THE WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION AND THE MONTANA STATE DEPARTMENT OF PUBLIC INSTRUCTION CONDUCTED A NATIONAL RESEARCH CONFERENCE ON SPECIAL EDUCATION SERVICES IN SPARSELY POPULATED AREAS. THIS PUBLICATION EMBODIES THE CONFERENCE'S RESEARCH RECOMMENDATIONS. FORTY-SEVEN PARTICIPANTS REPRESENTING RESEARCH, ADMINISTRATION, AND EDUCATION MET IN GENERAL SESSIONS AND WORKING GROUPS TO CONSIDER POSITION PAPERS ON ADMINISTRATIVE ORGANIZATION, FINANCIAL PATTERNS, PERSONNEL, AND SUPPORTIVE SERVICES. TRADITIONAL ADMINISTRATIVE STRUCTURES DO NOT LEND THEMSELVES TO THE PROVISION OF SPECIAL EDUCATIONAL SERVICES DUE TO FACTORS OF VAST LAND AREAS, SCATTERED POPULATION, AND RELATIVELY FEW CHILDREN HAVING SPECIAL NEEDS. PATTERNS OF FINANCING SPECIAL EDUCATION RELATE TO ADMINISTRATIVE ORGANIZATION AND VARY FROM AREA TO AREA AND STATE TO STATE. PERSONNEL PROBLEMS IN RURAL AREAS ARE DIFFERENT FROM THOSE OF URBAN AREAS DUE TO LACK OF FINANCIAL SUPPORT, VARIABILITY OF ASSIGNMENT, REMOTENESS, AND LACK OF PREPARATION. SUPPORTIVE SERVICES, INCLUDING CLINICAL SERVICES, SOCIAL SERVICES, VOCATIONAL SERVICES, EDUCATIONAL SERVICES FOR CHILDREN, AND RESEARCH TRAINING, ARE SEEN AS BEST ADMINISTERED ON A COMPREHENSIVE REGIONAL CENTER BASIS. (SF)
SPECIAL EDUCATION SERVICES IN SPARSELY POPULATED AREAS:
GUIDELINES FOR RESEARCH

WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION
Special Education Services in Sparsely Populated Areas: Guidelines for Research

A report of the National Research Conference on Special Education Services in Sparsely Populated Areas

Cosponsored by the Western Interstate Commission for Higher Education and the Montana State Department of Public Instruction

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Preface

Problems of children with special learning needs who live in sparsely populated areas have received little, if any, attention from educational research personnel. Administrators of special education services in these regions face the problem of providing programs for exceptional children without well developed guidelines defining methods for establishing such services. The more remote the region, the more complex the problem becomes. Limited research talent has been available to study this difficult situation. Therefore, in most sparsely populated areas, services are planned with little or no benefit of research findings.

Recognizing this neglected area, the Western Interstate Commission for Higher Education and the Montana State Department of Public Instruction submitted a proposal to conduct a National Research Conference on Special Education Services in Sparsely Populated Areas to the United States Office of Education. The proposal was approved and, with additional support from the United Cerebral Palsy Research and Education Foundation, Inc. and the Vocational Rehabilitation Administration, 47 participants representing research, administration, and education convened in Denver, March 28-31, 1966. This publication delineates the research problems and problem areas identified by the conference personnel in the specific topic areas of (a) administrative organization, (b) financial patterns, (c) personnel, and (d) supportive services.

During the opening general session of the conference, presentations relating to these topics were made. After a general discussion, participants reported to one of the four topic area working groups. In these sessions, position papers identifying research problems were developed. Each resulting paper was then reviewed by all participants in reconstituted group arrangements. Comments compiled by recorders and associate editors assigned to each topic area were submitted to the original groups for modification of initial papers.
Sections 2, 3, 4, and 5, respectively, contain the final reports of the four topic areas. The introductory statement in section 1 is based on the keynote remarks of Harriet Miller. Chairmen, recorders, and associate editors for the four topics, as well as the total roster of participants, are listed in section 7.

The participants, cosponsoring agencies, and funding agencies hope that the results of this conference will offer direction and stimulate research on the problems of providing special education services in sparsely populated areas.

JUNE B. JORDAN
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1 Special Education Services in Sparsely Populated Areas: An Area for Research

HARRIET MILLER

Exploration of special education services in sparsely populated areas offers a tremendous challenge to the research field. Despite rapid escalation in kind and number of educational research projects within the past few years, despite all we hear about creativity, imagination and bold thought, new and better approaches to old problems, and new answers to new questions, little recognition and practically no attention have been given to this research problem. There are practically no research and almost no guidelines relevant to the provision of special education programs for youth in geographic areas characterized by great space and few people.

