are unchanged (but more troublesome).

*For example, the mobile training team approach discussed in Appendix C makes the preparation program visible to teachers in the field, has the attractive feature of being a released-time program, and consequently, might well result in an increase in the number of applicants to such a program.
Since there is no specific credential required for teaching the EH, there are really no generally accepted and clearly delineated pre-service teacher education programs for preparing individuals who decide to teach the EH.* For the most part, it seems that such individuals seek out a course here, a workshop there, and whatever other relevant experiences are available to them. This is particularly true of practicing teachers who decide they would like to teach the Educationally Handicapped. Thus, the preparation of EH teachers, prior to their being employed as such (i.e., their EH pre-service education) resembles, and is subject to all the major defects which are seen in the majority of current in-service approaches to teacher education.**

Because of this state of affairs, there will be considerable discussion and activity in coming years regarding the development and improvement of pre- and in-service programs for EH teachers. Since the majority of current teacher education programs appear to be unsatisfactory, it does not seem unreasonable to suggest that new approaches should be explored. More strongly stated, it is felt that the development of new programs in this area carries with it the unique opportunity and, indeed, the pressing responsibility, to explore new models.

In this connection, it may not be too inappropriate to offer a rather...
specific example of one possible approach to pre-service preparation. By adapting the in-service model described in Appendix C, a novel pre-service program designed to prepare EH specialists could be instituted by the State. Since this program would require an initial investment by the State in recruiting (in and out of the State), employing, and upgrading the competencies of a basic corps of EH specialists, it should be noted at the onset that the Federal government might be willing to provide much of the funding in the form of a demonstration, training and research grant. The training of the corps of EH specialists could be accomplished through a special summer teacher education program during which a group of experts from throughout the country could be brought together to teach and supervise the academic, observational, and participatory experiences of these corps of individuals. (A nice "spin-off" of this summer program would be the sharing of ideas which would result from the interaction of the experts.)

The State then would employ (for a limited period of time—perhaps two years) these specialists as "EH consultants" who would work in pairs and be based at strategic points throughout the State. These pairs would constitute mobile training and accreditation teams who could be employed for delimited periods of time (payment to go to the State to defray the cost of these) by a local school district to help (a) initiate appropriate programs for coping with youngsters with learning and/or behavior problems, (b) develop the needed specialist personnel and/or (c) verify the competency of the district's EH teachers. Such personnel would be comparable to the "clinical professors of education" suggested by Conant, but obviously would be functioning within a different model. Districts would, of course, not be obliged to use the State's consultants to train personnel; they could simply request a team visit to verify the competency of their EH staff when such personnel appear to meet local and state standards.

Such an approach to preparation is viewed as overcoming many of the major problems which have been discussed and should help to guarantee that the best of what is known about working with EH youngsters is incorporated into school district programs. Moreover, such a procedure should facilitate efforts to ensure that all EH teachers can perform at least at a minimal level of competency in order to be certified.

Certainly other examples could be offered regarding novel and potentially better ways for preparing EH teachers. It would be a mistake, however, in this discussion to dwell on the pros and cons of various plans. The point for emphasis here is the need to explore viable alternative to current approaches to preparation, since most contemporary procedures are not satisfactory.*

*As such alternative approaches to teacher education are implemented, formal evaluation will become a necessity in judging their relative merits. See Appendix D for some practical suggestions regarding the systematic evaluation of EH teacher education programs.
A Note on Certification

There has been a considerable amount of debate regarding whether or not there should be a separate credential for EH teachers. Therefore, before concluding it seems appropriate to make a few comments on this topic.

First of all, it should be reemphasized that a credential which is not based on performance criteria is a poor predictor of on-the-job competence and quality (Chapter 1). In the absence of delineated performance criteria, the solution is not viewed as one of simply accepting course, unit, and hour accomplishments. At the very least, the emphasis in certifying EH specialists should be on screening out individuals whose personal characteristics and/or lack of competency could result in perpetuating or worsening a youngster's problems. More specifically, it seems reasonable to reemphasize the need for exploring more effective means for certifying competency. For example, the State could reasonably (1) accept the recommendations of professionally accredited trainers and/or (2) allow schools to employ graduates of such accredited programs and then accept the district's recommendations regarding certification for a particular role and function. If such procedures were employed, it seems likely that an improvement in quality of preparation programs might be forced due to pressure both from the State in refusing to accredit poor programs and from the districts in refusing to accept graduates of accredited programs which have been producing relatively poor personnel. This pressure may be just what is needed to encourage those responsible for preparation programs to be more aware of performance criteria and to focus on producing individuals who have developed needed competencies. Furthermore, such procedures should do away with such anomalies as restricted credentials which suggest that an individual can be competent to teach handicapped pupils but is not competent to teach regular students. (As should be evident at this point, such teachers are viewed as requiring the competencies needed for success with regular students and then some.)

