Professional Preparation for Teachers of Exceptional Children

An Overview

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Professional Preparation

For Teachers of Exceptional Children: An Overview

A Report Based on Findings from the Study
Qualification and Preparation of Teachers of Exceptional Children

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This publication is a part of the broader study

Qualification and Preparation of Teachers of Exceptional Children

Conducted by the Office of Education and made possible by the cooperation of many agencies and individuals, and with the special help of the Association for the Aid of Crippled Children, New York City

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Foreword

IN THE NATION there are four or five million children who have educational needs so unusual that they require special help from the schools. Such children include those with physical handicaps, mental retardation, serious social or emotional problems, or giftedness. Progress is being made in providing for these children, but educational provisions are far from adequate. Educational programs are being extended or developed by State and local school systems, but in this expansion, the crucial need is for larger numbers of well-qualified teachers.

Perhaps not more than one-fourth of the number of teachers needed are available, and some of these may not be well prepared for their work. At present the Nation, therefore, is faced with a twofold need: the first is for more special educators, the second is for improvement of the professional qualifications of many special educators who are already in service. The growing demand for teachers of exceptional children has tended to focus attention on the qualifications which contribute to success in working with these children. It is hoped that this publication, which results from the cooperative efforts of many leading special educators in the Nation, will form a basis for guidelines for future improvements.

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—The Association for the Aid of Crippled Children, for their special cooperation throughout the project.

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—The consultants who gave advice on special problems.

—The many special educators who so carefully completed extensive inquiry forms.

—The members of the Competency Committee who prepared a statement of the distinctive skills and abilities needed by special education staffs in colleges and universities.

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Courtesy Royal National Orthopedic Hospital, Middlesex, England

Early education begins in the hospital.

CHAPTER I

Introduction

SCHOOLS AND CLASSES for handicapped and gifted children are expanding and new ones are being developed so rapidly that a critical need has arisen for teachers whose professional preparation enables them to work successfully with some of the schools' most difficult problems. Simultaneously, the extension of supervisory and consultative programs at the State and local level is creating a demand for increased numbers of competent directors and supervisors of special education. As colleges and universities initiate, expand, and develop high quality programs of preparation, they too are seeking faculty members with specialized competence and experience.

The growing demand for teachers has tended to focus attention on the nature of the qualifications which contribute to the development of professional competence. At this time when programs are relatively new and before patterns become crystalized, much can be done to elevate the standards of educators who will be responsible for the instruction of children with exceptional educational needs.

There are many factors in the development and maintenance of professional qualifications (standards) for teachers and other educators concerned with exceptional children. A number of people and institutions bear major responsibility for attaining the high quality programs which this Nation wants for its handicapped and gifted children. In fact, the initiative and leadership for professional preparation programs shift back and forth among those who share this responsibility. From the time the teacher chooses his profession, he more than anyone else determines the nature and the scope of the competencies he will bring to his work. The colleges and universities bear a major responsibility for the selection of teacher candidates, for their initial professional preparation, and for some participation in inservice programs. The school systems bear major responsibility for the professional development of teachers after they have entered employment.

Apparently a new emphasis is developing in professional preparation which may well call for much more attention of special educators than they have given to it in the past. In a field such as the education of exceptional children, where the findings of science may alter the conditions of exceptionality so radically and even suddenly as to markedly alter the child's problems, the continued

process of professional education, both theoretical and practical, appears to be more important than it usually is in professional education.

Since 1952 a nationwide study[1] of the qualifications needed by special educators has been under way. A number of reports[2] have been published—for example *Teachers of Children Who Are Mentally Retarded* and *Special Education Personnel in State Departments of Education*. In contrast to the specialized reports, *Professional Preparation of Teachers of Exceptional Children* seeks to give a comprehensive (or inclusive) view of the central issues in all areas, to trace the common threads running through the qualifications and preparation of special teachers.

SCOPE OF THE PUBLICATION

This bulletin, in its six chapters, covers several major parts of the nationwide study. Opinions are reported on teacher *competencies* in the ten areas of exceptionality (chapter II), on *professional preparation* of such teachers (chapter III), and on their *in-service* education (chapter V). While some of these findings have been published previously in the separate bulletins (listed inside the back cover), opinions from all areas of exceptionality are brought together and reexamined in order to provide in this report a cross-sectional view for special education. *Qualifications and preparation* needed by *college staff members*, which had not been published previously, are reported in considerable detail (chapter IV). The bulletin concludes with a brief summary together with some implications for future planning (chapter VI).

COLLECTION OF THE INFORMATION

Facts and opinions for the study were secured by two methods. One was through the use of a series of inquiry forms which were sent to four groups of special educators totaling about 1,600 people.[3] Since the inquiry forms were designed to draw out the information most pertinent and distinctive to each area of specialization, such as the mentally retarded or the deaf, they varied considerably.[4] The ten areas were: Blind, partially seeing, crippled, special health problems, deaf, hard of hearing, speech correction, socially or emotionally maladjusted, mentally retarded, and gifted.

The other method used was the writing of a report by a committee of nationally recognized special educators. In this publication, the committee report deals with competencies needed by college staff members who are primarily responsible for the professional training of teachers of exceptional children.

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[1] See appendix A, page 108, for the plan of the broad study, "Qualification and Preparation of Teachers of Exceptional Children."

[2] See inside back cover for listing of completed reports now available from the U. S. Government Printing Office.

[3] See appendix B, page 110, for the sampling procedures employed.

[4] See appendix D for excerpts from inquiry forms.

THE PARTICIPANTS

Since the findings will perhaps be more meaningful to the reader if he knows something about the special educators who contributed opinions, a few details are reported on the situations in which they were working, and the areas of exceptionality for which they had responsibility, and the geographic representation. The four groups of educators who contributed opinions through inquiry forms were: (1) Superior teachers in each of the ten specialized areas; (2) college faculty members; (3) directors and specialists in State departments of education, and (4) directors and supervisors in local school systems.

The superior *teachers,* including approximately 100 teachers in each of the 10 areas, were working in both urban and rural centers in 41 States and the District of Columbia. The majority of them were teaching elementary school age children, but some were teaching children under age 6, and others were teaching high school pupils. They were in several different types of school organizations, including day and residential schools, hospital classes and home instruction, and itinerant services. Approximately half of those teaching in

TABLE 1.—Number of Teachers Participating in the Study, by Area of Exceptionality and Time of Specialized Preparation

Area of exceptionality	Total	Specialized preparation received		No specialized preparation [1]
		Prior to January, 1946	Since January, 1946	
1	2	3	4	5
Total	1,079	558	471	50
Blind	100	50	50	0
Partially seeing	130	90	40	0
Crippled	150	73	77	0
Special health problems	85	48	37	0
Deaf	100	65	35	0
Hard of hearing	100	60	40	0
Speech correction	120	40	80	0
Socially maladjusted	75	42	26	7
Mentally retarded	150	75	75	0
Gifted	69	15	11	43

[1] Teachers without specialized preparation working in the areas of the gifted and socially maladjusted were included because of the difficulty in obtaining an adequate sample of teachers who had had specialized professional preparation.

each area of exceptionality had received their professional preparation before January 1946 and half after that time, between 1946 and 1953. Throughout the bulletin, the latter group will be referred to as the "more recently prepared teachers." Although effort was made to secure completed inquiry forms from 100 representative teachers in each of the 10 areas, the number from whom usable replies were received ranged from 69 teachers of gifted children to 150

teachers of crippled and 150 teachers of mentally retarded children.[5] (See table 1 on page 3.)

The 279 *college staff members* who gave opinions were employed in 85 colleges and universities throughout the Nation. Each of the college faculty members gave opinions for each area of exceptionality in which (*a*) he carried direct instructional or supervisory responsibility, and (*b*) his college or university offered a complete sequence of preparation[6] during the regular academic year. Staff members primarily responsible for such courses as remedial reading, mental health, or child development were not included unless the course was pointed specifically to exceptional children.

The titles of the participating college staff members varied considerably, for example, director, coordinator, head of department, department chairman, professor, associate professor, demonstration teacher, master teacher, senior teacher, supervising teacher. In analyzing the data, staff members were grouped into the following five categories: (1) Director of special education, (2) instructors of special education, (3) cooperating teachers (demonstration teachers, critic teachers and supervisors of student teaching), (4) directors of speech correction programs, and (5) instructors in speech correction programs.

TABLE 2.—Number of College Staff Members Participating in the Study, by Position and by Area of Exceptionality [1]

Area of exceptionality	Total	Special education programs			Speech correction programs	
		Directors	Instructors	Cooperating teachers	Directors	Instructors
1	2	3	4	5	6	7
Total participating [2]	279	23	92	34	52	78
Blind	11	3	8			
Partially seeing	18	8	10			
Crippled	30	8	19	3		
Special health problems	13	5	8			
Deaf	70	12	35	12	7	4
Hard of hearing	98	14	26	1	26	31
Speech correction	145	11	10	1	51	72
Socially maladjusted	16	7	9			
Mentally retarded	74	20	34	20		
Gifted	5	2	3			

[1] College staff members are included in this table when (1) they themselves reported responsibility for an area and (2) the college also reported a sequence in the area.
[2] Columns do not total since many college staff members reported responsibility for more than one area of exceptionality.

[5] See appendix B of the individual area publications for further information about the participating teachers.

[6] A sequence of preparation has been defined for this study as one which contains three courses or at least from 9 to 12 semester hours of specialized preparation made up of (1) a study of the characteristics (physical, mental, and emotional) of the particular condition under consideration (such as mental retardation or deafness); (2) a study of the teaching methods and curriculum adjustment needed; (3) observation and student teaching practicum in the specialized area.

Not all of the 279 college staff members held full-time appointments—36 percent (excluding the area of speech correction where the percent was 15) were on a part-time basis. Each of the 10 areas of exceptionality was represented to some degree by participating college staff members (see table 2). The largest number (145) reported some responsibility in the area of speech correction. Next in order came the hard of hearing (98), mentally retarded (74), and deaf (70). The fewest reported responsibility in the areas of the gifted (5), blind (11), and special health problems (13).

TABLE 3.—Number of Directors and Specialists (Supervisors) of Special Education in State and Local School Systems Participating in the Study, by Position and by Area of Exceptionality

Area of exceptionality	State departments of education			Local school systems		
	Total	Directors [1]	Specialists [2]	Total	Directors [1]	Supervisors [2]
1	2	3	4	5	6	7
Total participating [4]	102	40	62	153 [4]	103	50 [3]
Blind	37	23	14	51	46	5
Partially seeing	53	35	18	95	89	6
Crippled	57	37	20	106	98	7
Special health problems	47	33	14	89	82	7
Deaf	41	25	16	80	72	8
Hard of hearing	62	38	24	104	94	10
Speech correction	60	38	22	106	91	15
Socially maladjusted	38	25	13	79	70	9
Mentally retarded	57	36	21	112	91	21
Gifted	25	19	6	21	20	1

[1] Includes overall coordinators of programs.
[2] Includes consultants and specialists in a single area or in a few related areas, such as speech and hearing.
[3] One of the 50 supervisors did not give this information.
[4] Columns do not total because many participants reported responsibility for more than one area of exceptionality.

Directors and specialists in State departments of education giving opinions totaled 102; 40 directors and 62 specialists. They were working in 36 States and the District of Columbia. While all areas of special education were represented to some degree by the State department staff members, the areas for which the largest number reported responsibility were hard of hearing (62), speech correction (60), crippled (57), and mentally retarded (57). (See table 3.) The fewest reported responsibility for the education of gifted children (25).[7]

Directors and supervisors of programs for exceptional children in local school systems giving opinions totaled 153. Of this number 103 were directors and 50 were supervisors. They were employed in 112 different school systems in 24 States across the Nation, in population centers ranging in size from "25,000

[7] For more information about personnel in State departments of education refer to: Romaine P. Mackie and Walter E. Snyder, *Special Education Personnel in State Departments of Education*, Washington, U. S. Government Printing Office (Bulletin No. 6, Office of Education, 1956, 49 p.)

or less" to "more than one million." Among the 112 school systems, 25 were organized on a county-wide basis. The report of local special educators on the areas of exceptionality for which they carried responsibility closely parallels that of the State personnel. (See table 3.) However, the largest number of the local special educators were working in the area of the mentally retarded (112), followed by speech correction (106), crippled (105), and hard of hearing (104). Like the State personnel, comparatively few local special educators have responsibility for the education of gifted children (21).[8]

THE ISSUES FROM DIFFERENT POINTS OF VIEW

Comparison of the opinions of these four groups of educators should have particular value since each looked at professional preparation from a different point of view. Teachers based their opinions on the help their college preparation had been to them in solving the day to day problems of educating exceptional children in their classrooms. Similarly, they viewed the contribution which was made to them by their supervisors. College faculty members based their opinions on first-hand experiences with strengths and weaknesses of the programs of professional preparation for which they were responsible. State and local personnel viewed the professional preparation of teachers in terms of the competence (proficiency) of teachers working in their own school systems.

[8] For more information about personnel in local school systems refer to: Romaine P. Mackie *and* Anna M. Engel, *Directors and Supervisors of Special Education in Local School Systems*, Washington, U. S. Government Printing Office. (Bulletin 1955, No. 13, Office of Education, 72 p.).

CHAPTER II

Competencies Needed By Teachers

IT WAS AGREED by those planning the nationwide study that if a fairly accurate picture could be drawn of the competencies which help teachers carry out their functions, a long step would be taken in developing and improving professional standards. It was assumed that the most successful teachers of handicapped or gifted children should first of all have the usual competencies in helping children develop the tools of learning (for example, skill in reading), in imparting some of the cultural heritage of mankind, and in applying the principles of child growth and development. It was a basic purpose of this study to identify, describe, and evaluate distinctive competencies needed by teachers in each of the ten areas of exceptionality.

What specialized knowledge and understanding about deviations and related matters are required of the teacher? What special abilities enable the teacher to aid a child who has difficult problems or one who has unusually rich endowments?

One method of securing opinions on these questions was evaluation of teacher competencies (knowledge, skills, and abilities) for relative importance in daily work with children.[1] To secure these opinions, the study staff developed ten lists of competencies, one in each area of exceptionality; they pretested, reviewed, and revised them and submitted copies through inquiry forms for evaluation to approximately 100 superior teachers in each of the areas.[2] [3] The number of competency items in the lists ranged from 72 in the area of the gifted to 103 in the crippled. The individual teacher evaluated each of the competencies in his area of specialization on a four-point scale as "very important," "important," "less important," or "not important." Their ratings were then assembled for the respective area, converted to an *average rating of relative importance*, and placed in rank order.[4] Throughout the

[1] The other method was through the work of committees of special educators (one in each area) who prepared extensive reports on the specialized competencies needed by teachers. Findings from both these sources have been published in separate specialized area reports. In this overview report it did not seem feasible to include the committee reports since only brief excerpts could have been used, and these might have been misleading when taken out of context. In general, the opinions of committees and teachers did tend to reinforce each other, so that an overview of teacher opinion is fairly representative of the thinking of both groups.

[2] For example, see appendix D (form EXC4A); Question No. 3.

[3] The reader may wish to refer again to the method of selection of the participating teachers—as outlined in appendix B.

[4] The rank order is based on the average rating of importance for each item. See appendix C, page 113, for statistical procedures used.

Courtesy Kansas City, Mo., Public Schools

School provides for auditory training.

study the rank order number is also used as the identification number. The lists of competencies, together with evaluations, have been reported in some detail in the special area bulletins.

In this publication the ten lists are assembled in order to see what common elements may be found in these competencies in the ten areas. (See table 4, page 18.) For several reasons, these lists of competencies merit attention; they seem to be basic, as substance for understanding the other opinion data on professional preparation. First, the competencies identified and evaluated in this study constitute the most extensive lists now available; second, they represent the opinions of a nationwide sample of successful teachers of exceptional children on their relative importance; and third, the lists appear to be valuable, because most of the items received high ratings of importance.[5] It may be assumed that much of the substance that should go into teacher

[5] Most competencies in the teachers' lists received an average rating of "very important" or "important." Very few items received an average rating of "less important" or "not important."

preparation and into the standards for teachers is to be found in these lists of competencies and that they may even offer a rough basis for self-rating by teachers. In looking at these competencies as a whole as they are assembled for an overview, much of the specificity is lost, but the purpose here is to outline roughly a picture of the central ideas in them and to see whether some elements (or features) are present in more than one area.

The original lists of competencies in the teachers' inquiry forms were not organized by topic, such as competence in "developing and adjusting curriculum," but certain natural groupings of items have been made in order to facilitate general discussion of the results. In this overview report the competencies are grouped around the following subjects: (1) Technical knowledge in the special area, (2) understanding the child and his deviation, (3) competence in curriculum adjustment and special teaching methods, (4) ability to select and use specialized equipment and materials, (5) competence in counseling and guiding children with problems arising from their handicaps or giftedness, (6) ability to use tests and records, (7) ability to work with adults and organizations, (8) administrative duties in connection with providing a program, (9) secondary deviations or multiple handicaps, and (10) personal characteristics and attitudes. (See table 4, page 18.)

TECHNICAL KNOWLEDGE

Technical knowledge in general included two types of competencies. The major group dealt with knowledge of deviating conditions in the specialized areas such as deafness, mental retardation, or cerebral palsy, their causes and treatment, and an understanding of how such conditions may affect children (for examples see table 4, section A: B6, C36, 52, SC1, 38, 5, SM7, 22, MR32).[6] The other group included knowledge of such things as legal provisions for the education and general welfare of exceptional children, research in the special area, and medical and psychological terminology.

There was a wide range of evaluations of importance attached to these different kinds of knowledge. To illustrate, highest ratings of importance were given to understanding the characteristics of children in the special area, the kinds of social and emotional problems that may arise as a result of the deviation, and the effects of different home environments on such children. While in many instances such knowledge and understandings are shared by—or centered in—other professions, the teachers evidently believe they need enough information to work intelligently in this field. Estimating the effect of the child's condition on his development or on his progress in learning, working with members of other professions in providing a well-rounded educa-

[6] In the text the following symbols represent the areas of exceptionality wherever the item numbers are referred to: B, Blind; PS, Partially seeing; C, Crippled; SH, Special health problems; D, Deaf; HH, Hard of Hearing; SC, Speech correction; SM, Socialy maladjusted; MR, Mentally retarded; G, Gifted. Numbers refer to rank order of importance in the indicated area of exceptionality and can be used to identify the competency item in table 4, page 18.

tional program—these are only some of the ways that teachers will use technical knowledge in carrying out their parts of a total community program for exceptional children.

Knowledge of research studies, current issues, and professional literature related to the special area in which the teacher was working was generally considered "important," but seldom high in the rank order of the area lists. Teacher evaluations varied considerably. (Examples of relatively low evaluations are found in section A: PS81, C67 and MR79.) Knowledge of professional literature and reference material, for example, ranked near the middle of the list in most areas, and considerably higher than a knowledge of research. Teachers of the *gifted* were an exception; they regarded knowledge of research as "very important."

These ratings give rise to some questions. Do they mean that teachers have not been challenged to see the possibility of gaining new concepts from professional literature? Are research studies not sufficiently focused on the day-to-day problems of instructing exceptional children?

UNDERSTANDING THE CHILD AND HIS DEVIATION

A common thread running through the teachers' evaluations is the high appreciation of the ability to understand each child in the classroom and the effect of his deviation on him (table 4, section B). The successful teachers rated as "very important" nearly all competencies having to do with *understanding individual children* (section B: for example, PS7, SM16, G22, SH11, MR1). They placed very high importance on the ability to interpret the behavior of the handicapped or gifted child in terms of physical, psychological, and emotional factors, and to recognize and provide for individual differences in each child (section B: B2, C4, SH11, D3, MR1).

The teachers considered the ability to recognize possible causes of a child's social and emotional problems and to help alleviate them, as an essential part of their professional mission, thus again reflecting their impression of the ever-present hazards faced by the handicapped in making adjustments (section B: B8, C9, SH4, D5, MR10). Furthermore they placed high value on ability to recognize symptoms in children needing referral to other professional persons. They rated somewhat lower the ability to cooperate with other professions in making a case study of an individual child in order to plan a program to meet his needs.

CURRICULUM ADJUSTMENT AND TEACHING METHODS

Approximately one-fourth of the competencies (263 items in all) in the 10 lists were focused specifically on curriculum or teaching methods. With some variations in evaluations of importance, the successful teachers tended to place a high value on them. They were most concerned with the ability (*a*)

to create a favorable classroom environment; (*b*) to individualize the curriculum to meet the needs of each exceptional child even though most children are taught in groups; (*c*) to help the child develop special or compensating skills needed because of his deviation; (*d*) to provide experiences for social growth.

(*a*) The ability to create a *classroom environment favorable to growth and development* of each individual child was one of the most highly valued competencies in the entire study and formed the center of a constellation around this function. In the lists (ranging from 72 to 103 items) it was placed among the top four in relative importance by teachers in eight areas (section C: B4, PS1, C1, SH1, HH4, SC2, SM1, G3). This is a complex responsibility and ability to discharge it depends on extensive knowledge and understanding of human behavior. The skills required to achieve such a goal with groups of handicapped or gifted children are unique and varied. Because they usually call for distinctive knowledge and ability in each area, the competencies may be much more difficult to attain than might appear on the surface.

(*b*) The ability to *recognize* and *provide* for *individual differences* in children who are exceptional because of such conditions as blindness or deafness was placed by teachers near the top of the list in their evaluation (section C: for example, MR4, G7). At the same time they continually emphasized the importance of understanding the educational implications of each child's deviation (section C: for example, D7, 28). There are many illustrations of these emphases. Teachers who work with visually handicapped valued ability to bring experiences close to the blind child and ability to plan a program to minimize eye fatigue for the partially seeing child (section C: B12, PS5).

Teachers of the blind emphasized the importance to curriculum planning of their knowing what effect the age of the child at onset of blindness had on him. Teachers of the socially maladjusted placed high in the list the ability to provide activities through which each child could have an experience of success and the importance of knowing how to avoid making stereotyped demands on pupils (section C: SM2, 13).

(*c*) The ability to help a child develop additional special or compensating skills needed because of his particular deviating condition is another aspect of curriculum adjustment which was ranked high by teachers. Most obvious examples are their high rating of the need for competence in teaching braille to the blind, language and speech development to the deaf, or speech-reading to the hard of hearing (section C: B14, 21, D1, 2). Less obvious examples include the high importance they placed on ability to help deaf and hard of hearing children learn to analyze situations by using visual clues (section C: D22, HH16). Another example, taken from the area of the gifted, is the ability to teach gifted children how to use library resources (section C: G8), and to solve problems and to do independent research (G4, 12).

Teachers in all areas placed a relatively high value on ability to teach health education. As might be anticipated, this item was given particular emphasis

by those working with the mentally retarded and the physically handicapped (section C: B22, PS28, C42, SH15, D19, HH54, and MR7). This may be one more way of their emphasizing the importance of helping the child learn self-care in relation to his disability.

(*d*) Superior teachers seem to believe that most exceptional children face social hazards in our society and that the teacher must constantly be alert to stimulate the child's social growth and to help the child overcome his problems. This opinion seemed to prevail throughout the study. They tended, for example, to emphasize ability to provide experiences in the curriculum which would offer children opportunities for socially meaningful experiences (section C: for example, B28, C21, SH7, MR25). Teachers also valued ability to provide opportunities for exceptional children to work and play with normal children within the school situation. Teachers of gifted children singled out ability to foster social responsibility as the most important competency on their list and teachers of the maladjusted placed it eighth.

SPECIALIZED EQUIPMENT AND MATERIALS

On the ability to use specialized equipment and materials, the findings in this study leave some rather conflicting impressions (table 4, section D). On the one hand, teachers in the various areas, with a few exceptions, valued ability to use *appropriate teaching aids,* designed for the most part to compensate for a handicap, such as a knowledge of the materials in teaching lip reading. They tended to place high value on knowing the types, sources, and uses of specialized teaching aids (section D: HH9, SC17, MR3, D18, B26, PS14, C54, SM42). On the other hand, the estimate of need for competence in the use of specialized audio-visual equipment, such as talking book machines, varied somewhat and tended to be lower.

These evaluations suggest a possible direction for further and more detailed study of equipment. In such a study it would be desirable to find out what specialized equipment has been available to teachers and what resources they have had for securing such material. Such study would need to be made in individual areas of specialization.

COUNSELING AND GUIDING

The superior teachers, in general, believe it is highly desirable for them to have skill in counseling and guiding techniques. From the total list of such competencies, which they evaluated, they regarded almost two-thirds as "very important" and none less than "important." (See table 4, section E). In other words, the teachers indicated that such abilities (which of course would require a good deal of knowledge) were among the most valued competencies for a teacher of handicapped or gifted children. While on the basis of these data, there is no way of knowing the intensity of counseling the teachers had

in mind when they rated these competencies, they do reflect their belief that the special teacher himself should be able to counsel pupils in regard to attitudes toward their disabilities as well as toward their educational problems (section E: for example, B5, PS15). Apparently during their day-by-day work with handicapped and gifted children, there often arises the necessity for teachers to give on-the-spot help with various kinds of problems.

The competencies in this group on which teachers placed highest importance were ability to guide pupils in their *personal* attitudes toward their physical deviation and to help them with social and educational problems. And they also placed high value on competencies which enabled them to counsel pupils on vocational problems and life goals, although they gave somewhat less prominence to this type of counseling, probably because a majority were working primarily with elementary age pupils and because they knew other agencies also were responsible for such functions.

These ratings on various aspects of counseling and guiding do imply that teachers need basic knowledge and skill in the field if they are to help children effectively. Training should also increase teacher skill in referring appropriate problems to other workers or agencies.

TESTS AND RECORDS

In general, ability to use tests and records is a competence which teachers regarded as important but not of relatively highest value to them in their daily work with certain types of handicapped or gifted children (table 4, section F). Through their evaluations successful teachers indicated that they did consider as highly important the ability to use those tests and records which helped them understand and guide pupils and individualize the curriculum, but they placed relatively less importance on the ability to administer various kinds of specialized tests. Altogether 112 ratings were made in the 10 areas on some of the foregoing functions.

The general impression to be gained from the ratings is that the teachers thought they should be able to *interpret* and *use* test *results* and various kinds of records, including educational and medical. Some considered "very important" the use of cumulative educational records (section F: C34, MR27). Apparently they did not believe that they should be responsible for administering certain kinds of tests. Their evaluation of ability to give both group and individual intelligence tests tended to be below the mid-point of the lists, suggesting that they apparently thought persons other than the classroom teachers should be responsible for the administration of tests. Here again is a matter for more study.

WORKING WITH ADULTS AND ORGANIZATIONS

In the competencies which successful teachers rated for relative importance, there were 139 items in the 10 areas dealing with some aspect of competence

in working with adults and organizations. They were mainly about ability to work with (1) other school staff members, (2) representatives of other professions, and (3) parents.

Slightly less than half the items received an average rating of "very important," and most of the others were judged to be "important." Only 2 in the entire list were evaluated as "less important."

When these teacher evaluations are viewed in summary, there seems to be a high value placed on competencies which enable them to *work with school staff members*. Some of these competencies were placed among the most important in the whole list by teachers of partially seeing children and by speech correctionists (section G: PS3, SC6, 16). In both cases the evaluation is understandable because of the type of program which many of them followed.

Working with other professional persons outside the field of education was considered to be "very important" (for example, section G: C8, SH6, and section B: B32, PS36). Generally rated lower however, was the need for an understanding of the purposes and services of local and national organizations concerned with exceptional children. (section G: for example, B37, PS62, C68).

On the constellation of competencies related to working with parents, there were 48 items, and 31 of them were rated as "very important." High evaluations were given to the competency which enabled the teacher to help the parent get professional advice or treatment for the exceptional child and to assist the parent of the gifted in developing good adjustment in his child.

Thus, in a field where it has been assumed that professional teamwork and adult cooperation are exceedingly important, the successful teachers apparently confirmed this assumption by rating this function as a most important part of their work. Later in the report more will be said about the opinions of other special educators concerning professional preparation to work with other teachers, parents, and other professional persons in the school and community.

ADMINISTRATION AND ORGANIZATION OF PROGRAMS

Those planning the study thought that many special teachers probably carried leadership functions of such a nature that they might require administrative competence, because in many smaller communities the special class teacher may be the only person with competence in a given aspect of special education. With the exception of the speech correctionists, however, the teachers participating did not seem to agree; they did not put top value on administrative competencies, although they did consider them to be "important" Speech correctionists placed high importance on knowing about and being able to use survey procedures for finding pupils with speech disorders, on ability to plan effective speech correction schedules, and ability to contribute

to community leadership in establishing an educational program for children with speech impairments. (Section H: SC20, 22, 9, 30).

SECONDARY DEVIATIONS OR MULTIPLE HANDICAPS

A finding of the study which may be surprising to some readers is the view of these successful teachers concerning the need for competence in areas of exceptionality other than the ones for which they have responsibility. In general, the teachers did not place high importance on knowledge of teaching methods in specialized areas other than the one in which they were working. (See table 4, section I.) A major exception was the value they attached to competence in teaching children with social and emotional disturbance (section I: B15, PS35, C35, SH5). The problems of these children, it is to be recalled, were recognized by the teachers throughout the study. Social and emotional disturbance is apparently a problem for which teachers are willing to accept responsibility along with their own specialities.

In the seven areas where this item was listed for rating, four groups of teachers rated methods of teaching children who are emotionally disturbed as "very important" and three as "important." A second exception was in the area of the crippled where teachers rated the ability to use special methods in teaching children with multiple atypical conditions as "very important" (section I: C43).

This tendency to put relatively low evaluations on methods of teaching in other than their own area appears repeatedly in the data. In a list of 87 competencies, teachers of the partially seeing rated teaching skills in the area of the blind as 84th in importance. Teachers of the blind attached more importance to teaching skills with the partially seeing; out of 82 items they listed it as 34th in importance.

Perhaps the most extreme illustration of this point of view about other specialities is found in the way teachers of the physically handicapped rated instructional skill in mental retardation. For example it was placed 82d in a list of 96 items by teachers of the hard of hearing, and 71st in a list of 103 by teachers of the crippled. Yet one of the most frequently occurring secondary handicaps is mental retardation.

As the schools attempt increasingly to provide for as many exceptional children as possible, the number who will have secondary deviations or multiple handicaps will automatically increase. It, therefore, appears that the function of teachers of exceptional children should be further studied in order to determine the nature and extent of specialized competencies he should have in areas other than his own. In preparing the teacher for a very specialized task in education how much proficiency in other areas can colleges realistically require? How can a balance be achieved so that the preparation will have the desired depth and breadth?

PERSONAL CHARACTERISTICS OF TEACHERS

The personality of any teacher is of utmost importance. Many studies have been made and considerable research has been done on personality characteristics of teachers in general; and so it was decided not to use the resources of this project to make a thorough study of this admittedly important factor in teaching success. Through one question, however, this matter was brought into sharp focus. Teachers in each of the ten areas were asked whether they thought they needed personal characteristics different in degree or kind from those needed by teachers of so-called normal children. More than three-fourths answered in the affirmative. Most of these teachers took time to comment extensively in support of this belief. A rather high percentage felt that teachers of exceptional children should have more than usual patience, and should be mentally alert and have attitudes which made them flexible, resourceful, and enthusiastic. They also stressed the need for emotional stability, personal warmth and friendliness, understanding, and sympathy coupled with objectivity, and sensitivity to people.

There were differences of emphasis from area to area. Teachers of blind children, for example, often mentioned the need for a clear, pleasant voice, while teachers of gifted children more often mentioned high intelligence and mental alertness and humility as important characteristics. Teachers of children who are socially maladjusted or emotionally disturbed thought that, along with other qualities, a sense of humor was especially valuable in their field.

Courtesy Chicago, Ill., Public Schools

Learning to listen for certain speech sounds.

A few personal attitudes and characteristics were also included in the competency lists; for the most part teachers rated them as "very important" (table 4, section K, page 36)

Committee members, too, identified and described many personal traits which they thought were particularly important for teachers in the respective areas of exceptionality. Committee reports in each area tended to parallel the teachers' opinions in that area. The committee on the blind emphasized that teachers in that area needed "versatility, flexibility, ingenuity, imagination, and complete acceptance of the child" to a greater degree than regular teachers. The committee studying competencies needed by teachers of socially maladjusted children stated that suitable personal qualities were just as essential as competencies for work with disturbed children and pointed out that such teachers need to have good judgment, a sense of humor, perspective, adaptability, and flexibility. Another committee studying competencies for teachers of the mentally retarded stated that ingenuity and originality were important characteristics of teachers of mentally retarded children.

The successful teachers also placed high value on the personality traits of the directors and supervisors of the school programs. Through free response comments, 740 teachers of all types of handicapped and gifted children portray such a leader as a somewhat ideal person who is emotionally mature, keen-thinking, understanding and tactful, truly democratic, positive, idealistic, ethical, and who has an honest interest in people.[7]

[7] Romaine P. Mackie and Anna M. Engel. *Directors and Supervisors of Special Education in Local School Systems.* Washington, U. S. Government Printing Office (Bulletin No. 13, Office of Education, 1955, 72 p.) and Romaine P. Mackie and Walter E. Snyder. *Special Education Personnel in State Departments of Education,* Washington, U. S. Government Printing Office (Bulletin No. 6, Office of Education, 1956, 49 p.)