Most of the current special education programs are designed to serve clusters of children with similar exceptionalities. Cities and metropolitan areas can and do provide separate programs for the hard of hearing, educable and trainable mentally retarded, blind, partially seeing, emotionally disturbed, physically handicapped, and gifted. Translation of these urban area programs into similarly organized programs for use in less populous areas has not been successful. The results have been much less than adequate. The programs fall far short of providing equal educational opportunities for the exceptional children who reside in sparsely populated areas.

If one considers that the large percentage of our national population is concentrated within a small number of metropolitan areas, it is easy to realize that very different educational organization patterns are necessary in various regions and within individual states themselves to reach all youth. It is not so easy to visualize from statistics the actual situations that should command attention when considering the really sparsely settled areas. As an example, Montana encompasses 150,000 square miles of mountains and plains where temperatures as low as 70 degrees below zero have been recorded. The state is larger than the total
area of the New England states, New York, New Jersey, Maryland, and Delaware. A single one of Montana's 56 counties is larger than the state of Connecticut. But in all this vast area there are only 700,000 people, averaging fewer than five per square mile.

Not surprisingly, there are schools located 80 miles from the nearest paved road. Some residents use airplanes when they shop for groceries. School consolidation in such areas holds little appeal for parents whose children would be faced with lengthy bus trips on icy roads; often it is hazardous enough to make the ten or fifteen mile trip by jeep to the little one teacher school which serves perhaps a half dozen children from two or three neighboring ranches. Snow and ice in the long winter and mud in the spring frequently make the remote roads completely impassable.

Let us focus on this situation more closely. A recent Montana survey revealed 11 children with 5 different types of handicaps living in a county encompassing 3,300 square miles. How can these 11 be provided with the multiple kinds of special services they need?

In a remote school, which has a total of 31 students in its 6 grades, is a third grade pupil who is rapidly losing her sight. The school is 420 miles from the state school for the blind, and the parents do not want to send the child that far away. How can the school district meet her educational needs? What is the answer? How do we provide special education for sparsely populated areas?

Montana is by no means unique in this respect. Many of the WICHE states are similar examples of isolation—made more striking by the fact that, in states such as Arizona, Colorado, and Utah, more than one-half of the total state population lives in one to four major cities. Hawaii, with high population density in most of its area, faces the problem of providing educational and other programs to a mere handful of people residing on each of several outlying islands. In Alaska, towering mountain ranges separate tiny villages and remote arctic outposts from each other and from the city centers that offer a variety of educational programs to the immediately surrounding areas.

Obviously, urban patterns cannot be superimposed in the areas just described. But in these areas there are exceptional children who need special education programs.

Today, as never before, parents and other lay groups are aware of the importance of education. They, as well as Congress, expect educators to assume leadership responsibilities. There is a need in public school administration for research findings on which to base more adequate educational programs. Educators must give direction and stimulate action in education; researchers must become acquainted with problems faced by administrators.
Of far reaching importance is the likelihood that the research exploration in special education will have value for many other educational programs for youth in sparsely settled areas. There is a measure of urgency in this task. School administrators are asking for assistance, and the public expects action. An unprecedented number of federal aid programs have the potential for implementing research projects and pilot and demonstration programs. The research field faces a challenge to find new and successful ideas in the provision of special education programs to those children who, for geographic reasons, have too long been denied educational opportunities that would prepare them for satisfying and responsible adulthood.
The existing and traditional arrangements for administering schools in sparsely populated areas do not lend themselves readily to, and in fact generally preclude, the provision of special education services. Vast land areas, scattered population, and a low incidence of children having particular special needs become obstacles for the development of service programs requiring highly trained and scarce personnel and specialized facilities and equipment. Local school districts, large in geographic area but small in enrollment, are not an appropriate base for administering comprehensive special education programs. Continued district reorganization and consolidation will not substantially alter this lack of appropriateness. Obviously necessary is the development of new administrative patterns which can reconcile these circumstances.

Background Information

Any exploration of new or innovative organizational approaches must take full account of certain distinct realities.

1. There is no inherent value in any organizational framework. It is nothing more than a vehicle which permits program development. Nonetheless, there must be structure before there can be function.