It seems reasonable to suggest that many of the conflicts which have arisen with regard to teacher preparation and qualifications, such as the debate over certification, will be resolved satisfactorily only after the substantive issues and problems which permeate teacher education programs are resolved.

If the goal is to guarantee that teachers are competent, the first step is to guarantee that the programs which prepare them for teaching are well conceived and implemented. This step will not result simply by establishing accreditation standards; there is also a need for a combined and concerted effort on the part of general and special educators to provide some systematic answers for the issues and problems which have been discussed throughout this monograph.
SOME CONCLUDING REMARKS

At all levels and in all aspects, the field of Education appears to be in a period of rapid transition. Some writers suggest that the whole educational system is "at a crisis point--a point of desperately important choice" (Rogers, 1969). Those responsible for formal education in this country are being bombarded by questions, and few of these questions are simply interested inquiries; most represent major challenges to contemporary practices and require answers in the form of effective action. This is particularly the case in the area of teacher education.

Clearly, teacher education is a major enterprise. It is estimated that approximately 1,200 institutions of higher education are engaged in this enterprise. "These comprise slightly more than half of all higher education institutions in the United States. More college students prepare for teaching in elementary and secondary schools than for any other single field of work" (Dorros, 1968). The numbers are impressive. But what is the quality of such teacher education activity? How many of these programs have carefully conceptualized guidelines, goals, content, and process? How many of these programs have carefully conceptualized guidelines, goals, content, and process? How many of these students will have developed at least to a level of minimal teaching competency by the time they enter their own classroom? Unfortunately, there is not a comprehensive body of data upon which to base an answer to such questions. Nevertheless, it would appear from available evidence that few programs can claim such accomplishments, and indeed, due to a lack of ability, time, or both, most programs probably are not even effectively pursuing such accomplishments. As a result, teacher education is still very much the "slum of American education." The need for improvement is dramatic; the challenge is clear!
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APPENDICES
Appendix A

NOTES ON PERSONALIZED CLASSROOM INSTRUCTION

It is assumed that school systems are concerned with pursuing long range goals in the cognitive, affective, and psychomotor domains. Thus, in discussing public school programs, it is not sufficient to talk only in terms of such immediate instructional objectives as the acquisition of a specific reading skill. Rather, it is necessary to discuss the acquisition of such a skill within the context of pursuing such long range goals as the development by the pupil of (a) positive attitudes towards learning (and school), (b) acceptance of responsibility for learning, and (c) the capability to pursue learning independently, as well as cooperatively.

At the same time, it is assumed that all learning which occurs in a classroom is not, will not, and should not be the result of a teacher's efforts to provide formal instruction. For example, it seems evident that no teacher is able to teach successfully a detailed and identically sequenced set of skills to every pupil in his classroom, and even if he could, there is no satisfactory evidence to suggest that this type of approach to the instructional and learning processes is necessary or desirable. In keeping with this assumption, the teacher's role is viewed not only as an instructor, but as a facilitator, i.e., a person who leads, guides, stimulates, clarifies, supports. Thus, he must know when, how, and what to teach and also know when and how to structure the classroom so that students can learn on their own.* To this end, the teacher involves students (and parents) in planning, implementing, and evaluating the classroom program and environment, e.g., each student is involved in determining his own program. Thus, the teacher and the student (and his parents) share responsibility for planning and implementing the goals and objectives of the educational program.

Specifically, with regard to daily functions, personalized classroom instruction means that the teacher's objectives are concerned with:

1. Varying the classroom environment, tasks, and activities so that there can be a good match with individual differences in development, performance and motivation;
2. Eliciting active participation by each student in the planning, selection, implementation, practice, and evaluation of learning tasks and

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*In this context, it is interesting to note that much more learning than formal instruction might take place in such a classroom. Also, it should be emphasized that teachers need to focus, first on the question of when and how pupils learn, and then to consider what a teacher's role and function should be with reference to classroom learning.
activities;
(3) assessing each student and situation with specific reference to what that student can and should be learning and how to facilitate such learning.

In meeting such objectives, personalized classrooms usually have:
(a) a variety of projects and learning activity centers, e.g., science, arts and crafts, listening, writing, reading, games, study, etc.;
(b) a variety of reading and subject matter materials, including books, work sheets, etc.;
(c) a variety of rewards and consequences;
(d) individual conferences for communication and assessment, e.g., for sharing, stimulating, providing feedback, decision-making;
(e) records of activity and accomplishment kept by both the pupil and the teacher;
(f) flexible groupings based on common needs and interests, some of which will be teacher initiated and some student initiated;
(g) lengthy periods during which pupils either work independently or in small groups without adult supervision;
(h) adult and/or student aides.

Such programs also are characterized by a great deal of emphasis on pupil responsibility in the learning process as manifested in self-direction, self-selection, self-evaluation, and inter-student cooperation. Clearly, such practices are not unique to personalized programs. However, they are particularly well-suited to the goals and objectives of teachers who personalize classroom instruction because such practices allow for individual differences while facilitating the development of competency, independence, and responsibility (including awareness of and positive attitudes towards self and others).