TABLE 4.—Specialized Competencies Needed by Teachers of Exceptional Children

[The symbol V indicates an average rating of "very important;" I, "important;" L, "less important;" and N, "not important." The numbers refer to the rank order of importance according to the average evaluation of teachers in the area. For example, under Section A, "Technical Knowledge," the first item, "An understanding of characteristics of children in the special area," was considered "very important;" it was ranked 27th in a list of 103 competency items by teachers of the crippled. Similarly, the second item, "Types of deviations within the special area (such as stuttering, delayed speech, and organic disorders in the area of speech correction)," was considered "important;" it was ranked 45th in a list of 96 items by teachers of the hard of hearing]

CENTRAL IDEA IN COMPETENCY ITEM [1]	Relative importance [2] for teachers in the area of— Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
SECTION A: TECHNICAL KNOWLEDGE										
An understanding of—										
characteristics of children in the special area	----	----	V 27	----	----	V [illegible]	----	----	V [illegible]	V 11
types of deviations within the special area (such as stuttering, delayed speech, and organic disorders in the area of speech correction)	----	----	V [illegible]	----	----	I 45	V [illegible]	I [illegible] I [illegible] I [illegible]	I 77	I [illegible]
the physical and psychological abnormalities attributable to brain injury	----	----	----	----	----	----	----	----	I [illegible]	----
medical, emotional, psychological, social, and educational implications of blindness	V [illegible]	----	----	----	----	----	----	----	----	----
An understanding of medical factors in relation to the special area—										
diagnosis, general plan of medical treatment, and physical limitations	----	----	I [illegible]	----	----	----	----	----	----	----
diagnosis and general plan of medical treatment (for speech disorders having physical basis)	----	----	----	----	----	----	I [illegible]	----	----	----
general plan of medical treatment	I [illegible]	----	----	----	I [illegible]	I [illegible]	----	----	I [illegible]	----
general plan of identification, medical treatment and prognosis	----	I [illegible]	----	----	----	----	----	----	----	----
causes, symptoms, diagnosis, and general plan of medical treatment of—										
cardiac conditions	----	----	----	I [illegible]	----	----	----	----	----	----
tuberculosis	----	----	----	I [illegible]	----	----	----	----	----	----
nephritis, arthritis, asthma, and other special health problems	----	----	----	I [illegible] I [illegible] I 77	----	----	----	----	----	----

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM [1]	Relative importance [2] for teachers in the area of— Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
An understanding of medical factors—*Cont.*										
causes of conditions resulting in the deviation	I$_{[illegible]}$	I$_{[illegible]}$	I$_{74}$	-----	I$_{[illegible]}$	I$_{[illegible]}$	V$_{14}$	-----	I$_{[illegible]}$	-----
conditions which result in loss of vision	-----	I$_{[illegible]}$	-----	-----	-----	-----	-----	-----	-----	-----
current theories and controversies about—										
diagnosis and treatment	-----	-----	-----	-----	I$_{[illegible]}$	I$_{[illegible]}$	-----	-----	-----	-----
causes, prevention, and treatment	I$_{73}$	-----	-----	-----	-----	-----	-----	-----	-----	-----
diagnosis and plan of medical treatment of hearing defects	-----	-----	-----	-----	-----	-----	I$_{78}$	-----	-----	-----
causes of hearing impairment	-----	-----	-----	-----	-----	-----	I$_{[illegible]}$	-----	-----	-----
causes of speech defects	-----	-----	-----	-----	-----	V$_{[illegible]}$	-----	-----	I$_{[illegible]}$	-----
An understanding of social and psychological factors in relation to the special area—										
kinds of social and emotional problems which may arise as a result of the deviation	-----	V$_{4}$	-----	V$_{9}$	-----	-----	-----	-----	-----	V$_{[illegible]}$
effect of different home environments on children in the special area	V$_{[illegible]}$	-----	-----	-----	V$_{21}$	V$_{27}$	-----	I$_{[illegible]}$	V$_{[illegible]}$	V$_{[illegible]}$
effect of environment and training on the growth and development of mentally retarded children	-----	-----	-----	-----	-----	-----	-----	-----	I$_{[illegible]}$	-----
vocational problems arising from partial loss of vision	-----	I$_{[illegible]}$	-----	-----	-----	-----	-----	-----	-----	-----
society's need for, attitudes toward, and opportunities for the gifted	-----	-----	-----	-----	-----	-----	-----	-----	-----	V$_{19}$
relationship of—										
giftedness to socio-economic and cultural background	-----	-----	-----	-----	-----	-----	-----	-----	-----	I$_{[illegible]}$
giftedness to heredity	-----	-----	-----	-----	-----	-----	-----	-----	-----	I$_{72}$
mental retardation to delinquency, crime, and pauperism	-----	-----	-----	-----	-----	-----	-----	-----	I$_{[illegible]}$	-----
mental retardation and heredity	-----	-----	-----	-----	-----	-----	-----	-----	I$_{[illegible]}$	-----
causes of such behavior as stealing, enuresis, and temper tantrums	-----	-----	-----	-----	-----	-----	-----	V$_{13}$	-----	-----
causes of truancy	-----	-----	-----	-----	-----	-----	-----	I$_{[illegible]}$	-----	-----
causes, incidence, characteristics and treatment of juvenile delinquency	-----	-----	-----	-----	-----	-----	-----	I$_{[illegible]}$	-----	-----

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM [1]	Relative importance [2] for teachers in the area of—									
	Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	[illegible]	87	103	85	92	96	86	88	100	72
An understanding of social and psychological factors—*Cont.*										
behavior symptomatic of delinquency	---	---	---	---	---	---	---	V 17	---	---
differences between normal and abnormal behavior at various age levels	---	---	---	---	---	---	---	I 32	---	---
the role of the school in helping mentally retarded pupils reach maturity physically, socially, emotionally as well as intellectually	---	---	---	---	---	---	---	---	V 31	---
the principles of leadership development, including group dynamics	---	---	---	---	---	---	---	---	---	V 23
An understanding of—										
present day issues in the special area	---	---	---	---	---	I 78	I 69	---	---	---
professional literature and reference materials in the special area	I 40	I 50	I 87	I 67	I 58	I 82	I 43	I 84	I 58	I 56
research in the special area	I 54	I 61	I 67 I 64	I 64	I 60	I 66	I 69	---	I 70	V 20
certain specific research studies in the special area (such as the follow-up studies of gifted children)	---	---	---	---	---	---	---	I 67 I 62 I 71	I 69	I 20 I 37 I 40
Knowledge of the history of education in the special area	L 78	I 78	L 100	L 83	I 71	L 84	---	---	I 80	I 63
Knowledge of legal provisions in the special area pertaining to—										
education	I 50	I 69	I 62	I 50	I 57	---	---	I 62	I 63	I 65
vocational training	---	---	---	---	---	---	---	I 68	I 75	---
employment practices	---	---	---	---	---	---	---	---	I 86	---
juvenile delinquency and probation	---	---	---	---	---	---	---	I 66	I 84	---
general welfare	---	---	I 98	---	---	---	---	---	---	---
A knowledge of—										
how children grow and develop (physically, emotionally, socially, intellectually)	---	---	---	---	---	---	V 8	---	---	---
dynamics of human adjustment	---	---	---	---	---	---	V 30	---	---	---
basic physical and psychological needs of man	---	---	---	---	---	---	---	V 7	I 53	---
mores of social and cultural groups in U. S.	---	---	---	---	---	---	---	I 79	---	---
cultural patterns of other societies	---	---	---	---	---	---	---	L 88	---	---

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM[1]	Relative importance[2] for teachers in the area of— Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
A knowledge of—*Cont.*										
anatomy and physiology (related to the handicapping condition)	I [illegible]	I [illegible]	I [illegible]	I [illegible]	{I [illegible] / I [illegible]	I [illegible] / I [illegible]	V [illegible] / I [illegible]	}	----	----
eye hygiene	I [illegible]	V [illegible]	----	----	----	----	----	----	----	----
psychological terminology	----	----	I [illegible]	I [illegible]	----	I 70	I [illegible]	----	----	----
medical terminology	----	----	I [illegible]	I [illegible]	----	I [illegible]	----	----	----	----
hospital terminology	----	----	----	I [illegible]	----	----	----	----	----	----
the phonetic structure of the English language	----	----	----	----	----	V [illegible]	I [illegible]	----	----	----
the grammatical structure of the English language	----	----	----	----	----	I [illegible]	I [illegible]	----	----	----
terminology related to hard of hearing	----	----	----	----	----	----	I [illegible]	----	----	----
terminology related to speech correction	----	----	----	----	----	----	V [illegible]	----	----	----
the physics of sound including fundamental concept of acoustics	----	----	----	----	----	I [illegible]	L 79	----	----	----
the basic theory of light (including correct lighting principles for teachers of partially seeing)	L [illegible]	I [illegible]	----	----	----	----	----	----	----	----
SECTION B: UNDERSTANDING THE CHILD AND HIS DEVIATION										
Ability to—										
recognise and provide for individual differences in each pupil	V [illegible]	----	V [illegible]	V [illegible]	V [illegible]	----	----	----	V 1	----
interpret behavior of the exceptional child in terms of physical, psychological, and environmental factors	----	V 7	----	----	----	----	----	V 16	V 6	V [illegible]
recognise symptoms needing referral to medical or other professional personnel	V [illegible]	V [illegible]	{V [illegible] / V [illegible]	}V [illegible]	----	----	V [illegible]	----	----	----
recognise fatigue in children with crippling and special health conditions	----	----	V [illegible]	V [illegible]	----	----	----	----	----	----
recognise causes of and help alleviate the social and emotional problems of each handicapped child	V [illegible]	----	V 9	V [illegible]	V [illegible]	----	----	----	V [illegible]	----
work with other professional personnel in making a case study	I [illegible]	V [illegible]	V [illegible]	V [illegible]	I [illegible]	V [illegible]	----	----	I [illegible]	----
Understanding the diagnosis and prognosis for each handicapped child	I [illegible]	----	V [illegible]	----	I [illegible]	----	----	----	----	----

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM [1]	Relative importance [2] for teachers in the area of									
	Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	98	86	88	100	72
SECTION C. CURRICULUM ADJUSTMENT AND TEACHING METHODS										
(a) *Creating a Favorable Classroom Environment*										
Ability to create a classroom atmosphere free from pressure and conducive to good mental health	V, 1	V, 1	V, 1	V, 1		V, 1	V, 1			V, 1
Knowledge of techniques adaptable for classroom situations for relieving tension								V, 1		
Ability to work with crippled children without using pressure			V, 1							
Understanding the benefits of an informal classroom atmosphere to personality development in the maladjusted child								V, 11		
Ability to create an environment in which children participate in group activities									V, 11	V, 1
Ability to motivate children with crippling and special health conditions			V, 11	V, 1						
Skill in establishing social control that is neither over-restrictive nor over-protective								I, 11		
Skill in using external social control when necessary								I, 11		
(b) *Providing for Individual Differences*										
Ability to recognize and provide for individual differences by										
developing curriculum, making special provisions for each child's unique abilities or handicapping conditions			V, 1		V, 1			V, 1	V, 1	V, 1
bringing pupil-selected activities into the curriculum		I, 11		V, 11						V, 11
understanding advantages of providing experiences in which the severely maladjusted child can be successful								V, 1		
avoiding identical, stereotyped demands on severely maladjusted pupils								V, 11		
understanding advantages of flexibility of program to permit individual adjustment of the severely maladjusted child								V, 1		

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM[1]	Relative importance[2] for teachers in the area of— Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
Ability to recognize and provide for individual differences by—*Cont*										
planning activities in keeping with medical instructions for each pupil			$V_{[illegible]}$	V_{14}						
adjusting to interruptions in child's day for therapy, rest, treatment			V_{17}	V_{19}						
understanding the educational implications of the deviation, such as the age of onset of deafness or blindness or different kinds of crippling conditions	V_{18} V_{70} V_{79}	I_{44}	$V_{[illegible]}$ V_{45}		V_{9} $V_{[illegible]}$	V_{8} V_{13} I_{44}			$I_{[illegible]}$	V_{8} I_{30}
using teaching techniques with brain injured in accordance with implications of different types of injury			$V_{[illegible]}$							
planning program to minimize eye fatigue		V_{4}								
bringing experiences close to the blind child	$V_{[illegible]}$									
developing a curriculum to meet the needs of each pupil in a rapidly changing group			$I_{[illegible]}$							
adapting materials and methods used in teaching the normal to needs of the partially seeing		V_{16}								
(c) *Developing Pupil Skills*										
Ability to develop additional and compensatory pupil skills needed because of the deviation:										
health habits in relation to the handicap (such as eye hygiene to the partially seeing)		V_{9}				V_{30}				
acceptable patterns of personal hygiene and behavior	V_{1}				V_{4}			I	V_{9}	
health education	V_{21}	$V_{[illegible]}$	V_{43}	V_{15}	V_{10}	I_{64}		$I_{[illegible]}$	V_{7}	$I_{[illegible]}$
sense of touch and hearing to analyze situations	V_{7}									
use of visual clues to analyze situations					$V_{[illegible]}$	V_{16}				
speech skills (such as conversation or telephone use)						$V_{[illegible]}$				
problem solving and independent research										V_{4} V_{13}
use of library resources										V

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM [1]	Relative importance [2] for teachers in the area of—									
	Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
Ability to develop additional and compensatory pupil skills—*Cont.*										
reading	...	...	...	...	...	...	...	...	...	V [88]
skill in use of aids and appliances such as talking books and hearing aids	V [19]					V [88]				
Specialized ability to—										
teach braille to the visually handicapped	V [86] V [87]	L [87]								
write braille with ease	I [88]									
develop and prepare work sheets and experience stories in braille	I [86]									
write clearly		I [88]			V [88]					
do lettering		I [88]								
prepare teaching materials in large type		V [88]								
teach touch typing to the visually handicapped	I [86]	I [86]	I [100]							
touch type	I [78]	I [87]	...	...	...	...	...	...	...	...
teach writing with pen or pencil to the blind	I [87]	...	...	...	...	...	...	...	...	...
teach—										
auditory training	...	...	...	...	V [87]	...	I [88]	...	...	...
speech reading (lip reading)	...	...	...	...	I [88]	V [1]	I [86]	...	...	...
speech development	...	...	...	...	V [8]	(V [86] V [88])	...	...	...	...
language development	...	...	...	...	V [1]	V [88]	...	...	V [86]	...
use the visual speech technique (of Bell laboratories)	...	...	...	...	L [86]	L [88]	...	...	...	...
use the Strauss technique	...	...	...	...	...	...	...	...	I [86]	...
read lips	...	...	...	...	L [87]	L [88]	L [81]	...	...	...
know different techniques of lip reading	...	...	...	...	...	...	I [71]	...	...	...
use diacritical marks	...	...	...	...	...	...	L [88]	...	...	...
use International phonetic system	...	...	...	...	...	...	I [77]	...	...	...
use "manual" alphabet in teaching	...	...	...	...	L [88]	...	...	...	...	...
use "sign" language in teaching	...	...	...	...	N [88]	...	...	...	...	...

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM [1]	Relative importance [2] for teachers in the area of—									
	Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
Special ability in—										
one of the liberal arts and sciences										V m
fine arts										I m
one of the industrial arts or crafts										L m
Knowledge of—										
current events, world affairs, and political philosophies										V m
a broad range of books and authors										V m
a broad range of liberal arts and sciences										I m
a broad range of music and musicians										I m
Knowledge of—										
a broad range of art and artists										I m
sociology and theories of social change										I m
a broad range of industrial arts and crafts										I m
(d) *Providing for Social Growth*										
Ability to provide experiences for social growth by—										
building curriculum around themes socially meaningful to the handicapped	V m		V m		V m				V m	
providing a wide range of social experiences			V m		V m				V m / V m	
providing opportunities for the handicapped to work and play with normal children	V s	V s	I m	I m	V m	V m			V m	
assisting with recreation programs and clubs for the handicapped			I m / I m	I m / L m	I m				I m	
helping crippled children develop a hobby suited to their abilities			I m							
guiding children into hobbies and clubs		V m						V m		
using games and play experiences to foster social development in child with special health problems				I m						
fostering social responsibility								V s		V s
fostering the leadership ability of the gifted										V s

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM [1]	Relative importance [2] for teachers in the area of—									
	Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
Ability to play a piano and direct a rhythm band	I 77	-----	I 84	-----	L 84	L 86	{L 88 / L 88}	-----	-----	-----
Ability to provide additional curriculum experiences needed because of the deviation:										
enriching experiences to compensate for lack of first-hand experiences due to hospitalization or illness	-----	-----	{V 14 / V 14}	V 7	-----	-----	-----	-----	-----	-----
vicarious experiences through story-telling	-----	V 33	I 77	I 77	-----	-----	-----	-----	-----	-----
a wide range of visual experiences for deaf children	-----	-----	-----	-----	V 11	-----	-----	-----	-----	-----
choral speaking, public speaking, puppetry, for the speech handicapped	-----	-----	-----	-----	-----	-----	L 78	-----	-----	-----
foreign languages for the gifted	-----	-----	-----	-----	-----	-----	-----	-----	-----	I 88
Ability to provide out-of-classroom experiences by—										
planning for necessary adjustments in making field trips	V 18	-----	I 76	I 74	I 68	I 76	-----	-----	I 68	-----
using community resources	-----	-----	-----	-----	-----	-----	-----	I 88	V 18	-----
using out-of-school situations whenever possible	-----	-----	-----	-----	-----	-----	-----	-----	V 38	-----
planning assembly programs suitable for deaf children	-----	-----	-----	-----	I 78	-----	-----	-----	-----	-----
(e) *Other Teaching Adaptations*										
Knowledge and ability in tool subjects—										
using phonetic attack in reading	-----	I 60	-----	-----	-----	-----	-----	-----	-----	-----
teach reading by wide range of methods	-----	-----	-----	-----	-----	-----	-----	-----	V 8	-----
provide remedial reading	-----	-----	-----	-----	-----	-----	-----	I 64	-----	-----
eye movements in reading	-----	I 87	-----	-----	-----	-----	-----	-----	-----	-----
teach spelling by various methods	-----	-----	-----	-----	-----	-----	-----	-----	I 87	-----
teach arithmetic around concrete situations	-----	-----	-----	-----	-----	-----	-----	-----	V 16	-----
Ability to provide experiences in subject matter fields:										
physical education (including orientation and travel for the blind)	V 23	I 70	-----	-----	I 39	-----	-----	I 21	V 38	I 40

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM [1]	Relative importance [3] for teachers in the area of— Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
Ability to provide experiences in subject matter fields—*Cont.*										
music	I [illegible]	I 60	I 58	I 66	I 64	I [illegible]	----	I 50	I 60	I 57
dramatic arts	I 54	I 75	I [illegible]	I 67	I 53	I 66	----	I 67	I 74	I 55
arts and crafts	I 47	I 50	I 73	I 44	I 60	I 77	----	I 51	I 59	I 65
fine arts	I 60	I 71	I 62	I [illegible]	I 61	I 74	----	I 60	I [illegible]	I 63
industrial arts	I 71	L 56	I 57	I 75	I 56	I 71	----	I 52	I 56	L 70
domestic arts	I 54	L 53	I 81	I [illegible]	I 67	I [illegible]	----	I 69	I 66	L 71
Ability to teach—										
a multi-grade class	----	V 22	V 31	----	I 70	----	----	----	V 26	----
a multi-grade class at the elementary level	----	----	----	I 40	----	----	----	----	----	----
a multi-grade class at the elementary and secondary level	----	----	----	I 61	----	I 73	----	----	----	----
Knowledge of specialized teaching methods and curriculum at the—										
elementary level only	----	----	----	----	----	----	----	I 56	----	I 51
secondary level only	----	----	----	----	----	----	----	L 57	----	I 50
elementary *and* secondary level	I 57	----	----	----	----	V 2	----	I 66	I 71	I 30
Ability to carry on a speech correction program at the—										
elementary level only	----	----	----	----	----	----	V 4	----	----	----
secondary level only	----	----	----	----	----	----	I 52	----	----	----
both elementary and secondary levels	----	----	----	----	----	----	I 65	----	----	----
A knowledge of—										
current methods of teaching in the special area	----	----	----	----	----	----	V 10	----	I 60	----
principals of learning applied to teaching the mentally retarded	----	----	----	----	----	----	----	----	V 15	----
curriculum development for the gifted	----	----	----	----	----	----	----	----	----	V 25
SECTION D: SPECIAL EQUIPMENT AND MATERIALS										
Ability to select and use specialized equipment such as materials for lip-reading and for speech correction	----	----	I [illegible]	----	----	V 9	{V 17, V 21}	----	V 3	----

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM[1]	Relative importance[3] for teachers in the area of— Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
Knowledge of—										
types, sources, and uses of specialized teaching equipment and materials (such as large-type books for the partially seeing)	V [illegible]	V 14	I 84	I [illegible]	-----	V [illegible]	I [illegible]	I [illegible]	I [illegible]	-----
types, sources, and uses of such equipment as cut-out tables and relaxation chairs	-----	-----	I [illegible]	-----	-----	-----	-----	-----	-----	-----
types, sources, and uses of self-help and corrective equipment	-----	-----	I [illegible]	-----	-----	-----	-----	-----	-----	-----
sources of procurement of special materials for deaf children	-----	-----	-----	-----	I [illegible]	-----	-----	-----	-----	-----
materials useful in teaching lip-reading	-----	-----	-----	-----	V 18	-----	-----	-----	-----	-----
arts and crafts media for partially seeing children	-----	I [illegible]	-----	-----	-----	-----	-----	-----	-----	-----
type faces and sizes of print	-----	I [illegible]	-----	-----	-----	-----	-----	-----	-----	-----
toys, games, recreational equipment suitable for use with children who have special health problems	-----	-----	-----	I [illegible]	-----	-----	-----	-----	-----	-----
Ability to use toys as educational tools	-----	-----	V [illegible]	-----	-----	-----	-----	-----	I [illegible]	-----
Competence in hearing aids—										
skill in giving "first aid" to hearing aids	-----	-----	-----	-----	I 71	I [illegible]	L [illegible]	-----	-----	-----
knowledge of factors involved in fitting hearing aids	-----	-----	-----	-----	I 75	-----	-----	-----	-----	-----
knowledge of basic theory of electronics as applied to amplifiers and hearing aids	-----	-----	-----	-----	L [illegible]	I [illegible]	-----	-----	-----	-----
Ability to use audio-visual equipment—										
audio aids (such as group hearing aids for the deaf)	I [illegible]	-----	-----	-----	I [illegible]	V [illegible]	I [illegible]	-----	-----	-----
audio-visual aids (such as movie projectors and tape recorders)	-----	I [illegible]	V [illegible]	I [illegible]	-----	-----	-----	I [illegible]	I [illegible]	-----
visual aids (such as film strip projectors)	-----	-----	-----	-----	I [illegible]	I [illegible]	L [illegible]	-----	-----	-----
tape and voice recorders	-----	-----	-----	-----	-----	I [illegible]	I [illegible]	-----	-----	-----
Ability to evaluate physical environment of classroom, including lighting	-----	V [illegible]	-----	-----	-----	-----	-----	-----	-----	-----
Ability to make effective use of classroom lighting, furniture arrangement, etc.	-----	V [illegible]	-----	-----	-----	V [illegible]	I [illegible]	-----	-----	-----

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM [1]	Relative importance [2] for teachers in the area of—									
	Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
SECTION E: COUNSELING AND GUIDING										
The ability to counsel children in the special area concerning their—										
personal attitudes toward their handicap	V 6	V 12	V 7	V 6	-----	V 12	-----	-----	-----	-----
personal attitudes	-----	-----	-----	-----	-----	-----	-----	V 6	-----	-----
emotional problems and personal attitudes	-----	-----	-----	-----	V 10	-----	-----	-----	V 14	-----
emotional and social problems	-----	-----	-----	-----	-----	-----	I 25	-----	-----	-----
educational problems	-----	V 15	V 15	V 20	V 20	V 23	-----	I 44	I 15	-----
social problems	V 16	V 22	V 20	V 23	V 14	V 20	-----	V 16	V 13	-----
limitations and potentialities	-----	-----	V 16	I 26	-----	V 29	I 47	-----	-----	-----
educational and vocational problems	V 25	-----	-----	-----	-----	-----	I 31	-----	-----	-----
vocational problems and life goals	V 20	V 29	V 23	I 23	I 20	V 23	-----	I 20	I 23	-----
The ability to carry out an educational, vocational, and social guidance program for the gifted	-----	-----	-----	-----	-----	-----	-----	-----	-----	V 23
Specific counseling skills in—										
intensive therapeutic counseling	-----	-----	-----	-----	-----	-----	I 23	I 14	-----	-----
play therapy	-----	-----	-----	-----	-----	-----	I 47	-----	-----	-----
occupational placement and post-school follow-up	-----	-----	-----	-----	-----	-----	-----	I 32	-----	-----
vocational guidance	-----	-----	-----	-----	-----	-----	-----	-----	I 34	-----
accepting role of parent figure	-----	-----	I 23	-----	-----	-----	-----	I 23	-----	-----
developing self-imposed social control in socially maladjusted pupils	-----	-----	-----	-----	-----	-----	-----	V 9	-----	-----
developing self-sufficiency in mentally retarded pupils	-----	-----	-----	-----	-----	-----	-----	-----	V 9	-----
helping shy children develop into well-adjusted individuals	-----	V 9	-----	-----	-----	-----	-----	-----	-----	-----
inspiring children to self-education for overcoming their difficulties	-----	-----	-----	-----	-----	V 9	V 7	-----	-----	-----
Knowledge of various psychotherapeutic techniques	-----	-----	-----	-----	-----	-----	I 23	I 23	-----	-----
Ability to work with normal children in helping them to accept the child with a deviation	-----	-----	I 10	-----	-----	I 23	I 23	I 23	-----	-----

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM [1]	Relative importance [2] for teachers in the area of—									
	Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
Ability to interpret educational programs, problems, and abilities of deaf children to normally hearing children					I_{84}					
SECTION F: TESTS AND RECORDS										
Ability to keep and use, in the special area—										
individual, cumulative records of children	I_{44}	I_{46}	V_{34}	I_{29}	I_{34}	I_{41}		I_{49}	V_{27}	I_{44}
anecdotal reports								I_{46}		
reports and case histories							I_{57}			
Ability to draw educational interpretations from—										
medical reports (such as ophthalmological reports on blind children)	I_{42}	V_{31}	I_{36}	I_{32}	I_{36}	V_{43}	V_{31}	I_{37}	I_{47}	I_{49}
audiograms					I_{32}	V_{39}	I_{46}			
psychological reports	I_{38}	V_{16}	I_{30}	I_{31}	I_{30}	V_{32}	I_{34}	V_{16}	V_{30}	I_{17}
interpreted results of individual tests of mental ability								V_{70}		
interpreted results of projective tests								[illegible]		
interpreted results of diagnostic tests of reading and arithmetic disability								I_{28}		
reports of social workers	I_{30}	V_{38}	I_{60}		I_{31}	I_{50}	I_{56}	I_{30}	I'_{36}	I_{67}
case records and histories				I_{41}	I_{31}			V_{11}	V_{38}	
Ability to administer—										
informal tests of visual acuity	I_{73}									
screening tests of visual acuity		I_{73}								
informal tests of hearing efficiency	I_{69}									
screening tests of hearing		I_{58}				I_{60}	I_{50}			
pure-tone audiometric test					I_{78}	I_{67}	I_{62}			
speech-hearing tests						I_{65}	I_{65}			
diagnostic speech tests							V_{11}			
Knowledge of methods of testing vision and the various instruments used	L_{81}									
Knowledge of methods of testing hearing and the various instruments used	L_{86}				I_{60}					

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM [1]	Relative importance [2] for teachers in the area of—									
	Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
Ability to administer to children in the special area—										
individual tests of mental ability	I 88	I 79	I 88	I 79	I 77	I 89	-----	I 88	L 88	I 88
group intelligence tests	-----	-----	L 100	L 88	-----	I 89	-----	I 88	L 89	I 87
group non-language tests of mental ability	-----	-----	-----	-----	L 88	I 89	-----	-----	-----	-----
aptitude tests	I 88	I 77	-----	-----	-----	-----	-----	-----	-----	-----
group interest and special aptitude tests	-----	-----	-----	-----	-----	-----	-----	I 88	I 88	I 88
group tests of personality and social and emotional adjustment	-----	-----	-----	-----	-----	-----	-----	I 84	I 88	-----
social maturity scales	-----	-----	-----	-----	-----	-----	-----	I 89	L 88	-----
sociometric tests	-----	-----	I 88	I 79	-----	-----	-----	I 88	L 88	I 88
projective tests	-----	-----	-----	-----	-----	-----	-----	I 88	L 100	-----
group achievement tests	I 78	I 78	L 100	I 78	I 78	I 81	-----	I 78	I 89	I 88
diagnostic tests of reading and arithmetic disability	-----	-----	-----	-----	I 88	-----	-----	I 88	I 88	-----
Ability to devise informal tests of achievement for children who are socially maladjusted	-----	-----	-----	-----	-----	-----	-----	I 76	-----	-----
Knowledge of adapted evaluative materials for use with partially seeing children	-----	I 88	-----	-----	-----	-----	-----	-----	-----	-----
SECTION G: WORKING WITH ADULTS AND ORGANIZATIONS										
Ability to work with other school personnel—										
developing an integrated program for each child in the special area	V 86	{V 11 V 8}	-----	-----	V 88	V 87	{V 88 I 88}	-----	V 88	-----
making the special program for handicapped children part of the total school program	-----	-----	-----	-----	-----	V 86	-----	-----	I 88	-----
serving as consultant to regular classroom teachers	-----	V 88	-----	-----	-----	-----	V 8	-----	-----	-----
helping classroom teacher when child transfers from one school situation to another	-----	-----	I 88	V 88	-----	-----	-----	-----	-----	-----
interpreting to classroom teachers findings of speech and hearing tests	-----	-----	-----	-----	-----	-----	V 88	-----	-----	-----
working with school administrators and architects in securing classroom and special facilities	I 79	I 88	I 88	L 88	L 88	I 88	I 76	-----	I 88	-----

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM [1]	Relative importance [2] for teachers in the area of— Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
Ability to work with other school personnel—*Cont.*										
working with administrators for satisfactory teaching accommodations	-----	-----	-----	-----	-----	-----	V	-----	-----	-----
Knowledge of organization and operation of public school systems	-----	-----	-----	-----	-----	-----	I	-----	-----	-----
Understanding the relationship of a speech correction program to the total school program	-----	-----	-----	-----	-----	-----	V	-----	-----	-----
Ability to work with other professional personnel—										
as a member of a professional team	-----	-----	V	-----	-----	V	V	V	-----	I
by cooperating in general plan of treatment with medical personnel	-----	-----	V	V	-----	-----	-----	-----	-----	-----
in vocational rehabilitation agencies	-----	-----	I	I	-----	I	-----	I	-----	-----
Understanding the services rendered by—										
medical specialists	-----	I	V	I	-----	-----	V	-----	-----	-----
physical therapists	-----	-----	V	-----	-----	-----	-----	-----	-----	-----
occupational therapists	-----	-----	V	I	-----	-----	-----	-----	-----	-----
speech correctionists	-----	-----	V	-----	-----	-----	-----	-----	-----	-----
psychologists	-----	-----	V	I	-----	-----	-----	-----	-----	-----
social workers	-----	-----	I	I	-----	-----	-----	-----	-----	-----
recreation leaders	-----	-----	-----	I	-----	-----	-----	-----	-----	-----
non-medical specialists, such as psychologists and social workers	-----	-----	-----	-----	-----	-----	V	-----	-----	-----
Understanding the purposes and services of—										
community agencies and resources (such as clinics and vocational rehabilitation agencies	{I I}	-----	{I I}	I	I	V	I	I	I	{I I I}
national agencies concerned with exceptional children (such as the Council for Exceptional Children)	I	I	I	I	I	I	I	I	I	I
Ability to work with parents by—										
helping them obtain information from clinics and agencies	-----	I	V	I	V	V	-----	I	I	-----
helping them obtain medical advice and care	-----	-----	-----	-----	-----	-----	V	-----	-----	-----

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM [1]	Relative importance [2] for teachers in the area of—									
	Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
Ability to work with parents by—*Cont.*										
cooperating with them in general plan of medical treatment	----	----	V 9	V 6	----	----	----	----	----	----
helping them maintain good health habits in their child	----	----	----	V 23	----	----	----	----	----	----
helping them when child transfers from one school situation to another	----	----	V 21	V 23	----	----	----	----	----	----
planning for continuous educational process	----	----	----	----	----	V 17	V 23	----	----	----
interpreting to them the results of speech and hearing tests	----	----	----	----	----	----	V 18	----	----	----
visiting the homes of mentally retarded pupils to gain parental support and cooperation	----	----	----	----	----	----	----	----	V 11	----
cooperating in parent-school activities	I 22	I 20	I 18	----	I 20	I 27	----	----	----	----
maintaining a sympathetic but realistic appreciation of parent's fears over child's condition	----	----	----	V 23	----	----	----	----	----	----
helping them accept child's giftedness and assist them in developing a well adjusted child	----	----	----	----	----	----	----	----	----	V
helping them understand their child's speech problems and personal attitudes	----	----	----	----	----	----	V 8	----	----	----
helping them with social and emotional problems which may arise from having a handicapped child in the family	----	V 17	----	----	----	----	----	----	----	----
helping them with school placement	I 11	V 20	V 23	V 24	V 23	V 23	----	----	----	----
helping them with their child's social and emotional problems	----	----	----	----	V 21	----	----	----	I 22	----
helping them with occupational placement	I 22	I 23	I 20	I 22	V 23	V 21	----	----	I 18	----
helping them with their child's limitations and potentialities	V 17	V 10	V 19	V 17	V 17	V 8	----	----	I 20	----
Ability to interpret special programs and the special needs and abilities of exceptional children to—										
the general public, regular school personnel, and others	----	V 17	I 22	----	----	V 23	----	I 23	----	V 23
the general public	I 23	----	----	----	I 23	----	V 20	----	V 21	----
regular school personnel	I 23	----	----	----	I 24	----	----	----	V 23	----

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM [1]	Relative importance [2] for teachers in the area of—									
	Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
Ability to interpret special programs to —*Cont.*										
school administrators	I [68]									
related professional personnel									I [70]	
non-professional school workers, such as bus drivers	I [68]				I [87]				I [70]	
SECTION H: ADMINISTRATION AND ORGANIZATION OF PROGRAMS										
Ability to administer an educational program for children in the special area			I [88]	L [84]	L [89]	I [84]			[illegible]	
Ability to plan an effective speech correction schedule							V [9]			
Ability to evaluate educational personnel, programs, and materials		I [68]								
Knowledge of different ways of providing and organising educational programs in the special area		I [84]		I [87]			I [87]	I [88]		V [88]
Ability to contribute to community leadership in establishing an educational program for children in the special area	I [68]	I [88]	I [88]	I [88]	I [74]	I [68]	V [89]	I [88]		
Skill in identifying children needing special help—										
recognising signs and symptoms of vision impairment in the general school population		I [68]								
knowing and using survey and referral procedures to find pupils with speech defects							{V [89] V [88]}			
identifying various types of speech difficulties						V [89]				
differentiating between maladjustment and mental retardation								V [4]	V [88]	
SECTION I: TEACHING IN MORE THAN ONE AREA OF EXCEPTIONALITY										
Ability to use accepted special methods in teaching children with multiple atypical conditions			V [68]	I [88]	I [68]				I [88]	
Knowledge of methods of teaching children who are—										
Socially and emotionally disturbed	V [68]	V [88]	V [88]	V [4]	I [88]	I [68]			I [68]	

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM [1]	Relative importance [2] for teachers in the area of—									
	Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
Knowledge of methods of teaching children who are—*Cont.*										
Mentally retarded	I 66	I 71	I 71	I 66	I 68	I 68	....	I 68	.....	.....
Gifted	I 66	I 74	I 68	I 68	I 70	I 68	.....	.....	.....	.....
Blind	.....	I 66	.....	.....	I 66	.....	.....	.....	.....	.....
Partially sighted	I 66	.....	I 68	I 70	.....	.....	.....	.....	.....	.....
Deaf	.....	.....	.....	.....	.....	I 68 I 70	.....	.....	.....	.....
Hard of hearing	.....	.....	I 66	I 71	.....	.....	.....	.....	.....	.....
Speech handicapped	.....	.....	.....	.....	.....	.....	.....	.....	I 66	.....
Crippled (including cerebral palsied)	.....	.....	.....	I 66	.....	.....	.....	.....	.....	.....
Cerebral palsied	.....	I 68	.....	.....	I 68	I 66	.....	.....	.....	.....
Aphasic	.....	.....	.....	.....	.....	I 66	.....	.....	.....	.....
Ability to carry on a speech correction program—										
under the direction of a speech correctionist	.....	.....	V 67	.....	.....	.....	.....	.....	I 68	.....
with only the occasional help of a speech correctionist	.....	.....	I 70	.....	.....	.....	.....	.....	I 68	.....
Understanding the education and psychology of the various types of exceptional children	.....	.....	.....	.....	.....	.....	I 66	I 66	I 66	.....
SECTION J: EDUCATION OF NORMAL CHILDREN										
Knowledge of methods and techniques of teaching normal children	V 66	V 66	V 66	V 66	I 66	V 66	.....	I 66	.....	I 66
Knowledge and understanding of philosophical concepts underlying present-day education	.....	.....	.....	.....	.....	.....	I 66	.....	.....	.....
Ability to serve as a regular classroom teacher	.....	.....	.....	.....	.....	.....	L 66	.....	.....	.....
Knowledge of classroom teaching methods at the—										
nursery and kindergarten level	.....	.....	.....	.....	.....	.....	I 66	.....	.....	.....
elementary level	.....	.....	.....	.....	.....	.....	I 67	.....	.....	.....
secondary level	.....	.....	.....	.....	.....	.....	I 73	.....	.....	.....