2. Public education is the legal responsibility of each individual state. However much a state legislature may delegate administrative authority for programs of development and implementation, it cannot divest itself of ultimate responsibility. Where structural modifications, adaptations, or innovations go beyond present legislative provisions, additional legislative action will be required.

3. Adaptations or innovations in administrative organization for extending educational services in sparsely populated areas must be in harmony with, or at least cognizant of, educational organizational arrangements which already exist.
4. New administrative patterns for extending special education services to sparsely populated areas should be designed in such a way that they incorporate, or at least operate harmoniously with, those programs of special education which are now in operation.

5. The greater the degree of sparsity, the more likely it may be necessary to provide state level direction, coordination, and financing.

6. The development of administrative patterns within the framework of educational organization should take fully into account other public and private organizations and agencies and the services they provide. Coordination among agencies and the avoidance of duplication should have high priority.

7. The development of special education programs derives much of its thrust from other than internal administrative forces—parent groups, legislatures, private organizations, etc. Providing direction for these forces requires extraordinary professional leadership.

8. Adequate and appropriate special education programs administered in the most efficient way possible will be high cost programs. The conditions and circumstances peculiar to each state are likely to be the greatest determinant of the kind(s) of administrative pattern(s) which might appropriately be developed. It is doubtful that there is any one best way, any single uniform pattern of organization that would fit all states with equal appropriateness. Whatever type or pattern of arrangement is devised, the organizational framework within which special education programs are provided should be (a) an integral part of the state school system, i.e., part of the structure that provides education for all children, and (b) capable of undertaking other than special education functions.

Recognizing that the need to develop some kind of administrative organization with comprehensive special education services capability requires a multidistrict approach immediately suggests some type of regional agency. Such an agency in a sparsely settled area may be a county or multicounty area or may have no relationship to existing political boundaries other than those of the separate local school districts which comprise the service area. Degree of population sparsity, coupled with the nature of the local school districts in the area to be served, the total state financial plan for education, the special education program requirements, and the readiness to adopt new organizational patterns, provides a basis for determining how large the geographical area for regional program development might be and the degree to which this area should conform to existing political boundaries. There is much room for flexibility.

Certain desirable characteristics for a regional service agency or area special education program can be identified, however. The program
should (a) be organized to serve all types of exceptional children;
(b) provide or have access to a complete diagnostic team and diagnostic
facilities; (c) be closely associated with all the health, welfare, and other
agencies and resources of the area; (d) have the ability to provide or
assume the necessary followup services for all exceptional children; and
(e) provide leadership that can coordinate all the special education ef-
forts in the area.

This concept of a regional agency or area (multidistrict) program is
not to suggest that all children having special needs should be brought
to a center. Most activities carried on would actually be more effective in
operation in local school districts and local school buildings. What seems
important if sparsely populated areas are to be served is providing lead-
ership, administration, and coordination on an area basis so that plan-
ning, the employment and deployment of staff specialists, and program
adaptation can be carried on in an efficient and effective manner.

Providing special education services in sparsely settled areas requires
an administrative structure with enough flexibility to use a wide range
of techniques in program implementation:

1. Moving children—full or part time.
2. Moving staff—full or part time.
3. Utilizing state institutions.
4. Utilizing foster homes.
5. Establishing small boarding homes. (The school home might be a
desirable alternative to a residential school for handicapped chil-
dren in sparsely settled areas—a temporary, perhaps only five days
per week and nine months per year, foster home simulation.)
6. Bringing parents and children to centers.
7. Developing new modes of contact—radio, television, and telephone.
8. Providing inservice education for regular teachers and principals to
permit them, with supervision, to work more effectively with chil-
dren with special needs.
9. Preparing rural specialists in special education to perform this in-
service education function.

Any or all of the above approaches may be utilized by a single admin-
istrative organization or by a combination of school agencies operating
at different levels in the structure.

Problem Areas for Research

The development of administrative patterns suited to providing special
education services in sparsely settled areas could be greatly facilitated
by completion of certain systematic studies.
There is an absence of information regarding children living in sparsely populated areas and having special education needs.

1. Who are they? Where are they? What do they need? Are they being served now? From what sources and how are they receiving help? What about those in rural subcultures? Those who are excluded from school? Those who are out of school?

2. What is the mobility pattern for these children? Are they likely to remain in or near their home community or go elsewhere?