Another way to conceptualize a personalized classroom is to view such a program as involving, in great part, an institutionalization of the Hawthorne effect.* That is, such a program requires that a teacher facilitate a variety of success experiences and novel changes which result in students being exposed to experiences which (a) arouse positive feelings to being the center of attention and of being special, (b) arouse such intrinsic motives as curiosity and competency, (c) result in a focusing of attention on relevant stimuli, and

*The term comes from a series of studies done at the Western Electric Company's Hawthorne plant between 1927 and 1933. The investigations were designed to determine the impact of changes in the physical environment upon worker productivity. However, instead the findings pointed to the potent impact of social organization as overshadowing physical surroundings in determining productivity, e.g., production increases seemed to be the result not of improvements in the physical situation, but rather from increased morale (positive attitudes and motivation) among the workers which was attributable to the special attention they were receiving as participants in the investigation.
(d) minimize boredom and tedium (and generate excitement and interest).

In summary, then, it should be clear that the needed teacher competencies are not seen simply as instructional skills, but more generally as the competencies necessary for facilitating approach and reducing avoidance tendencies toward classroom learning. Furthermore, it should be reemphasized that these competencies must encompass not only the ability to facilitate retention and transfer of training with reference to the "3 R's", but also the abilities required for facilitating growth towards appropriate and purposive competency, independence, and responsibility.*

*The reader who is interested in pursuing this topic might consult Individualizing Instruction: A selected bibliography published by the Institute for Development of Educational Activities, Inc. which contains references up to the middle of 1968. In addition, there is a recent collection of readings edited by Virgil M. Howes, and numerous magazine articles, e.g., Beatrice and Ronald Gross', "A little bit of chaos," Saturday Review, May 16, 1970.
Appendix B

EARLY IDENTIFICATION OF SCHOOL FAILURE AMONG EH CHILDREN

It has been suggested that, if all regular classrooms were effectively personalized, it would be possible to reduce substantially the number of youngsters who are labeled currently as Learning Disabled (LD), Emotionally Disturbed (ED), and/or Educationally Handicapped. Even if only the first-grade classrooms were personalized, the impact would probably be very impressive. However, it is recognized that very few classroom teachers currently offer personalized programs, and it would be unrealistic to expect the situation to change dramatically in the near future.

The next best strategy is viewed as one of identifying, at least by the end of kindergarten, those youngsters who constitute a "high risk" group. Then, rather than assigning them indiscriminately to first-grade classrooms, these youngsters can be assigned to teachers who have been trained to prevent school failure.

How can such an early identification be accomplished? In a recent article, my colleague, Seymour Feshbach, and I have described an early identification procedure, the effectiveness of which we hope to investigate empirically. The following is extracted with minor adaptations from a proposal we have submitted to the U. S. Office of Education.

PROBLEM AND OBJECTIVES. The need for this proposed investigation stems from a major problem which is shared by both the fields of education and mental health. From an educational standpoint, the number of students with behavioral and learning problems (the Emotionally Disturbed and Learning Disabled) which result in school failure has been reported as ranging from a conservative five per cent to a staggering thirty per cent of the school population. The impact of these numbers is seen directly in the millions of dollars which must be devoted each year to remedial education programs and activities; the indirect impact is felt by almost every student, for as teachers try, often unsuccessfully, to cope with Learning Disabled (LD) and Emotionally Disturbed (ED) youngsters, other student are slighted. From the point of view of mental health programs, the debilitating and devaluing long-term impact of school failure on personal and vocational adjustment has been well documented in the psychological and psychiatric literature.

*Adelman, H. S., and Feshbach, S., Predicting reading failure: Beyond the readiness model. Exceptional Children, in press.
The ultimate aim of this project is the establishment of effective and efficient diagnostic and educational procedures which may be used systematically in programs designed to prevent school failure. As a first major step towards accomplishing such a goal, it is necessary to be able to anticipate which children are most likely to fail in school and become labeled as ED or LD.

There has been increasing interest in developing procedures for the early identification of such youngsters (Austin and Morrison, 1963; Barrett, 1965; Bower, 1960, 1963; Chall, Roswell, et al., 1965; Cohen, 1963; de Hirsch, et al., 1966; Haring and Ridgway, 1967; Harrington and Durrell, 1955; Henig, 1949; Kermoian, 1962; Kohn and Silverman, 1966a, 1966b; Lambert, 1968; Martin, 1955; Monroe, 1935; Rubin, Simson, and Betwee, 1966; Weiner and Feldman, 1963). The majority of the predictive research which has been generated, to date, has focused specifically on reading failure. While some of these studies have yielded significant correlations between predictors and criterion variables, the relationships have been weak, particularly when subjected to cross-validation procedures. This relative lack of success, in large part, is seen as resulting from the fact that these efforts have been based upon what is essentially a "disordered child" or "reading readiness" model, i.e., a model which, traditionally, has emphasized the assessment of a youngster's deficits with reference to a delimited set of reading correlates such as perceptual-motor and linguistic skills.