See footnotes at end of table.

TABLE 4.—Specialized Competencies—*Cont.*

CENTRAL IDEA IN COMPETENCY ITEM [1]	Relative importance [2] for teachers in the area of—									
	Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items	82	87	103	85	92	96	86	88	100	72
SECTION K: PERSONAL CHARACTERISTICS										
Ability to—										
remain objective, while retaining sympathy and sensitivity	----	----	V 5	V 10	----	----	----	----	V 9	----
accept children without overt negative reaction	----	----	V 9	----	----	----	----	----	----	----
accept and benefit from children's contributions	----	----	----	----	----	----	----	----	----	V 11
tolerate anti-social behavior particularly when directed toward authority	----	----	----	----	----	----	----	I 11	----	----
win the trust and approval of children	----	----	----	----	----	----	----	----	V 11	----
see normally	----	V 11	----	----	----	----	----	----	----	----
hear normal speech clearly (with or without a hearing aid)	----	----	----	----	----	V 11	V 11	----	----	----
enunciate clearly and pronounce correctly	V 11	V 11	----	----	V 9	V 7	V 9	----	----	----

[1] The original competency items have been generalized to some extent in order to present this summary table on findings in all ten areas of exceptionality. To make specific application of the data in any one area, the reader may refer to the appropriate area publication which includes a list of competencies arranged in rank order of importance according to the evaluations of the teachers.

[2] The rank order numbers also serve as an item identification number in the original list of competencies as reported in table 1 of each area publication. See appendix C, page 113, for a description of the statistical procedures used. Area columns do not total since a few items included more than one idea and appear more than once in the table. Because of differences from one area list to another, only rough comparisons can be made.

TEACHER COMPETENCIES: PROFICIENCY RATED LOWER THAN IMPORTANCE

In this overview report of opinions about competencies, attention must be called to one other finding. Special teachers in all ten areas of exceptionality rated the list of specific competencies summarized above not only for "importance" but also for their own "proficiency" in using these competencies in their daily work with exceptional children. On some items the teachers as a group rated their proficiency higher than they rated the importance of the competency. In other instances the reverse was true.[8]

Of special interest are those competencies which received very important ratings and on which the teachers' evaluations of proficiency were significantly lower. These, together with rank order, are given in table 5, for each of the 10 areas. As can be seen from these lists, teachers expressed some lack of proficiency in competencies of high importance, such as ability to help and guide exceptional children and the ability to work with other adults and organizations. They also showed lack of satisfaction with proficiency in many highly valued competencies of technical importance in their area of specialization. The emphasis on inadequate ability to deal with the social and emotional problems of exceptional children pervaded these evaluations.

Reasons for these differences in the ratings of importance and self-competence are open to speculation; it is not within the scope of this study to explain these differences. The most significant thing about them is that the opinions came from "superior" teachers themselves. This suggests that there may be an even greater "gap" among teachers in general. These data provide one more clue to professional needs in both preservice and inservice education.

[8] Each of the ten sets of teacher competencies were statistically analyzed in two ways: (1) to find out whether each *individual* teacher tended to rate himself "good" on the skills and abilities he had rated as "very important", and (2) to see whether there were any items on which there was a statistically significant difference between the importance and proficiency ratings of the teachers, *as a group*. In general there was found to be a rather high but varying relationship between the rating assigned by the teachers on the basis of the importance of a competency and the proficiency they believed they possessed in it. In other words, teachers showed only a *moderate* tendency to rate as important those items in which they felt individually proficient. On some items the teachers as a group rated their proficiency higher than they rated the importance of the competency. In other instances the reverse was true. The method used to determine statistically significant differences is given in appendix C of the area bulletins. See list inside back cover.

TABLE 5.—"Very Important" Competencies on Which Teachers' Self-Ratings of Proficiency Were Significantly Lower Than Their Ratings of Importance, by Area of Exceptionality [1]

Rank order of importance [2]	COMPETENCIES	Rank order of proficiency [3]
	BLIND (82 items in area list)	
3	A knowledge or understanding of— the significance of the possible effect of the socio-economic conditions and emotional climate of the home on the blind child's social, emotional, and intellectual development.	15
8	the medical, emotional, psychological, social, and educational implications of blindness	25
15	methods and techniques of teaching the socially and emotionally disturbed child.	48
23	The ability— to provide blind pupils with opportunities in the curriculum for experience in physical education (skill in orientation and travel including recreational activities)	58
30	to help blind children with respect to their vocational problems and life goals	54
	PARTIALLY SEEING (87 items in area list)	
4	A knowledge or understanding of— social and emotional problems arising from partial loss of vision	25
29	The ability— to counsel partially seeing children with respect to their vocational problems and life goals.	55
34	to develop interest and guide partially seeing pupils into hobbies, diversional interests, and clubs suited to their abilities.	57
35	A knowledge or understanding of— the methods or techniques of teaching the socially or emotionally disturbed child.	60
	CRIPPLED (108 items in area list)	
9	The ability— to detect the crippled pupil's worries, and to plan courses of action aimed at alleviating these.	83
25	to use teaching techniques with brain-injured children in keeping with our present knowledge of the implications of different types of injury.	72
32	to help crippled children with their vocational problems and life goals.	77
35	A knowledge or understanding of— methods and techniques of teaching the socially and emotionally disturbed child.	71
43	The ability— to use accepted special teaching methods and procedures in teaching crippled children with multiple atypical conditions, such as those who are mentally retarded, gifted, or acoustically handicapped.	70
45	A knowledge or understanding of— the difference between teaching-learning processes of the crippled with orthopedic handicaps and those with neurological handicaps.	73

See footnotes at end of table.

TABLE 5.—"Very Important" Competencies—*Cont.*

Rank order of importance [1]	COMPETENCIES	Rank order of proficiency [1]
	SPECIAL HEALTH PROBLEMS (85 items in area list)	
3	A knowledge or understanding of — the social and emotional problems which may arise from epilepsy, prolonged illness or cardiac limitation	31
4	The ability to detect the child's worries and emotional problems and to plan courses of action aimed at alleviating these	19
5	A knowledge or understanding of — methods and techniques of teaching the socially and emotionally disturbed child	32
7	The ability — to bring demonstrations and enriching materials to these children in order to compensate for lack of first-hand experiences due to hospitalization or illness.	21
9	to devise ways of motivating pupils who may have become apathetic	37
	DEAF (92 items in area list)	
2	The ability to teach speech development and voice improvement to deaf pupils by one or more methods, such as the elements, syllables, whole words, kinesthetic, and auditory methods	35
5	to recognise possible causes of social, educational, and emotional maladjustments of deaf children, and to participate in planning courses of action aimed at alleviating these	22
8	to organise and develop a curriculum for deaf children on the basis of their individual needs and potentialities	45
9	to help parents get information which will assist them in facing the problems arising from having a deaf child in the family	27
10	to counsel deaf children with respect to their emotional problems and personal attitudes toward their handicap.	29
25	to participate with other members of a professional team in helping parents with problems related to their deaf child's occupational placement.	67
27	to teach auditory training by one or more methods, such as Goldstein's Acoustic Technique, and the Whitehurst Method.	55
	HARD OF HEARING (96 items in area list)	
3	The ability— to inspire hard of hearing pupils to self-education for overcoming their difficulties, and to adjust to a hearing world.	24
6	to help parents understand their child's limitations and potentials.	23
17	to develop for each hard of hearing pupil an educational program which is a total continuous process involving the parents and regular school personnel.	54
28	to teach the hard of hearing pupil to use and service his hearing aid.	55
41	to help parents understand occupational placement.	69

See footnotes at end of table.

TABLE 5.—"Very Important" Competencies—*Cont.*

Rank order of importance [1]	COMPETENCIES	Rank order of proficiency [2]
	SPEECH HANDICAPPED (86 items in area list)	
3	The ability— to help parents understand their child's speech problems and personal attitudes.	15
5	A knowledge or understanding— of how the child grows and develops physically, emotionally, socially and intellectually.	26
7	The ability— to inspire pupils with speech handicaps to self-education for overcoming their difficulties.	29
14	A knowledge or understanding— of current information on causes (emotional and physical) of various types of speech handicaps.	24
23	The ability— to cooperate in developing for each pupil with a speech or hearing problem an educational program which is a total continuous process involving the parents, regular school personnel and the speech correctionists.	31
25	A knowledge or understanding— of the dynamics of human adjustment.	48
29	of services rendered by such medical specialists as physicians, pediatricians, endrocrinologists, neurologists, otologists, otolaryngologists, psychiatrists, oral surgeons, orthodontists.	58
31	The ability— to make interpretations from information supplied by otologists, otolaryngologists, oral surgeons, orthodontists, and other medical specialists.	47
	SOCIALLY MALADJUSTED (88 items in area list)	
1	A knowledge or understanding of— techniques adaptable to classroom situations for relieving tensions and promoting good mental health.	11
2	the advantages of providing experiences in which pupils can be successful.	7
	MENTALLY RETARDED (100 items in area list)	
5	The ability— to interpret the behavior of mentally retarded pupils in terms of physical, psychological and environmental factors.	22
6	to help mentally retarded pupils develop self-sufficiency in daily living and in planning for the future.	20
12	to differentiate between social and emotional maladjustment and mental retardation.	42
20	to provide a wide range of experiences in community living for mentally retarded pupils.	52
24	to analyze the factors which have contributed from infancy to the language development of each mentally retarded pupil, to evaluate continuously his level of development and to provide appropriate learning experiences at this level.	58

See footnotes at end of table.

TABLE 5.—"Very Important" Competencies—*Cont.*

Rank order of importance [2]	COMPETENCIES	Rank order of proficiency [3]
	GIFTED (72 items in area list)	
9	A knowledge or understanding of— individual differences in special interests, abilities and talents of gifted pupils, and their implications for educational planning.	21
13	the effect of the emotional climate of the home on the gifted child's growth, development and attitudes.	28
18	principles of leadership development and human relations, including a knowledge of group dynamics.	39
20	The ability— to carry out an educational, vocational, and social guidance program for the gifted.	50

[1] These competencies received an average rating of "very important" by teachers in the respective areas and the ratings of importance were significantly greater than the self-ratings of proficiency. See Appendix C, page 113, for the statistical procedures used to determine significant difference. Other items in each area received evaluations of importance which were significantly different from the self-ratings of proficiency. These, however, received ratings of "important" or "less important" or "not important". For the complete lists, together with teacher evaluations, see the area bulletins, some of which are listed on the inside of the back cover.

[2] See page 113 of appendix C for a detailed description of the statistical procedures used to determine the rank order of importance.

[3] See page 113 of appendix C for a detailed description of the statistical procedures used to determine the rank order of proficiency.

CHAPTER III

Opinions on Adequacy of Professional Preparation

THIS CHAPTER contains a report of opinions on the general strengths and weaknesses of professional preparation of teachers of exceptional children in both initial college and university programs, and as it is later applied in the practical situation of the school system. In the preceding chapter an overview was presented of a large number of distinctive competencies which were thought to be valuable by superior teachers. In this chapter opinions will be presented on the development of these important competencies in special teachers and on some other aspects of their professional preparation. These opinions are provided by four groups of special educators: by superior teachers, by college and university faculty members preparing such teachers, and by directors and supervisors in State and in local school systems.

Each of the four groups of special educators looked at professional preparation from somewhat different points of view; thus the questions asked of the groups varied according to the position and work of these educators. To illustrate, college instructors were generally asked questions about the adequacy of the college programs; special teachers, about their own training programs; and State and local directors and supervisors were asked about the effectiveness of more recently prepared special teachers in their school systems. A variety of questions and rating terms was used in the inquiry forms as can be seen in graphs 1 to 7 and in tables 6 through 8.

A large proportion of the opinions in this chapter were secured from four groups of special educators who replied to a series of questions on certain aspects of professional preparation by answering "yes," "no," or "undecided." Only affirmative (satisfactory) answers are reported here. (See graphs 1, 2, 5, 6, 7.)

Opinions on which much of the data in this chapter is also based were secured through three questions directed only to teachers. The first was designed to secure ratings of self-competence (proficiency) on the competencies which they had evaluated for relative importance in their work with children. The teachers evaluated their own proficiency on the competencies on the rating scale of "good," "fair," and "not prepared." The average self-ratings reported for all areas of specialization are summarized in table 6. (The item was included in this summary table only if the item had been presented for rating in five or more areas of specialization.)

The second question on which teachers expressed opinions was on the relative importance of certain practical experiences for preparation to work in his own area of exceptionality. (See table 7.)

The third question on which teachers expressed opinions in this chapter was on the adequacy of practical experiences in their professional preparation. This they did by indicating on each of the items whether their college or university preparation had been "about right," "too much," "too little," or "none." These teacher opinions are presented in table 8.

Also included in this chapter are opinions of all four groups of special educators on the amounts of specialized student teaching and classroom teaching of normal children needed by those preparing to teach exceptional children (see graphs 3 and 4).

This chapter is concerned specifically with: (1) Specialized teacher competencies—their development and application; (2) the contribution of *practical* experiences such as student teaching to professional competence, and (3) some overall aspects of *planning* and *administering* a university program of professional preparation.

SPECIALIZED TEACHER COMPETENCIES— THEIR DEVELOPMENT AND APPLICATION

The opinions of all four groups of special educators are available on at least some aspects of developing and applying teacher competencies. Not all groups, however, had an opportunity to express opinions on all questions. When opinions are available they are incorporated here.

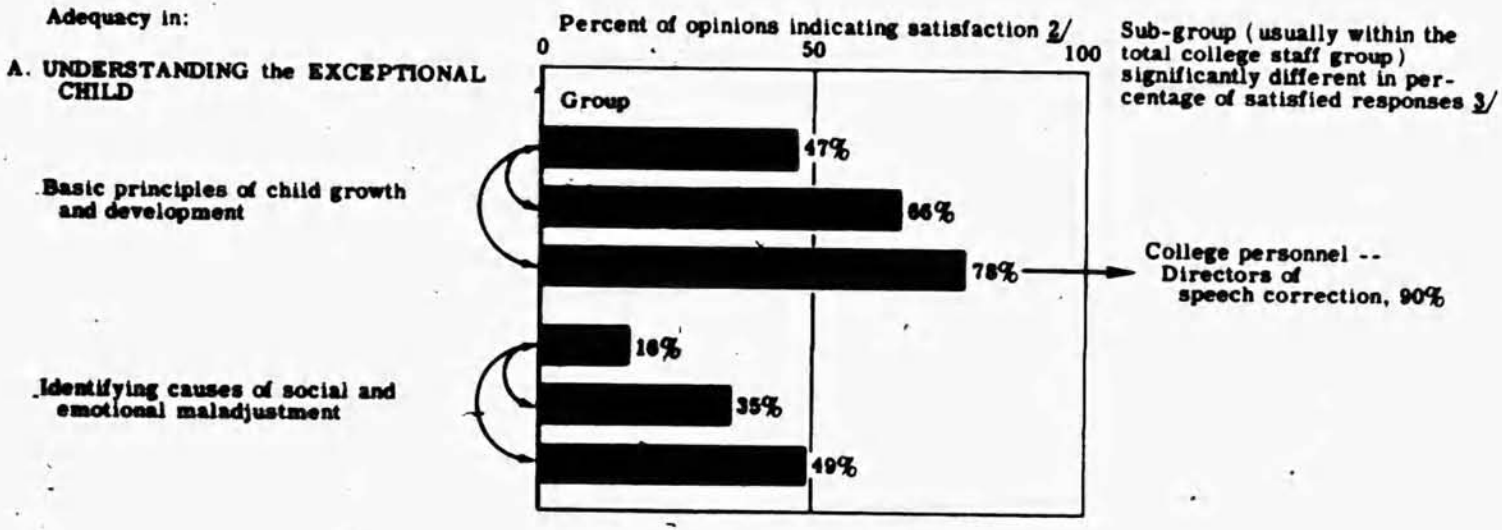
How well are the important distinctive competencies being developed in initial preparation and continued into the teaching situation? Many opinions were collected on this issue. They are summarized here in order to give a general indication of the strengths and weaknesses in developing and applying desirable teacher competencies.

The general impression to be gained is that teachers are best prepared: (1) To use specialized methods and teaching aids, (2) to provide for group participation in the curriculum according to each child's abilities, and (3) to teach at appropriate developmental levels. They were apparently least prepared to identify the underlying causes of social and emotional maladjustment, especially when it is complicated by the presence of a handicap or high talent. The foregoing generalization is based on the level of satisfaction of the groups of special educators observing the teachers as well as those responsible for college programs. (See graph 1). Teachers themselves indicated they were best able to make provisions for individual differences, to counsel children about their personal attitudes toward their handicap, and to work cooperatively with other professional persons. As a group they were least well prepared to provide curricular experiences in domestic or industrial arts, to give individual intelligence tests, or to administer a special education program (see table 6).

GRAPH 1.—Opinions of special educators on the adequacy of some aspects of the professional preparation of teachers of exceptional children [1]

State = Directors and specialists in State departments of education
Local = Directors and supervisors in local school systems
College = College staff members responsible for programs of preparation of teachers of exceptional children
Teacher = Superior teachers in the various areas of exceptionality

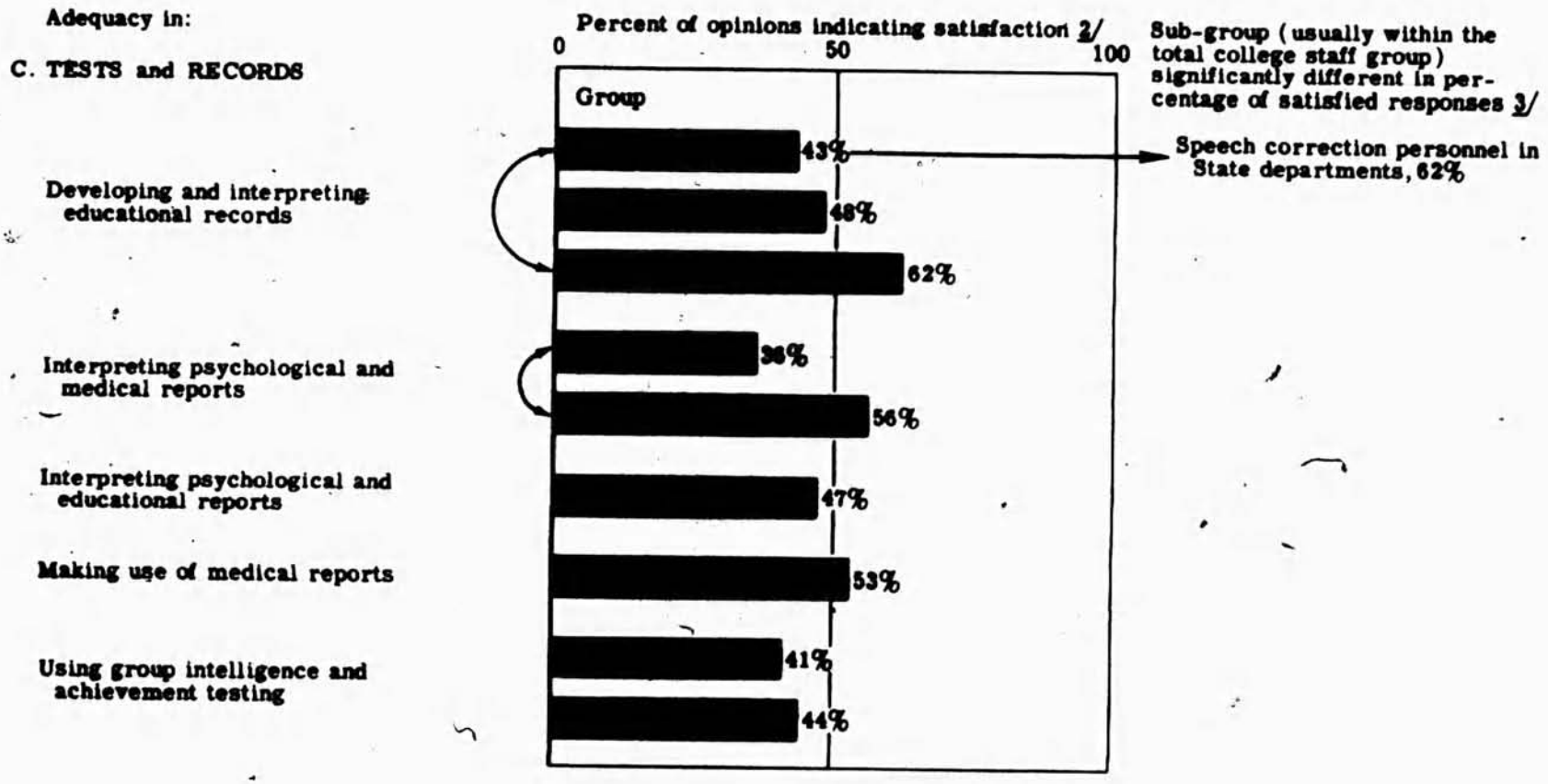
An arrow connecting bars denotes a significant difference between the groups in percentage of satisfied responses. An arrow from a bar to a sub-group item also denotes a significant difference.



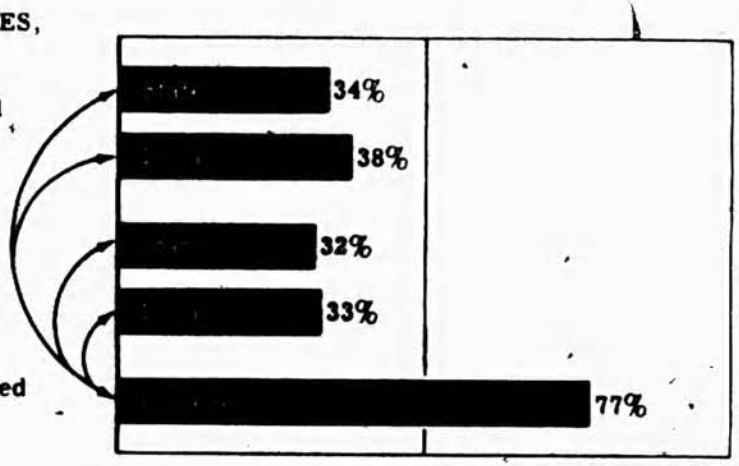
B. CURRICULUM PLANNING, TEACHING METHODS, and AIDS

See footnotes at end of graph, page 48.

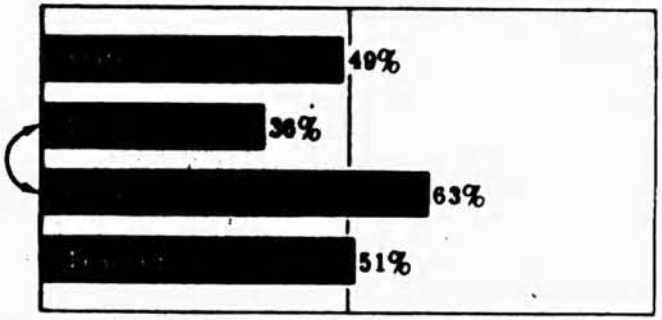
GRAPH 1.—Opinions of special educators on adequacy of professional preparation—*Cont.*



D. WORKING with ADULTS, AGENCIES, and ORGANIZATIONS

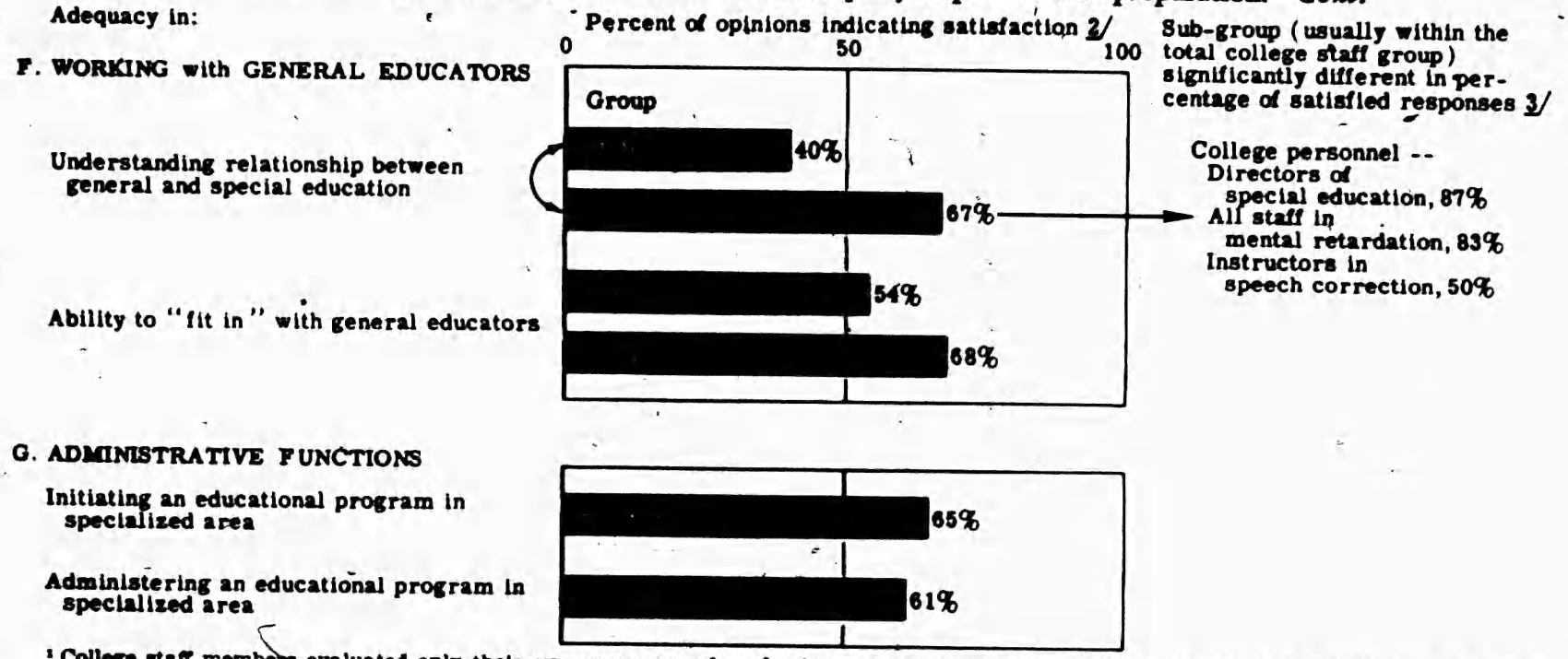


E. ORIENTATION to ALL AREAS



See footnotes at end of graph, page 48.

GRAPH 1.—Opinions of special educators on adequacy of professional preparation.—*Cont.*



[1] College staff members evaluated only their own programs of professional preparation. State and local personnel evaluated recently prepared teachers in their school systems; teachers participating in the study evaluated the institution at which they received the major part of their professional preparation. Only the opinions of teachers prepared since January 1946 have been included here. Questions were slightly different from group to group. See appendix D for exact wording in the inquiry forms.

[2] The percentage of opinions is based on answers to series of questions which were answered by "yes," "no," or "undecided." Only responses indicating "satisfaction" are reported here. On the items included in Graph 1, the average percent of responses indicating "dissatisfaction" was 26, with a range of 3 to 56; the average percent of "undecided" responses was 21, with a range of 6 to 31.

[3] Differences between the percentage of satisfaction of any one group and all other groups combined were considered to be significant if the probability of chance occurrence was 0.01 or less. See appendix C, page 113, for statistical procedures employed.

TABLE 6.—Self-Evaluations of Proficiency of More Recently Prepared Teachers on Some Selected Competencies [1]

[Symbols represent the areas of exceptionality in which the competency item was included: B, Blind; PS, Partially seeing; C, Crippled; SH, Special health problems; D, Deaf; HH, Hard of hearing; SC, Speech correction; SM, Socially maladjusted; MR, Mentally retarded; G, Gifted.]

Competency [2]	Area of exceptionality	Percent checking [3]			Areas in which the percent of "good" responses differed significantly from the corresponding percent in all other areas combined [4]
		Good	Fair	Not prepared	
1	2	3	4	5	6
SECTION A: TECHNICAL KNOWLEDGE					
Types of deviation within the special area	PS,C,HH,SC,MR,G	66	30	4	SC, 87; MR, 41
General plan of medical treatment	B,PS,C,D,HH,SC,MR	29	56	14	B, 6
Causes of conditions resulting in the deviation	B,PS,C,D,HH,SC,MR	62	35	3	C, 80; B, 37
Effects of different home environments on children in the area	B,D,HH,SM,MR,G	63	30	7	B, 85; D, 12
Research in the special area	B,PS,C,SH,D,HH,SC, MR	34	57	9	
Professional literature and reference materials	All areas	60	40	0	SM, 30
History of education in the special area	B,PS,C,SH,D,HH, MR,G	47	48	5	PS, 72
Legal provisions for education of children in the area	B,PS,C,SH,D,SM, MR,G	42	51	8	
Anatomy and physiology related to the handicapping condition	B,PS,C,SH,D,HH,SC	55	40	5	D, 81; SC, 71; C, 25
SECTION B: UNDERSTANDING THE EXCEPTIONAL CHILD					
Recognising and providing for individual differences	B,C,SH,D,MR	84	16	0	
Recognising possible causes of and helping to alleviate social and emotional problems of each child	B,C,SH,D,MR	65	33	1	
Recognising symptoms needing referral to other professional personnel	B,PS,C,SH,SC	77	22	1	SC, 92
Working as a member of a professional team in making a case study of a child in order to plan a program	B,PS,C,SH,D,HH,MR	70	26	4	
SECTION C: CURRICULUM PLANNING, TEACHING METHODS AND AIDS					
Developing a curriculum making special provision for each child's unique abilities or handicaps	C,D,SM,MR,G	76	24	0	
Developing a teaching atmosphere free from pressure and conducive to good mental health	B,PS,C,SH,HH,SC,G	86	13	0	
Planning for necessary adjustments in making field trips	B,C,SH,D,HH,MR	63	33	3	D, 83; HH, 38

See footnotes at end of table.

TABLE 6.—Self-Evaluations of Proficiency—*Cont.*

Competency [1]	Area of exceptionality	Percent checking [1]			Areas in which the percent of "good" response differed significantly from the corresponding percent in all other areas combined [4]
		Good	Fair	Not prepared	
1	2	3	4	5	6
SECTION C: CURRICULUM PLANNING—*Cont.*					
Teaching at elementary and secondary levels	B,HH,SM,MR,G	54	42	5	HH, 80; SM, 32
Providing opportunities for the handicapped to work and play with normal children	B,PS,C,SH,D,H,MR	69	28	3	
Providing opportunities in the curriculum for—					
health education	All except SC	73	25	2	
physical education	B,PS,D,SM,MR,G	54	34	12	MR, 76
music	All except SC	38	38	24	HH, 18
dramatic arts	All except SC	44	44	11	C, 63
arts and crafts	All except SC	35	46	19	MR, 63; PS, 17; HH, 17
fine arts	All except SC	44	40	16	MR, 63; HH, 19
industrial arts	All except SC	16	29	55	MR, 38
domestic arts	All except SC	27	36	37	MR, 48; D, 9
Knowledge of types, sources, uses of special equipment and materials	B,PS,C,SH,HH,SC, SM,MR	65	33	2	PS, 88; SH, 41
Ability to use audio or audio-visual aids	All except gifted	70	25	5	
SECTION D: COUNSELING AND GUIDING					
Counseling exceptional children concerning their—					
educational problems	PS,C,SH,D,HH,SM, MR	77	21	2	
social problems	B,PS,C,SH,D,H,SM, MR	61	37	2	
vocational problems and life goals	B,PS,C,SH,D,H,SM, MR	44	44	12	C, 25
personal attitudes toward handicap	B,PS,C,SH,D,HH	79	20	1	
SECTION E: TESTS AND RECORDS					
Keeping and using educational records	All except SC	73	25	2	
Making educational interpretations from—					
medical reports	All areas	50	31	9	SH, 73; PS, 70
psychological reports	All areas	62	32	6	
social work reports	All except SH	65	30	4	

See footnotes at end of table.