3. What occupational opportunities are available to them?

4. What educational program leads can be derived from such information?

5. How might such data be used in developing a program or service index that could be used in educational planning?

There is need for a serious exploration of the potential of an area program approach in selected sparsely populated states.

1. Is it possible to create service areas with boundaries different from towns, cities, and counties?

2. Is it possible to provide area direction and coordination of a program in such a way that the local school districts served are strengthened? In such a way that the program is responsive to the unique circumstances of local school districts? In such a way that a variety of approaches and techniques are used and tested? In a way that assures sufficient flexibility to meet changing needs and circumstances? In a way that makes maximum use of the services and resources of other institutions and resources—public and private agencies, colleges and universities, state education departments, etc.? In a way that a pattern for statewide development might be evolved?

There is need to explore the potential of regional programs which cut across state lines.

1. Is there merit in developing interstate planning and services? Might such an effort be gauged broadly enough to include health, welfare, and rehabilitation interests, as well as education?

2. Can strategies regarding the preparation and assignment of personnel, the utilization of certain facilities, and the conduct of research and demonstration efforts be developed?

There is need for an intensive study of existing administrative patterns for providing special education services.

1. What are the various types of area programs now in operation?

2. What are their organizational characteristics? How are functions allocated and responsibilities assigned?

3. How adequate are the programs provided? How efficient? What are
the organizational strengths and weaknesses? What special problems do they encounter?
4. How do they relate to local school districts? To the state education department? To the total state system of schools?
5. Does the area nature of program operation encounter special difficulties in working with other agencies?
6. How much flexibility do they have for program adaptation? For extending special education services? For undertaking other than special education functions?

There is a particular need to strengthen state leadership in special education in states having vast areas of sparse population.
1. Can effective state leadership provide the encouragement and direction for local and area pilot projects?
2. Can a statewide pattern for service be evolved through such a procedure?

There is a need for developing a central registry of all handicapped children.
1. Is it not possible to avoid expensive diagnostic duplications when these children move from one community, area, or state to another? Can there be immediate identification of their need to be cared for in the event of the death of their parents or guardian? Do states now have such a registry?
2. Could one be organized and maintained?
3. What program contributions would access to such information have?
4. Is this a means of keeping track of those who leave residential institutions? Might such a registry be an extension of service?
GLORIA CALOVINI

Financing of special education programs should be considered in the context of financing a total school program. Financial patterns will vary in relation to administrative organization. Educational services, plus excess costs accrued in providing auxiliary services, raise the cost of providing a special education program. Various patterns of financing special education have evolved, such as state reimbursement on a portion of excess costs, including capital outlay. To date, the research literature offers little information regarding financial patterns, except in relation to general school support.

Background Information
Some preliminary investigation demands attention before focusing on the problem of financial patterns. Situations deserving review include:
1. A clear and thorough understanding of the services needed should be determined.
2. Long range services beyond the childhood period should receive adequate study.
3. The possibility that services can be provided within existing situations if these are enriched with special techniques and devices should be investigated.
4. Existing institutions and services that traditionally have had a stereotyped function (e.g., schools for the deaf, blind, retarded, etc.) should be evaluated to determine the possibility of making services more flexible and usable by multihandicapped persons.
5. Services previously provided by health, education, and welfare agencies should be reviewed to determine any duplication of services.
6. Private agencies have offered special services. Their role is important and must be considered in relation to the entire fiscal program.
7. Technology (radio, television, programmed instruction) should be extended into the rural area.

The organization of a comprehensive program follows certain administrative patterns which consider such factors as incidence of exceptionality, density or sparsity of population, taxing ability, and willingness to provide services. Figure 1 designates the levels of financial support. It has been traditional that basic financial responsibility belongs to the local system, but support will necessarily be extended increasingly from other levels as various plans emerge.

**FIGURE 1. Levels of Financial Support**

In view of the financial problem of supporting more expensive total programs, three specific recommendations are made:

1. The excess cost formula should be administered so that the problem of sparsely settled areas is recognized.
2. State and federal assistance should be offered for capital outlay.
3. Federal support when offered should be administered through appropriate state agencies.

**Problem Areas for Research**

Existing patterns of financial support have emanated from legislative provisions. This broad spectrum of enabling legislation points up the need for a review of the many systems.