At the very least, it is evident that most of these investigations have been restricted to procedures which do not assess the impact of many key variables which interact in shaping school success and failure.

The work of de Hirsch and her colleagues (1966), while of considerable interest and importance, nevertheless provides a recent example of such a restricted approach. The almost exclusive focus of these investigators on "readiness" variables is rather surprising in view of the explicit awareness of the dynamic nature of the process by which reading skill is acquired. As the investigators themselves point out:

"We recognize that a variety of social, environmental, and psychological factors are significant in the acquisition of reading skills, and we concur with Abraham Fabian (1951), who maintains that learning to read requires the developmental timing and integration of both neurophysiological and psychological aspects of readiness. Nevertheless, we limited ourselves to the preschool child's perceptual-motor and linguistic functioning because in this area we had found considerable deviation from the norm among children who subsequently failed in reading and spelling. We therefore put together a battery of tests which we hoped would reflect the children's perceptual-motor and linguistic status at kindergarten level." (de Hirsch, et al., 1966.)

Thus, despite recognition of the importance of socio-emotional and environmental factors, essentially, the decision was made to ignore the impact of such variables. This decision is reflected not only by the limiting of assessment to perceptual-motor and linguistic functioning but also by the choice of a "battery of tests" which are administered to each youngster individually. Such assessment procedures obviously entail markedly different performance conditions than are to be found in the classroom, e.g., the adult tester provides undivided attention in contrast to a classroom teacher whose
attention is almost always divided when she is teaching, and, more generally, the influence of such relevant factors as peer-group pressures, distractions, and other classroom situational variables is removed. In using such procedures, one is placed in the position of attempting to make predictions about later classroom performance, based on admittedly limited information, derived under conditions which are extremely dissimilar from the situation in which such performance is expected to occur. (This dissimilarity alone could account for many of the "false negatives" in the de Hirsch study and certainly would result in a great number of undetected potential failures in a large scale predictive program.)

A discussion of all the theoretical and practical limitations of such restricted approaches to the problem of predicting school failure is beyond the scope of this discussion. (For further critical discussion see de Hirsch, et al., 1966; Rozeboom, 1966; Zieky and Ellis, 1968.) Our primary purpose here is to go beyond the disordered child or readiness model and propose a viable alternative, i.e., an approach which provides a closer approximation between predictor and criterion.

As implied above, a youngster's success or failure in school is most fruitfully seen as a function of the interaction between his strengths, weaknesses, and limitations and the specific classroom situational factors he encounters, including individual differences among teachers and differing approaches to instruction. This interactional model leads to the inference that success in the first-grade depends not only on the youngster having the necessary skills and behaviors for learning what is being taught but also is dependent on the characteristics of the classroom situation to which he is assigned. Thus, it is hypothesized that the greater the congruity between a youngster's skills and behaviors (as manifested under representative classroom conditions) and those required of him in a specific first-grade classroom, the greater the likelihood of success; conversely, the greater the discrepancy between the child's skills and behaviors and those required in his classroom, the greater the likelihood of failure. (It should be noted for purposes of this discussion "failure" is viewed as performance which results in a child receiving a D or F grade in basic school subjects.)

A major implication of this hypothesis is that one effective strategy for predicting school failure is to assess the degree to which the kindergarten youngster can successfully cope under representative classroom conditions with tasks which are as similar as possible to those which he will encounter in the first-grade program. Such an assessment can be accomplished by (1) evaluating, in situ, deficits in or absence of learning-relevant skills and behaviors, as well as evaluating the presence of interfering behaviors in each kindergarten child, (2) evaluating each first-grade classroom program to determine the pattern and degree of skills and behaviors which the youngster assigned to that classroom and teacher will find critical in coping with the learning-relevant tasks, and (3) analyzing the discrepancy between a youngster's skills and behaviors and what is being required for success in that classroom.

The following brief description of how these steps will be implemented in the proposed experimental program should help to clarify this approach. At the onset, it should be noted that it is our intention that this early identifi-
cation model will be one which can be easily adopted in any school, i.e., the procedures will be such that with minimal training current school personnel (e.g., counselors and kindergarten teachers) will be able to make such an analysis.

Evaluation of Kindergarten Children

In developing a new child assessment procedure specifically designed to aid in predicting which children will fail in the first-grade program, the emphasis is on those behaviors and skills which first-grade teachers generally require and those behaviors which they will not tolerate during activities related to classroom instruction. The specific instrument currently being developed is a rating scale consisting of items which reflect a recent analysis of such requirements. This analysis is based on observation of numerous first-grade and kindergarten classrooms, a survey of available readiness inventories and curriculum manuals, a review of various writers (Bruner, et. al., 1966; Fernald, 1943; Havighurst, 1953; Hebb, 1949; Hewett, 1966; Hunt, 1961; Piaget, 1950), and relevant personal experiences in working with i.D and ED youngsters over the past ten years. To date, this analysis has yielded the following list of abilities.