TABLE 6.—Self-Evaluations of Proficiency—*Cont.*

Competency [1]	Area of exceptionality	Percent checking [2]			Areas in which the percent of "good" responses differed significantly from the corresponding percent in all other areas combined [4]
		Good	Fair	Not prepared	
1	2	3	4	5	6
SECTION E. TESTS AND RECORDS—*Cont.*					
Administering to children in the special area—					
group achievement tests	All except SC	57	29	15	B, 57, MR, 75
sociometric tests	C,SH,SM,MR,G	24	38	38	----------
group intelligence tests	C,SH,D,H,SM,MR,G	42	34	24	----------
individual tests of mental ability	All except SC	28	32	40	----------
SECTION F: SECONDARY HANDICAPS					
Knowledge by teachers in other areas of methods of teaching—					
socially and emotionally maladjusted	B,PS,C,SH,D,HH,MR	45	46	9	----------
mentally retarded	B,PS,C,SH,D,HH,SM	34	43	22	SM, 57; HH, 13
gifted	B,PS,C,SH,D,HH	25	50	25	----------
SECTION G: WORKING WITH ADULTS AND ORGANIZATIONS					
Working with other school personnel to develop an integrated program for each child	B,PS,D,HH,SC,MR	71	24	5	B, 89; HH, 46
Working with school administrators and architects in securing adequate classrooms and special facilities	B,PS,C,SH,D,HH,SC, MR	35	43	22	----------
Knowledge of services offered by non-school local organizations	B,C,SH,D,H,SC,SM, MR	57	38	5	B, 85
Knowledge of national organizations concerned with education or welfare of children in the special area	All areas	54	41	6	D, 73, SM, 26
Working with other professional personnel as a team member	C,HH,SC,SM,G	80	19	2	----------
Helping parents obtain information from clinics and agencies	PS,C,SH,D,HH,SM, MR	55	40	5	----------
Helping parents with—					
school placement	B,PS,C,SH,D,HH	68	27	6	PS, 23
occupational placement	B,PS,C,SH,D,HH,MR	32	46	22	----------
with child's limitations and potentialities	B,PS,C,SH,D,HH,MR	65	33	2	----------
Participating in parent-school activities	B,PS,C,D,HH	62	34	3	----------

See footnotes at end of table.

TABLE 6.—Self-Evaluations of Proficiency—*Cont.*

Competency [1]	Area of exceptionality	Percent checking [2]			Areas in which the percent of "good" responses differed significantly from the corresponding percent in all other areas combined [3]
		Good	Fair	Not prepared	
1	2	3	4	5	6
SECTION H: ADMINISTRATIVE FUNCTIONS					
Knowledge of different ways of organizing educational programs for children in special area	PS,SH,SC,SM,G	46	49	5	PS, 68
Interpreting the special program and needs and abilities of exceptional children to regular school personnel, general public, and others	PS,C,HH,SM,G	67	31	2	
Contributing to community leadership in establishing educational programs for children in special area	B,PS,C,SH,D,HH,SC, SM	43	45	12	SC, 60; D, 21
Administering an educational program for children in the special area	C,SH,D,HH,MR	21	29	50	
SECTION I: TEACHING NORMAL CHILDREN					
Knowledge of methods and techniques of teaching normal children	B,PS,C,SH,D,HH, SM,G	80	19	1	

[1] Self-evaluations of teachers are reported in this table only when the competency item was included in at least five of the area lists. Only the self-evaluations of teachers prepared since January 1946 are included.

[2] Original competency items have been generalized to some extent. See table 1 in the area publications such as those listed on the inside of the back cover for the exact wording of each item.

[3] The teachers rated their own proficiency (self-competency) on the individual competencies in their own areas which were summarized in table 6, using as a rating scale: "good," "fair," and "not prepared." The percentage of teacher opinions reported in this table is based on these teacher evaluations. Because numbers have been rounded, total does not always equal 100.

[4] Differences between the percentage of teachers in one area checking "good" and the percentage of teachers in all other areas combined checking "good" were considered to be significant if the probability of occurrence was 0.01 or less. See appendix C, page 113, for statistical procedures employed.

Of the three groups considering teacher competence and preparation, the college faculty members expressed greater satisfaction than the directors and supervisors of education for exceptional children in State or local school systems. The teacher competency on which there was the widest divergence of opinion (on the one hand in the college situation and on the other in the school situation) was knowing the services of community agencies and clinics.

There may be a basic reason for the difference in ratings of college staff members and State and local special educators. It is quite possible that the most extensive program of initial preparation for the teacher candidate could never be broad enough, or deep enough, or specific enough to prepare a teacher for more than a beginning—and that real competencies will develop only as the teacher works and matures, under good supervisors in a local community.

Opinions of these four groups of educators are reported here around the same broad general groupings used to discuss teacher competencies. They are: (1) Technical knowledge; (2) understanding the exceptional child; (3) curriculum planning, adjustments, and teaching methods; (4) counseling and guiding; (5) using tests and records; (6) working with adults and organizations; and (7) working with more than one area of exceptionality.

Technical Knowledge

The term "technical knowledge" was used in this study to describe the bodies of knowledge related to the deviating conditions of the exceptional child. Opinions in this report on the value and application of these important competencies are based only on teacher opinions. In rating such competencies the teachers expressed varied views, with highest emphasis on knowing the characteristics of the exceptional child and the kinds of social or emotional problems that may arise as the result of the deviating condition. The teachers also evaluated their own technical knowledge, and most of them gave themselves proficiency ratings of "good," or "fair" (table 6, section A). Each area competency committee identified bodies of technical knowledge (such as the process of communication as it relates to deaf children) which they felt teachers should have.

It is unfortunate that balancing opinions on the adequacy of teacher knowledge and ability to apply such knowledge were not also sought from other educators. This is perhaps an issue for deeper search, for more study is needed on both the exact nature and extent of the technical knowledge which it is desirable for teachers to have in the various areas of exceptionality.

Understanding the Exceptional Child

The study explored the extent to which teachers were being prepared to understand the individual child and his deviation as it affected the child in his situation at school and his broader social and emotional adjustment to life.

When the opinions on the important function of understanding the child were brought together, several significant matters became apparent. The successful teachers considered it as a highly valuable part of their work, for as just reported in Chapter II, they evaluated as "very important" nearly all the competencies related to this function (table 4, section B).

What did the other three groups of special educators think about teachers' ability to perform these functions? The two questions asked of them were at different ends of a scale of complexity and dealt *first* with basic principles of child growth and development and *second* with the ability to identify causes of maladjustment. Even on so fundamental a competence as the first there was not complete satisfaction. Less than 50 percent of the State directors and supervisors believed the teachers were adequately qualified (graph 1, section A). Local supervisors and college faculty members, however, seemed to view the situation more favorably for a higher proportion of them were satisfied with the basic preparation of recently graduated teachers. Local directors and supervisors, and college faculty members, differed significantly from the State personnel, with the degree of satisfaction ranging from 47 percent to 78 percent. The directors of speech correction programs in colleges and universities differed with their university colleagues and held even more favorable opinions, for their average level of satisfaction was 90 percent.

Turning to the second question, the much more complicated matter of identifying causes of social and emotional maladjustment, it appears that this was the function on which the participants in the study obviously felt the teachers were least well prepared. Less than half of any group expressed satisfaction. The directors and supervisors of State programs were least satisfied of all. However, this is a function on which teachers are receiving professional preparation. All teachers participating in this study had apparently had at least some preparation, either in their initial college program or after they had begun to work with exceptional children. (For teacher self-evaluation see table 6, section B, column 5, under the heading "not prepared.") Further, most teachers said they were "good" in recognizing and providing for individual differences of children in their classes. However, as many as one-third of these successful teachers thought they were only "fair" in recognizing possible causes of social and emotional problems of each child and in the ability to alleviate the conditions resulting from them (table 6, section B).

These opinions again call to attention the problem of the teacher's preparation in dealing with the social and emotional difficulties of children for future consideration in planning professional standards and curriculums for preparation of teachers of exceptional children. This point is emphasized as an issue for much more study. Over and over it can be noted in the data collected that superior teachers regarded ability to deal with social and emotional problems as of prime importance, but at the same time felt relatively less secure or less qualified to provide the service needed. Does lack of competency result from a tendency of colleges to train the teacher primarily for group or classroom work

with children? Or is competence to help people with their social or emotional problems a frontier in working with people—including children—in which members of other professions feel a comparable lack? Is it, perhaps, a basic skill which we have not yet developed to a substantial degree in our society?

Curriculum Planning, Adjustment, and Teaching Methods

Competency in curriculum development and adjustment as well as proficiency in the use of appropriate teaching methods was strongly emphasized in the teachers' evaluations. As was reported in chapter II, more than one-fourth of the competencies identified in the ten lists were concerned with some aspect of curriculum or teaching methods and aids. There were variations in evaluations from item to item and from area to area, although it was noted that very high ratings of importance in the entire study were placed on competence in this specialized function (table 4, section C). Furthermore, the superior teachers thought that they themselves were "good" in a large number of curriculum-building skills (table 6, section C). Nearly all of them agreed that they were either "good" or "fair" in developing and adjusting the curriculum and in using teaching methods and aids.

The other 3 groups of special educators also registered high satisfaction with teacher preparation and skill in curriculum adjustment and the use of specialized teaching methods and aids. On the proficiency of teachers in these functions, the average ratings of satisfaction of the 3 groups of special educators were well above the 50 percent mark, and on the ability to use specialized methods and aids it went as high as 89 percent (graph 1, section B).

The most marked differences of opinions among State and local directors and supervisors and the college staff members were on the teachers' professional competencies: (1) to provide in the curriculum for group participation according to each child's abilities, and (2) to use specialized teaching methods and aids. Among the college staff members, from area to area, there were also a few significant differences of opinion. For example, those responsible for the program on the mentally retarded were more satisfied with the time made available to teacher candidates for studying curriculum planning than were the other staff members with a similar function in their areas of exceptionality. (See right hand column of graph 1.)

Counseling and Guiding

On the function of giving help to the child with educational or social problems or with negative attitudes toward their handicaps, we have opinions only from teachers. Yet these opinions seem to represent some of the most striking findings in the study. As was mentioned earlier, the teachers placed high value on competencies which would aid them in counseling and guiding. (Refer to table 4, section E.)

In view of the importance the participating teachers placed on guiding and counseling competencies, it should be noted that about one-third of these superior teachers rated themselves as only "fair" in the performance of these skills. Opinions were not collected from the other three groups of special educators and it is possible that their standards for adequacy of professional qualifications on these functions might have been even more rigorous. The amount and type of counseling and guiding skill which the various types of special education teachers need might well be the focus for research.

Using Tests and Records

The findings provide information on the use of certain tools teachers need in gaining an understanding and making evaluations of exceptional children. It is to be recalled that the teachers themselves rated more than 100 items on these functions and that the evaluations varied considerably from item to item and from one area of exceptionality to another. The competencies evaluated dealt mainly with developing and interpreting educational records, using intelligence and achievement *tests*, and being able to make educational *interpretations from* psychological, social, and medical reports (table 4, section F). (Of the 112 ratings, 15 were "very important," 86 "important," and 11 "less important.")

The teachers have expressed some opinions which may serve as guidelines for professional standards. For example, they considered it quite valuable in general for them to be able to interpret and use test results and various kinds of records, including both educational and medical. They did not, however, seem to feel they should be responsible for administering certain kinds of tests.

On how well the use of tests and records are being taught to teacher candidates and on teachers' ability to use them in practical situations, opinions are available from all four groups of educators participating in the study (see table 6 and graph 1). On all items the satisfaction of non-teacher personnel was around the 50 percent mark. However, some statistically significant differences of opinion were found among the groups of special educators both on the adequacy of teachers' preparation in developing and interpreting educational records and on interpreting medical and psychological records.

The more recently prepared teachers seem to be in general agreement with the other groups of special educators, for about one-half of them rated themselves less than "good" in administering group tests of intelligence or achievement. Only about one-fourth thought they were "good" in the administering of individual intelligence tests. Before full use can be made of the opinions reported here, more attention should be given to the unresolved issue of the teachers' role in administering tests.

Working With Adults and Organizations

On the development of the important function of working with others, about three fourths of the college staff members felt that teacher orientation to clinics and agencies serving exceptional children was systematic and adequate. The employers of teachers seem to have a different impression. Only about one third of them felt that teachers on the job had a satisfactory working knowledge of either specialized clinics or community agencies, or how to secure their services (graph 1, section D, page 47). Teacher opinion, as reported in table 6, section G, page 51, fell between these two extremes. Only a few more than half of the more recently prepared successful teachers said they had a "good" knowledge of services provided by community organizations.

Here again there may be some connection between the competence of these teachers and the amount of practical experience in their professional preparation. In general a little less than one-third of them thought the emphasis in their professional preparation on observations of various kinds of community resources had been "about right." In fact rather large numbers reported no experience of this kind at all in initial preparation (table 8, section C). Furthermore, it is to be remembered that the teachers giving these opinions had been singled out by their supervisors as "superior" and for this reason may have been far better than average in the ability to cooperate. It may be that unselected teachers would have an even greater need for competence in working with adults, organizations and agencies than these data suggest.

It appears that college faculty members as well as directors and supervisors of educational programs should take more responsibility for developing a knowledge about and ability to work with community agencies and organizations. Part of this should undoubtedly be borne by the colleges and universities during initial preparation of the student; part should also be a responsibility of the leaders of State and local school systems; and part should be the responsibility of the teacher himself. Community resources are becoming increasingly complex, and it appears that the development of the special teacher to work with other agencies and organizations should be a continuous process, and should have strong emphasis in various types of inservice programs.

Working In More Than One Area of Exceptionality

Increasingly, the schools are attempting to provide for large numbers of severely handicapped children, and thus are automatically including more pupils who have multiple handicaps. As has been pointed out, this study does not include extensive analysis of the implications of this trend for teacher competence or preparation. Findings do, however, suggest that teachers have shown a tendency to value competence in one area of specialization rather than in several (table 4, section I).

Only about half of each of the four groups of special educators was satisfied with the degree of teacher preparation in the *orientation* to the *education* of various types of exceptional children (graph 1, section E). In support of this opinion, it was found that a relatively small number of the teachers rated their knowledge of teaching methods in areas other than their own as "good" (table 6 section F), and even more striking, many teachers reported they had not even had opportunity for systematic observation of children with multiple handicaps. About two-thirds of them said they had had "too little" or "none" of this type of observational experience as a systematic part of their own

Courtesy Chicago, Ill., Public Schools

Learning to control breath stream for speech.

preparation (table 8, section C). While this condition may currently be undergoing some change, the matter is probably one for further study. (Refer to discussion in chapter II, page 15.) The fact that so many teachers had never had an opportunity in their preparation to learn systematically about other exceptional children might explain some of the rather contradictory findings and especially the evaluations of importance which the superior teachers attached to certain relevant competencies.

PRACTICAL EXPERIENCES IN PROFESSIONAL PREPARATION

The general picture drawn by these opinions on professional competence of teachers of exceptional children suggests strongly that higher teacher competence—particularly in certain functions—should be developed in initial preparation and continued through inservice programs. There has been a recurring implication in this study that supervised practical experience should play a very important role in improving the preparation of teacher candidates for their responsibilities.

How much importance did teachers themselves place on such practical experiences as "student teaching," "systematic observation," and "opportunities to use tests and records"? Did the various groups of special educators think colleges should put more emphasis on this part of preparation? What would be a desirable amount of practice teaching with exceptional children? Did they regard teaching experience with normal children as a favorable factor in the professional background? Some opinions on these questions gathered in this study will be presented in the following paragraphs.

Value of Practical Experiences

The superior teachers made some judgments on the value of practical experiences in initial professional preparation. The activities which they rated are concerned mainly with *practice teaching, clinical* experiences, planned *observations,* and the use of *tests and records.* Evaluations of the relative importance of these were made by teachers in each of the ten areas in much the same way as evaluations of the competencies were made. Ten lists of practical experiences —one in each area of exceptionality—were developed by the study staff. They were pretested, reviewed, revised, and submitted through inquiry forms for evaluation by the approximately 100 superior teachers in each of the areas. They were rated in each area of specialization on a 4-point scale of "very important," "important," "less important," and "not important." Here again the ratings in the respective areas were converted to average ratings of relative importance and placed in rank order. These rank order items are also used as identification numbers. In this report the opinions of teachers in ten areas are assembled and are to be found in summary in table 7.

There can be little question about the importance of these experiences, since none was valued so low as to have an average rating of "not important," and only a few were rated "less important." The five highest ranking experiences in each area were spread over a rather wide range, including student teaching and observation of various kinds and interpreting records and reports. Teachers rated *student teaching* at the *elementary level* near the top of the list in all areas of exceptionality.

TABLE 7.—Teachers' Opinions on the Importance of Practical Experiences in Professional Preparation

[The symbol V indicates an average rating of "very important"; I, "important"; L, "less important"; and N, "not important." The numbers indicate the rank order of importance and the identification number of the item. For example, under Section A, "Student Teaching," the first item in the left-hand column, "student teaching of normal children" was ranked by teachers of the blind as number 7 in a list of 22 items; the second item, "student teaching in special day schools or classes" was considered very important by teachers of crippled children; they ranked it number 3 in a list of 29 items.]

EXPERIENCE [1]	Evaluation of importance [1] by teachers in the area of—									
	Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items rated in each area	22	18	29	29	23	23	22	18	22	18
SECTION A: STUDENT TEACHING										
Student teaching of normal children	I 7	V 4	V 2	V 1	I 12	I 13	I 22	I 8	I 10	V 2
Student teaching—										
in special day schools or classes	-----	-----	V 3	I 10	-----	-----	-----	I 16	-----	{I 7 / I 8}
in a school system	-----	-----	-----	-----	-----	-----	V 1	-----	-----	-----
in regular classes with accelerated or enriched curriculum	-----	-----	-----	-----	-----	-----	-----	-----	-----	I 6
in residential schools	-----	-----	I 16	I 20	-----	-----	-----	I 18	-----	-----
in hospital classes	-----	-----	I 17	I 14	-----	-----	-----	-----	-----	-----
in convalescent homes	-----	-----	I 19	I 21	-----	-----	-----	-----	-----	-----
in sanatorium classes	-----	-----	-----	I 23	-----	-----	-----	-----	-----	-----
in home instruction	-----	-----	I 21	I 22	-----	-----	-----	-----	-----	-----
at nursery level	I 13	I 15	I 11	I 25	V 4	V 7	I 19	-----	I 11	I 11
at elementary level	V 4	V 2	V 5	V 2	V 3	V 2	V 6	I 1	V 2	I 4
at secondary level	I 14	I 11	I 12	I 17	I 10	I 9	I 11	I 13	I 12	V 1
in regular academic subjects	V 2	-----	-----	-----	V 6	I 14	-----	-----	-----	-----
in reading braille	V 1	-----	-----	-----	-----	-----	-----	-----	-----	-----
in writing braille	V 3	-----	-----	-----	-----	-----	-----	-----	-----	-----
in auditory training	-----	-----	-----	-----	-----	-----	I 15	-----	-----	-----
in language development	-----	-----	-----	-----	V 1	V 5	-----	-----	-----	-----
in speech development and voice improvement	-----	-----	-----	-----	V 2	V 3	I 14	-----	-----	-----
in speech development—										
with cerebral palsied	-----	-----	-----	-----	-----	-----	I 17	-----	-----	-----
with aphasic	-----	-----	-----	-----	-----	-----	I 18	-----	-----	-----
in lipreading	-----	-----	-----	-----	V 5	V 1	I 16	-----	-----	-----

See footnotes at end of table.

TABLE 7.—Teachers' Opinions on Practical Experiences—*Cont.*

EXPERIENCE[1]	Evaluation of importance [2] by teachers in the area of—									
	Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items rated in each area	22	18	29	29	23	23	22	18	[3] 22	18
Student teaching—*Cont.*										
in school systems—										
with groups	-----	-----	-----	-----	-----	-----	V 8	-----	-----	-----
with individual children	-----	-----	-----	-----	-----	-----	V 7	-----	V 9	I 14
in speech clinics—										
with groups	-----	-----	-----	-----	-----	-----	V 6	-----	-----	-----
with individual children	-----	-----	-----	-----	-----	-----	V 5	-----	-----	-----
SECTION B: CLINICAL EXPERIENCES										
Hearing testing with audiometer	-----	-----	-----	-----	-----	-----	I 10	-----	-----	-----
Diagnosis of speech disorders	-----	-----	-----	-----	-----	-----	V 9	-----	-----	-----
Diagnosis of ability, interests, and aptitudes	-----	-----	-----	-----	-----	-----	-----	I 9	-----	I 13
Counseling individual children	-----	-----	-----	-----	-----	-----	-----	I 7	-----	I 10
SECTION C: PLANNED VISITS AND OBSERVATIONS										
Student observation of teaching in the special area	I 12	I 6	I 17	I 8	V 7	V 6	-----	I 12	-----	I 8
Observation of regular classroom teaching at different grade levels	-----	-----	-----	-----	-----	-----	I 11	-----	-----	-----
Planned observation—										
in day schools and classes	I 9	V 1	V 1	I 7	I 9	I 10	-----	-----	V 1	-----
in residential schools	I 8	-----	I 23	I 27	I 8	I 20	-----	-----	I 19	-----
Planned visits—										
to community agencies serving the exceptional child	I 22	I 16	-----	-----	L 21	I 22	-----	-----	I 21	-----
to organizations interested in welfare of children in the special area	-----	-----	I 19	I 19	I 20	-----	-----	-----	I 20	-----
throughout the community to discover and analyse how best to use available resources	-----	-----	-----	-----	-----	-----	-----	I 15	-----	I 11
to rehabilitation centers	I 18	I 14	I 10	I 13	I 15	I 18	-----	I 18	I 15	-----
to vocational rehabilitation agencies	-----	-----	I 20	I 28	-----	-----	-----	-----	-----	-----
to police, parole, and judicial services	-----	-----	-----	-----	-----	-----	-----	I 14	-----	-----
to hospitals	-----	-----	I 28	I 22	-----	-----	-----	-----	-----	-----
to convalescent homes	-----	-----	I 24	I 16	-----	-----	-----	-----	-----	-----
to sanatoriums	-----	-----	-----	I 24	-----	-----	-----	-----	-----	-----

See footnotes at end of table.

TABLE 7.—Teachers' Opinions on Practical Experiences—*Cont.*

EXPERIENCE [1]	Evaluation of importance [2] by teachers in the area of—									
	Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items rated in each area	22	18	29	29	23	23	22	18	22	18
SECTION C: PLANNED VISITS AND OBSERVATIONS—*Cont.*										
to homes of individual exceptional children	I 20	I 14	I 25	I 27	I 22	I 21	I 20	I 17	I 17	I 16
Planned observation—										
in clinics—										
cerebral palsy			V 4		I 23	I 23				
medical				I 16						
speech and hearing			I 15		I 12	V 4			I 18	
otological					I 16	I 19				
psychological									I 16	
child-study								I 11		
of work done by—										
ophthalmological specialists	I 19	I 9								
occupational therapists			I 16	I 21						
physical therapists			I 15	I 20						
speech correctionists			I 13							
of children with multiple handicaps	I 17	I 13			I 14				I 14	
in classes dealing with other types of exceptional children	I 21	I 17			I 19				I 21	
of multi-professional case conferences on individual children	I 14	I 8	I 12	I 6	I 17	I 16		I 6	I 11	I 13
of teacher conferences in the special area	I 11	I 10	I 9	I 5	I 13	I 18		I 4	I 9	I 5
SECTION D: EXPERIENCES IN USING TESTS AND RECORDS										
Developing and interpreting individual educational records of exceptional children					I 11			I 5		I 10
Drawing educational interpretations from—										
cumulative educational records	I 8	I 7	V 7	I 4		I 11			V 8	
case records							V 8			
psychological reports	I 6	V 5	V 6	I 3		I 8	I 9	I 2	V 4	I 8

See footnotes at end of table.

TABLE 7.—Teachers' Opinions on Practical Experiences—*Cont.*

EXPERIENCE [1]	Evaluation of importance [2] by teachers in the area of—									
	Blind	Partially seeing	Crippled	Special health problems	Deaf	Hard of hearing	Speech correction	Socially maladjusted	Mentally retarded	Gifted
1	2	3	4	5	6	7	8	9	10	11
Total number of items rated in each area	22	18	29	29	23	23	22	18	[3] 22	18
Drawing educational interpretations from—*Cont.*										
medical reports	I 18	V 8	I 16	I 8	.....	I 17	I 13	.....	I 8	.....
social work reports	I 16	I 11	I 9	I 11	.....	I 17	I 19	.....	I 8	.....
Developing case reports based on first-hand study of individual exceptional children	.....	.....	.....	.....	.....	.....	.....	I 8	.....	I 17

[1] Wording of the items has been edited slightly for tabular presentation. For exact wording of items as they appeared in the inquiry forms in each of the 10 areas of exceptionality, see the area publications.

[2] The rank order numbers also serve as an item identification number in the original list of experiences as reported in each area publication. See Appendix C, page 113, for a description of the statistical procedures used. Because of differences from one area list to another, only rough comparisons of these rank order numbers are possible. For further information, see appendix C, page 113.

[3] One unrelated item on instruction in administering an educational program for mentally retarded children has been omitted from this table.

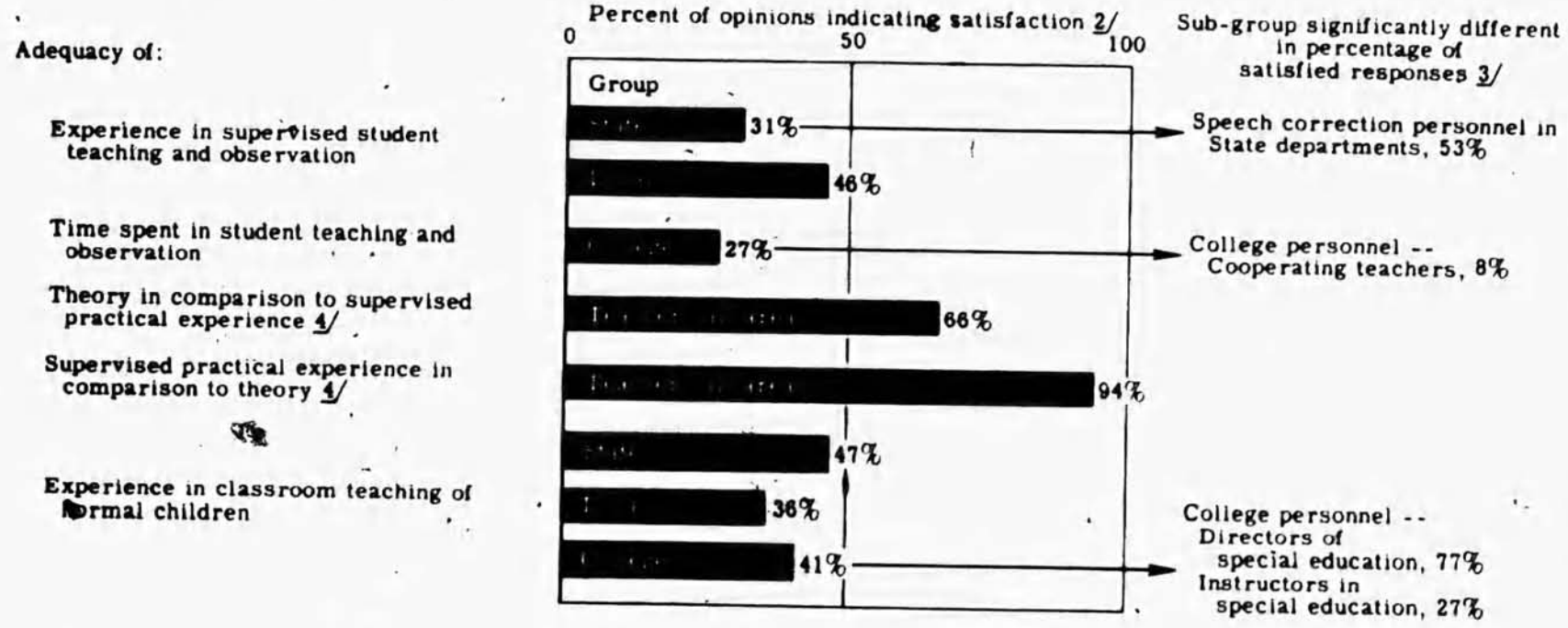
The teachers, in rating practical experiences, placed rather high importance on observation of both teacher and multi-professional case conferences designed to plan for individual exceptional children. This is an evaluation to note, especially in relation to some of the evaluations the teachers made on their own competencies.

Amount of Practical Experience

Granted that practical experiences are valuable, how have the colleges been doing in providing them? A disconcertingly small number of special educators (including college staff members) thought that teacher-candidates were spending enough time in their initial preparation on practice teaching and observation (graph 2, page 64.) Opinions of more recently graduated superior teachers on the adequacy of practical preparation also support this view. (Table 8, page 66.) A large number of these superior teachers reported that they had experienced "too little" or no opportunity for *practice* in applying the principles learned in their more theoretical courses. From the mass of data collected and presented in table 8, it would seem that for many teachers initial preparation had not included any experiences designed to develop many of the competencies they valued most. Even at the elementary level, only a few more than one-half of the teachers registered their student teaching experience as "about right," and approximately half reported no experience at the nursery or secondary level.

GRAPH 2.—Opinions of special educators on the adequacy of practical experiences in the professional preparation of teachers of exceptional children [1]

State = Directors and specialists in State departments of education
Local = Directors and supervisors in local school systems
College = College staff members responsible for programs of preparation of teachers of exceptional children
Teacher = Superior teachers in the various areas of exceptionality



[1] College staff members evaluated only their own programs of professional preparation. State and local personnel evaluated recently prepared teachers in their school systems; teachers participating in the study evaluated the institution at which they received the major part of their professional preparation. Only the opinions of teachers prepared since January 1946 have been included here. Questions were slightly different from group to group. See appendix D for exact wording in the inquiry forms.

[2] The percentage of opinions is based on answers to series of questions which were answered by "yes," "no," or "undecided." Only responses indicating "satisfaction" are reported here. On the items included in Graph 2, the average percent of responses indicating "dissatisfaction" was 38, with a range of 2 to 68; the average percent of "undecided" responses was 14, with a range of 4 to 30.

[3] Differences between the percentage of satisfaction of any one group and all other groups combined were considered to be significant if the probability of chance occurrence was 0.01 or less. See appendix C, page 113, for statistical procedures employed.

[4] In condensing the items, some of the meaning was lost in items 3 and 4. Questions were as follows: Do you believe that you received *too much theory* and *not enough* supervised practical experience in your specialized area? Do you believe that you received *too much* supervised practical experience and *not enough* theory in your specialized area? A reply of "no" was considered to be an indication of "satisfaction."

TABLE 8.—Opinions of Recently Graduated Teachers on the Amount of Emphasis Given to Certain Practical Experiences in Their Own Specialized Preparation

[Symbols represent the areas of exceptionality in which the competency item was included: B, Blind; PS, Partially seeing; C, Crippled; SH, Special health problems; D, Deaf; H, Hard of hearing; SC, Speech correction; SM, Socially maladjusted; MR, Mentally retarded; G, Gifted.]

Experience [1]	Area of exceptionality	Percent checking [2]				Areas in which the percent of "about right" responses differed significantly from the corresponding percent in all other areas combined [3]
		About right	Too much	Too little	None	
1	2	3	4	5	6	7
SECTION A STUDENT TEACHING						
elementary level	All areas	57	1	16	26	Deaf, 84; speech correction, 37
nursery level	All except SM	32	1	17	50	Deaf, 72
secondary level	All areas	34	1	18	47	
with groups	SC	31	0	19	50	
with individuals	G,MR,SC	44	1	21	34	
special day schools or classes	C,SH,G,SM	41	0	20	39	
regular classes with enriched or accelerated curriculum	G	57	0	29	14	
residential schools	C,SH,SM	31	1	13	55	
hospital classes	C,SH	32	0	11	57	
convalescent homes	C,SH	19	0	8	73	
sanatorium classes	SH	13	0	17	70	
home instruction	C,SH	25	0	12	63	
in clinics with groups	SC	73	0	16	11	
in clinics with individuals	SC	72	8	20	0	
regular academic subjects	B,D,H	62	1	21	16	
reading braille	B	44	6	25	25	
writing braille	B	47	9	19	25	
auditory training	SC	41	0	35	24	
language development	D,HH	62	0	25	12	
speech development and voice improvement	D,HH,SC	59	1	27	13	
speech development with cerebral palsied	SC	43	4	44	10	
speech development with aphasics	SC	27	4	33	36	
lipreading	D,HH,SC	66	0	19	15	
with normal children	All areas	61	2	10	27	Speech correction, 30; deaf, 27
SECTION B: CLINICAL EXPERIENCE						
Hearing testing	SC	61	2	26	11	

See footnotes at end of table.

TABLE 8.—Opinions of Recently Graduated Teachers—*Cont.*

Experience [1]	Area of exceptionality	Percent checking [2]				Areas in which the percent of "about right" responses differed significantly from the corresponding percent in all other areas combined [3]
		About right	Too much	Too little	None	
1	2	3	4	5	6	7
SECTION B. CLINICAL EXPERIENCE—*Cont.*						
Diagnosis of speech disorders	SC	63	0	27	10	----
Counseling individual children	SM,G	21	0	45	34	----
diagnosing ability, interests and aptitudes	SM,G	39	0	33	27	----
SECTION C. PLANNED VISITS AND OBSERVATIONS						
Student observation of teaching in the special area	B,PS,C,SH, D,H,SM,G	60	4	23	13	Deaf, 79
Day schools and classes	B,C,D,H, MR,PS,SH	51	0	32	17	----
Residential schools	B,C,D,H, MR,SH	42	2	23	33	Mentally retarded, 25
Hospitals	C,SH	53	0	24	23	----
Sanatoriums	SH	16	0	28	56	----
Convalescent homes	C,SH	29	0	21	50	----
Police, parole, and judicial services	SM	32	0	32	36	----
Community agencies	C,SH,D,MR	25	0	29	46	Deaf, 9
Organizations interested in the welfare of exceptional children	B,PS,D,H, MR	24	0	25	51	----
Rehabilitation centers	B,PS,C,SH, D,H,MR, SM	30	0	20	50	----
Vocational rehabilitation agencies	C,SH	32	0	30	38	----
Throughout community to discover and analyze how best to use community resources	G,SM	37	3	20	40	----
Clinics related to special area	C,SH,D,H, MR,SM	44	1	28	27	Crippled, 62; mentally retarded, 20
Work done by—						
ophthalmological specialists	B,PS	70	1	8	21	Partially seeing, 87; blind, 56
occupational therapists	C,SH	62	0	24	14	----
physical therapists	C,SH	64	0	21	15	----
speech correctionists	C	53	0	34	13	----
Multi-professional case conferences on individual children	All except SC	32	1	30	37	Crippled, 48; deaf, 13
Teacher conferences in the special area	All except SC	34	2	33	31	----

See footnotes at end of table.