**Review of Systems To Determine Most Equitable, Efficient, and Economical Means of Support.**

1. Examination of the types of legislation which have strengthened or may strengthen a program in special education.
2. An analysis of special needs of rural areas recognizing that patterns of financing urban programs may not be effective in sparsely populated school districts.
3. Examination with a critical concern for additional financial provisions which may be needed by rural or regional programs.
4. The feasibility of planning comprehensive regional programs which are not necessarily limited by political borders.
5. Investigation of the relationship between good organizational patterns and effective use of money for program support.
6. A study of the present system of allocating funds to determine that they are used for special education services and further to study the effectiveness of the expenditures.
7. Investigation of how states can provide an adequate financial structure which will support the types of program organization to which the state is committed.
8. A study of financial arrangements in the acquisition of special facilities.

Although special education programs are necessarily more expensive, no adequate statistics have been accumulated on these programs that consistently reflect true costs. The complete expenditure of funds includes such items as services provided by private agencies as well as parents. Any study concerning itself with efficient use of funds must begin with some realization of total costs involved. This points up the need for a study of the variables constituting the cost index for special education. Such a study should be conducted in several states, computing a cost index in relation to the total cost of education within the state. The objective would not be to arrive at a proven formula for financing a program, but to derive some expectancy figures that would be realistic for the area.

**Special Education Cost Index Variables.**
1. What are the costs relative to special classes, resource personnel, ancillary services, institutional programs, semiresidential programs, and foster homes?
2. What are the costs in respect to program size, number of children, and geographic factors?
3. What factors account for differences in local attitudes toward financial support of education? What factors account for variations in interest in special education where (a) general education is of high quality or (b) general education is not of high quality?
4. What different sources of financial support can be identified?
5. What constitutes an adequate financial level of public school support for a special education program that is (a) minimal, (b) adequate, and (c) superior?
6. To what extent does a variation in tax ability affect program support?
7. What kinds of incentives of state aid can be used to support a local tax effort?
8. In view of the density-scarcity factor and the most effective programs and their locations, as well as the needs of programs, which patterns of finance are more efficient and effective: (a) separate special education tax and administrative unit, or (b) intermediate and/or overlapping districts?

9. In the event of intermediate and/or overlapping districts, what relations are needed with local districts, ancillary services, etc?

10. How can we develop refinements in the formula of correction for sparsity?

11. What kinds of procedures can be developed at the federal, state, and intermediate levels?

A study of this type should be representative of all programs of special education in a variety of locales, ranging from the larger metropolitan centers to the rural areas where only isolated exceptional children are located. The research relates to sociology, economics, government, and administration, as well as to special education and further to local areas, states, intrastate and interstate regions, and the nation. It is therefore recommended that such a study be conducted by an instrument representing a number of states offering a variety of kinds of administration structures in different geographic areas.
The personnel problems in sparsely populated areas are in many ways different from those of urban areas. The differences relate to lack of financial support, variability of assignment, remoteness, lack of preparation, and others. The specialist in a sparsely populated area usually is expected to be a person with many competencies, prepared to work with teachers who often have no background for the task of meeting special learning needs and problems. The specialist is often unavailable to teachers; or if he is available, he provides services which are less frequent and continuous than those in urban areas. The teacher in day to day contact with exceptional children, then, becomes the person who has almost total responsibility for providing adequate learning opportunities for the child and becomes the key to educational improvement. His background and preparation, his knowledge and effective use of resources, and his skills become the avenue to better learning for the child.

Background Information

The problems of teachers, administrators, and special personnel in sparsely populated areas cannot be studied adequately without certain basic information, including the answers to such questions as:

1. What are the special learning needs of all children within a given geographic area?
2. What human resources now available may be utilized to meet identified needs? What are their competencies?
3. What resources and services are needed to enable teachers to provide...?
Problem Areas for Research

Although reliable data are not available at present, the assumption may be made that public school facilities often do not provide for children with special learning needs. Some may be educated in regular classes, in special classes, in special facilities, or through part time arrangements of varying types, but some have no educational provisions available at all. The preparation of the teachers who work with them will range from no preparation to fairly complete preparation. Thus, research must begin with the needs of children and move to questions related to recruitment, selection, and preparation of teachers and finally go into areas dealing with means for improving the effectiveness of all personnel. The questions below are grouped into three broad categories which range from initial recruitment, selection, and retention of personnel to the improvement of auxiliary resources.

*Recruitment, Selection, and Retention of Professional Personnel.*
1. What are the factors involved in effective selection and recruitment of teachers of exceptional children?
2. What can be done to interest prospective teachers in special education in sparsely populated areas?
3. What are the factors involved in effective retention of teachers of exceptional children in sparsely populated areas?