1. With regard to physical and motor development and general health, the important areas and functioning levels are viewed as:
   a. adequate sensory capacity, i.e., Johnson and Myklebust (1967) indicate that hearing loss greater than thirty to thirty-five decibels (computed as an average for the speech range of the better ear) might result in a detriment to learning. Lawson (1967) indicates a visual impairment of 20/40 or greater (when glasses are worn) should be considered consequential for learning. In addition to visual acuity, color blindness may contribute to learning difficulties, especially in the early grades. (Impairment of other senses has not been demonstrated to be a serious problem in learning academic skills.)
   b. adequate eye-hand coordination, i.e., the youngster performs such skills as using a pencil appropriately and with enough control to keep close to the outline of large figures;
   c. general health which is good enough so that the youngster maintains regular attendance at school.

2. With regard to language skills, the important abilities are viewed as:
   a. expressive, i.e., the youngster speaks clearly and plainly enough to be understood in class and manifests a working vocabulary;
   b. receptive, i.e., the youngster understands what is said in class;
   c. use, i.e., using at least simple sentences, the youngster expresses ideas, thoughts, feelings; the youngster also has an awareness of the relationship between spoken and written language.

3. With regard to perceptual abilities, the important abilities are viewed as:
   a. visual discrimination, i.e., the youngster discriminates differences and similarities in letters, words, numbers, and colors, and sees the relationship of a part to the whole;
   b. auditory discrimination, i.e., the youngster discriminates differences and similarities in speech sounds and in letter names;

4. With regard to other general school behaviors and skills, items are being developed to allow for evaluation of the degree to which a youngster manifests interest in pursuing reading-relevant activities and the degree to which he manifests the ability:
(a) to follow simple directions;
(b) to maintain attention for sufficient period of time in doing seat work to accomplish a simple classroom task;
(c) to observe and to remember;
(d) to answer questions about a simple story;
(e) to tell a story from a picture (associate symbols with pictures, objects and facts);
(f) to direct attention toward print or pictures displayed to the class by the teacher;
(g) to solve simple problems;
(h) to tolerate failure sufficiently to persist on a task;
(i) to make transitions from one activity to another;
(j) to carry on with a task over several days;
(k) to accept adult direction without objection or resentment;
(l) to do work without constant supervision or reminders;
(m) to respond to normal classroom routines;
(n) to suppress tendencies to interrupt others;
(o) to suppress tendencies to aggress against others.

In addition to these skills and behaviors, it is obvious that if a child manifests certain other negative behavior, he may well have serious difficulties in school. These include problems in terms of teacher and/or peer relationships, being able to care for himself, control himself, and so forth. An empirical basis for the assessment of such factors is provided by the work of Bower (1960, 1963), Kohn and Silverman (1966a, 1966b), Lambert (1963), and Rubin, Simson, and Betwee (1966).

In general, then, the child evaluation instrument being developed covers all the areas listed above and is designed for use in the kindergarten classroom by the kindergarten teacher. Three examples of scale items are presented below:

"When the task requires it, how often do you find he can and does speak clearly enough so that you can understand him?"

"When the task requires it, how often can and does he discriminate the differences and similarities in letters and words when he is looking at them?"

"When the task requires it, how often can and does he answer questions about a simple story?"

Such items are rated on a five point scale with 1 being the lowest point and indicating that in situations requiring the specific behavior or skill the youngster's response never or hardly ever is adequate or appropriate. ("Never or hardly ever" are defined as 0-10 percent of the time and the frame of reference established for "adequate or appropriate" responding is performance which the teacher would grade C or better.) The highest point on the scale, 5, indicates that in situations requiring the specific behavior or skill the child's response is adequate or appropriate always or almost always (90-100 percent of the time). In addition to such items, the Kohn Competence Scale and the Kohn Symptom Checklist are to be used (Kohn and Silverman, 1966a; 1966b).
The proposed approach for using these procedures involves training the kindergarten teacher to observe her students, with specific reference to the rating scale items over the period covering the last 2-3 months of the youngster's kindergarten year. At the end of the school year, she rates the child on the items, thereby evaluating the pattern and degree of skills and positive and negative behaviors which the youngster has manifested. (If the kindergarten teaching program does not include activities which require some of the skills and behaviors which are included on the rating scale, then a series of "lessons" will be initiated by the teacher so that she will be able to rate all items. In addition, it is assumed that general medical screening, e.g., of visual and auditory acuity, will be accomplished by competent physicians, especially in those instances when a youngster is evaluated as being a potential failure.)

It may be noted, in passing, that these procedures have several major advantages over procedures that have been typically used in the prediction of school failure. For example, since the assessment is made over an extended period of time, it involves a broader sample of behavior than can be obtained during a single test session; in addition, the use of the classroom teacher avoids the necessity of employing specially trained testers, a procedure which is not only more economical but which can also facilitate the use of the findings as an educational aid.