TABLE 8.—Opinions of Recently Graduated Teachers—*Cont.*

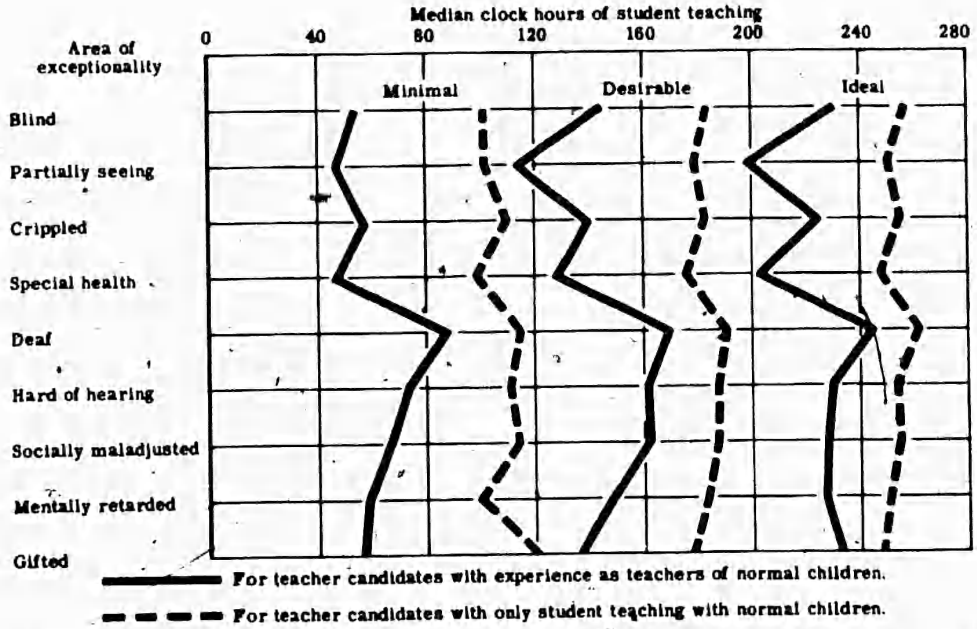
Experience [1]	Area of exceptionality	Percent checking [2]				Areas in which the percent of "about right" responses differed significantly from the corresponding percent in all other areas combined [3]
		About right	Too much	Too little	None	
1	2	3	4	5	6	7
SECTION C: PLANNED VISITS AND OBSERVATIONS—*Cont.*						
Homes of exceptional children	All areas	14	0	17	69	
Children with multiple handicaps	B,PS,D,MR	34	1	33	32	
Classes dealing with other types of exceptional children	B,PS,D,MR	38	1	25	36	
Regular classroom teaching at different grade levels	SC	33	0	23	44	
SECTION D: EXPERIENCES WITH TESTS AND RECORDS						
Drawing educational interpretations from—						
cumulative educational records	B,PS,C,SH, H,MR	57	0	31	12	
case records	D,SC	52	8	23	17	
psychological reports	All except D	53	1	33	13	
medical reports	B,PS,C,SH, H,SC,MR	52	0	31	17	Mentally retarded, 30; partially seeing, 86
social work reports	B,PS,C,SH, H,SC,MR	45	1	29	25	
Developing and interpreting individual educational records of exceptional children	SM,G	50	3	27	20	
Developing case reports based on first-hand study of individual exceptional children	SM,G	56	0	26	18	

[1] Original experience items have been generalized to some extent. See area publication for exact wording.

[2] The percentage of opinions is based on the participating teachers' evaluations of the adequacy of these practical experiences. They expressed their opinions by checking a list of practical experiences in their college or university preparation as "about right," "too much," "too little," or "none."

[3] Differences between the percentage of teachers in one area checking "about right" and the percentage of teachers in all other areas combined checking "about right" were considered to be significant if the probability of occurrence was 0.01 or less. See appendix C, page 113, for statistical procedures employed.

GRAPH 3.—Opinions of special educators on the amount of student teaching in the special area needed by those preparing to teach exceptional children



Based on the opinions of 1,353 special educators: 837 teachers; 99 directors and supervisors in State departments of education, 141 directors and supervisors in local school systems, and 276 college staff members. The opinions of speech correction teachers are not included in this graph since they rated amount of time needed for student teaching in a different way. For further information see the special area publications listed on the inside o fthe back cover.

On *student observation* of teaching in the specialized area, 60 percent (or slightly less than two-thirds) thought their experience had been "about right." The only statistically significant exception to this was in the field of the deaf where 79 percent said "about right." On another practical experience which teachers valued highly—that of drawing implications from different kinds of records and reports, as well as in developing records—the number of teachers expressing an "about right" opinion hovered around 50 percent.

In the light of these attitudes toward the amount of practice being provided, a basic question arises: How much time should be devoted to practical experiences? Opinions have been expressed by the four groups of special educators on the amounts of student teaching in the special area they considered "minimal," "desirable," and "ideal."[1] For the teacher who had not had experiences in teaching normal boys and girls, the "desirable" amount suggested for the special area was about 180 clock hours, (graph 3, above). The special educators indicated that even teachers with experience in instructing normal children still needed some specialized practice teaching, although less than the

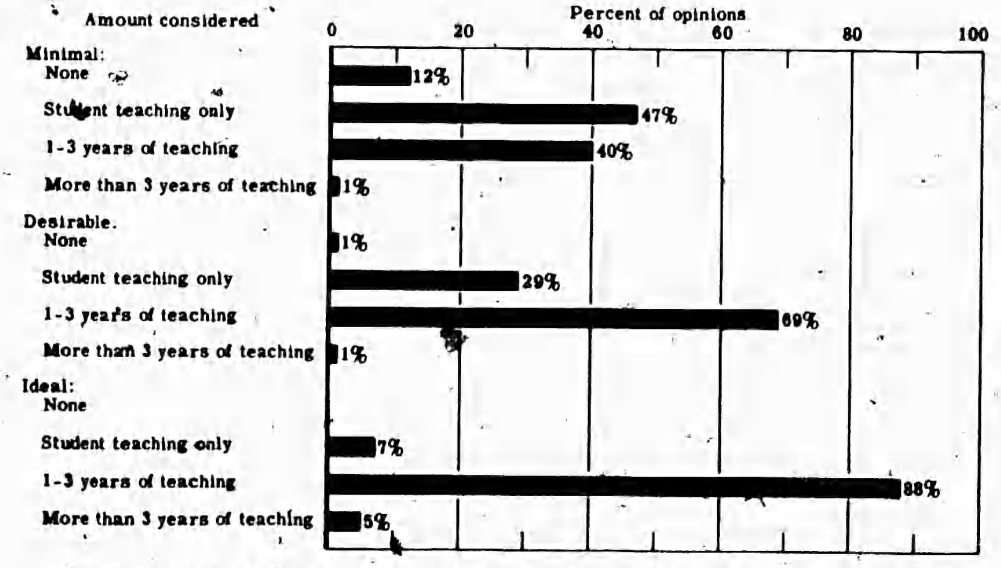
[1] In each area publication data are presented that show the wide range of opinion on the number of clock hours, and the opinions are reported separately for each of the four groups of special educators.

inexperienced teacher. Even as a "minimal" amount for this group, the median never went below 50 and the "ideal" reached as high as 250 hours in one area. The number of clock hours considered "desirable" for experienced teachers of normal children ranged from about 110 for those preparing to teach partially seeing children to about 170 for those preparing to work with deaf children.

Teaching Experience With Normal Children

An often debated question is whether teachers of exceptional children should have regular teaching experience. Opinions related to this matter are available from all four groups of special educators. Their rather high agreement on the amount of experience needed with normal children indicates that most of the experts believe the special education teacher should have some experience in the regular classroom but not too much. The "ideal" or "desirable" amount (as is reflected in graph 4) is somewhere between 1 and 3 years. Variations in

GRAPH 4.—Opinions of special educators on the amount of teaching experience with normal children needed by those preparing to teach exceptional children



Based on the opinions of 1,455 special educators: 979 teachers, 92 directors and supervisors in State departments of education, 135 directors and supervisors in local school systems, and 249 college staff members. Some statistically significant differences of opinion were expressed on the amount of teaching experience with normal children needed by those preparing to teach gifted children or to be speech correctionists. As a *minimal* amount for teachers of gifted children, 68 percent checked "one to three years," and as a *desirable* amount, 83 percent chose "one to three years." For speech correctionists, 62 percent checked "student teaching only" as a *minimal* amount, while 21 percent checked "one to three years" as *minimal*. As a *desirable* amount for speech correctionists 45 percent selected "student teaching only," and 53 percent chose "one to three years." For further information, see appendix C, page 113, and the special area publications listed on the inside of the back cover.

opinions are, of course, lost in the averages; they were reported, however, in detail in each area publication. Special educators, however, do not believe that the amount of regular classroom teaching experience is adequate. Less than half or between 35 and 50 percent of the college, State, and local groups thought that special education teachers recently graduated had had sufficient experience in classroom teaching of so-called normal children, (graph 2, p. 64).

Supervision of Practical Experience

The general reaction of both college instructors and teachers toward student teaching experiences was favorable (graph 5). Teachers registered generally a higher degree of satisfaction than did the college personnel. Such factors as adequate planning and scheduling, observation conferences, and constructive help to students were all reported at about the 50 percent satisfaction level or above. Opinions varied considerably on opportunity for planning and scheduling. All college staff members indicated a 54 percent satisfaction, but analysis showed that those in speech correction registered 68 percent and in crippled 32 percent, while *instructors in special education* registered 40 percent satisfaction. This gives some indication that preplanning could be considerably strengthened.

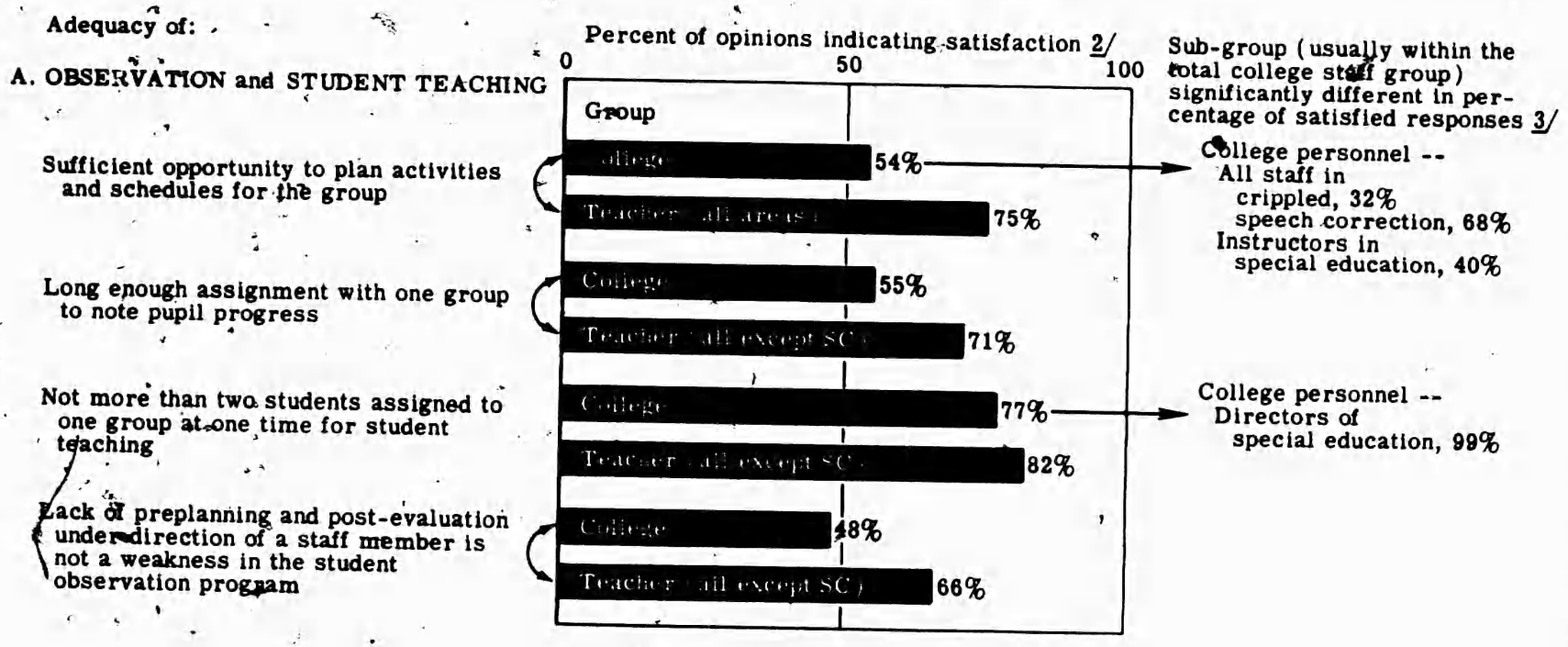
Facilities

For adequate teacher preparation there is almost universal consensus that the community should have such facilities as special schools or classes, residential schools, hospital and medical resources, speech and psychological clinics. Approximately 80 percent of the college group thought that sufficient numbers of *special schools and classes, speech and psychological clinics* were available for student teaching and planned observation (graph 6, page 75). About 60 percent showed satisfaction with the availability of *special medical clinics and residential schools.* In general staff members were not so satisfied with facilities for home and hospital instruction. In the case of those responsible in the field of the crippled, however, 80 percent were satisfied with the opportunity for student teaching in hospital classes and 60 percent with opportunities for practice in home instruction. In the closely allied field of special health problems, the opinions on availability of these two types of facilities were also favorable (73 percent and 70 percent) although the number of college staff members involved was too small to determine whether this difference was statistically significant.

Even so it seems that a wide variety of facilities were not being fully utilized since teacher reports reflected inadequate experiences in such facilities even though they placed very high value on them (see tables 7, p. 60 and 8, p. 66).

GRAPH 5.—Opinions of special educators on the adequacy of organization and supervision of the student teaching and observation program in the professional preparation of teachers of exceptional children [1]

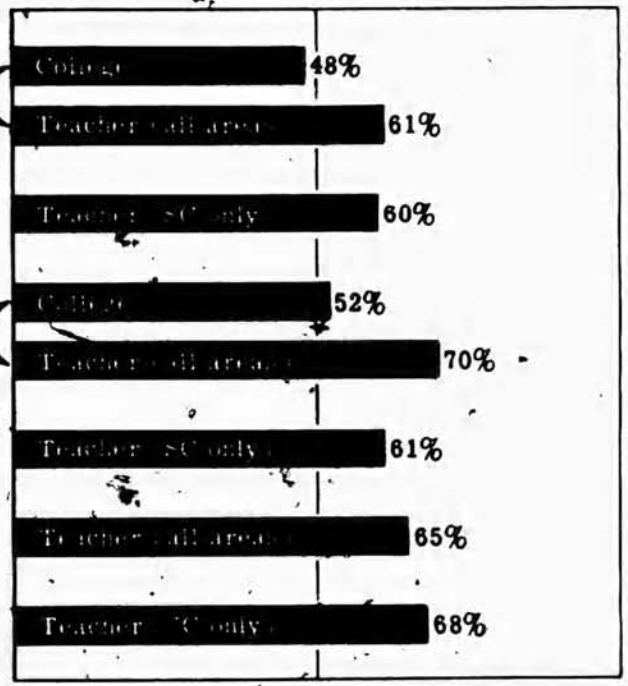
College = College staff members responsible for programs of preparation of teachers of exceptional children
Teachers = Superior teachers in the various areas of exceptionality. SC = Speech Correctionist.
An arrow connecting bars denotes a significant difference between the groups in percentage of satisfied responses. An arrow from a bar to a sub-group item also denotes a signficant difference.



B. SUPERVISION of STUDENT TEACHING

Supervisors of student teaching --

- spend sufficient time observing student teaching in schools
- spend sufficient time observing speech correction practice in clinics
- hold conferences frequently enough based on observation in schools
- hold conferences frequently enough based on observation of speech correction practice in clinics
- give sufficient constructive criticism and advice
- give sufficient constructive criticism and advice about speech correction practice in clinics

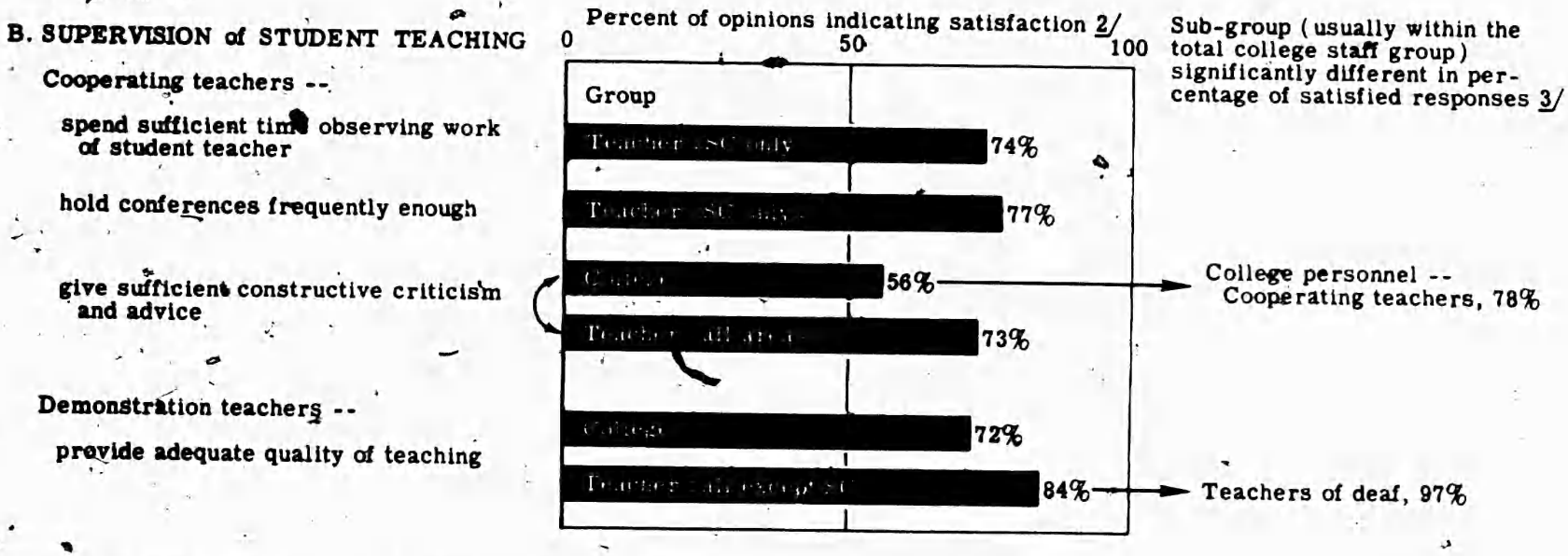


See footnotes at end of graph, page 74.

(Section B continued next page)

GRAPH 5.—Opinions of special educators on adequacy of organization and supervision of student teaching and observation program—*Cont.*

(Section B continued)



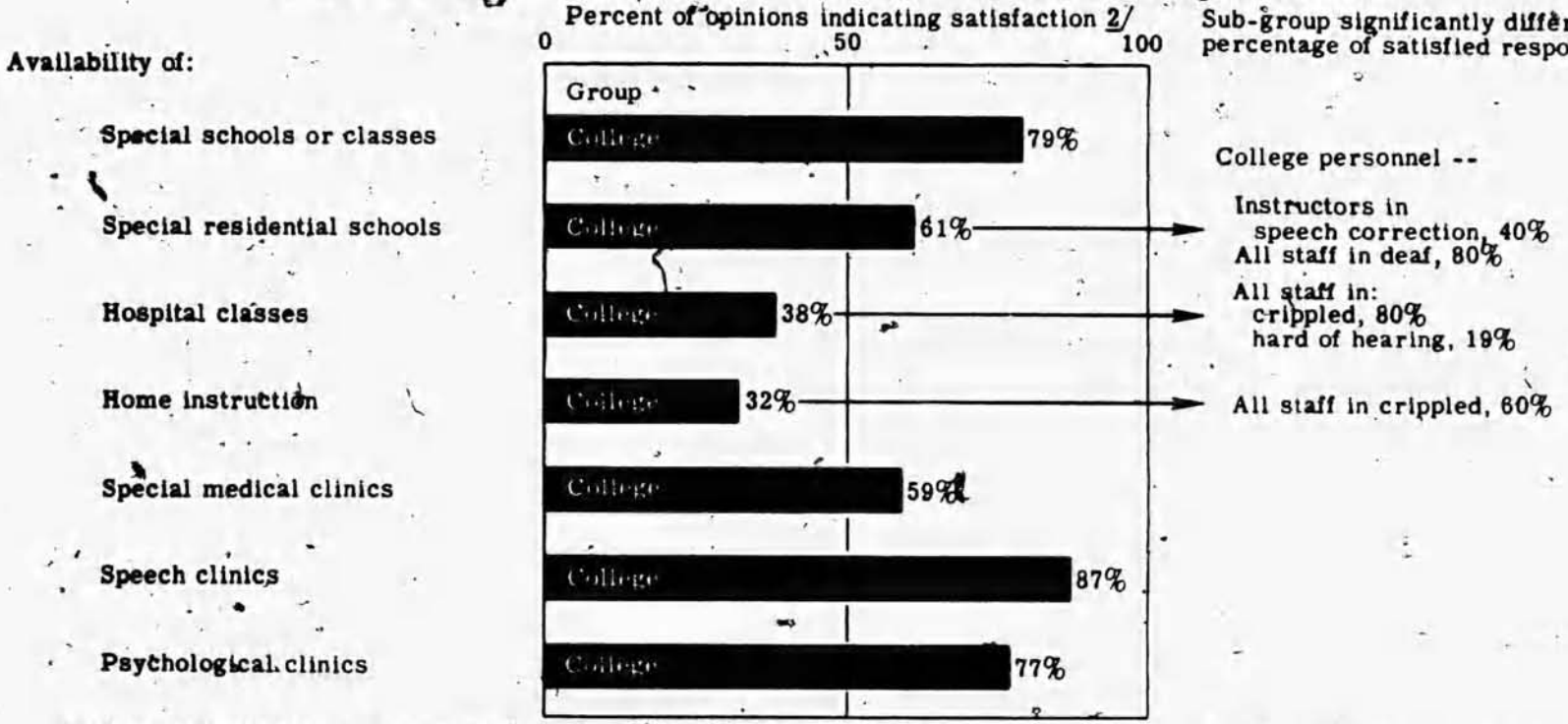
[1] College staff members evaluated only their own programs of professional preparation. Teachers participating in the study evaluated the institution at which they received the major part of their professional preparation. Only the opinions of teachers prepared since January 1946 have been included here. Questions were slightly different from group to group. See appendix D for exact wording in the inquiry forms.

[2] The percentage of opinions is based on answers to series of questions which were answered by "yes," "no," or "undecided." Only responses indicating "satisfaction" are reported here. On the items included in Graph 5, the average percent of responses indicating "dissatisfaction" was 24, with a range of 10 to 36; the average percent of "undecided" responses was 10, with a range of 3 to 27.

[3] Differences were considered to be significant if the probability of chance occurrence was 0.01 or less. See appendix C, page 113 for statistical procedures employed.

GRAPH 6—Opinions of college staff members on the availability of facilities for student teaching and observation [1]

College = College staff members responsible for programs of teachers of exceptional children



[1] College staff members evaluated only their own programs of professional preparation. See appendix D for exact wording of questions in the inquiry forms.

[2] The percentage of opinions is based on answers to series of questions which were answered "yes," "no," or "undecided." Only responses indicating "satisfaction" are reported here. On the items included in Graph 6, the average percent of responses indicating "dissatisfaction" was 30, with a range of 8 to 52; the average percent of "undecided" responses was 8, with a range of 4 to 16.

[3] Differences were considered to be significant if the probability of chance occurrence was 0.01 or less. See appendix C, page 113, for statistical procedures employed.

ADMINISTRATIVE CONSIDERATIONS IN COLLEGE PROGRAMS

The focus of the report now moves to some special aspects of planning college and university programs of preparation for teachers of exceptional children. All of these may be of particular interest to persons administering programs in higher institutions and most of the data in this section were reported by college staff members. The information to be presented falls into the following categories: (1) Recruitment and securing of teacher candidates; (2) college course content and teaching methods, (3) administrative support, and (4) library resources.

Recruiting and Selecting Teacher Candidates

College staff members provided some opinions on teacher recruitment, and they, together with the directors and supervisors in State and local school systems, expressed views bearing on the selection of teacher candidates. Earlier chapters in this publication show the emphasis placed on the personality traits of the teacher and one can assume that in recruitment and selection attention should first be given to personal characteristics which will form a base for developing professional competencies.

On the fundamental question of attracting sufficient numbers of both undergraduate and graduate students between 40 and 50 percent of the college staff members reported difficulty.[2] (Graph 7, section A.) The problem seemed to be most critical in the area of mental retardation. This is in keeping with information on the availability of teachers reported in 1953–54, when the requests received by colleges for teachers of the mentally retarded exceeded those of all other areas.[3]

With few exceptions, the college staff members did not think that potentially successful teachers were being excluded because of *too rigid* screening procedures. In fact, only about half of them believed that potential teacher candidates were being screened with sufficient care to exclude those with unsuitable personality characteristics. In contrast, the directors and supervisors thought that recently graduated teachers did not have unsuitable personality patterns. Does this mean that some of the teacher candidates less well adapted to working with exceptional children either fail to graduate or to become employed as teachers? This difference in opinions might result from the use of different criteria for "unsuitable personality patterns," but it is more likely that when answering this question the directors and supervisors had in mind groups of teachers who had gained knowledge and experience beyond that of a teacher candidate (graph 7, section A).

[2] This is one question on which the negative answer seemed to have more significance.

[3] Romaine P. Mackie, *and* Lloyd M. Dunn. *College and University Programs for the Preparation of Teachers of Exceptional Children.* Washington, U. S. Government Printing Office, 1954. (Office of Education, Bulletin 1954, No. 13) 90 p.

Even though no direct effort was made in this study to examine the relationship between personality characteristics and teacher competence, in the few places where opportunity was given for an expression of opinion on this matter, a striking emphasis was placed on the importance of the personality of the special educator. Teachers themselves, as reported earlier in this publication, went to great lengths to identify many traits which they felt were needed for themselves or for their supervisors in State and local school systems.

This picture of the teacher drawn by the teachers themselves, when reviewed together with the somewhat dissatisfied opinions of the college staff members, emphasizes the importance of screening for personality traits in the recruitment and selection of teacher candidates. Data in this study point to screening as a major issue in improving professional standards.

Course Content and Method

Evaluation of the effectiveness of programs of study in colleges and universities can be done only in part by a college staff. The students who complete the program and the supervisors of those students when they become teachers are in a position to indicate the success or failure of the program. The inquiry forms yielded data on overlap and repetition in content of course, extensiveness of course offerings, and emphasis on different instructional techniques (graph 7, section B).

On the first two questions in this series, we have the opinions only of the more recently prepared teachers. They registered fairly high satisfaction with general cultural courses (80%) and with specialized courses (77%), but about half of the group (51%)[4] believed there was an undue amount of repetition and overlapping in general teacher education courses.

When one considers the wide variety of learning to which teacher candidates in special education should be exposed, as is evident in the wide array of knowledge and skills identified as valuable to the teacher in his work it becomes obvious that undue repetition and overlap should be avoided to insure the productive use of the student's time. These opinions suggest the need for further review of the content of college courses, but especially general education courses, to eliminate overlap and repetition.

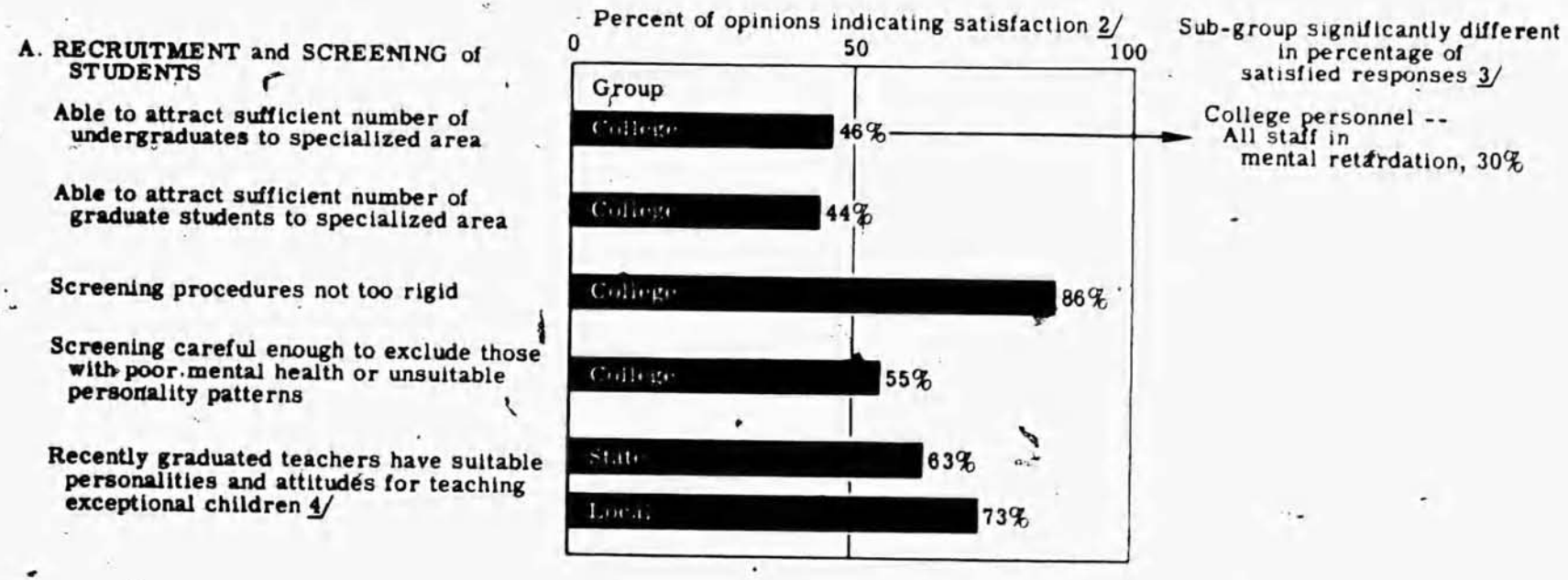
Another problem is the number and *sequential character* of courses and experiences in the college course. Opinions on this were provided only by staff members in colleges which were known to have at least a minimum sequence in the area (or areas) of special education for which they were reporting. In view of this selective factor, it is not surprising that 83 percent expressed satisfaction with this aspect[5] of their program. Within the college

[4] On the basis of unpublished data.

[5] The definition of a sequence used in this study is on page 4, footnote 6.

GRAPH 7.—Opinions of special educators on some aspects of planning and administering college and university programs for the professional preparation of teachers of exceptional children [1]

State = Directors and specialists in programs for excecptional children in State departments of education
Local = Directors and supervisors of programs for exceptional children in local school systems
College = College staff members responsible for programs of preparation of teachers of exceptional children
Teacher = Superior teachers in the various areas of exceptionality



B. COURSE CONTENT and METHODS

No undue repetition and overlap in general cultural courses such as English, history, and the sciences

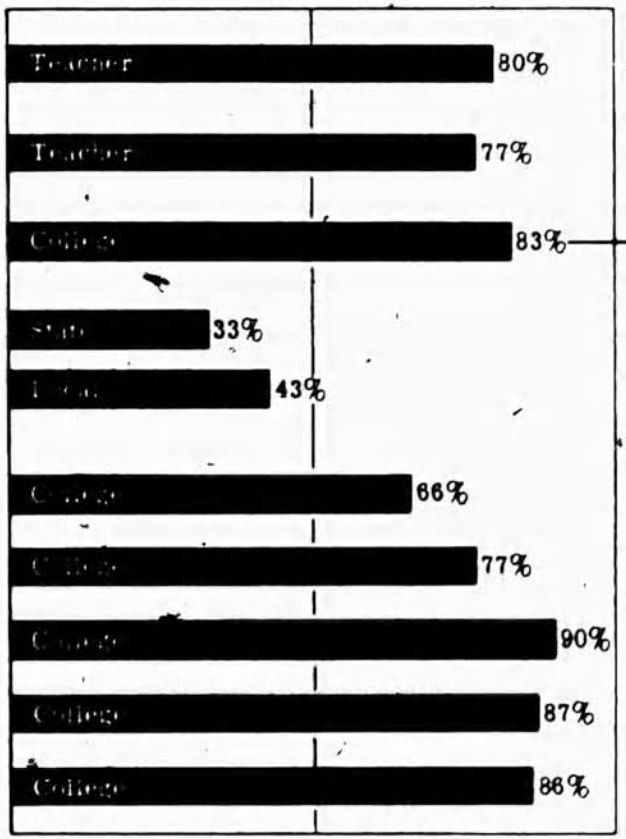
No undue repetition and overlap of content in specialized courses

Sufficient number of sequential specialized experiences (including courses) to prepare good teachers

Teachers have not been prepared to teach under ideal conditions only

Too much emphasis is not placed on --

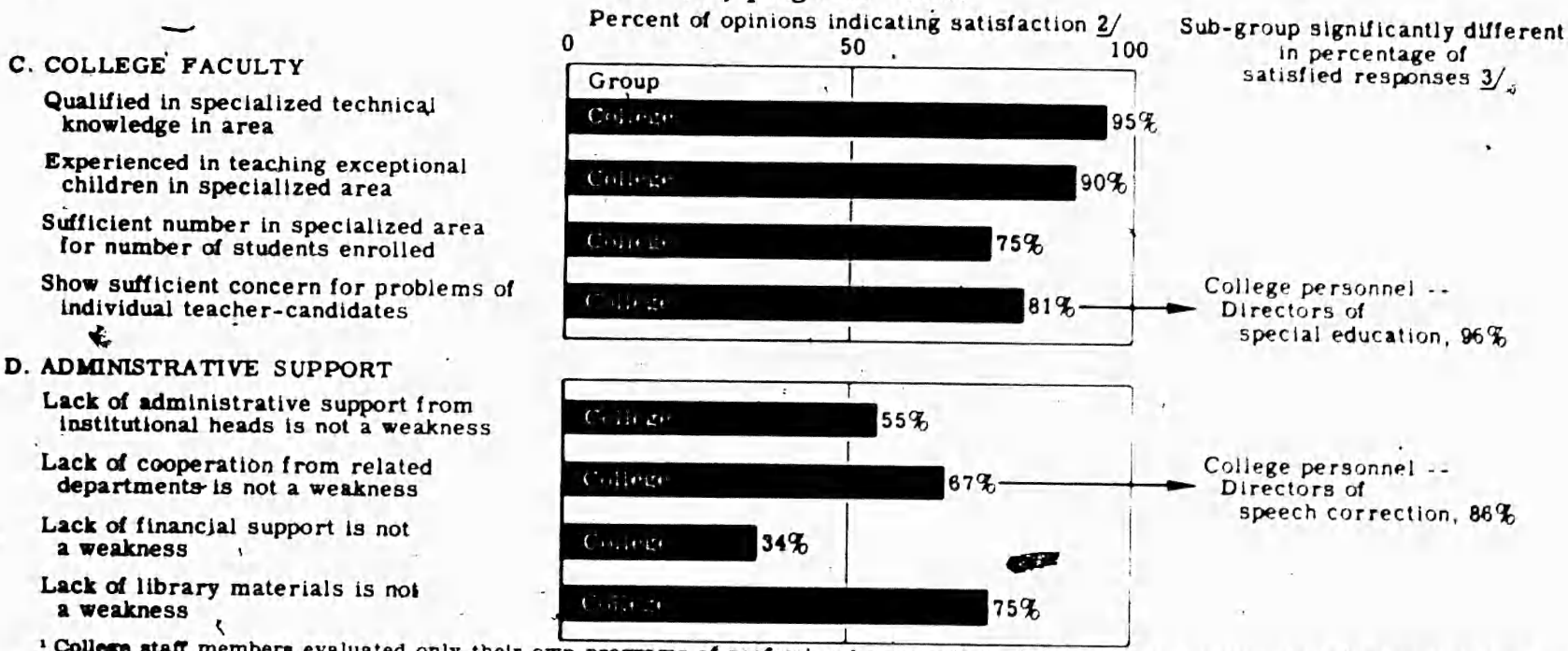
- Lecture methods
- Group project methods
- Individual conference techniques
- Group discussion methods
- Research



College personnel -- Directors of special education, 96%

See footnotes at end of graph, page 80.