*Initial Preparation and Continuing Education for Personnel To Meet Exceptional Learning Needs.*
1. What are the preparation needs in special education of teachers in varying geographic areas?
2. What can be done to help generalists do better teaching of exceptional children in sparsely populated areas?
3. What is the preparation and background of teachers working with exceptional children in sparsely populated areas?
4. What are the implications for teacher preparation in sparsely populated areas?
5. What are the differences in personnel needs between various areas of sparsely populated states?
6. What are the implications for preparation of personnel as they pertain to the particular subculture of the child?
7. What effective means can be used to develop sensitivity to the needs of children in auxiliary personnel and teachers? How can personnel be made aware of the real life needs of the child in relation to his current environment and future employment and total life pattern? (For example, identifying and labelling a child in an environment in which he has complete acceptance may be a great disservice.)
8. What minimal skills are needed by various personnel? Is tender loving care with little specialized skill sufficient for teachers of some handicapped children? Does this approach produce results better than the efforts of a trained specialist?

9. What are teacher education programs doing to prepare regular classroom teachers and special teachers for understanding and/or work with exceptional children?

10. What can be done via preparation, special institutes, and demonstration projects to increase the competency of college personnel preparing teachers of exceptional children in sparsely populated areas?

11. How can large universities and colleges effectively assist smaller institutions which prepare teachers in special education?

12. How can guidance counselors best be given a more sophisticated background in special education?

13. How can special education personnel be brought to a higher level of competence in parent counseling?

14. How can an effective program be developed to sensitize general administrators and supervisors to special needs?

15. What effective conferences and special study institutes can be planned as part of a programmatic series or as an interstate effort to improve programs and personnel?

Deployment of Resources.

Administration

1. What are the advantages and disadvantages of localized and centralized special education services?

2. What various personnel, other than teachers, are needed for identification, diagnosis, and educational planning?

3. What are effective patterns for personnel services in state departments of education, and how can Title V of PL 89-10 be used?

4. How can various agencies (i.e., state departments of education, colleges and universities, and other agencies) be mobilized for effective participation in various stages of program development from identification and diagnosis of special needs to program implementation and improvement?

5. How can the Vocational Rehabilitation Administration and Department of Labor be effective in improving job opportunities for exceptional children?

6. What leadership from regional groups such as WICHE and SREB can assist sparsely populated states in recognizing the need for special education in rural areas?
PERSONNEL
1. What are the personnel implications of complete preschool, school, and postschool programs?
2. How can home demonstration workers be made more effective in work with parents?
3. How can lay personnel be mobilized effectively?
4. How can interchange of doctoral candidates and teachers be planned so that doctoral candidates may serve rural internships and teachers may be released for college and university study? Can similar exchanges be effectively arranged for other personnel?
5. What personnel and techniques are needed to transfer knowledge from “islands of progress”?
6. How can diagnostic consultant personnel best meet the needs of isolated children through the medium of regular personnel?
7. How can travelling diagnostic and clinic teams be most effective in sparsely populated areas?
8. How can local teaching personnel be utilized more effectively than they are?
9. What are the respective roles of state departments of education and local school districts in teacher preparation and continuing education?

MATERIALS AND MEDIA
1. Can accurate models for data collection and educational records on children’s needs be developed and maintained so that such data may be readily available for study, continuing education, research, and other purposes? How may computers be utilized effectively?
2. How can new methods and materials be evaluated effectively? How can selectivity be applied to disseminating new knowledge?
3. What is the place of regional educational centers for (a) determining personnel needs, (b) providing assistance to children, (c) providing continuing education for teachers, (d) providing assistance to teachers, and (e) assisting in the evaluation of programs?
4. What are the most effective media of communication and transportation for providing effective services for children and for improving teaching competency?
5. To what extent can teachers be prepared to use packaged programs for specific children in their schools?
6. To what extent can demonstrations for improving teacher competency be developed and sent to teachers in mobile teaching units?
7. How can personnel needs be minimized? What new media and techniques can be utilized toward this end, such as taped lessons, 8 mm. cartridges, or programmed learning?
Supportive services are conceived as continuous life services which support the educational process. They include clinical services, social services, vocational services, educational services for children, education of professional personnel, and research training. These services could be incorporated into a comprehensive regional center which would be a central administrative structure for supportive services. Diagnosis, treatment, and followup represent the spectrum of functions to be provided to the client.

