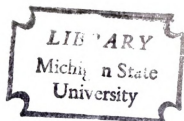


A SYSTEMS APPROACH TO
EDUCATIONAL PLANNING
APPLIED TO SPECIAL EDUCATION

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
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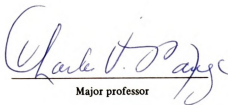
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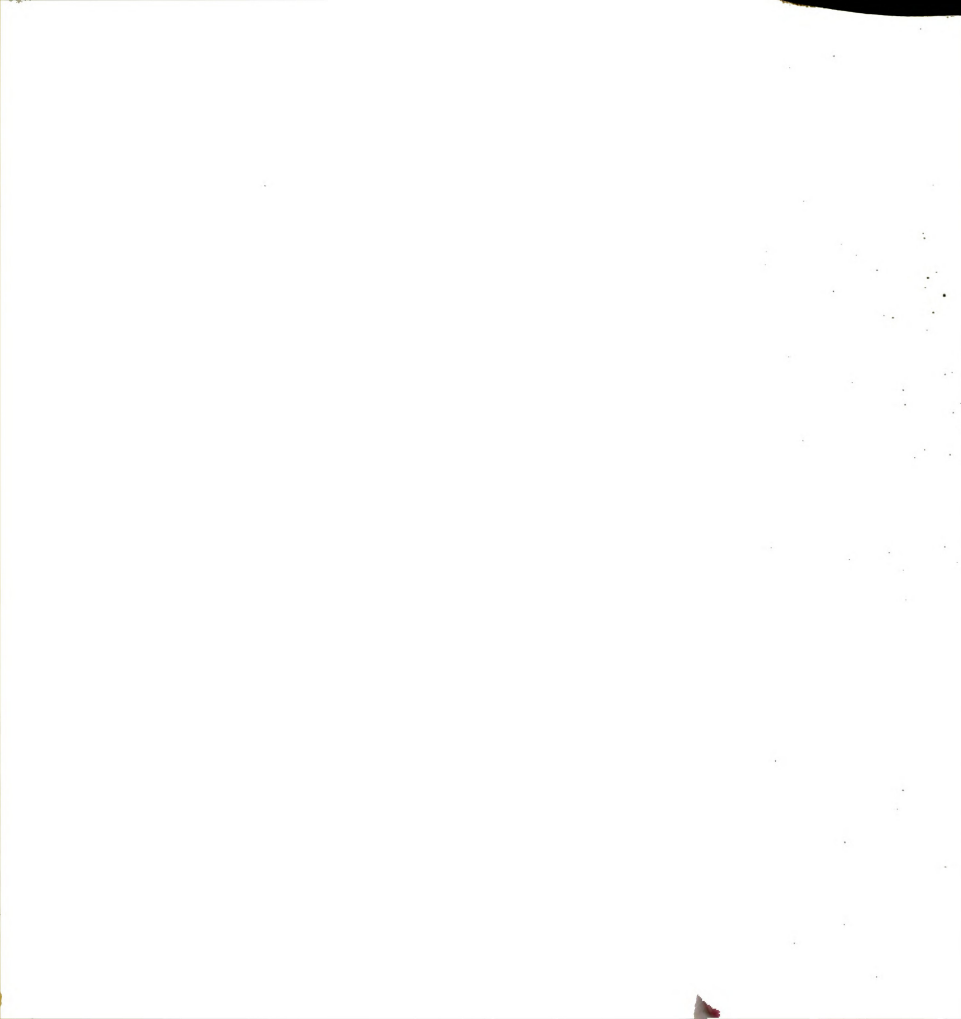
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ABSTRACT

A SYSTEMS APPROACH TO EDUCATIONAL PLANNING APPLIED TO SPECIAL EDUCATION

By

Gordon Dennis Bergman

In an era of accountability and student-product emphasis in education, it is imperative that the education and training needs of all students be met. The cry for equality of educational opportunity rings clearly in an age when minority groups vie for recognition and fair treatment. Special education, involving children and youth less fortunate than the average, stands conspicuously in public view, representing an area of service fraught with emotionalism and missionary zeal. Handicapped children elicit the sympathies of many.