GRAPH 7.—Opinions of special educators on some aspects of planning and administering college and university programs—*Cont.*



[1] College staff members evaluated only their own programs of professional preparation. State and local personnel evaluated recently prepared teachers in their school systems; teachers participating in the study evaluated the institution at which they received the major part of their professional preparation. Only the opinions of teachers prepared since January 1946 have been included here. Questions were slightly different from group to group. See appendix D for exact wording in the inquiry forms.

[2] The percentage of opinions is based on answers to series of questions which were answered by "yes," "no," or "undecided." Only responses indicating "satisfaction" are reported here. On the items included in Graph 7, the average percent of responses indicating "dissatisfaction" was 18, with a range of 1 to 51; the average percent of "undecided" responses was 12, with a range of 3 to 27.

[3] Differences were considered to be significant if the probability of chance occurrence was 0.01 or less. See appendix C, page 113, for statistical procedures employed.

[4] In condensing the items, some of the meaning was lost in item 5. The question was as follows: Do you believe that an abnormally high percentage of recently graduated special education teachers have "unsuitable" personalities and attitudes for teaching exceptional children? A "no" reply was considered to be an indication of satisfaction.

group itself there was a significant difference of opinion on this matter with the directors of special education registering highest satisfaction. Opinions from other special educators seemed to be in conflict with this high degree of satisfaction. Even these teachers who were selected by their supervisors as "superior" indicated that they did not have in their preparation enough such experiences as supervised student teaching or planned observations, or help in interpreting and using records (see table 8).

On still another issue in college offerings, that is content and methods of instruction, a group of questions were asked. Between 75 percent and 90 percent of college staff thought that *group project method, individual conference techniques, group discussion methods,* or *research* were not overemphasized. A slightly smaller number thought that not too much emphasis was placed on the lecture method. Unfortunately, the study does not provide opinions on the other side of this issue. It is hoped that future research will measure the effects of some of these methods and techniques on the long-term development of teachers.

Administrative Support

To be fully successful any college program will probably require the support and leadership of top level administrators of the institution. This is particularly true in programs for teachers of exceptional children where need for interdisciplinary cooperation is imperative. What did the college staff members say about their own programs? The majority did not think that they were weak in top level administrative support or in obtaining cooperation from related departments such as general education, psychology, and speech (graph 7).

The directors of speech correction programs registered a higher level of satisfaction with interdepartmental cooperation than did the other groups of college staff members. This might suggest that speech correction offerings are more thoroughly integrated into the total college instructional programs than are other special education programs. In contrast, only about one-third of college staff members thought there was strong enough financial support. The evidence suggests that, in the thinking of college personnel, the greatest need is for more nearly adequate financing of educational programs.

Library

The development of a college program would be dependent to a great extent upon library resources on the education of exceptional children and youth and on materials in related fields such as medicine. In this study, college and university staff members were asked about their libraries, and teachers were asked about their knowledge of professional literature. Three quarters of the college staff members reported that lack of library materials was not a weakness in their programs (graph 7, section D).

Teachers said it was "important" but seldom "very important" for them to have a knowledge or understanding of reference materials and professional literature and journals on the education and psychology of children in their own special area; 60 percent rated their proficiency as "good" in this respect. The remaining 40 percent indicated that they were only "fair."

It would be interesting to see the results of a more extensive study on college and university library materials. Does the high level of satisfaction among college faculty members mean that libraries are adequate? Were the specialists answering in terms of what they regarded as minimal rather than desirable? Does the low percentage of research activity in many college programs result from lack of the library and research resources? Do library budgets carry adequate appropriations for purchase of technical area reports and materials from the ever-increasing supply of information on education and care of exceptional children? A project is suggested for further study.

CHAPTER IV

Qualifications of College Staff Members

AT THE CORE of an outstanding college or university program of teacher education, there must be an outstanding instructional staff in the college or university. Basic questions then are: (1) What qualifications should special education personnel in collegiate institutions possess? (2) What specific preparation and experiences will contribute most to their success? This section of the bulletin presents findings from the study on these two queries.

COMPETENCIES FOR COLLEGE STAFF MEMBERS AS IDENTIFIED BY A COMMITTEE

In order to perform their duties, college staff members need many specialized competencies and specialized knowledge. The identification and discussion of such competencies and knowledge was undertaken by a committee of experts in special education, all of whom had competencies in all or several areas of special education. Five committee members were in college positions, three in State departments of education and the others in supervisory positions in local school systems. The committee was asked to formulate a narrative report which would reflect the thinking of the group on the competencies essential to a college faculty in special education.

In defining the distinctive competencies needed by college faculty members, the committee's task was a creative one. The National Advisory Committee suggested that committee members should set their sights high and their statement in terms of the ideal. Thus, their report would serve as a goal toward which to work rather than merely as a basis for minimum standards. They were requested to work without reference to existing standards, college curriculum, or reports of other educators. They did not have access to inquiry forms used to collect data in this study. The committee was regarded as autonomous in making its statement, and although the report was reviewed by many people, changes in it were made only by committee action.

Nominations to the competency committee were made by the national advisory committee.[1] Insofar as possible, committee members were selected on

[1] See appendix A for information on how the committee was formed.

the basis of (1) teaching experience with exceptional children; (2) supervisory or administrative responsibility for educational programs for the exceptional; and (3) experience in the preparation of teachers of exceptional children through appointments to the staff of a college or university. A committee of 11 leaders recognized as outstanding in the field was formed. Their extensive statement, which results from deliberation by the group over a period of 2 years, is reproduced in the following pages.

Perhaps it should be pointed out that the committee did not differentiate between personnel in speech correction programs and those in the other areas of exceptionality. Desirable as it may have been to collect parallel data, it was considered best not to limit the committee's task to this degree.

THE COMPETENCY COMMITTEE AND ITS REPORT

Francis E. Lord *(Chairman)*

Leo F. Cain
Maurice H. Fouracre
Frederick J. Gillis
Ross Hamilton
John J. Lee
John D. Messick
Marguerite Rapson
Mildred Stanton
Raymond M. Taibl
Esther Wilberg

(Titles and addresses of committee members appear on page IV.)

The committee report describes the desirable qualifications of college personnel primarily responsible for the specialized professional training of teachers of exceptional children, that is, (1) directors, coordinators or department heads, (2) college instructors of special education courses, (3) cooperating or demonstration teachers. It is recognized that there are many other types of specialists who contribute significantly to the total educational program. For example, teachers of physically handicapped often receive instruction from medical specialists, or teachers of the mentally retarded may receive instruction from specialists in psychology. Because the entire study was limited to educational personnel this committee has devoted its report to those who contribute most directly to the professional training of teachers of special education.

College Staff Members: Competencies and Training

Director or Coordinator

The director of special education in a college or university is expected to assume the leadership role in his institution for the development of a functional program of education for teachers of exceptional children. He will also have responsibility for adapting the facilities available within his college and utilizing to best advantage the varied community resources essential to the operation of a successful program, including such resources as hospitals, clinics, schools, social agencies, and parent organizations.

Competencies

The director or coordinator of special education should have the same personal qualifications as are required of directors of other programs in teacher education. In addition, he should have particular competencies and personal qualities such as those described below.

He should be able to work cooperatively with other specialists, both in the college or university and in the community. To do this he will need to understand the problems of the staff working in elementary and secondary education as well as the point of view and approach of general physicians, medical specialists, rehabilitation counselors, psychologists, psychiatrists, social workers, physical and occupational therapists, and the many other professional workers concerned with a well-rounded program for exceptional children. He should know the programs and the contributions of the medical facilities, the guidance centers, the social agencies, and the public and private residential schools in his community and State.

He should have the ability to evaluate objectively the competencies and personal qualifications of teachers under his guidance, and of the students in training in relationship to the demands of their respective fields.

The director should be an effective interpreter of the special education program to the college or university and to the community. He should be able to interpret special education to the other professional educators in the college, showing the interrelationship of special education to other fields—elementary, secondary, physical education, guidance and counseling, psychology, creative arts, and the many other departments and programs making up the college community. He should continually interpret to public school administrators and teachers the purposes and programs of special education and assist in every way possible in program development. He will have to work sympathetically but objectively with parents and to cooperate with community agencies which sponsor parent education programs.

Professional preparation

The general professional preparation for a director of special education should be similar to that required of faculty members in comparable academic positions within the college or university. He should have basic college preparation in general education, including an understanding of the functions of education in American life. He should possess an earned doctor's degree. His graduate work should include professional courses to enable him to gain a comprehensive overview of the entire field including the organizational, administrative, and supervisory problems involved and to attain a high degree of competency in at least one area of special education.

In order to provide the mature leadership necessary for success, both in the college and in the community, the director of special education should have had a wide variety of practical experience with children in and out of school.

A director should have a minimum of 2 years of successful teaching experi-

Courtesy Boston, Mass., Public Schools

Learning to read braille.

ence in special education at the elementary or secondary school level, either in public or private schools or in residential schools. If his experience is obtained at both levels and with normal children, so much the better. Clinical experience and work in rehabilitation agencies dealing with children and youth are extremely valuable and should complement the director's teaching experience.

A director of a special education program should have had at least 2 years' experience in administration, preferably as a school principal, supervisor, or superintendent. Administrative experience in a State department of education, a clinic, a hospital, a rehabilitation agency, or a social agency, however, provides excellent training. Experience with research projects involving exceptional children is helpful in providing a background for theoretical and applied research at the college level. Before assuming the directorship, he should have had full-time teaching experience at the college level in special

education, including the teaching of methods courses and supervision of student teaching.

College Instructor

The college teacher is responsible for course instruction in one or more areas of special education designed to prepare teachers. His major contribution is usually to curriculum and method in his area of specialization. He may also be responsible for supervision of laboratory teachers and or student teachers in his area.

Competencies

The reports of the various area competency committees, such as the blind or deaf, describe in detail the competencies necessary for teachers in each of the fields of special education. It is assumed that most of these would be used in evaluating the preparation of college instructors in the relevant areas of exceptionality.

Most of the competencies discussed below are important for all college instructors engaged in teacher education, but they seem to have particular significance for persons assigned to special education positions.

The college instructor should know the college and community resources which can be utilized to give students a rich background of experience. Unlike many other training programs, most of the resources needed for enrichment of programs for teachers of exceptional children are in hospitals, clinics, and other agencies off the campus. He should be able to work harmoniously with medical and nursing groups, therapists, social workers, psychologists, and others from both public and private agencies. He should, in a very real sense, be able to teach students how to serve as members of a professional team.

He should understand and respect both the limitations and the contributions of each discipline and be able to cooperate with others in using such contributions.

The college instructor should be skilled in counseling college students and in assessing their qualifications for the specific type of work for which they are training. He should be well acquainted with current methods and trends in the education of normal children and be able to adapt the methods to his specific field. He needs to be acquainted with and able to evaluate various methods of teaching in current use in his area of specialization.

He should be able to recognize and interpret the needs of individual exceptional children and to assist special and regular teachers in effective planning for them. He should also be able to evaluate various administrative plans for providing an educational program suitable to the total needs of a particular child.

The college instructor should possess an experimental attitude, be interested in trying new methods and new materials, and engage in constant evaluation

of common practices. He should be able to develop in his students an interest in creative experimentation and a capacity to develop new materials of instruction. He should be able to evaluate research and make practical use of research data in his instruction.

Professional preparation

The professional preparation for the college instructor in special education should be similar to that required for staff members in comparable academic positions within the college or university. His general preparation should include work in the education of normal children in order that he may understand the problems of the toral public school program and the place of special education in it.

The college teacher in special education should have at least one semester of graduate credit beyond the master's degree, including professional courses which would enable him to attain a high degree of competency in his area of specialization. He should have basic orientation courses in the problems of other areas of special education since many exceptional children are multiply handicapped. He should have had some experience as a participant in research related to the education of exceptional children.

Courtesy The Pennsylvania State University

Learning to compensate for hearing loss.

In order to provide leadership, the college teacher should have had a wide variety of practical experience with children. Minimum experience should include: (1) Successful teaching of normal children at the elementary or secondary level, (2) a minimum of from 3 to 5 years of successful teaching of exceptional children in the area of specialization. Successful supervisory experience in a residential school or with day classes is a desirable experience

Cooperating or Demonstration Teacher

The cooperating teacher, or in some cases the demonstration teacher, is responsible for guiding the laboratory experience of teacher candidates during their periods of student teaching. He may be assigned responsibilities in a campus laboratory or demonstration school, a special public school, or a residential school. He may be employed as a member of the college staff or of the local school system which has a cooperative relationship with the college.

Competencies

The reports of the area competency committees [2] describe in detail the qualifications of superior teachers of children who are blind, deaf, gifted, etc. These reports, therefore, provide a foundation for the personal and professional qualifications of the cooperating teacher. This report concentrates on the competencies required of the college staff member who guides trainees in student teaching and other laboratory experiences.

He should be sufficiently mature to work under constant observation. Wholesome personal adjustment is necessary in order that he may be able to work under conditions involving continuous, critical evaluation in the classroom. The cooperating teacher must be able to accomplish a dual educational program—for pupils and for student teachers. Such a program requires ability to relate successfully to both children and adults. He should know how to create a classroom environment and conditions in which the practice teacher may experience satisfying achievements. He should have exceptional ability to inspire student teachers to develop initiative, creativity, and imagination.

He should be able to describe, demonstrate, and evaluate specific teaching techniques in relation to goals and objectives and to explain to a student teacher *why* certain techniques are important as well as *how* they are acquired. Since techniques change with new research developments in special education, the training teacher should assist the trainee in becoming adaptable and in developing initiative in devising new techniques whenever a challenging need arises.

He should desire to increase his understanding of the basic principles of sociology, psychology, and child growth and development. Exceptional children often have problems of learning and personal adjustment which require of the teacher, if he is to help them, an integration of professional knowledge from the several behavioral sciences. He should have skill in working with other

[2] See inside back cover for the list of area reports coming from the study "Qualification and Preparation of Teachers of Exceptional Children," each of which contains a committee report.

professional persons. Since special education is a complex field involving cooperation with many other professions, the training teacher needs great awareness of the various disciplines with which the trainees will be involved.

He should have skill in working with parents of exceptional children and with the community.

He should be well versed in the general objectives of the total teacher training program and fully cognizant of his role in that program. He should have adequate knowledge of all resources in the college or university and the community.

The cooperating teacher should understand the importance of complete pupil personnel records. Since medical, social, psychological and school records are the foundation for much of the planning for exceptional children, the cooperating teacher must insure that the trainee understands their importance and has developed some skill in maintaining them.

He should recognize the importance of the vocational and employment problems which his pupils will face. He should be prepared to demonstrate effective guidance techniques and to cooperate with the rehabilitation services in the community which share in training and placement.

The cooperating teacher should be skillful in interpreting his work to his professional colleagues and to the community. He should understand the relationship between general and special education.

Professional preparation

It is desirable for the cooperating teacher to have a master's degree or its equivalent in his field of specialization. He should have had a practicum or in-service training in problems of supervising student teaching to develop skill in the following competencies: (1) Translating theory into practice, (2) recognizing stages in growth in student teachers, (3) group process techniques and leadership, (4) counseling students, (5) evaluating a student's program, and (6) meeting special situations peculiar to the training program.

The cooperating teacher should have demonstrated superior teaching ability in his special area. It is desirable for him to have teaching experience with normal children at the student-teaching level and in the field. While there are no data to support this point of view, there is strong professional belief that it is sound. Experience with normal children and with other teachers should help the cooperating teacher of exceptional children retain perspective.

The cooperating teacher in special education should have broad experiences and training in order to cope realistically with varied cultural patterns and with the social attitudes prevalent in work with exceptional children, their parents, and the community.

Concluding Statement

It is difficult to present objective criteria for the determination of the qualifications of college personnel, for there are many factors of training,

personality, and leadership which are not easily described or assessed. The role and the responsibilities of college staff members in special education may, in many instances, differ from those of the staff members in other fields of education for two major reasons.

First, it is often true that a staff member in a given area of special education is the only faculty person on campus who is qualified to represent his area of education. He is expected to speak with authority and to assume special responsibilities of leadership in the college and in the community. His position is then somewhat different from that of members of larger staffs such as one finds in elementary or secondary where there is opportunity to distribute responsibilities and to plan for a balance of skills among members of a staff. Here members of a team get strength as a group by complementing each other.

Second, special education is a comparatively new field which in its best form not only embodies the good practices of regular elementary and secondary education, but also provides many adaptations and extensions. Effective personnel in special education then must possess a breadth of competency and a capacity to envision instructional practices which are rich, meaningful, and especially adapted to children who have specialized needs. This adaptation must spring from a knowledge of sound principles, and from a creative and experimental mind. In this report stress has consequently been placed on broad, comprehensive training enriched by varied and extensive experience.

(End of Committee Report)

PROFESSIONAL PREPARATION AND EXPERIENCES FOR COLLEGE STAFF MEMBERS

The committee of experts has identified and described competencies needed by college and university staff members preparing special educators to work with exceptional children. They have recognized that in attaining these competencies, successful educators draw on varied experiences including professional preparation. One purpose of the study reported here was to secure information from a number of groups on the *combination* of experience and preparation which constitutes a suitable background for such persons.

All four groups of special educators participating in this study, including the college staff members—totaling 1,429—gave opinions on the professional *experience*, academic *major*, academic *minors*, and *degrees* which they thought contributed to the competence of college and university staff members responsible for the preparation of teachers of the various types of exceptional children. They did this by selecting from a list of items in inquiry forms. (See also appendix D, page 119.)

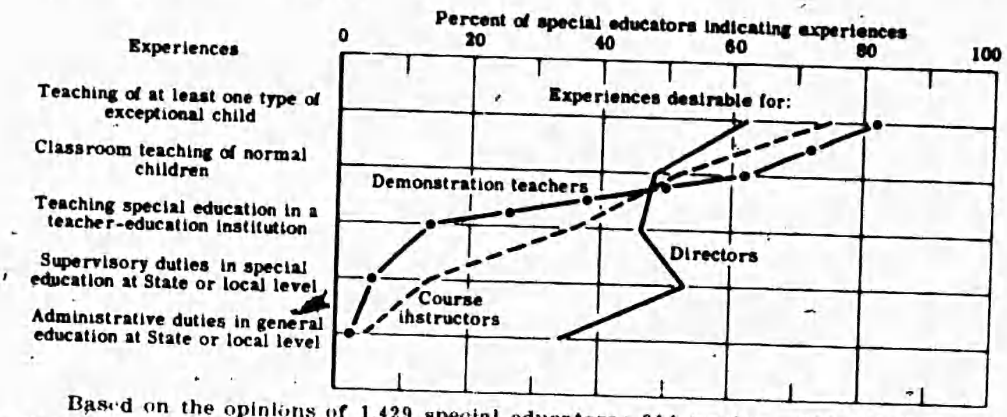
On the basis of these opinions, it becomes obvious that there are some common elements as well as marked differences in the combination of prepa-

ration and experience considered desirable for directors, instructors, and demonstration teachers. Both of these will be discussed below. (See graphs 8, 9, 10, and 11.)

Common Elements

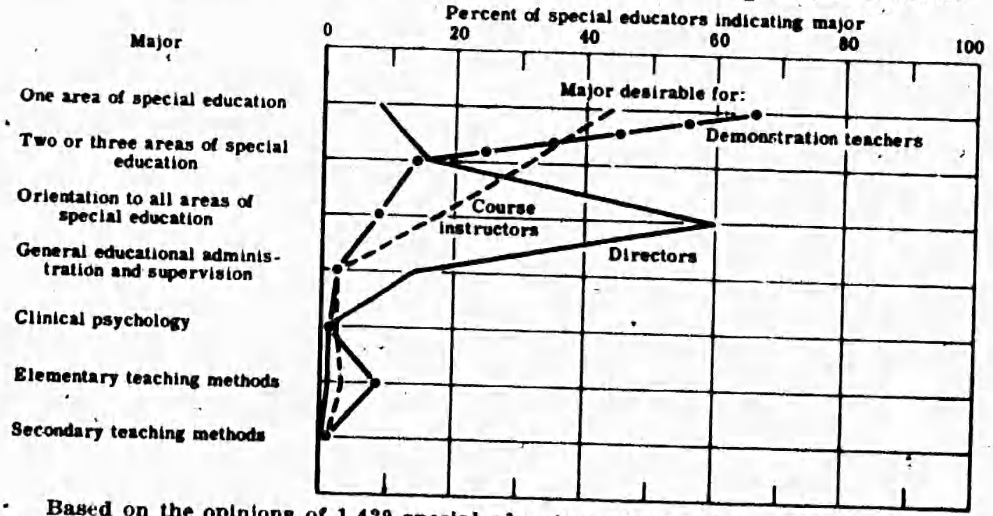
According to the opinions expressed, all college staff members preparing special educators, regardless of their position, are more likely to be successful if "education" is the major emphasis in their experience and preparation. More

GRAPH 8.—Opinions of special educators on the professional experiences desirable for college staff members preparing teachers of exceptional children



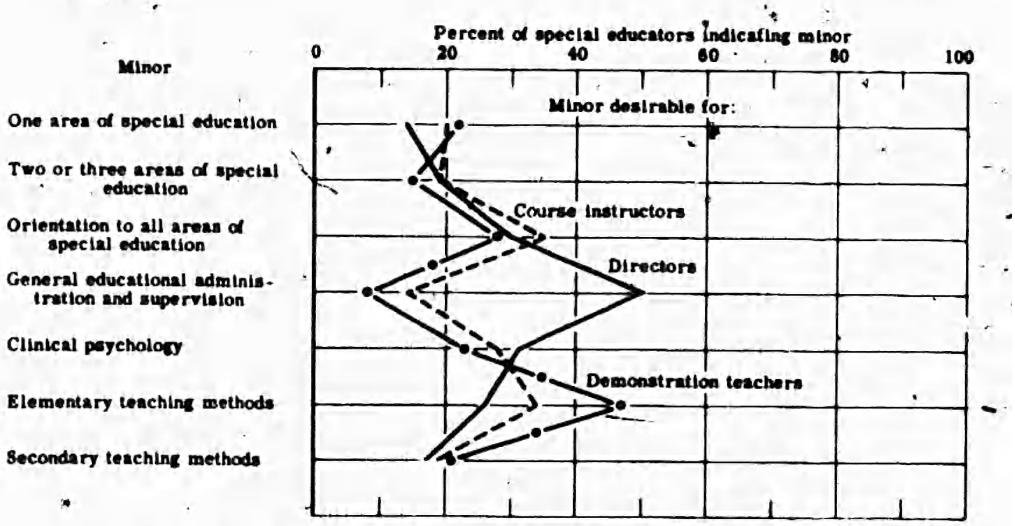
Based on the opinions of 1,429 special educators: 914 teachers, 100 directors and supervisors in State departments of education, 150 directors and supervisors in local school systems, and 265 college staff members.

GRAPH 9.—Opinions of special educators on academic majors desirable for college staff members preparing teachers of exceptional children



Based on the opinions of 1,429 special educators: 914 teachers, 100 directors and supervisors in State departments of education, 150 directors and supervisors in local school systems, and 265 college staff members.

GRAPH 10.—Opinions of special educators on academic minors desirable for college staff members preparing teachers of exceptional children



Based on the opinions of 1,429 special educators: 914 teachers, 100 directors and supervisors in State departments of education, 150 directors and supervisors in local school systems, and 265 college staff members.

particularly, their professional preparation should be in education of exceptional children, rather than in psychology, social work, medicine, or other closely related fields.[8]

The experience most often selected for directors of college programs, instructors, and demonstration teachers was "teaching of at least one type of exceptional child." About half of all the participants agreed that all college staff members should also have had experience in classroom teaching of normal children (graph 8). Consistent with this was the opinion of all four groups that academic preparation should include a major in education of exceptional children, which might be either orientation to all areas of special education, or specialization in one, two, or three areas, depending on the position of the staff member (graph 9).

In the selection of the academic minor, preferences were more divergent. For all the three types of college personnel, participants chose either clinical psychology, elementary or secondary teaching methods. Some preferred special education for a minor, but the percentage was understandably small since education of exceptional children was so frequently chosen as a major.

Different Elements

The most striking difference in opinion was expressed on the professional experience desirable for the director of a college program; the difference seems

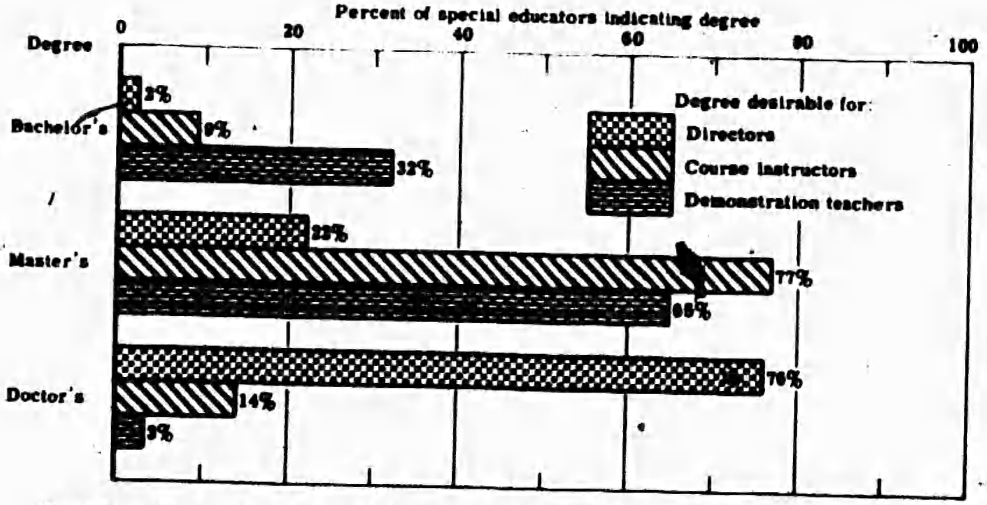
[8] Although the list presented in the inquiry form covers mainly educational activities, participants had an opportunity to add to each of the four categories; very few additions were made.

to be in the emphasis on a background of experience in supervision of special education at the State or local level. Many participants also considered it desirable for a director to have had administration experience in general education and teaching experience in special education at a college or university. A little more emphasis was placed on the teaching of exceptional children as experience necessary for an instructor (75%), and for a demonstration teacher (82%), than for a director (62%) (see graph 8).

Another rather marked difference occurs in the degree of specialization within the college major. (See graph 9, page 92.) For the director, the largest percent (60%) of choices went to orientation in all areas of special education, suggesting the need of broad preparation. For the demonstration teacher, a major in one area of exceptionality received by far the largest proportion of choices (66%); this leads one to believe that this person should have intensive, rather than extensive preparation. Although there was no clearcut majority opinion, the largest number of choices of a major for course instructors were for one area, the next largest number for two or three areas of special education. In the choice of the college minors, the main thing to be noted was the value given to general educational administration and supervision for a director of a program (50%) and the emphasis on elementary teaching methods for a demonstration teacher (47%). (See graph 10).

Although these opinions suggest that directors, instructors, and demonstration teachers should all have graduate degrees, about three-fourths of the special educators indicated that the director should have a doctor's degree and

GRAPH 11.—Opinions of special educators on academic degrees desirable for college staff members preparing teachers of exceptional children



Based on the opinions of 1,429 special educators: 914 teachers, 100 directors and supervisors in State departments of education, 150 directors and supervisors in local school systems, and 265 college staff members.

that the master's degree would be adequate for instructors and demonstration teachers (graph 11).

In summary, the data indicates that the director should have a broad background of experience and preparation in many special areas and that the instructor and cooperating teacher, on the other hand, should have intensive specialized preparation in from one to three areas.

CHAPTER V

Inservice Education

THIS REPORT cannot be brought to a close without again calling attention to the leadership role of State and local supervisors of special education in the continued professional development of teachers in their school systems. Two bulletins have been published on the competencies and professional preparation of these two emerging groups of educators.[1]

Of particular significance in this overall report are the opinions which teachers gave in free response answers on the services they want from their directors and supervisors—particularly their local supervisors. These opinions have so much bearing on the overall consideration of professional preparation that they are briefly summarized here even though the full text is found in the already published bulletins.

Teachers expect their directors and supervisors in local school systems to be available for consultation and guidance, have firsthand knowledge of pupils and conditions, and evaluate carefully teaching methods and curriculum procedures. They want department meetings and conferences for exchange of ideas, discussion of methods, lesson plans, and guidance on problems. Teachers appear to expect directors and supervisors in local school systems to maintain a sort of clearinghouse of information on the exceptional child. They want their leaders to maintain a complete and up-to-date professional library, including books on all phases of the exceptional child, bibliographies of books and articles, materials on new methods, equipment, research, and developments in the field. They also expect their leader-directors and supervisors to gather information on conferences, conventions, and group demonstrations and to pass it on to them so that they may participate in relevant programs. They want their directors to help them to be well informed and up to date.

They seem to believe their supervisors should conduct field inservice training programs and refresher courses, including seminars, workshops, and conferences. They request their leaders to provide them with speakers, to make it possible for them to hold discussions with other teachers and with leaders in the field, and encourage them in every way possible toward greater professional

[1] Romaine P. Mackie and Walter E. Snyder, *Special Education Personnel in State Departments of Education*, Washington, U. S. Government Printing Office, (Bulletin 1956, No. 6, Office of Education, 49 p.)

Romaine P. Mackie and Anna M. Engel, *Directors and Supervisors of Special Education in Local School Systems*, Washington, U. S. Government Printing Office, (Bulletin 1955, No. 13, Office of Education, 72 p.)

growth. They want their supervisors to play a major role in coordinating and developing a smooth-running program for exceptional children. These efforts should include exceptional children and their teachers, regular school personnel, the local board of education, parents, public and private agencies, and the community at large.

Teachers were asked what services State directors and specialists should provide that would be different from, or in addition to, those provided by local supervisory personnel. About half of them took time to list and describe needed services. The replies indicated that teachers expect such persons to play a broad leadership role, especially in developing new programs and in spreading public information about the education of exceptional children.

They want their State leaders to be the first to know of any project on the National and State levels and to send pertinent information on to the local supervisors. They believe State directors and supervisors should prepare for

Courtesy Minneapolis, Minn., Public Schools

Multiply handicapped child learns through creative activity.

distribution a wide variety of publications on various areas of special education, should keep abreast of research findings as they relate to the education of exceptional children, and otherwise open the avenues of communication. They also want their State leaders to be instrumental in establishing workshops, especially for the benefit of school systems without local supervisors, for they indicated that the exchange of ideas made possible to all workshop participants was extremely valuable.

It could be assumed that in this enormous and challenging task, teachers expect their supervisors to draw upon the resources of their own school systems, colleges and universities, teacher groups, and others to provide good inservice education in its broadest and most dynamic sense.

Teachers further want directors and supervisors to present, interpret, and clarify the aims and purposes of special education programs to educators, other professional persons, and the general public thus working toward acceptance of the program for the exceptional child.

While the maintenance of teacher competence is to a large extent the responsibility of the teacher himself, these superior teachers apparently are eager for stimulation, guidance, and professional help from their supervisors.

CHAPTER VI

Summary and Implications

THIS REPORT is an overview of the opinion data on professional preparation of teachers of handicapped and gifted children collected as part of the study, "Qualification and Preparation of Teachers of Exceptional Children." Two methods were used for obtaining the basic data. Opinions were collected through inquiry forms from about 1,600 special educators including successful teachers, college staff members, directors and specialists in State departments of education, and directors and supervisors in local school systems. Competency reports were prepared by 13 committees of nationally recognized special educators. The report on competencies needed by college staff members is included in this publication; others have been published in individual area publications. The validity of the findings rests on the expertness of the participants who were recognized as qualified to express opinions based on broad and varied experience and preparation and success in their chosen field.