The formation of a comprehensive regional center could be organized on an intrastate or interstate regional basis. Its purpose would be multidimensional in nature, covering a broad area of services and encompassing professional members of the clinical team. To implement the designated services, it is imperative either that the client be brought to the regional center or that services be deployed through the distribution of mobile units for the client in his immediate locale.

To a large degree, the development of supportive services depends upon the values and social commitment of the community. It is axiomatic that supportive services must not be superimposed upon a community. Acceptance and understanding by the community are essential ingredients for participation and utilization. Specifically, the success of implementing comprehensive supportive services is dependent upon the positive interactions between people and agencies, adequate social welfare legislation, and financial reimbursement. Thus, if social changes are to occur expeditiously and economically, the behavior of people must be modified in consonance with the goals and objectives of society and the community. To assure positive social action, the delineation of educational mandates and meaningful communication among members of the community are fundamental.

Realistically, one of the prime barriers to organizing and developing
comprehensive supportive services is the factor of financial outlay. It is the responsibility of the professional community to ascertain the point to which the members of society will tolerate spending a great deal of money for the few and the degree to which they will accept supportive services that are decreed as requisite for the exceptional child. Yet, cost must not be a deterrent to developing supportive services. In substance, the needs of children are the philosophical bases for social and educational implementation of supportive services.

Another critical issue that must be considered in the determination of services for individuals in sparsely settled areas is the problem of remoteness. There is no doubt that psychological reluctance for services and vast geographical distances present difficulties for the optimal use of services. Yet remoteness, although a relevant variable for research in sparsely populated areas, is not the most critical for seeking and obtaining supportive services. The crux of the problem is whether the parents and the community recognize the value of such services as essential for helping the child and maintaining family cohesiveness. Consequently, the initial strategy for research is the determination of the characteristics of people.

Background Information
The development of supportive services depends upon the geographical area, manpower resources, and the needs of the community. An appraisal of these factors is basic before any attempts are made to provide supportive services. Hence, before the instituting of a research program, there should be assessment of the following:
1. What are the incidence, distribution, and population trends of exceptional children in the particular area under consideration?
2. What supportive services are available in the community, and how effective are they to meet the needs of exceptional children?
3. What professional personnel—physicians, psychologists, social workers, nurses, special educators, etc.—are available in the community?
4. What is the political milieu of the community, and how receptive are the status leaders to the development of supportive services?

Problem Areas for Research
The questions which have research implications for supportive services merge into the following patterns:

People—The Family and the Child.
1. What are the values and attitudes of the family and the child toward the importance of supportive services? How do the values and atti-
tudes of the family toward the handicapped child affect their use of supportive services?

2. What are the educational, social, and vocational goals of parents for their exceptional child? What influence do these aspirations have on interests and needs of parents for supportive services?

3. How are the people who have needs for supportive services coping with their problems? What intervention techniques and processes can most feasibly be employed to assist people in utilizing supportive services? How can we incorporate the use of a communicative agent (county agent, nurse, welfare worker, etc.) to make people more aware of existing services?

4. What are the ethnic, cultural, and psychological differences between those people in sparsely populated areas who actively obtain services (seekers) as compared to those who do not (nonseekers)? To what extent does the factor of distance influence the seekers and nonseekers? Would the ease of transportability by buses and helicopters markedly stimulate the use of supportive services?

   How does the factor of socioeconomic level affect the seekers and nonseekers? What are the significant differences among the low, middle, and high socioeconomic families in their desire for and use of supportive services?

   Does the kind of exceptionality of the child have an impact as to whether a parent is a seeker or a nonseeker?

   Does the severity of the child's handicap have an impact as to whether a parent is a seeker or a nonseeker?

   What are the motivational factors which impel people to seek and obtain supportive services?

   To what extent do the parents in sparsely populated areas shop around for supportive services?

5. What are the ethnic, cultural, and psychological factors which significantly differentiate the seekers and nonseekers in sparsely populated areas, as contrasted to those in urban environments?

6. What kinds of information and communication processes can help parents utilize supportive services?

7. Does the payment of financial reimbursement to the client make him more receptive to accept services?

Community—Federal, Regional, State, Local.

1. What is the priority for allocation of supportive services in a sparsely populated community and state?

2. What is the influence of cultural and regional characteristics upon the development of supportive services? What changes in the com-
munity mores can be brought about through educational and psychological techniques?

3. How can we unify federal, state, and local financial and professional resources in order to develop supportive services?