Educational systems have often survived by crisis management and without sufficient planning and forethought. They have failed to provide comprehensive programs and services, adequate to meet the needs of all children within their jurisdictions. Public and humanitarian sentiments demand just treatment for our handicapped citizens of tomorrow.

The purpose of this dissertation is to provide a systems approach to planning comprehensive programs and services in Special Education. Within a programmed, orderly format, school systems will

be able to systematically plan the implementation of programs and services for exceptional children which are relevant in the light of current societal pressures. Priority based planning will compensate for fiscal constraints and yet insure that quality is produced for finances invested. Within the accountability of mandatory legislation, the delivery of Special Education services can be enhanced through "A Systems Approach to Educational Planning Applied to Special Education."

Through successive planning and evaluation procedures outlined in this study, the educational system's "Existing Program in Special Education" is circumscribed, delineating the pupil population being served, and the instructional and support personnel employed to provide a special profile of programs and services. The second phase of presentation assists the school system to determine a "Gross Needs Assessment" using national disability incidence figures. The numbers of students so indicated as requiring special education services within the jurisdiction, are utilized to gauge a need for personnel on a pupil-professional ratio basis. As the final step of the planning process is presented, "A Real Needs Assessment," enables the school system to structure a plan for Special Education to meet the unique requirements of each system. Applying a series of planning variables and constraints, revised target population, manpower base, facilities provision, transportation needs, materials and equipment; requirements are profiled in conjunction with cost projections for each element of service. Within a priority based multi-year plan, resources are

allocated, programs and services are initiated and through a process of continuing evaluation, annual up-dating of the planning process is achieved.

The Special Education Planning Proposal offers predictive and standardizing potential for school systems large and small. In the light of emerging requirements for State planning, systems' accountability for quality student-products, and adequate return for monies expended, this format warrants the consideration of educational administrators interested in providing appropriate programs and services for all children within their jurisdictions. Particularly, for planning systems at local, intermediate and state levels of Special Education, the format presented facilitates a systematic delivery of services with accountability for exceptional children.

A SYSTEMS APPROACH TO EDUCATIONAL PLANNING
APPLIED TO SPECIAL EDUCATION

By

Gordon Dennis Bergman

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Finally, particular indebtedness is recognized for the indispensable assistance provided to me by my wife, Jennie, who learned to type doing my dissertation. For the many hours of determined effort expended on my behalf, I am truly grateful.

It has been a unique pleasure for me to have attended Michigan State University and to have had the privilege of working with distinguished scholars and professionals in the Colleges of Education and Communication Arts. Errors which might be detected within this text should only be attributed to the writer.

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CHAPTER I

THE PROBLEM

Introduction and Purposes of Study

Educational Planning is a broad, comprehensive process for designing, initiating, and evaluating necessary programs and services in the educational system. Planning is also a continuous long-range activity. The major purpose of educational planning is to establish program priorities in terms of goals and objectives and illustrate the use of human and material resources to accomplish these goals. The organization for instruction must systematically focus on the educational welfare of its students.

A comprehensive special education program for exceptional children should be designed to provide instructional and supportive services in addition to, or in lieu of, the regular education program, when special provisions are required to meet the educational needs and/or capabilities of these children. The development of a comprehensive program of special education services within a school area requires the use of both long and short-range planning by the individual school unit and by the system of schools under the jurisdiction of an administrative school system.

It should be possible for each school system to develop a comprehensive Multi-Year Plan for the provision of special education programs and services. This type of continuous planning assists the board in developing and extending special education services in an orderly and systematic fashion based upon exceptional children's educational needs and the school system's growing capability to provide programs and services.