Evaluation of First-Grade Programs

For evaluating the critical demands of a specific first-grade classroom situation and teacher, a separate but parallel rating scale is currently being developed. For example, the following three sample items parallel the kindergarten items presented above.

"How often does the teacher require clarity of speech in order for a student to be able to perform adequately and appropriately on a reading-relevant task?"

"How often does the teacher require the ability to discriminate visually the differences and similarities in letters and words in order for a student to be able to perform adequately and appropriately on a reading-relevant task?"

"How often does the teacher require at least the ability to answer questions about a simple story in order for a student to be able to perform adequately and appropriately on a reading-relevant task?"

Again, such scale items are rated on a five-point scale with 1 being the lowest point. In this case, 1 indicates that the teacher never or hardly ever (0-10 percent of the time) appears to require the particular behavior or skill in order for a student to be considered to have performed adequately and appropriately. (Performance which the teacher would not consider adequate or appropriate is defined as behavior which she assigns a grade of D or F.) With minimum training, the school counselor or some other member of a particular school's staff can use such a first-grade evaluation scale to rate the level of skill and behavioral performance required of a pupil for success in the
classroom. In making such ratings, a rater observes a first-grade teacher during the specific instruction period and particularly in the pattern-setting initial weeks of the program. Primary focus is on the teacher's interactions with those students who are doing poorly in learning-relevant activities. The final ratings on the scale are made at the conclusion of the entire period of observation which will probably require a number of weeks. Every first-grade teacher in a given school is to be rated in this manner, thereby empirically determining not only which student skills and behaviors are required but which ones are critical, i.e., the degree to which the teacher requires certain levels of performance and the degree to which she tolerates and/or compensates for particular deviations.

Discrepancy Analysis

The above procedures, then, can yield (1) an indication of which skills and behaviors are critical for succeeding in the first-grade program in a particular classroom, school, and district, and (2) the level of performance of a particular kindergarten child with regard to these critical skills and behaviors. These data permit an analysis of the discrepancy between a specific youngster's skills and behaviors and the requirements for successful first-grade performance. For research purposes, all three levels of discrepancy analyses can be carried out, i.e., a separate discrepancy score may be derived from the differences between the ratings given a youngster on each item and the normative rating for the district, the normative rating for a particular school, and the idiosyncratic rating given to the first-grade teacher to whom the youngster is assigned. A comparison of these sources provides an empirical means for determining the significance of variations in requirements in different first-grade classes as compared to the normative skills demanded of each child during classroom instruction.*

It is our intention to compare the de Hirsch approach with the approach we have described above and thereby evaluate the differences between a predictive approach which attempts only to assess a youngster's strengths, weaknesses, and/or limitations with reference to a delimited set of reading correlates under standardized test conditions and an approach which attempts to assess a greater range of factors (and their relative importance) under regular classroom conditions. It is these differences which are viewed as critical in effectively predicting which children are most likely to fail. (The cross-validation of the de Hirsch

*The need to assess idiosyncratic as well as normative aspects of teacher' behavioral and skill demands or lack thereof in the reading area was demonstrated dramatically in the classroom of one first-grade teacher observed recently. Her only criterion for deciding whether a student should be placed in the lowest reading group, (with the probable psychoeducational consequences of such a placement) was the child's lack of ability to open his book and rapidly find the place she had indicated.
Predictive Index will also allow for a determination of whether various combinations of both approaches yields greater predictive accuracy than either approach alone.) While the de Hirsch Predictive Index is restricted to the prediction of reading performance, there is still considerable utility to be derived in contrasting our more broadly gauged approach with the de Hirsch model. We, of course, are concerned with criteria other than reading, particularly personal and social adjustment indices that reflect success and failure in the classroom. The de Hirsch approach, though limited, serves as an excellent prototype of prediction procedures which are based on a deficit model and which predict to a normative criterion. In addition, the acquisition of reading skills and reading performance appear especially vulnerable to emotional disturbances and to specific cognitive dysfunctions. For these reasons, we have chosen to compare the model proposed here with that of the de Hirsch group and to determine the possible predictive advantages to be derived in combining elements of both approaches.

In addition to improving predictive accuracy, another benefit which should accrue from this study is that the first-grade evaluations will allow for an assessment of the actual demands of the programs in these classrooms, as well as the determination of how closely these demands resemble the first grade curriculum established by the school district. Thus, as we expand our efforts with regard to assessing the problems of the child and the process by which we teach him, we place ourselves in a better position to improve the weaknesses in the system, as well as in the child.
REFERENCES FOR APPENDIX B


Appendix C

THE EH SPECIALIST AS AN IN-SERVICE EDUCATOR: A MODEL

The procedures which are described below are derived from an experimental project in which this writer currently is involved. The project is designed to demonstrate (among other things) how specialists can be used effectively in upgrading regular classroom teachers. The in-service model being demonstrated could be adapted for use by EH specialists in the following manner.