Agencies and Professional Personnel.
1. What changes in structure and function of existing agencies can be instituted to make them more effective? What kinds of processes and relationships can lead to better coordination among supportive agencies? What combination of agencies and services can be fused to make them more effective?

2. What is the effect of a comprehensive regional center upon a region, the parents, and their exceptional child? How can existing supportive services be mobilized and integrated into a comprehensive regional center?

3. What educational and social processes are necessary to efficiently and effectively integrate agencies and people?

4. What knowledge and skills can be developed in training of professional personnel to improve their use of existing supportive services?

Recommendations
In order that a regional research program be implemented, the following recommendations are proposed:

1. Develop a regional research cooperative board to serve as a focal agency for research proposals.

2. Include, wherever possible, the incorporation of research proposals in special education with other research projects currently in operation.
Suggested Guidelines for a Cooperative Area Study

RUTH A. MARTINSON

The suggestions in this publication obviously encompass research questions numerous enough to occupy the attention of many research personnel for some time to come. It is possible that many of the suggestions may provide the bases for master's theses and doctoral dissertations. Such independent investigations are desirable and should be encouraged.

It may be desirable, in addition to single studies, to launch a cooperative study broader in scope and more comprehensive than the typical thesis or dissertation. Such a study might be directed toward the identification of all special educational needs within a designated geographic area and could encompass numerous questions included in the four preceding general areas (finance, administration, personnel, and supportive services). These general areas relate to one another in many ways, and all are facets of the effort to educate exceptional children appropriately. Within a comprehensive study, serious consideration should be given to the planning of a total research program with adequate scope, appropriate priorities, elimination of duplicate efforts, careful staff selection, completeness of research design, and other factors necessary to the greatest return for the investment made.

In such an effort, a single agency should assume major responsibility. This agency might be WICHE, SREB, or another nonprofit educational agency interested in professional problems in education, or it might be a college or university specifically interested in the problems of sparsely populated areas. It is expected that the chief factor in the designation of the coordinating agency would be the ability of such agency to work efficiently with other groups which could contribute substantially to a total research effort in a given region.

Certain preparatory steps are important in the planning of a comprehensive study, apart from the selection of a coordinating agency.
These steps are preliminary to the refinement of research details in order to insure effective communication and support. The following suggestions are offered as guidelines to be considered in the implementation of a study which encompasses a wide geographic area and various political and educational groups.

1. A small group of experts should be selected to work with a representative of the designated agency in preliminary planning of the scope and functions of the study. This group, three or four in number, may include such persons as a special education director for a sparsely populated state, a person who has actually conducted a research study in a broad geographic setting, a representative from an institution preparing special education personnel, and a research representative from the US Office of Education.

2. The initial planning group should define geographic criteria for the study to include the following: The geographic area for the study should be determined by the group to minimize local problems through selection of an area where desire to participate is high, where cooperation is predictable, and where political problems can be avoided. (An area which overlaps state boundaries might prevent local domination, for example.) The geographic area should include that territory which will provide a total population of varied ages, resources, educational facilities, and needs. The area selected should encompass features which will provide data useful to other sparsely populated areas, independent of location.

3. The planning group should establish criteria and recommendations to be used in the identification and complete study of the entire pupil population. An initial thorough survey should be planned to provide data to identify all children with special learning needs.

4. The planning group should make recommendations to be used in the study of resources available in the given area, including such factors as the background and professional needs of teachers, special educators, and others involved in special education efforts.

5. The planning group should outline a proposal for a planning study which would encompass the above steps as preparatory for a plan of action for an ideal program for exceptional children in a sparsely populated area. The ideal program would be based upon findings related to educational needs as identified and would include detailed plans to be developed by a study director and staff.

6. An application should be forwarded by the principal agency for funding.

7. A director and staff should be selected to design and conduct the study outlined in 5 and 4 as phase one of a two part study.
8. A plan of action for an ideal demonstration program should be developed on the basis of phase one findings to include such elements as the planning of educational goals for the participating children; added resources as needed; teacher education; improvement of media, facilities, or other factors; and evaluation.

9. The plan for the ideal program should be reviewed with an expanded advisory committee to include the initial planning group in order to assure continuity. Detailed guidelines for the demonstration program, prepared by the director and staff, should be included in the review, with detailed plans for orientation of staff and teachers to the actual educational and life needs of the children, for maximum efficiency in the use of personnel within the study, and for careful definition of roles and relationships of participating personnel.
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