Within the realm of decision-making, the art of choosing priorities is the key element. In a day of cost-benefit analyses, accountability and fiscal constraint, the need for realistic planning in education is a requirement. Problems need to be analyzed and approached objectively. To achieve balance and continuity, alternatives must be weighed and choices made concerning the needs of exceptional children, their education and their training. These provisions may then be reflected in a budget design.

The purpose of this study is to provide, for the use of school systems, a planning format whereby crisis management, characterized by a hit-and-miss, piecemeal approach to educational planning might give way to a system-plan for providing programs and services on behalf of all children requiring special education. Having developed dimensions of local need within a standardized planning approach, a basis is provided for inter-systems comparability and higher level comparisons. Equality of opportunity takes on definite potential as discrepancies are identified and as broad decision-making becomes possible through the elimination of systems' variability.

Definition of Terms

Systems Planning in Education--Educational planning that is serious and purposeful; integrated as a process into planning of all other major activities of the organization, is forward looking. The examination of past experience--what we call evaluation--serves only to inform what can be accomplished in what period of time, given the resources available.

Properly applied the new systems approach can be an effective tool for school systems and especially for those who refuse to respond to critics on an impulsive, ad hoc basis. It provides a way of adopting systematic planning procedures to ensure that proposals for reform or further development are related to system-wide objectives. Through integrative education and interdisciplinary synthesis, alternative solutions may be devised and relevant actions selected in order to maximize efficiency at minimal costs within a complex network of interacting elements.

A systems plan is an abstract reference to concrete things used for purposes of analysis, conceptual organization and planned implementation. To study a system, a boundary is drawn around elements considered to be relevant (see Figure 2). Any system may be made up of sub-systems and these may overlap in their interactions. Their goals may be complementary or divergent. The systems model is designed to be all-inclusive, looking at the organization as a whole and is therefore often used to study problems of change. Changes affect the whole system but growth is achieved when dominant trends emerge from within the multi-variable, interdisciplinary principles.

The school organization must be an open system exchanging energy and information with its environment. Through a regulation of inputs and outputs, a steady state is achieved wherein a dynamic interplay of educational sub-systems function to direct conflict, motivation and decision-making in the best interests of the student-product. All this can be realized only if systems theory provides general simplifying laws through which the researcher can describe, explain and predict the wide range of human behavior within the organization. Taking a systems overview simply means that every action has a reaction. Apart from common standards based upon needs no decisions are made without reference to other related parts of the system. Administrators must pre-determine the probable implications of their actions. The extent of positive and negative consequences aid in determining the best courses of action to be taken.

Comprehensive Programs and Services for Handicapped

Children.--David J. Evans, Governor of the State of Washington, in his opening address to delegates at the Governor's Conference on Education in Seattle, Washington in 1968 (1) said that,

A system both serves society and anchors it. We must fashion . . . a flexible and sophisticated educational instrument . . . which will impart meaningfulness to life and a sense of purpose to its participants. The future system of education must possess the elements of: totality, relevancy, creativity and solvency.

In such a sweeping assessment of the educational enterprise, all children legally qualified to partake of public education, must be included (54). Comprehensive programs and services for exceptional children must therefore provide for the social, emotional, physical

and psychological needs of children and youth from pre-school to adult habilitative levels. An adequate referral system adequately communicated, will assure that needy children gain access to required services. Diagnostic services for both program and educational needs will provide necessary guidance for learning prescriptions. Appropriate student placements dictate the need for full-range disability programming within a continuum of services. Follow-up services to assure successful integration into the community brings to fruition all efforts for the well-being of exceptional children. Utilizing professional support services to provide required treatment services, educational programs may be prescribed for the Emotionally Disturbed, Socially Maladjusted, Mentally Handicapped, Gifted and/or Talented, Physically Handicapped (hearing, vision, speech, orthopedic), Learning Disabled, and those children requiring Remedial Instructional services as described in Appendices A and B.

The professional support services alluded to would consist of Psychological, Social, Administrative, Diagnostic, and Rehabilitative complements as necessary adjuncts to the pupil's schooling experiences.