Basically, the procedures would involve pairs of EH specialists going from classroom to classroom (mobile training teams) to help regular teachers learn how to cope with youngsters with learning and behavior problems. The training process would consist of four overlapping steps and would require from four to seven weeks per cycle during which time a pair of specialists could rotate among three teachers providing a reasonably comprehensive in-service education regarding how to cope with such youngsters.

More specifically, the process is conceptualized as follows:

(1) Demonstration and discussion (2-3 weeks). The training cycle is initiated with an individual meeting between the specialists and each of the three participating teachers who are to be trained during that cycle. The focus of the discussion is on learning from each teacher the procedures currently being employed in coping with learning and behavior problems and sharing some general thoughts about such youngsters. (The specifics of the training process itself are described prior to selection of participants for the in-service program but are usually reviewed at this time, as well). Then, for a day or two, the specialists observe during the reading period in each of the three classrooms. The reading period is chosen as a point of focus since this is the time during which learning and behavior problems have been found to occur with great frequency and because of the importance of this basic skill. Based on these initial discussions and observations, one of the specialists takes over responsibility for teaching during the reading period. This provides a "master" demonstration of the procedures which the participating teacher is to learn, and it frees the teacher to observe what is being demonstrated. The second specialist's function is to meet with the teacher for purposes of discussing the rationale underlying the procedures being demonstrated, as well as for exploring alternative ideas.

*The three participating teachers must schedule their reading periods for different times of the day to allow the specialists to rotate to each room.
and procedures and for problem-solving when a procedure being demonstrated does not appear to be effective. During this step, then, the participating teacher has the opportunity for observation of a master demonstration and for in-depth, personalized discussion of what is observed, all in his own classroom, with his own students, everyday for almost two weeks.

(2) Practice (1-2 weeks). After approximately two weeks of demonstration (sooner if the teacher appears ready), the participating teacher begins to apply what has been learned. While one of the specialists still continues to be responsible for teaching the reading lesson, the teacher "practices" new procedures and the second participant observes and is ready to provide guidance, feedback, and additional demonstrations. In this way, the participating teacher is free to stop at any point during an activity and receive immediate feedback and/or additional input. Furthermore, since one of the specialists is still teaching the class, it is possible for the teacher to stop participating and observe and discuss whatever is being demonstrated at that time. Clearly, then, Steps 1 and 2 overlap; this blending of one step into the next is a goal at each transition point in the process.

(3) Initial implementation (1-2 weeks). After a period of supervised participation, the teacher assumes full responsibility for teaching the reading lesson while the two specialists observe. Meetings with the teacher are held as needed for feedback, questions and answers, and general discussion, and if necessary, the specialists provide additional demonstrations. (At this point, the process more closely resembles traditional supervised teaching, but by virtue of the preceding interactions, the characteristics of the experience have been found to be very different, e.g., the contacts between the "supervisors" and the "supervised" usually are devoted to collaborative sharing and problem-solving rather than to critiques.)

(4) Follow-up. Obviously, the specialists should be available as often as possible to answer questions, problem-solve etc. Thus, as they begin a new training cycle (with teachers in the same school or in another school), they need to reserve some time for follow-up consultation, i.e., observation and feedback, demonstrations and discussion. (In practice, it has been found that such support is mostly needed in the first month after completing the third step and that this need can be dealt with by setting aside one day a week for such consultation.)
Appendix D

NOTES ON THE SYSTEMATIC EVALUATION OF EH TEACHER EDUCATION PROGRAMS

As Haring and Fargo (1969) have pointed out with reference to the area of the Emotionally Disturbed:

"Although a great deal of concern has been given to the need for evaluating the professional preparation of teachers of the emotionally disturbed, little systematic assessment of professional trainees, teachers, and training programs has been made. Concern has centered primarily on the number and content of courses and the variety of experiences rather than on the competency of the educational product. The national picture of programs for training teachers of emotionally disturbed children has been seen only in form—number of courses in common and hours spent in practicum and class. Furthermore, these curricula tend to be eclectic in character and operate without a point of view, thus confounding description and statements of operational objectives.

...It is difficult, if not impossible, to evaluate any program by examining a list of courses or practical experiences. While theory and practice are, of course, the core of professional preparation, the program should derive from objectives that are operational. Courses and experiences must be subject to acceptance, modification, and rejection based on objective evaluation of the extent to which the aims have been realized."

Clearly, this statement applies equally to programs for the Learning Disabled or, more generally, the Educationally Handicapped.

In reaction to this state of affairs, there has been an attempt (e.g., on the part of legislators) to have programs evaluated primarily in terms of direct achievement benefits to children and cost accounting procedures. That is, it has been suggested that a program's benefits be evaluated in terms of immediately, measurable improvement in the "3 R's" among the children served by the teachers trained in a particular program and that the amount of improvement should warrant the fiscal expenditure per trainee and per child. On the surface, such criteria may appear to be reasonable. However, in light of our current limited knowledge regarding effective strategies for educating children who do not perform well in school, this level of assessment is probably premature and is certainly not comprehensive enough.