The most significant finding to come from the overall study is the confirmation of the premise that special educators will need to be increasingly prepared with specialized knowledge, skills, and abilities in each area for which they carry responsibility.

OVERVIEW OF TEACHER COMPETENCIES

Approximately 100 teachers in each of the 10 areas of exceptionality evaluated a list of competencies relevant to their own area. Most of the items were rated as "very important" or "important" in their daily work with children. For this publication, the ten lists, one for each area of exceptionality, were compiled into a master table to provide an overview of teacher competencies for special education. Committees of experts also identified and described large numbers of distinctive competencies for teachers of handicapped or gifted children and youth in reports which could not be effectively condensed for a summary statement.

From the lists of competencies evaluated by teachers, these major observations can be drawn: (1) Many distinctive competencies are needed by teachers in each area of exceptionality; (2) the lists have significance for special education because of the importance attached to most of the competencies

by successful teachers; (3) they are probably the most extensive lists currently available to special educators, numbering in all about 1,000 items; (4) they may well serve as guidelines for the development and improvement of professional standards. The kinds of knowledge and ability highly valued in each area suggest that the teacher should know and understand each individual child's unique problems—medical, psychological, social, educational—and then use a problem-solving approach in his efforts to provide an effective educational program.

In the following summary, the teacher evaluations are reported around the same groupings used in table 4, pages 18 to 36. No attempt is made to point out individual area differences in these literally thousands of ratings. However, even when teachers in more than one area of exceptionality agree on the importance of a particular knowledge or ability, differences exist since the competency usually would have a distinctive meaning when applied to each individual area. For example, competence in teaching methods in the area of the deaf would be quite different from that in the area of the mentally retarded or the blind.

In evaluating *technical knowledge* appropriate to the specialized area teachers placed highest value on social and psychological understandings. They gave somewhat lower ratihgs to knowledge of medical factors, professional literature and research, and legislative provisions. Nearly all competencies having to do with applying this knowledge to understanding *each individual child* and the effect of his deviation on him were evaluated as "very important."

Approximately one-fourth of the competency items were focused specifically on *developing and adjusting the curriculum and using specialized teaching methods.* Teachers indicated that they were most deeply concerned with the abilities necessary to individualize the curriculum and to use appropriate teaching methods in meeting the needs of exceptional children, to create a favorable classroom environment, to develop skills needed by the child because of his deviation, and to provide stimulating experiences for intellectual and social growth.

The successful teachers regarded most of the items dealing with *counseling and guiding* as "very important" in their work and evaluated none as less than "important." They reflected the belief that the special teacher should be trained to help pupils not only with their educational problems but with their social, emotional, and vocational problems, and their life goals. It was considered especially important for teachers of physically handicapped children to have ability to counsel children on their personal attitudes toward their handicaps.

In general, ability to *use and interpret various kinds of records and reports is a competence* which teachers regarded as "important" but not of relatively highest value to them in their daily work with handicapped or gifted children. Even lower ratings on ability *to administer group and individual tests* of intelligence and achievement indicate that many teachers do not consider this function as their responsibility.

Contributing their own specialized knowledge and ability to the *team approach* to serving the handicapped or gifted child was another kind of competence highly valued by the teachers. Cooperation with other educators, with specialists in other professions, and with parents is apparently of paramount importance in achieving an effective program for these children.

Teachers repeatedly put relatively low evaluations on *knowing specialized teaching methods in areas other than the one for which they had responsibility.* Although mental retardation, as an example, is rather frequently found among the physically handicapped, teachers of these children did not place a high value on knowing methods used to teach the mentally retarded.

There was a distinct feeling that teachers of exceptional children need personal characteristics somewhat different in degree or in kind from those needed by teachers in general. Flexibility, resourcefulness, and more than usual patience and understanding were among the characteristics most frequently mentioned. In addition, some characteristics were identified as particularly needed by teachers in specific areas of exceptionality. For example, teachers of blind children often mentioned the need for a clear, pleasant voice.

A comparison of the teachers' *ratings of importance* and their *self-ratings of proficiency* on the competencies showed that in general they considered themselves well prepared in most of the knowledge and abilities which they valued highly. Nevertheless in each area these successful teachers rated their proficiency in some competencies significantly lower than they rated the importance of the competency. Most of these were concerned with some aspect of developing curriculum, using specialized teaching methods, counseling children or working with parents. Of considerable interest is the common denominator of social or emotional factors running through more than two-thirds of the competencies in which the self-ratings of these superior teachers suggest a need for higher competence.

PROFESSIONAL PREPARATION OF TEACHERS

Effectiveness of recent professional preparation in developing the needed teacher competencies was evaluated by college staff members, State and local supervisors, and the recently prepared successful teachers. Although identical questions were not asked of each group, many of the issues were looked at from the point of view of each of the four groups. In addition, teachers made self-ratings of proficiency on each knowledge and ability in their area competency list, and all four groups of special educators expressed opinions on the amounts and kinds of practical experience which should be included in professional preparation.

In terms of the ability to apply *technical knowledge* in their special area to the *understanding of each individual* child, most teachers said they were well prepared to recognize and provide for individual differences; however, as many as one-third of these successful teachers thought they were only "fair" in rec-

ognizing possible causes of social and emotional problems and helping to alleviate them. The other three groups felt that recently prepared teachers were weak in the ability to identify causes of emotional and social maladjustment; yet the data indicated that successful teachers regarded this ability as of prime importance.

In the functions of *curriculum development, use of specialized teaching methods and aids*, where teachers generally rated themselves as "good", opinions of the other groups ranged from about 50 to 90 percent satisfied. Only about one-half of the recently prepared teachers in the study reported that the emphasis on practical experience in *using various kinds of tests and records* was "about right" in their preparation. Almost an equal number indicated "too little" or "no" emphasis on this type of experience. Similarly, only about half of the college or supervisory personnel were satisfied with professional preparation in the use of tests and records.

Differences of opinion were expressed on the adequacy of teacher *orientation to community clinics and agencies* serving exceptional children. Only one-third of the teachers and supervisors, as compared with three-fourths of the college staff members, felt that such orientation was systematic and adequate. Further, only a little more than half of the recently prepared successful teachers said that they had a "good" knowledge of services provided by these community organizations.

Orientation to the *education of various types of exceptional children* is another part of professional preparation in which only about one-half of all the participants seemed to be satisfied. Many teachers reported that they had little or no opportunity for systematic observation of children with multiple handicaps and that they had little knowledge of teaching methods in areas of exceptionality other than their own specialty.

Providing a *variety of practical experiences* as a part of professional preparation was considered of great value by teachers in the study. Judging by their evaluations, an effective program of professional preparation would include not only many specific types of student teaching and planned observations but also experiences in interpreting educational, psychological, medical, and social reports, and opportunities for observing multi-professional and teacher conferences on individual children. In a few areas of specialization, some types of clinical experiences in diagnosing or counseling were also thought to be of importance to the future teacher.

Neither college staff members nor supervisory personnel in State and local school systems were satisfied with the *amount of time alloted to student teaching and observation*. A majority of teachers, recently prepared, reported "too little" or "no" emphasis on many types of practical experiences. All four groups of special educators chose an average of about 200 clock hours as a "desirable" amount of student teaching in the special area. In their opinion, if a teacher has had experience as a classroom teacher of normal children, the amount of specialized student teaching could be reduced somewhat.

Less than half of the college staff members or the special educators in State and local school systems said they were satisfied with the amount of *regular classroom experience* of recently prepared teachers. While teachers in many areas rated student teaching of normal children high on their list of needed preparatory experiences, hardly two-thirds of those recently prepared reported sufficient amounts in their own preparation. All four groups of special educators indicated that from 1 to 3 years of classroom experience with normal children would be "desirable" for those preparing to teach exceptional children in any area.

Organization of student teaching programs to allow sufficient opportunities for practice in planning activities, time to note pupil progress, and a minimum of two students per classroom were considered as adequate by a majority of college staff members and teachers. Supervision of student teaching by the college instructors and cooperating teachers was also adequate in the opinion of both college staff and teachers.

The *facilities* of special schools or classes, speech clinics, and psychological clinics are more readily available for student teaching and observation than special medical clinics, residential schools, hospital classes, or home instruction programs, according to the participating college staff members.

Most aspects of the *planning and administration* of programs of professional preparation were viewed favorably by college staff members. In their opinion, colleges and universities offer a well-balanced sequence of courses and experiences, do not place too much emphasis on any one teaching method, have sufficient numbers of technically qualified and experienced faculty, have a well-stocked library, and receive cooperation from related departments. However, there were some indications that administrative and financial support could be strengthened. Opinions of college staff members revealed two other possible weak points which are probably closely related: Only a little more than half said (1) that their screening process was careful enough to exclude those personally unsuitable for teaching exceptional children and (2) that they were able to attract sufficient numbers of students, at either the graduate or the undergraduate level of preparation.

QUALIFICATION AND PREPARATION OF COLLEGE STAFF MEMBERS

Consistent with the high standards set for teachers by the participants in this study are the high qualifications indicated for college staff members responsible for teacher preparation in special education. While the competencies and preparation recommended by the committee and the professional preparation and experiences recommended by teachers, by State and local supervisory personnel, and by college staff members themselves may be idealistic, they provide goals toward which to work.

The committee concerned with competencies for college staff members agreed that the specialized knowledge and ability needed to fill the position of director, instructor, or cooperating teacher in a college or university program should be built on a minimum foundation of the specialized competencies identified in the study as necessary for a teacher in one of the specialized areas as well as on the personal qualifications required in a similar position in other programs of teacher education. For a *director or coordinator* of special education in a college or university, the competency committee stressed the importance of ability to interpret special education and to work cooperatively with other professional persons, both in the college and in the community. For a special education *instructor* in a particular area ability to adapt regular teaching methods, to evaluate specialized methods, and to experiment (and encourage his students to experiment) with new methods and materials of instruction were among the abilities identified by the committee. For a *cooperating teacher*, they recommended such competencies as ability to describe, demonstrate, and evaluate specific teaching techniques in relation to goals and objectives.

All four groups of special educators and the committee members gave some opinions on the types of experiences and professional preparation which college staff members should have. All agreed that teaching experience with at least one type of exceptional child is a necessary background experience for college staff members in special education. Teaching experience with normal children was also recommended by the participants. Desirable professional experience before directing a college program would also include a supervisory or administrative position at the State or local level and special education teaching experience in a college or university. In this study, all groups agreed a director should have an earned doctor's degree and that an instructor or a cooperating teacher should have at least a master's degree representing concentrated study in his own area of exceptionality.

INSERVICE EDUCATION

Successful teachers in this study indicated, through replies to free response questions, that they were eager to continue their professional development beyond their initial academic preparation in a college or university. It appears from this study that teachers expect inservice education to be extended and improved. They listed various ways in which their State or local supervisors could assist them in their total professional development and in keeping up to date with changes which occur in special education as a result of new knowledge. Teachers expect their supervisors to give them wise counsel and guidance, especially in understanding and planning for individual children. They want supervisors to make available results of current research and to help interpret its meaning in the practical situations faced by teachers in their day-by-day work. Teachers want opportunities for participation in such inservice

programs as workshops, conferences, discussion groups and conventions. The quality of leadership needed in each of the specialized areas of special education is clearly indicated by these and other services supervisors are expected to perform in the interests of better education for handicapped and gifted children and youth.

IMPLICATIONS

1. More attention will likely be given in the future, through both initial preparation and inservice education, to the development of distinctive competencies--area by area--for educators responsible for the education of exceptional children and youth. This means distinctive competencies not only for those who instruct children in each of the areas, such as teachers of mentally retarded or deaf, but also for those who will carry responsibility for programs of professional preparation in colleges and universities and for those who will direct and supervise programs in State and local school systems.

At this time when the Nation has not more than *one-fourth* of the qualified personnel required to staff the special school programs, a challenge of great magnitude faces the institutions of higher learning, the school systems, and other agencies committed to the extension and improvement of educational opportunity for handicapped and gifted children. The challenge is not only to provide the children with educators who have the personal qualifications and the distinctive knowledge, skills, and abilities which will enable them to deal with some of the schools' most difficult problems, but also to multiply several times the number of such qualified educators in the Nation.

2. Teachers of exceptional children will be expected increasingly to have competencies different in kind or degree from those needed by teachers of so-called normal children. Further these specialized competencies differ from one area of exceptionality to another. A beginning in identifying and describing these has been made in the study reported here. These findings may well serve as guidelines to special educators for self-evaluation and for developing and improving college curriculums and professional standards.

3. On some of the "very important" competencies—such as ability to guide and help children with social or emotional problems resulting from their deviations—the superior teachers suggested their own need for higher competence. Their self-evaluations provide a clue to colleges and universities and to State and local school systems for new emphases in their programs of professional development. At the same time evidence in this study implies that there should be no lessening in existing emphases on such features as technical knowledge, understanding the child and his deviation, curriculum development and adjustment, and specialized teaching methods.

4. Colleges and universities preparing special education personnel may well use the suggestions of the participants in this study as a guide for strengthening their curriculums at all levels of study and for all types of special educators.

They may need to increase opportunities for relevant practical experiences and for planned observations. In this process it is likely that there will be an ever-widening collaboration with other agencies and a systematic and extensive use of community resources.

5. Persons preparing to be directors or supervisors in State or local school systems will inevitably seek colleges which offer preparation at the graduate level and which have curriculums comprehensive enough to fully prepare them for work in their areas of specialization. They will very likely choose colleges offering opportunities wider in scope and with more depth than is needed to prepare a special class teacher.

6. College and university staff members will need outstanding technical qualification in their specialized area if they are to impart the high level of technical knowledge and assist in the development of the skills identified in this study as necessary for persons in various special education positions.

7. In the future, directors and supervisors will apparently be expected to give a larger share of their time to the inservice education of teachers in their school systems. The sample of successful teachers reporting in this study recognized a need for continuing professional development; it can therefore probably be assumed that other special teachers also want and need this. Many teachers in this study expressly stated that they expect their directors and supervisors to be available not only to consult with them but also to provide a clearinghouse of information on all aspects of education for handicapped and gifted children, including currently pertinent literature, research findings, and films. They also want their supervisors to organize workshops and make arrangements for other inservice opportunities such as observations and participation in community programs. In carrying forward an inservice program, school systems would undoubtedly make full use of colleges and universities, appropriate National, State, and local voluntary organizations, and other agencies.

8. The best qualified special teachers and directors and supervisors of special education will likely be attracted and retained by school systems with well-informed and sympathetic administrators and school board members. Persons with a high degree of competence—that is those equipped with specialized knowledge as well as those with ability to work with individuals who have severe human problems—will seek school systems in which they can make the greatest contribution.

9. For years to come there will probably be a critical shortage of educational personnel to work in the various programs for exceptional children. It appears that one of the most immediately effective ways to meet this problem is to focus efforts on the development of specialized professional leadership. Through supervisory and administrative services in State or local school systems and through instruction in college or university programs well-trained leaders will be able to raise the qualifications of personnel and at the same time multiply the numbers of persons working directly with the children and

their parents. It seems, therefore, that adequate fellowships and scholarships should be provided to attract promising persons to prepare to be directors or supervisors of school programs and directors or instructors in colleges or universities preparing teachers of handicapped or gifted children and youth.

APPENDIX A.—*The Plan and Procedures Used in the Office of Education Study, "Qualification and Preparation of Teachers of Exceptional Children"*

THIS PROJECT was undertaken by the Office of Education in collaboration with many leaders in special education from all parts of the Nation, and with the special help of the Association for the Aid of Crippled Children, of New York City. It was directed by a member of the Office of Education staff, who was counseled by two committees. One was an *Office of Education Policy Committee,* whose function it was to assist the director in management and personnel aspects of the study. The other was a *National Advisory Committee* of leaders in special education from various parts of the United States; it was the function of this group to help identify the problems, to assist in the development of the design of the study and otherwise to facilitate the project. The study also had the counsel of a number of consultants who reviewed written material and made suggestions on personnel and procedures. (A complete list of these committee members and consultants appears on pages II and III.)

The general purpose of the study was to learn more about the qualification, distinctive competencies, and specialized preparation needed by teachers of handicapped and gifted pupils. The term "teachers" was interpreted broadly to mean not only classroom instructors of the various types of exceptional children, but also directors and specialists in State and local school systems, and professors of special education in colleges and universities. A separate study was made of the qualification and preparation needed by teachers of children who are: (1) Blind, (2) crippled, (3) deaf, (4) gifted, (5) hard of hearing, (6) mentally retarded, (7) partially seeing, (8) socially and emotionally maladjusted, (9) speech handicapped, or (10) handicapped by special health problems, such as rheumatic fever. Separate studies were also made of (11) directors and supervisors of special education in State departments of education; (12) directors and supervisors of special education in local school systems; and (13) faculty members in colleges and universities preparing teachers of exceptional children. Thus, incorporated into the broad project were 13 smaller studies.

Two techniques were used to gather data on the qualification and preparation needed by special education personnel. One was by means of a series of *inquiry forms;* the other was through a *committee statement* describing desirable com-

petencies. The plan of the study also included provision for conferences where practical.

Through the series of inquiry forms, facts and opinions were collected from superior teachers in each of the 10 areas of exceptionality listed above, from directors and supervisors of special education in State and local school systems, and from college instructors of special education. By means of the questionnaires, the 13 groups of special educators had opportunity to express their views on the distinctive skills, competencies, and experiences which they consider basic for special educators. Through the inquiry forms, status information was also gathered on State certification requirements for teachers of exceptional children, and on existing teacher education programs for the preparation of those teachers.

Through the committee technique, reports were prepared on the distinctive competencies required by educators in areas paralleling those studied through the inquiry forms. There were 13 such committees in all. The names of committee members were proposed by the National Committee, and the chairmen were appointed by the U. S. Commissioner of Education. Committees were composed of from 8 to 12 leading educators in their area of interest who, insofar as possible, had engaged in college teaching, had held supervisory positions in State or local school systems, and had classroom teaching experience with exceptional children.

Three major conferences on the study were called. In September 1952 private agencies interested in gifted and handicapped children met with the Office of Education staff and the National Committee. In March 1953 the U. S. Commissioner of Education called a 3-day conference on distinctive competencies required by special educators. In October 1954, a week's work conference was convened in Washington, when working papers incorporating all data collected were presented, reviewed, and modified. The Conference provided opportunity for a free exchange of views, and for analysis and interpretation of data.

The findings coming from such a study, representing the point of view of no single individual or agency, will, it is hoped, contribute effectively toward the goal of increasing the number of educators competent to teach our exceptional children.

APPENDIX B.—*Information About the Special Educators Participating in the Study*

ALTOGETHER, approximately 1,600 persons filled out the inquiry forms on which much of the information in this report is based. These people were special educators of four groups: (1) Teachers of exceptional children considered by their supervisors to be "superior" in each of the 10 areas of exceptionality; (2) directors and specialists in programs for exceptional children in State departments of education; (3) directors and supervisors of programs in local school systems; (4) instructors in colleges and universities preparing teachers of exceptional children.

TEACHERS OF EXCEPTIONAL CHILDREN

The design of the study called for 100 classroom teachers in each of the 10 areas of exceptionality to supply information through inquiry forms. Effort was made to secure a representative sampling of superior teachers throughout the Nation by establishing a quota for each State. State quotas were based on such factors as child population and special educational facilities within the States. Members of the State departments of education compiled lists of teachers on the basis of the State quota and the following guidelines: these teachers were to have had specialized preparation and to be considered superior; they were to be as nearly as possible representative of the various types of teaching facilities in the State, coming from urban and rural centers, public and private schools, residential and day schools, and home and hospital instruction programs; insofar as possible, half of them in each State were to have completed their specialized preparation before January 1, 1946, and half after that date.

When the inquiry forms were returned, it was found that in some areas of exceptionality, fewer than 100 teachers met all the criteria; in others, more than 100 teachers met the criteria, and hence were included. The number of teachers whose inquiry forms met the standards of the study and could be included by areas of exceptionality is as follows: Blind, 100; crippled, 150; deaf, 100; gifted, 69; hard of hearing, 100; mentally retarded, 150; partially seeing, 130; socially maladjusted, 75; special health problems, 85; and speech correction, 120.

INSTRUCTORS IN COLLEGES AND UNIVERSITIES

First a search was made to find out what colleges and universities offered sequences of preparation for teachers of exceptional children. Inquiry forms were then sent to special education instructors in colleges and universities currently offering such a sequence. (A sequence of preparation includes at least three courses of specialized preparation in one of the areas of exceptionality, such as mental retardation, including a study of the characteristics (physical, mental, emotional), a study of the specialized teaching methods and curriculum adjustment, and observation and student-teaching in the specialized area.) All full-time and part-time college faculty members were included; however, staff members responsible for courses in remedial reading, mental hygiene, child development or related courses were not included unless such courses were pointed specifically to exceptional children. When the forms were returned (1953), 279 staff members were eligible to participate.

EDUCATION PERSONNEL IN STATE DEPARTMENTS OF EDUCATION

The names of persons responsible for the education of exceptional children in State departments of education were ascertained through the help of chief State school officers. The criteria for participation were that the person be giving full time to the education of exceptional children; be an educator, not a psychologist, therapist, or specialist concerned with related fields; and have statewide responsibility for the education of exceptional children. When the forms were returned (1953), 102 people met the criteria. These people were working in 36 States and the District of Columbia. Twelve States are not included in this report for the following reasons: 8 States reported no special education staff; 2 States had vacancies in director positions; 2 States included persons who were spending only a small part of their time on special education. Of these 102 people, 40 were directors and 62 were specialists. Participants were considered to be directors when they had overall responsibility for administering the total special education program in their State. They were considered to be specialists when they had responsibility in a few areas or when they were statewide consultants or assistant directors. California, Delaware, and the District of Columbia each reported more than one director.

SPECIAL EDUCATION PERSONNEL IN LOCAL DEPARTMENTS OF EDUCATION

The names of persons responsible for the education of exceptional children in local school systems were obtained from the Government statistical file and from the membership list of the Council of Administrators, Supervisors, and Coordinators of Special Education. The criteria for their participation were that

they be full-time directors or supervisors in one or more areas of special education, working in a central office. Those who were primarily teachers or principals were not included in this study. When the forms were returned, 153 people, from all parts of the country, met the criteria. Of these, 103 were directors and 50 were supervisors.

APPENDIX C.—*Statistical Procedures and Results*

PROCEDURES USED IN ANALYZING DATA REPORTED IN TABLES 4 AND 5

Each of the competencies listed in the ten areas (blind, crippled, etc.) in table 4 was rated in two ways by the teachers in that area. First, they checked whether, in their judgment, each item was "very important," "important," "less important," or "not important" in their present positions. Second, they checked whether they considered themselves to be "good," "fair," or "not prepared" in each of these competencies.

The *average importance* of each competency was computed by multiplying the number of checks in the "very important" column by 4, those in the "important" column by 3, those in the "less important" column by 2, and those in the "not important" column by 1. The results were added together and divided by the number of checks for that particular item.

The *average proficiency* of the teachers was computed in the same way, using a "converted score" which made it possible to compare ratings of importance on a 4-point scale with ratings of proficiency on a 3-point scale. For example, the average proficiency of the speech correctionists was computed by assigning a numerical value of 3.89 for "good," 2.52 for "fair," and 1.15 for "not prepared." These numerical values were derived as follows: The average rating of importance was found for all the competencies. This average was 3.22. Then the standard deviation was found for this distribution; it was 0.92. Next, the average rating of proficiency was found for all the competencies, by assigning a value of 3 to the checks in the "good" column, 2 to those in the "fair" column, and 1 to those in the "not prepared" column. This average was 2.51. Then the standard deviation was found for this distribution; it was 0.67. The z-scores of the second distribution were equated to the corresponding z-scores of the first. For example, z-score for 3 in the distribution of proficiency ratings was found to be $(3-2.51/0.67)$, which equals $+0.73$. Using the standard deviation of the first distribution as a unit, this yields $+ 0.73 \times 0.92$ or $+ 0.67$. Adding 0.67 to 3.22, the mean of the first distribution, yields 3.89. This is the "converted score" assigned to the checks in the "good" column.

A rank order of the list of competencies in each area was determined for both the average ratings of importance and the average ratings of proficiency. Consecutive whole numbers were used for ranks even though a few of the items received identical average ratings. This was done so that the rank-order number might also serve as an item-identification number.

COVARIATION BETWEEN RATING OF IMPORTANCE AND RATINGS OF PROFICIENCY

The hypothesis that teachers tended to rate themselves most proficient on those competencies which they also rated most important, and less proficient in those they rated less important, was tested statistically. Because a complete analysis did not seem necessary, a random sample of 10 competency items was drawn from the list in each area. For each of these items, a "scatter diagram" or "contingency table" was prepared, with the ratings of importance on the X-axis and the proficiency ratings on the Y-axis. The coefficient of contingency for the table was then computed. Where necessary, adjacent categories of importance ratings were combined in order to avoid low-frequency intervals (the marginal frequency in any row or column was never allowed to fall below 15). This was desirable in order to obtain a fair and stable value of the contingency coefficient.

The statistical significance of each contingency coefficient was computed using the chi-square technique, with $(s - 1)$ $(s - 1)$ degrees of freedom, where s = number of intervals on the X-axis, and s = number of intervals on the Y-axis.

For each contingency table, there was computed not only the actual value of C, but also the maximum value of C obtainable from the set of marginal frequencies characterizing the particular contingency table. This maximum was computed by inserting in one (or more) of the cells of the table the highest possible number consonant with the marginal frequencies and a positive relation between X and Y. Because of the small number of degrees of freedom, the numbers to be inserted in the remaining cells of the table were readily determined by reference to the marginal frequencies and the figures in the cell (or cells) already containing the maximum entry. The coefficient of contingency of the table, thus constructed, was calculated in the usual manner. This maximum coefficient of contingency provides a useful reference-value for the evaluation of the contingency coefficient calculated from the original or empirical table. See area reports for a detailed report of the results.

STATISTICAL SIGNIFICANCE OF DIFFERENCES BETWEEN AVERAGE RATINGS OF IMPORTANCE AND AVERAGE RATINGS OF PROFICIENCY

To determine the statistical significance of the difference between the average importance rating and the average self-competence rating on an item, the procedure employed in each area was as follows: The difference between the ratings on importance and proficiency ("converted scores") for each teacher on each item was determined. The average difference between the ratings for all teachers was calculated $\left(\frac{\Sigma D}{N}\right)$; the standard deviation $\left(\sqrt{\frac{\Sigma D^2}{N} - (M_D)^2}\right)$

and the standard error of the average of the differences $\left(\frac{\sigma_D}{\sqrt{N}}\right)$ were computed; the average difference was expressed in z-score units $\left(\frac{M_D}{\sigma_{M_D}}\right)$ (this is the "critical ratio"). The probability of obtaining a difference as large as, or larger than, the observed difference if we continued to take samples of the same size from a zero-difference universe, was read from the appropriate table of probabilities. (Reference: Quinn McNemor, *Psychological Statistics*, pages 73-75). Differences were considered to be significant if the probability of chance occurrence was as little as 0.01 or less.

In the procedure described above, only *paired* ratings were employed; thus, if a teacher rated an item for importance, but failed to make a proficiency rating for the item, it was impossible to determine the difference between importance and proficiency of that teacher for that item. His response to this item was therefore not usable in this calculation. The ratings of all teachers in each area were used in obtaining the averages both for importance and for proficiency on which the ranks in table 4 and 5 are based.

In the case of items for which the difference between the average importance rating and the average proficiency rating (converted scores) was less than 0.20, no test of statistical significance was employed. It was considered that differences smaller than 0.20 were too small to have any practical significance.

PROCEDURES USED TO TEST FOR SIGNIFICANT DIFFERENCES OF OPINION

(Data reported in tables 6 and 8 and in graphs 1, 2, 4, 5, 6, and 7)

Opinions of the four major groups of special educators polled in this study have been presented in a series of tables and graphs throughout the publication. These major groups were teachers of special education in ten areas of exceptionality, college staff members, directors and specialists in State departments of education, and directors and supervisors of special education in local school systems. In most cases, the data were collected and tabulated in such a way that statistical tests could be made of differences of opinion (1) between any two of these four major groups, (2) between any one of the five sub-groups of college staff members and all other staff members combined, and (3) between any one area of exceptionality and all others *within* any of the four major groups or five sub-groups of college staff members. Arrows have been used to indicate the first type of difference (that is, a difference between the total opinion of one major group and the total opinion of another major group). Differences of the second and third type have been reported in the far right-hand column of the tables and graphs. The following outline may clarify the sub-groups among whom tests of significant differences of opinion were made:

TEACHERS

COLLEGE STAFF MEMBERS:

- Directors of special education
- Directors of speech correction
- Instructors of special education
- Instructors of speech correction
- Cooperating teachers

DIRECTORS AND SPECIALISTS IN STATE DEPARTMENTS OF EDUCATION

DIRECTORS AND SUPERVISORS IN LOCAL SCHOOL SYSTEMS

Each of these four major groups and each of the five college sub-groups was subdivided into ten groups, one for each area of exceptionality. In the case of teachers, there were ten distinct and separate groups, each composed of a sample of superior teachers working in a particular area of exceptionality. In the case of the college, State, and local personnel, there was much overlapping in the sub-groups because most of these persons carried responsibility for more than one area of exceptionality.

In executing these tests of significant differences, the first step was to run tests between "satisfied" responses on like items until a perspective was gained of the amount of difference likely to produce significance. Further tests were made (after the perspective was gained) on differences which, by inspection, appeared to have a likelihood of significance.

This same method of testing was further applied to two other sets of data (series of comparisons). Tests were made to determine the following points: (1) whether the totals for the major college personnel group adequately represented the sub-totals of personnel groups of which it was composed (this type of comparison did not apply to State, local, or teachers, since these major personnel groups were never further subdivided); and (2) whether the totals of the major personnel group adequately represented the sub-totals of any one of the 10 areas of exceptionality of which the total major group was also composed. For example, college total "satisfied" responses were tested in two ways: first, between the total for all ten areas of any sub-group, such as director of special education or instructor of speech and hearing programs, and the total "satisfied" responses of all other sub-groups. In other words, when the responses of one sub-group were tested against the total of all college responses, the responses of that sub-group were subtracted from the grand total against which it was tested; second, between the total of college "satisfied" responses from personnel working in any one special area (blind, deaf, etc.) and the total "satisfied" responses of total personnel working in all of the other nine special areas. (In the case of some items from the college inquiry form, the items were not designed to obtain opinions according to special areas.)

State, local, and teacher totals were tested in the only way possible, where the "satisfied" responses from any one special area (blind, deaf, etc.) were tested

against the total "satisfied" responses from the other nine special areas.

In all cases where tests were made to determine if the total "satisfied" responses of the major personnel groups (teachers, college, State, local) were adequately representative of the sub-groups, the sub-group needed to be composed of at least 30 persons in order for the test to be reliable. Because of this limitation, the occasional difference of opinion expressed by the following sub-groups could not be tested for significance, and are consequently not reported in this publication: College staff members with responsibility in the areas of blind, gifted, partially seeing, special health problems and socially maladjusted; State and local personnel in the area of the gifted, and recently prepared teachers of the gifted and of the socially or emotionally maladjusted. This restriction was applied to all such tests with the exception of the college sub-group of directors of special education, who as a group totaled only 23 in number. This exception was permitted because this group did not represent a sampling, but rather comprised a universe of personnel so defined in the study (at the time, 1952).

The following is an example of the procedure used to test for significant differences: In calculating the significance of the difference between the percent of "yes" (satisfied) responses of State personnel and of local personnel on a given item, the "yes" responses in each of the two groups were expressed as a percent of all responses in the group (i.e., the "yes" responses of the State personnel to an item were expressed as a percent, p_1, of all responses of State personnel to that item, and the "yes" responses of local personnel to the same item were expressed as a percent, p_2, of all responses of local personnel to that item). The standard errors of the percentages (p_1 and p_2) were computed by the formulas, $\sigma_{p_1} = \sqrt{\frac{p_1 q_1}{N_1}}$ and $\sigma_{p_2} = \sqrt{\frac{p_2 q_2}{N_2}}$. In these formulas, $q_1 = 1 - p_1$ and $q_2 = 1 - p_2$. The standard error of the difference between the two percentages was determined by the formula, $\sigma_{p_1 - p_2} = \sqrt{\sigma^2_{p_1} + \sigma^2_{p_2}}$. The observed difference between the percentages ($p_1 - p_2$) was expressed in z-score units $\left(\frac{x}{\sigma} = \frac{p_1 - p_2}{\sigma_{p_1 - p_2}}\right)$. The probability of obtaining a difference as large as or larger than the observed difference, if we continued to take samples of the same size from a zero-difference universe, was read from the appropriate table. Differences were considered to be significant if the probability of chance occurrence was 0.01 or less.

ADDITIONAL TESTS FOR DIFFERENCES AMONG COLLEGE STAFF MEMBERS

A further statement is necessary on the 48 questions on which college staff members expressed opinions. In the planning stage, the staff considered it necessary to determine whether the responses of college personnel in speech

correction programs could be appropriately combined with those of personnel working in the other nine special areas. Three methods were used in this respect. The first has just been described on pages 115 to 117. Second, the responses of each of the five college (personnel) sub-groups (directors of special education, instructors of speech programs, etc.) were combined into an "actual" total, that is, where each response was represented. Also a "weighted" total was made where equal weighting was given to each of the five sub-groups (each of which contained a different number of responses), and where the "weighted" total represented an average of the responses of each sub-group. A test for correlation was run between the two totals ("actual" and "weighted") thus obtained, and a correlation coefficient of .9956 resulted. This was a strong indication that either the "actual" or the "weighted" totals would adequately represent the responses of the sub-groups. "Actual" totals have been used.

Third, two separate totals were made on each of the 48 items, where one was composed of the responses of the director of special education, the instructor of special education, and the cooperating teachers (the special education totals); and where the other total was composed of the responses of directors and instructors of speech programs (the speech education totals). Tests were then made for significance of difference between the responses of the special education group and the speech education group in the same manner as described above.

Of the 48 comparisons, on only six items was there significant difference of opinion at the 0.01 level. The tests for significance of difference of opinion of the five groups of college staff members, as described on page 115 to page 116 of this appendix, showed these differences on five of these six items, and in addition, showed differences on ten other items. Thus the method adopted was considered to be more precise. It was decided that there was insufficient need to report separately the speech education group from the special education group as a general practice on all items. All significant differences have been reported in the tables and graphs in this bulletin.