Special Education...Special Education is primarily designed to deal with exceptional children marked by handicapping mental, physical or social deviations. The handicap seriously restricts learning or disturbs classroom behavior beyond the feasible limits of usual curricular or disciplinary modification or tolerance,

exemplified by any one or combination of the following characteristics of children:

- (1) extraordinary intellectual superiority, deficiency or defect;
- (2) severe sensory impairment in vision or hearing;
- (3) orthopedic handicaps which interfere with physical attendance, locomotion or coordination;
- (4) speech handicaps which disrupt and impair oral communication;
- (5) emotional disturbances which distort or inhibit productive behavior;
- (6) specific defect in learning skills or processes;
- (7) circumstances of health or vitality affecting school attendance or vigorous application and activity participation;
- (8) home conditions conducive to poor scholastic support or behavior;
- (9) neuropsychiatric conditions interfering with adjustment (see Appendices A, B, and E);
- (10) interacting psycho-social concomitants in multiply handicapped children.

The purposes of Special Education dictate that exceptional children have educational opportunities appropriately adapted to their aptitudes and disabilities so that they may receive that education which shall make them effective and useful members in their ultimate adult place in society. It is essential that this instruction proceed effectively in the context of individually prescribed instruction.

Importance and Need for Study

Elliott L. Richardson, Secretary of the federal government's Health, Education, Welfare Department has disclosed a plan whereby block grants in federal aid would be extended to State Departments of Education for use in five major areas: vocational education, impact aid, education of children in low-income families and the disadvantaged, education of the handicapped, and education support services.

More effective planning by states is an essential ingredient of the program. We would ask each state to submit a comprehensive plan on how the state would allocate federal monies in each of the five broad areas covered by the assistance act. The money would flow by block grant through the state and, according to its plan, to the local school districts. . . . each state plan and its formulation would be a unique response to the special problems of that state. It would be a real plan--a design for action (2, p. 309).

The fact that this pending legislation would provide funds for the implementation of "plan-approved" programs in Special Education, makes it essential that school systems be enabled, by means of an effective planning instrument to meet the needs of the children requiring special services and therefore qualify for reimbursement on the basis of goal-oriented state and federal funding.

Within the framework of the systems planning format presented, school systems at both Intermediate and State levels of administration are then able to structure State Plans to achieve co-ordination of planning and delivery of services in a continuum from local to federal levels. In order to achieve ultimate equality and standardization of educational opportunity for all, this form of systematic co-operation at all levels is essential.

Education, in the day in which we live, has assumed the proportions of "big business," and every business executive must accept, as a matter of necessity, certain priority considerations. First, that problems will be analyzed and approached objectively instead of by quick responses to a series of heated emotional emanations. The second benefit is that priorities will help restore a sense of balance and continuity. The third benefit brought by a system of priorities will be reflected immediately in the budget. William Johnson (3) asks,

Do you know the difference between planning and forecasting? Where are we going? Where should we be going? How do we get there? Trouble is, not enough systems realize they need answers to such questions until hard realities bring them up short. . . . no business today can afford the luxury of running blind into the future, . . . the modern manager needs to master the techniques of long-range planning.

In light of the sound business rationale stated above, and motivated by concern for the future of Special Education and the welfare of exceptional children, Stephen Lilly (4) determined, at a recent Council for Exceptional Children Conference in Chicago, that certain urgent issues be brought before the Committee on Educational Diagnosis and Programming, for discussion and debate. Focusing on those children traditionally labeled as educable mentally retarded, emotionally disturbed, behaviorally disordered, educationally handicapped, learning disabled and brain injured, an effort was put forth to test the relevancy of current educational practices and motives in the light of social and moral justifications. In terms of pupil program placement, opinions varied from incarceration in institutional settings to complete integration into regular classes within the

regular public school systems. The gravest concern, however, revolved about the fact that, of the 6,000,000 handicapped children in the nation [U.S.A.] only one-third were receiving special educational services (4, p. 45).