The general discussion of evaluation in Chapter 1 suggests a more realistic and comprehensive approach to the evaluation of teacher education
programs for EH specialists.* Using the earlier discussion (in Chapter 1) as background, it seems appropriate at this point to suggest some practical approaches for use in formal and systematic efforts to evaluate teacher education and classroom instructional procedures.

Ideally, as noted in Chapter 1, a comprehensive evaluation requires assessing a teacher education program's impact (a) on the participating teachers, (b) on their pupils, and (c) on their school district, and/or on any institution of higher education. Within the limitations set by the practical, conceptual, and technical problems which have been described in Chapter 1, any teacher education program should attempt to assess such a wide range of impact utilizing appropriate procedures and standards to allow for objective and generalizable conclusions. The following are examples of the types of data which may be gathered.

(1) With reference to the pupils, important areas for concern are:
   (a) achievement with reference to the remediation of underlying process deficits and/or interfering behaviors, e.g., perceptual deficits, extreme withdrawal and passivity;
   (b) achievement with reference to needed pre-requisites, e.g., attending and listening;
   (c) achievement in basic school subjects, e.g., reading, language, mathematics;
   (d) relevant other positive behaviors and attitudes, e.g., liking school, self-directive, self-evaluative, and inter-student cooperative behavior;

Clearly, whenever possible standardized procedures should be employed; however, when such procedures are not available, efforts must be made to develop new approaches. Procedures which might prove useful include:

1. Academic and behavioral measures such as standardized readiness and achievement tests, systematic analyses of performance (qualitative and quantitative changes in attention, disruptive behavior, written products), systematic records of specific accomplishments (skills learned, books read);
2. Motivational and attitudinal measures such as those which focus on self-control, anxiety, locus of control, general attitudes toward academics, expectancy of success. In addition, of course, ratings by teachers, principals, parents, and the students themselves provide sources for evaluating academic, behavioral, motivational, and attitudinal changes.

*Another useful reference is the resource guide, Planning for the evaluation of Special Education Programs (McIntyre, et al., 1969).
With reference to teachers, important areas for concern are:
(a) the new competencies which are acquired and the degree to which existing competencies are strengthened, e.g., new procedures for teaching reading, increased effectiveness with previously used procedures;
(b) relevant other positive behaviors and attitudes, e.g., increased involvement in general school affairs, improved morale, etc.;
(c) the number of teachers (and other concerned professionals and potential recruits) who experience the impact of the program— with specific reference to the nature and scope of the program's influence on such individuals;
(d) any other contributions which the teacher makes to the field, e.g., improving the understanding of basic issues which are currently unresolved.

Procedures for assessing competency, motivation and attitudes, as well as general impact include measures of observed performance in situ, written products, and self-reports. More specifically, the data can be gathered using such instruments as rating scales, open-structure essays, teacher questionnaires, Q sorts, systematic records of specific accomplishments, and directly solicited evaluations. It should be noted that such instruments also can provide direct evaluative feedback of the teacher education program itself which can be used in reshaping the program content and process.

Some of the other basic possible sources of evaluative data with regard to both pupils and teachers which can be explored include such general behavioral indices as changes in attendance and changes in grading patterns. In addition, efforts can be made to identify other behaviors which may reflect positive or negative involvement in school-related activities. And it is possible, of course, also to collect basic descriptive data which may help in continuing efforts to explore those individual differences which are related to success and failure of teachers and students.

The primary emphasis in analysing both the teacher and the pupil data should be on evaluating (describing and judging) the congruence between stated instructional objectives and what is accomplished, as well as the possibility of major negative side effects on the teacher and the pupils.

With reference to school and district, important areas for concern are:
(a) changes in policies and practices regarding classroom methods, materials, and staffing;
(b) changes in policies and practices regarding teacher education.
Such information generally can be gathered by use of a questionnaire.

A questionnaire can also provide data regarding changes which occur in the pre- and in-service programs offered by institutions of higher education which appear to be attributable to the existence of the teacher education program being evaluated. In addition, the manner in which evaluative feedback influences changes in the program itself should be described.
Finally, with reference to follow-up evaluations, the procedures which have been suggested in each area generally can be employed often with only minor adaptations for purposes of gathering such follow-up data.

As these examples suggest, teacher education programs can and should be evaluated on many levels. This is particularly true of programs which prepare teachers to work with exceptional children since the problems with which such teachers are confronted are complex and poorly understood. Until there is a more definitive body of knowledge in this area, it is hoped that programs which prepare teachers for the EH will be evaluated broadly in terms of their general contribution to current educational services, training, and research, rather than in terms of such narrow criteria as pupil achievement in the "3 R's" or per captia cost with reference to immediate pupil benefits.