PROCEDURES USED IN ANALYZING DATA REPORTED IN TABLE 7

The teachers in each area rated the relative importance of each of a list of experiences by checking whether, in their judgment, it was "very important," "important," "less important," or "not important" to include the experience in the specialized preparation of teachers in their area. The average importance of each experience was computed by multiplying the number of checks in the "very important" column by 4, those in the "important" column by 3, those in the "less important" column by 2, and those in the "not important" column by 1. The results were added together and divided by the number of checks for that particular item. A rank order of the list of experiences was then determined on the basis of these average ratings of importance.

APPENDIX D.—*Excerpts From Inquiry Forms*

I. EXCERPTS FROM INQUIRY FORM EXC 2A FILLED OUT BY STAFF MEMBERS OF SPECIAL EDUCATION DEPARTMENTS IN COLLEGES AND UNIVERSITIES

The Office of Education Study
"QUALIFICATIONS AND PREPARATION OF TEACHERS OF EXCEPTIONAL CHILDREN"

INQUIRY FORM EXC 2A (Opinion Data)	To be filled out by *All* Staff Members of Colleges and Universities Who Participate in the Specialized Preparation of Teachers of Exceptional Children

Miss
Mrs

1.1 Your name Mr ..... Date .....

1.2 Official Position .....
(Specify—Director of Special Education, Demonstration Teacher, etc.)

1.3 Official Title .....
(Specify—Associate Professor, Graduate Assistant, etc.)

1.4 College or University ..... City ..... State .....

1.5 Do you hold a full-time staff appointment at the college or university? Yes_____ No_____ If your answer is "no", check (√) the figure below which comes nearest to the amount of time of your appointment.
⅛ ___; ¼ ___; ⅓ ___; ⅜ ___; ½ ___; ⅝ ___

1.6 In which area or areas of Special Education do you have *direct* administrative, instructional, and supervisory responsibilities? (Check (√) as many as applicable.)

_Blind	_Gifted	_Socially Maladjusted [2]
_Crippled [1]	_Hard of Hearing	_Special Health Problems [3]
_Deaf	_Mentally Retarded	_Speech Defective
	_Partially Seeing	

Throughout the inquiry form:
[1] The term "crippled" includes the cerebral palsied.
[2] The term "socially maladjusted" includes the emotionally disturbed.
[3] The term "special health problems" includes children with cardiac conditions, tuberculosis, epilepsy, and below-par conditions.

IN PUBLISHED REPORTS, OPINIONS EXPRESSED THROUGH THIS INQUIRY FORM WILL NOT BE IDENTIFIABLE WITH THE NAMES OF THE PERSONS COMPLETING THE FORM

4. What are your views on your institution's student-teaching program for teachers of exceptional children?

Answer the following questions for the areas in which you have responsibility. Place (in the respective columns for each area you complete) +, O, or — according to the following key:

+	= yes
O	= uncertain or undecided
—	= no

Student-Teaching Program	Special Education Curricula									
	Blind	Crippled	Deaf	Gifted	Hard of Hearing	Mentally Retarded	Partially Seeing	Soc. Maladjusted	Spec. Health Probs.	Speech Defective
4.1 Do you believe that a *greater* proportion of the special education teacher-candidate's time should be allocated to student-teaching and observation of exceptional children in their area(s) of specialization?										
4.2 Do you believe *less* time should be allocated to student-teaching and observation of exceptional children in their area(s) of specialization?										
4.3 Do you believe that, in general, graduating special education teacher-candidates have had sufficient experience in classroom teaching of so-called normal children?										
4.4 Are student-teachers given sufficient opportunities (under supervision) to plan the activities and schedules of the class (or pupils)?										
4.5 Do the student-teachers remain with one group of exceptional children long enough to note pupil growth?										
4.6 Are more than two student-teachers frequently assigned, at the same hour, to one group of children for purposes of student-teaching?										
4.7 Do you believe (in general) the calibre of teaching of the demonstration teachers is adequate?										
4.8 Do you believe (in general) that the demonstration teachers give a sufficient amount of constructive criticism to student-teachers?										
4.9 Do you believe that staff-supervisors at your college or university spend sufficient time in observing the student-teaching of the teacher-candidates?										

Student-Teaching Program	Special Education Curricula									
	Blind	Crippled	Deaf	Gifted	Hard of Hearing	Mentally Retarded	Partially Seeing	Soc. Maladjusted	Spec. Health Probs.	Speech Defective
4.10 Do staff-supervisors spend sufficient time in individual student-supervisor conferences where observed student-teaching is evaluated?										
4.11 Is lack of pre-planning and post-evaluation under the direction of a staff-supervisor a weakness in your student-observation program?										

(Items 5.1, 5.2, and 5.3 were also completed by special education personnel in State Departments of Education and in Local School Systems)

ITEM	Blind	Crippled	Deaf	Gifted	Hard of Hearing	Mentally Retarded	Partially Seeing	Soc. Maladjusted	Spec. Health Probs.	Speech Defective
5.1 Indicate the amount of successful classroom teaching with so-called *normal* children that you believe should be MINIMAL, DESIRABLE and IDEAL prerequisites for a special education teacher-candidate										
Answer by areas, by placing three letters (M, D, and I) in each column you complete according to the following key: M = minimal; D = desirable; I = ideal										
5.11 No teaching of normal children										
5.12 At least one semester of half-time student-teaching with normal children (or equivalent)										
5.13 At least one semester of full-time student-teaching with normal children (or equivalent)										
5.14 At least one year of on-the-job classroom teaching with normal children										
5.15 At least two years of on-the-job classroom teaching with normal children										
5.16 At least three years of on-the-job classroom teaching with normal children										
5.17 *Other* (specify):										

ITEM	Blind	Crippled	Deaf	Gifted	Hard of Hearing	Mentally Retarded	Partially Seeing	Soc. Maladjusted	Spec. Health Probs.	Speech Defective
5.2 Indicate the amount of student-teaching with *exceptional children* which you believe should be MINIMAL, DESIRABLE, and IDEAL prerequisites for a special education teacher-candidate who is a successful regular classroom teacher. (Use the M, D, and I key as in item 5.1)										
No student-teaching in the specialized area										
1–75 clock hours [1]										
76–150 clock hours										
151–225 clock hours										
226–300 clock hours										
Other (specify):										
5.3 Indicate the amount of student-teaching with *exceptional children* which you believe should be MINIMAL, DESIRABLE, and IDEAL prerequisites for a special education teacher-candidate who has *only student-teaching with normal children.* (Use the M, D, and I key as in item 5.1.)										
No student-teaching in the specialized area										
1–75 clock hours										
76–150 clock hours										
151–225 clock hours										
226–330 clock hours										
Other (specify):										
5.4 Please express your views relative to planning a desirable student-teaching program for teachers of exceptional children by supplying the data requested below.										
In your opinion:										
5.41 For approximately how many clock hours (out of 15 clock hours of student-teaching) do you believe the staff-supervisor should observe the student-teacher?										
5.42 For approximately how many clock hours (per 15 clock hours of student-teaching) do you believe individual student-supervisor conferences should be held?										
5.43 What, in your opinion, is the maximum number of student-teachers that can profitably be assigned to one group of exceptional children at the same hour for purposes of student-teaching?										

[1] One semester hour = 15 clock hours.
One quarter hour = 10 clock hours.
One academic year = 450 clock hours.

6 What are your views concerning your institution's program for the specialized preparation of teachers of exceptional children?
Answer each of the following questions by placing a check √ in ONE of the three columns on the right for each item.

ITEM	Yes	No	Uncertain or Undecided
6.1 Are your special education teacher-candidates screened with sufficient care so as to exclude those with poor mental health and unsuitable personality patterns?			
6.2 Are teacher-candidates in special education given an adequate orientation to the education of various types of exceptional children?			
6.3 Are these teacher-candidates given an adequate background—			
—in developing and interpreting education records?			
—in interpreting psychological and/or medical reports?			
—in diagnosing causes of social and emotional maladjustments?			
6.4 Is too much emphasis at your college or university placed on—			
—research?			
—the lecture method of conducting a course?			
—the group project method?			
—individual conference technique?			
—the group discussion method?			
6.5 Does the professional staff in special education show sufficient concern for the problems of the individual teacher-candidates?			
6.6 Is lack of financial support a weakness in your special education program?			
6.7 Is lack of administrative support from college or university heads a weakness?			
6.8 Is lack of co-operation from related departments (general education, psychology, speech, etc.) a weakness?			
6.9 Is lack of library materials a weakness in your program?			
6.10 Is lack of information about the distinctive competencies needed by teachers of exceptional children a weakness in your program?			
6.11 Are the screening procedures so rigid as to exclude from special education many candidates who would probably be successful teachers? If yes, please specify in what respect:			

7. What are your views concerning your institution's present program for the specialized preparation of teachers of exceptional children during (1) the regular academic year (1952–53) and (2) summer school (1952)?

Answer the following questions—for both the regular academic year and summer session— by placing in the respective columns for each area you complete +, O, or — according to the following key. *Leave blank* items which are not appropriate to your specialized area(s).

+ = yes
O = uncertain or undecided
— = no

Resources	Regular Academic Year									
	Blind	Crippled	Deaf	Gifted	Hard of Hearing	Mentally Retarded	Partially Seeing	Soc. Maladjusted	Spec. Health Probs.	Speech Defective
7.1 Is there a sufficient number of staff members in the specialized area(s) in the light of the number of students enrolled?										
7.2 Are the staff members in special education in general well-qualified with respect to—										
—specialized technical knowledge in their specialized area?										
—practical experience in the teaching of exceptional children in their specialized area?										
7.3 Is there a sufficient number of the following facilities available for use in student-teaching and observation:										
—special schools or classes?										
—special residential schools?										
—hospital classes?										
—home instruction?										
—special medical clinics?										
—speech clinics?										
—psychological clinics?										
7.4 Is your institution able to attract a sufficient number of undergraduate students to the specialized area(s)?										
7.5 Is your institution able to attract a sufficient number of graduate students to the specialized area(s)?										
7.6 Is a sufficient proportion of the teacher-candidate's time allocated to studying curriculum planning and methods of curriculum adjustment in his specialized area?										

Resources	Regular Academic Year									
	Blind	Crippled	Deaf	Gifted	Hard of Hearing	Mentally Retarded	Partially Seeing	Soc. Maladjusted	Spec. Health Probs.	Speech Defective
7.7 Does your institution's program offer an adequate and systematic orientation to the types of specialised clinics and agencies concerned with exceptional children, the services they offer and how to secure these services?										
7.8 Do teacher-candidates in special education receive an adequate background—										
—in the basic principles of child growth and development?										
—in specialised methods used in their area of specialisation and how to apply these to their teaching?										
—in teaching aids especially applicable to the specialised area?										
—in the relationship between general and special education?										
7.9 Do these teacher-candidates have sufficient preparation—										
—in how to initiate an educational program in their specialised area?										
—in how to administer an educational program in their specialised area(s)?										
7.10 Is your institution currently providing a sufficient number of sequential specialised experiences (including courses) to prepare good teachers?										

13. (Completed by College Staff Members. Also completed by Special Education Personnel in State Departments of Education and Local School Systems: EXC–1, Item 14 and EXC3, Item 11 and by teachers; EXC–4A-J.)

Indicate, as one factor, the combination of professional preparation and experience that you believe the following special educational personnel on a *college or university* staff should have in order to be competent in carrying out their duties. (Assume comparable capacities and personal fitness.) Check √ ONE item in each of the categories 13.1 and 13.2, and ONE or MORE in categories 13.3 and 13.4.

ITEM	Director of the Special Education Program of Teacher Preparation	Area Specialists: Course Instructor (Class Coordinator)	Area Specialists: Demonstration Teacher	Area Specialists: Supervisor of Student Teaching
13.1 (Check ONE per column.)				
Bachelor's degree (or equivalent)				
Master's degree				
Doctor's degree				
13.2 *Major* in: (Check ONE per column.)				
one specialized area of special education				
two or three specialized areas of special education				
orientation to all areas of special education				
general educational administration and supervision				
clinical psychology				
elementary teaching methods				
secondary teaching methods				
other (specify):				
13.3 *Minor* in: (Check ONE or MORE per column.)				
one specialized area of special education				
two or three specialized areas of special education				
orientation to all areas of special education				
general educational administration and supervision				
clinical psychology				
elementary teaching methods				
secondary teaching methods				
other (specify):				
13.4 *Professional experience:* (Check ONE or MORE per col.)				
specialized teaching of at least one type of exceptional children				
regular classroom teaching of normal children				
teaching special education in a teacher-training institution				
supervisory duties in special education at the *State* or *local* level				
administrative duties in general education at the *State* or *local* level				
others (specify):				

II. EXCERPTS FROM INQUIRY FORM EXC-2B FILLED OUT BY DIRECTORS OR COORDINATORS OF COLLEGE OR UNIVERSITY PROGRAMS OF SPECIAL EDUCATION

The Office of Education Study

"QUALIFICATIONS AND PREPARATION OF TEACHERS OF EXCEPTIONAL CHILDREN"

INQUIRY FORM EXC-2B: (Status Data) To be filled out *only* by persons responsible for *directing or coordinating* (in one or more areas) the college or university program for the specialized preparation of teachers of exceptional children

Miss
Mrs.

1.1 Your name Mr. ..... Date .....

1.2 Official Position .....
(Specify—Director of Special Education, Head of the Speech Department, etc.)

1.3 Official Title .....
(Specify—Associate Professor, etc.)

1.4 College or University .....City .....State .....

1.5 Do you hold a full-time staff appointment at the college or university? Yes_____ No_____. If your answer is "no," check √ the figure below which comes nearest to the amount of time of your appointment.

$\frac{1}{8}$_____; $\frac{1}{4}$_____; $\frac{1}{3}$_____; $\frac{3}{8}$_____; $\frac{3}{4}$_____; $\frac{4}{5}$_____

1.6 In which area or areas of Special Education do you have *direct* administrative (directing and/or coordinating) responsibility? (Check √ as many as applicable.)

_____Blind	_____Gifted	_____Socially Maladjusted [2]
_____Crippled [1]	_____Hard of Hearing	_____Special Health Problems [3]
_____Deaf	_____Mentally Retarded	_____Speech Defective
	_____Partially Seeing	_____Other (specify):

Throughout the inquiry form:

[1] The term "crippled" includes the cerebral palsied.

[2] The term "socially maladjusted" includes the emotionally disturbed.

[3] The term "special health problems" includes children with cardiac conditions, tuberculosis, epilepsy, and below-par conditions.

7. Please complete the following table relative to the student-teaching requirements in your college or university.

Student-Teaching Program	Special Education Curricula										
	Blind	Crippled	Deaf	Gifted	Hard of Hearing	Mentally Retarded	Partially Seeing	Soc. Maladjusted	Spec. Health Probs.	Speech Defective	Other (specify)
7.1 Number of required clock hours [1] of student-teaching with so-called normal children											
7.2 Number of required clock hours of student-teaching in the specialized area of exceptionality											
7.3 Number of special education staff members supervising student-teaching by actual observation of the specialized student-teaching											
7.4 Approximate number of clock hours (out of 15 clock hours of student-teaching) that staff supervisors observe the student-teaching											
7.5 Approximate number of clock hours (out of 15 clock hours of student-teaching) that individual student-supervisor conferences are held											
7.6 Average number of student-teachers assigned to one group of pupils at the same hour for purposes of student-teaching											

[1] One semester hour = 15 clock hours.
One quarter hour = 10 clock hours.

11. Which of the facilities listed in the table below are available for student-teaching and systematic observation?

In the left-hand group of columns, check √ the facilities which are now in use; in the right-hand group of columns, check √ those which are not currently in use but which are available (at or within daily commuting distance) for student-teaching and systematic observation.

FACILITY	Facilities Currently Being Used										Facilities Available but Not in Current Use									
	Blind	Crippled	Deaf	Gifted	Hard of Hearing	Mentally Retarded	Partially Seeing	Soc. Maladjusted	Spec. Health Probs.	Speech Defective	Blind	Crippled	Deaf	Gifted	Hard of Hearing	Mentally Retarded	Partially Seeing	Soc. Maladjusted	Spec. Health Probs.	Speech Defective
Special classes in day schools																				
Residential school classes																				
Convalescent home classes																				
Hospital classes																				
Home instruction under observation																				
Medical clinics																				
Speech clinics																				
Psychological clinics																				
Others (specify):																				

The Office of Education Study

"QUALIFICATIONS AND PREPARATION OF TEACHERS OF EXCEPTIONAL CHILDREN"

SUPPLEMENTARY FORM: Professional Experience and Preparation

(To be used in conjunction with Inquiry Forms EXC–1, EXC–2, EXC–3 and EXC–4.)

1. Your name Miss / Mrs. .....Date.....
2. Your mailing address.....
   City (or Post Office).....State.....
3. Your present position or title (relative to special education).....
   .....

THE INFORMATION SUBMITTED THROUGH THIS SUPPLEMENTARY FORM WILL BE KEPT IN STRICT CONFIDENCE BY THE OFFICE OF EDUCATION STAFF WORKING ON THE STUDY. IN PUBLISHED REPORTS, DATA SUBMITTED WILL NOT BE IDENTIFIABLE WITH INDIVIDUALS.

4. *PROFESSIONAL EXPERIENCE:*
What has been the nature and extent of your professional experience? (Please supply data asked for below. Begin with your present position and work back.)

Dates (inclusive)	School or Agency	Location	Position (Describe as 4th grade teacher, principal of high school, teacher of deaf, etc.)

(over)

5. *COLLEGE OR UNIVERSITY PREPARATION:*
5.1 What degrees, diplomas, or special certificates do you hold? (Please supply data asked for below.)

Dates (inclusive)	Undergraduate Majors	Undergraduate Minors	Degree, Diploma, or Certificate	College or University

Dates (inclusive)	Graduate Majors	Graduate Minors	Degree, Diploma, or Certificate	College or University

5.2 How many hours of credit have you earned since obtaining your highest earned degree? (Please supply data asked for below.)

Dates (inclusive)	Majors	Minors	Semester Hours	College or University

5.3 What special college or university preparation have you had which is not reported above?

III. EXCERPTS FROM INQUIRY FORMS EXC-1, EXC-3, AND EXC-4 A through J FILLED OUT BY (a) SPECIAL EDUCATION PERSONNEL IN STATE DEPARTMENTS OF EDUCATION, (b) DIRECTORS AND SUPERVISORS OF SPECIAL EDUCATION IN LOCAL SCHOOL SYSTEMS, AND (c) TEACHERS IN THE TEN AREAS OF EXCEPTIONALITY: BLIND, CRIPPLED, DEAF, GIFTED, HARD OF HEARING, MENTALLY RETARDED, PARTIALLY SEEING, SOCIALLY MALADJUSTED, SPECIAL HEALTH PROBLEMS, AND SPEECH CORRECTION, RESPECTIVELY.

3. (Completed by Teachers in All Ten Areas of Exceptionality. In each case it appears as item 3 on the Inquiry Forms. The following excerpt from the Blind Inquiry Form shows the directions given in each of the areas and the format of the question.)

In your present position as a teacher of blind children, how important is it that you possess the following competencies?

(Check √ ONE of the four columns on the *left* for each item.)

AND

How do you rate your competency at each of the items listed?

(Check √ ONE of the three columns on the *right* for each item.)

Very important	Important	Less important	Not important	ITEM	Good	Fair	Not prepared
				A knowledge and/or understanding of—			
				3.1 the causes of the various conditions which result in blindness or loss of vision.			
				3.2 the general plan of medical treatment of the different conditions which result in blindness or loss of vision.			
				3.3 the general meaning of the diagnosis and prognosis of the visual condition for each blind pupil in the class.			
				3.4 the medical, emotional, psychological, social and educational implications of blindness.			
				3.5 current theories and controversies concerning causes, prevention and treatment of blindness and diseases of the eye.			

4. (Completed by State Personnel Only)

How do you evaluate, in general, the professional preparation of "teachers of exceptional children" employed in your State who, within the last five years, have completed a sequence of courses of specialized preparation? [1]

(Answer the following questions by placing —, O, or + in the respective columns for each area you complete, according to the following key.)

+ = yes
O = uncertain or undecided
— = no

ITEM	Blind	Crippled	Deaf	Gifted	Hard of Hearing	Mentally Retarded	Partially Seeing	Soc. Maladjusted	Spec. Health Probs.	Speech Defective
Do you believe these recently graduated special education teachers have had sufficient experience—										
4.1 in classroom teaching with so-called normal children?										
4.2 in supervised student-teaching and observation in their specialized area?										
Do these teachers have adequate preparation—										
4.3 in developing and interpreting educational records?										
4.4 in interpreting psychological and medical reports?										
4.5 in diagnosing causes of social and emotional maladjustments?										
4.6 in group intelligence and achievement testing?										
Do these teachers have an adequate understanding—										
4.7 of the basic principles of child growth and development?										
4.8 of methods and teaching aids used in their specialized area, and how to apply these to their teaching?										
4.9 of the relationship between general and special education?										
4.10 Do these teachers have the ability to plan with groups of pupils so as to provide for group participation according to each child's abilities										
4.11 Do these teachers have the ability to plan a curriculum suited to the individual and group needs of their pupils?										
4.12 Do these teachers, upon graduating, have a working knowledge about agencies concerned with exceptional children, the services they offer, and how to secure these services?										

See footnotes at end of table.

ITEM	Blind	Crippled	Deaf	Gifted	Hard of Hearing	Mentally Retarded	Partially Seeing	Soc. Maladjusted	Spec. Health Probs.	Speech Defective
4.13 Are these teachers, upon graduating, sufficiently familiar with the services provided for exceptional children by speech, psychological, and medical clinics, and so on?[1]										
4.14 Do these teachers have an adequate basic orientation to the education of various types of exceptional children?[1]										
4.15 Have these teachers been prepared to teach under rather ideal conditions and therefore lack the ability to fit into less-than-ideal special education programs such as unusual groupings?[1]										
4.16 Do you believe that an abnormally high percentage of recently graduated special education teachers have "unsuitable" personality patterns?[1]										
4.17 Do these teachers tend to have a "separatistic" attitude as far as the field of special education is concerned to the degree that they do not fit in with general educators?[1]										
4.18 Are these teachers able to ascertain and to teach at the appropriate developmental levels of their pupils?[1]										

[1] The definition of a "sequence of courses" which appears on page 5 of the 1949 publication "Opportunities for the Preparation of Teachers of Exceptional Children" (a cooperative study sponsored by the National Society for Crippled Children and the United States Office of Education) has been adopted for use throughout this study. A "sequence of courses" involves 9 to 12 semester hours made up of (1) a study of the characteristics of the particular condition under consideration, (2) a study of teaching methods and curriculum adjustment, and (3) observation and student-teaching in the specialized area.

4. (Completed by Local Personnel Only)

How do you evaluate, in general, the professional preparation of "teachers of exceptional children" employed in your school system who, within the last seven years, have completed a sequence of specialized preparation [1] leading to initial certification or approval?

Answer the following questions for the areas in which you have responsibility by placing +, O, or —, in the respective columns for each area you complete, according to the following key:

+ = yes
O = uncertain, undecided or no clear trend (half and half)
— = no

ITEM	Blind	Crippled	Deaf	Gifted	Hard of Hearing	Mentally Retarded	Partially Seeing	Soc. Maladjusted	Spec. Health Probs.	Speech Defective
Do you believe these recently graduated special education teachers have had sufficient experience—										
4.1 in classroom teaching with normal children?										
4.2 in supervised student-teaching and observation in their specialized area?										
Do these teachers have adequate preparation—										
4.3 in developing and interpreting educational records?										
4.4 in interpreting educational and psychological reports and case histories in records?										
4.5 in making use of medical reports?										
4.6 in identifying causes of social and emotional maladjustments?										
4.7 in group intelligence and achievement testing?										
Do these teachers have an adequate understanding—										
4.8 of the basic principles of child growth and development?										
4.9 of teaching methods used in their specialized area, and how to apply these to their teaching?										
4.10 of the teaching aids and equipment used in their specialized areas and how to apply these to their teaching?										
4.11 Do these teachers have the ability to plan with groups of pupils so as to provide for group participation according to each child's abilities?										
4.12 Do these teachers have the ability to plan a curriculum suited to the individual and group needs of their pupils?										

See footnotes at end of table.

ITEM	Blind	Crippled	Deaf	Gifted	Hard of Hearing	Mentally Retarded	Partially Seeing	Soc. Maladjusted[1]	Spec. Health Probs.	Speech Defective
4.13 Do these teachers, upon graduation, have an adequate working knowledge about agencies concerned with exceptional children, the services they offer, and how to secure these services, when they enter the field?										
4.14 Do these teachers, upon graduation, have sufficient familiarity with services provided for exceptional children by speech, medical, psychological, and other clinics?										
4.15 Do these teachers have an adequate basic orientation to the education of various types of exceptional children?										
4.16 Have these teachers been prepared to teach under rather ideal conditions and therefore lack the ability to work in less-than-ideal situations, such as multi-grade groupings and improvised classrooms?										
4.17 Do these teachers tend to teach at an appropriate level and not above or below the development levels of their pupils?										
4.18 Do these teachers tend to have a "separatistic" attitude as far as the field of special education is concerned to the degree that they do not fit in with general educators?										
4.19 Do these teachers show an interest and concern for exceptional children over and above that demanded of them at school through participation in such out-of-school activities related to the welfare of these children as being active in parent-groups, national organizations, play projects, and so on?										
4.20 Do you believe that an abnormally high percentage of recently graduated special education teachers have "unsuitable" personalities and attitudes for teaching exceptional children?										
Explain:										

[1] A sequence of specialized preparation involves three courses or at least 9 to 12 semester hours made up of (1) a study of the characteristics (physical, mental, and emotional) of the particular condition under consideration; (2) a study of the teaching methods and curriculum adjustments needed; and (3) observation and student-teaching in the specialized area. This definition appears on page 5 of the 1949 publication, "Opportunities for the Preparation of Teachers of Exceptional Children," (a co-operative study sponsored by the National Society for Crippled Children and Adults, Inc., and the United States Office of Education) and has been adopted for use throughout this study.

4. (Completed by Teachers in Nine Areas of Exceptionality: Blind, Crippled, Deaf, Gifted, Hard of Hearing, Mentally Retarded, Partially Seeing, Socially Maladjusted, and Special Health Problems. It appears as Item 4 on each of these Inquiry Forms with the exception of the Gifted where it is Item 5. The excerpt below is from the Blind Inquiry Form.)

Please answer the following questions relative to the program of specialized preparation which *was* offered by the institution at which you received the *major* part of your specialized preparation which led to your initial certification or approval as a teacher of blind children.

(Check √ in ONE of the three columns on the right in answering each of the following questions. Leave blank those experiences you have not had.)

ITEM	Yes	No	Undecided
In your experience in student-teaching of blind children—			
4.1 did the teachers with whom you did your specialized student-teaching give sufficient constructive criticism and advice?			
4.2 in general, was the quality of teaching of the special teachers with whom you did your student-teaching adequate?			
4.3 did the supervising instructor make frequent enough visits to observe your teaching?			
4.4 did he hold individual and/or group conferences with you frequently enough?			
4.5 did he give you a sufficient amount of constructive criticism and advice?			
4.6 were you given sufficient opportunity to help in the development of the activities and schedule of the group with whom you did your student-teaching?			
4.7 did you remain with one group long enough to note pupil progress?			
4.8 were more than two student-teachers frequently assigned to one group of pupils at the same hour for the purpose of teaching?			
4.9 Was lack of planning and evaluation under the direction of staff-supervisors a weakness in the student-observation program?			
4.10 Do you believe that you received *too much* theory and *not enough* supervised practical experience in the education of the blind?			
4.11 Do you believe that you received *too much* supervised practical experience and *not enough* theory in the education of the blind?			
Was there an undue amount of repetition and overlapping of content—			
4.12 in the general cultural courses (history, English, science)?			
4.13 in the general teacher-education courses?			
4.14 in the specialized courses in the education of blind children?			
4.15 Did your specialized preparation include enough work on the education of other exceptional children such as the partially seeing, gifted and mentally retarded?			

The following additional question was answered only by Teachers of Children who are Deaf:

4.16 Did you get sufficient background in phonetics to teach speech to deaf children?			

4. (Completed by Teachers in the Area of Speech Correction)

ITEM	Yes	No	Undecided
4.1 Did your specialized preparation include sufficient study concerning education of other exceptional children such as the deaf, mentally retarded and gifted?			
Was there undue repetition and overlap of content—			
4.2 in the general cultural courses (history, English, science)?			
4.3 in the general teacher-education courses?			
4.4 in the specialized courses in speech correction?			
4.5 Do you believe that you received *too much theory* and *not enough* supervised practical experience in speech correction?			
4.6 Do you believe that you received *too much* supervised practical experience and *not enough* theory in speech correction?			
4.7 Did you receive *too much* of your supervised practice in speech correction in a clinic and *not enough* in a school system?			
4.8 Did you receive *too much* of your supervised practice in speech correction in a school system, and *not enough* in a clinic?			
In your supervised student-teaching in speech correction in a school system—			
4.9 did the *speech correctionist employed by the school system* under whose supervision you did your student-teaching make frequent enough visits to observe your work?			
4.10 did she hold individual and/or group conferences with you frequently enough?			
4.11 did she give you sufficient constructive criticism and advice?			
4.12 did the *supervising instructor from the college or university* make frequent enough visits to observe your work?			
4.13 did she hold individual and/or group conferences with you frequently enough?			
4.14 did she give you sufficient constructive criticism and advice?			
4.15 were you given sufficient opportunity to plan the activities and schedules of the pupils to whom you gave speech correction?			
In your supervised practice in speech correction in a clinic—			
4.16 did the supervising instructors spend sufficient time observing your work?			
4.17 did they hold individual and/or group conferences with you frequently enough?			
4.18 did they give you sufficient constructive criticism and advice?			

5. (Completed by Teachers in all ten areas of exceptionality. It appears as Item 5 in all Inquiry Forms except the Gifted, where it appears as Item 6. The following excerpt from the Crippled Inquiry Form shows the directions given in each of the areas and the format of the question. See Appendix D in the Area Reports for a complete list of experiences.)

Do you consider the following experiences "very important," "important", "less important", or "not important" in the specialized preparation of teachers of crippled children?

(Check √ ONE of the four columns on the *left* for each item.)

AND

How much emphasis was placed on these experiences by the institution at which you received the *major* part of your specialized preparation which led to your initial certification or approval as a teacher of the crippled?

(Check √ ONE of the four columns on the *right* for each item.)

Very important	Important	Less important	Not important	ITEM	Too much	About right	Too little	None at all
				5.1 Supervised *student-teaching* of so-called normal children				
				Supervised student-teaching of crippled children—				
				5.2 in special day schools or classes				
				5.3 in a residential school for crippled children				
				5.4 in hospital classes				
				5.5 in convalescent home classes				
				5.6 in home teaching services for crippled children				
				5.7 *other* (specify):				

11. (Completed by teachers in all areas of exceptionality except Speech Correction. It appears as item 11 in all areas except Deaf where it is Item 14.1. For comparable questions in College, State, and Local Inquiry Forms, see page 121 of this appendix.) Indicate (1) the amount of successful *classroom teaching* of so-called NORMAL children which you believe should be *minimal*, *desirable* and *ideal* prerequisites for a teacher of blind children, and (2) the amount of teaching of so-called normal children which you have had.

(Place ONE check √ in *each* column on the *right* opposite the appropriate amount.)

Amount of Teaching of So-called NORMAL Children as a PREREQUISITE for Teaching Blind Children	Minimal	Desirable	Ideal	Amount which you have had
No teaching of normal children				
At least one semester of half-time student-teaching with normal children (or equivalent)				
At least one semester of full-time student-teaching with normal children (or equivalent)				
At least one year of on-the-job classroom teaching with normal children				
At least two years of on-the-job classroom teaching with normal children				
At least three years of on-the-job classroom teaching with normal children				
Other (specify):				

12. (Completed by teachers in all areas of exceptionality except Speech Correction. It appears as Item 12 in all areas except Deaf where it is Item 14.2. For comparable questions in College, State and Local Inquiry Forms, see page 122 of this appendix.) The following excerpt from the Blind Inquiry Form shows the directions given in each of the areas and the format of the question. Indicate (1) the amount of *student-teaching* with blind children that you believe should be *minimal*, *desirable* and *ideal* prerequisites for a teacher of the blind, and (2) the amount of *student-teaching* of blind children you have had.

(Check √ in *each* column on the *right* opposite the appropriate amount.)

Amount of Student-Teaching of Blind Children Needed as a PREREQUISITE for On-the-job-Teaching of Blind Children	For experienced regular classroom teachers			For teacher-candidates with only student-teaching of so-called normal children			Amount which you have had
	Minimal	Desirable	Ideal	Minimal	Desirable	Ideal	
No student-teaching of blind children							
1–75 clock hours							
76–150 clock hours							
151–225 clock hours							
226–300 clock hours							
Other (specify):							

7. (Completed by Teachers of Speech only)
Indicate (1) the amount of student-teaching in a school speech correction program and (2) the amount of practice in a speech clinic that you believe should be *minimal*, *desirable*, and *ideal* prerequisites for a school speech correctionist.

(Place ONE check √ in *each* of the eight columns opposite the appropriate amount.)

AMOUNT	Student-teaching in School Speech Correction Program			Amount You Had	Clinical Work with Speech Handicapped			Amount You Had
	Minimal	Desirable	Ideal		Minimal	Desirable	Ideal	
None								
1–75 clock hours								
76–150 clock hours								
151–225 clock hours								
226–300 clock hours								
301–375 clock hours								
376–450 clock hours								
Other (specify):								

8. (Completed by Teachers of Speech only.)
If you consider *regular* classroom teaching of some importance, indicate (1) the amount which you believe should be *minimal*, *desirable* and *ideal* prerequisites for a speech correctionist in a school system, and (2) the amount of classroom teaching which you have had.

(Place ONE check √ in *each* of the four columns opposite the appropriate amount.)

Amount of Regular Classroom Teaching	Minimal	Desirable	Ideal	Amount You Had
At least one semester of half-time student-teaching				
At least one semester of full-time student-teaching				
At least one year of on-the-job classroom teaching				
At least two years of on-the-job classroom teaching				
At least three years of on-the-job classroom teaching				
Other (specify):				

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