It is proposed that school systems which are exposed to a systems approach to educational planning, and are aided and directed in their planning and implementation of comprehensive programs and services for handicapped children, will demonstrate improved delivery services in Special Education. It is with this priority in mind that this dissertation attempts to provide a means whereby school systems will be able to plan and appropriately meet the needs of all exceptional children for whom each jurisdiction is responsible.

Organization of Study

The general stimulus-response model presents a means whereby systems may assess the effects of input variables on outcomes (21, p. 20).

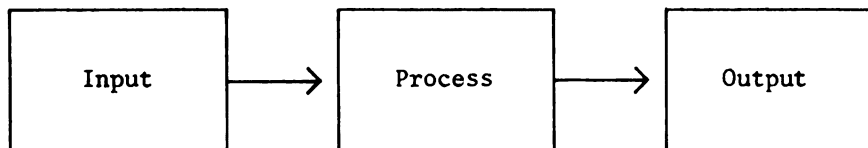


Figure 1.--The Stimulus-Response Model.

Note: In an attempt to clarify the parallel relationships of repeated elements within the planning models presented, color coding can be utilized.

In writings from Pavlov to Weiner (5) to Shannon (6) the closed cycle system, or servo-system (59, p. 135), has stressed the past as a means of control for the output, or prediction of the output's future. The monitoring interpretation refers to functional control through a feedback process. Feedback of the output to the place of control, comparison of the output to the input, and such manipulation of the output-producing device as will cause the output to have the same functional form as the input, helps to ensure a quality product.

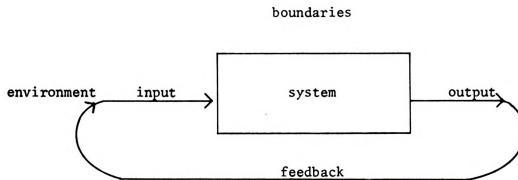


Figure 2.--A Servo-System Model

When applied to education, the initial element constitutes an input consisting of teacher influence, curriculum, environmental variables, administrative effectiveness, parental co-operation, etc. The process which intervenes, acts upon the learner, taking into consideration each individual's interests, capabilities and personality. The education process works toward the creation of a learned, well adjusted and socially beneficial student-product who will take his place in the world of work. The output consists of a quality

product in the form of a contributing citizen in a democratic societ
A feedback process serves as a corrective feature. Following an
evaluation of the product, information is provided which in turn may
be applied to both the input and the education process for the pur-
pose of enhancing the effectiveness and efficiency of the learning
institution.

The challenge to educational administrators in an age of
accountability and student-product responsibility dictates that
systems planning be instituted. To assure that parent-clients, the
supporters of public education, receive due reward for resources in-
vested, a systematic, predictable and stable form of educational
organization is necessary. Within an analytical decision-making
format the realization of planned equality of educational opportunity
is a distinct possibility. The following basic elements should be
considered in any educational system's planning provision (7).

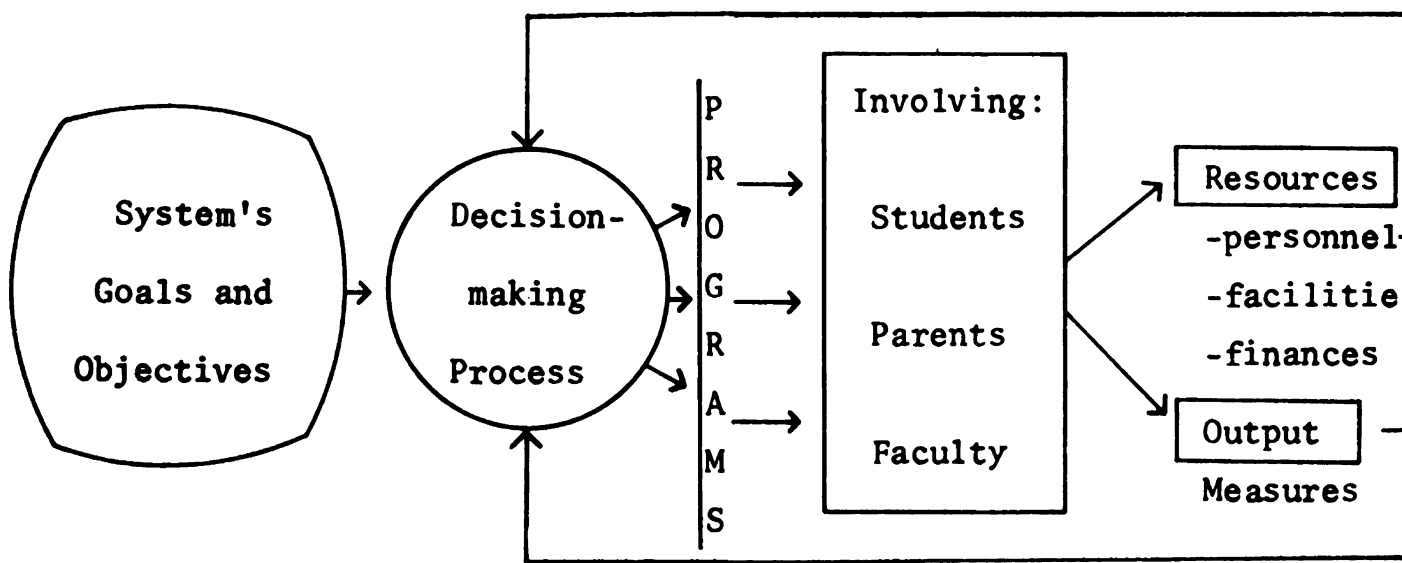


Figure 3.--Educational Systems Model.

The indispensable element of a systems planning model for education consists of establishing goals and objectives. Having duly considered what must be reflected in the make-up of the finished product, in equipping him to conform to the demands of society, a school system needs to structure principles of action which will help to ensure the accomplishment of acceptable goals. Parents, students, faculty, programs, equipment, buildings, financial resources, etc. comprise the "raw materials" used in the educational decision-making process. The application of financial, material and personnel resources to the learning process makes possible a finished product, which when measured for quality and acceptability, becomes the gauge by which subsequent processes become altered and more goal oriented.

In developing a comprehensive plan for special education services, the school system would draw upon a variety of its own human resources, including administrative and instructional personnel in regular as well as special education programs.

Figure 4, The Planning Process in Special Education, presents a planning model which will prove helpful in developing a comprehensive plan for special education services for a projected time period. The planning process necessitates developing each area of the model for each year of projected planning. Implementation of successive year's planning would proceed only after appropriate annual modifications were incorporated, dictated by results of feed-back evaluations made from previous year's operations.

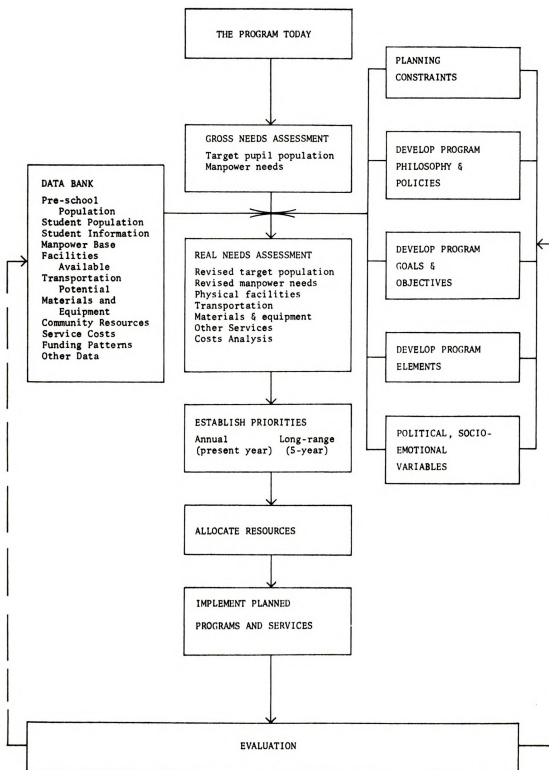


Figure 4.--The Planning Process in Special Education.

The planning strategy suggested by the model is outlined in considerable detail in the sections which follow and each is identified for convenient reference through codification with specific model stages. Sufficient flexibility is inherent, however, to compensate for obvious state, area, or local differences. The planning process considers the activities of a basic school unit in establishing its local micro program in special education. The individual school units then combine to form the macro programs and services design. Strategies should be designed for the co-ordination of individual school participation in the co-operative production of a system's plan.

The planning document which this exercise generates will emerge in the following format as educational agencies approach the system's planning:

- Stage 1. The preparation of a description of special education as it exists within the jurisdiction at present.
- Stage 2. The determination of the gross needs for special education programs and services based upon the application of incidence measures to the total school population.
- Stage 3. The development of local program policies for special education based upon a philosophy conceptualized by the school system and its educators.

- Stage 4. The development of special education pupil program goals utilizing operational objectives that are specific, measureable and related to the needs of exceptional children within each program and service (see Appendix K).
- Stage 5. The determination of program categories (see Appendices A, B) under which special education will be organized (e.g. mentally handicapped, emotionally disturbed, multiply handicapped, resource room with partial integration, diagnostic teaching, etc.).
- Stage 6. The consideration of planning constraints such as State Regulations and the determination of such effects on the system's program organization.
- Stage 7. The consideration of current emotional and/or political pressures affecting advisability of particular elements of system's planned change and implementation.
- Stage 8. The utilization of system's data relative to target population, pupil profiles, manpower needs and potential, physical facilities, transportation potential, community resources, etc. should aid in determining and facilitating decision-making as required in the following stages of planning.

- Stage 9. The application of the results of Stages 3 through 8 to Stage 2 as a process of modification and revision, whereby the real needs of the school jurisdiction are plotted.
- Stage 10. The utilization of the results from Stage 9 and Stage 1 to create and adapt a plan unique to the system's jurisdiction based upon program priorities established with State guidelines and regulations considered.
- Stage 11. The allocation of physical and personnel resources for deployment over a projected period of planning in light of permissive State legislation, program policies and/or within the latitude offered by court interpretations.
- Stage 12. At this stage of planning, consideration should be given to the implementation of the planned program.
- Stage 13. Ongoing evaluation and modification of planning as the need for changes becomes evident.

Note: Throughout this material, a series of forms is used to demonstrate the cycle of planning events which make up the total exercise. The forms are designed as suggestions, permitting each system to make necessary modifications as may be required to conform to differing modes of organization and operation.

Applicability of the system's plan being proposed contains generalizability to educational systems small and large. Limited degrees of modification in format and design will permit the utilization of these procedures by local or area school districts. It is projected that school systems generally will find the proposed study of significant value as a means for achieving improved delivery of special education programs and services to exceptional children.

In Chapter II of this study a review of pertinent literature related to the matter of Special Education planning is summarized. Chapter III sets out in "programmed" form, the sequence to be followed by a school jurisdiction in its multi-year planning of programs and services in special education. The approach to this planning follows through three distinct stages:

- (1) The Program Today, profiled on Series A Forms;
- (2) A Gross Determination of Needs, on Series B Forms;
- (3) Creating The System's Plan for Future Implementation, on Series C Forms.

Evaluations and recommendations for the application of the planning model are delineated in Chapter IV and the study concludes with the incorporation of additional planning aids and informational resources as appendices.

Appendix M contains a Sample Plan Completed for Leader County Board of Education. Utilizing an early draft of the Systems Planning Model presented in this study, Leader County School system was approached; requesting that it participate in an actual pilot project in Special Education planning.

Educational administrators in Leader County agreed to submit their programs to the test and the data incorporated in Appendix M reflects the dimensions of its projected planning.

As a result of information gained in this project, indications for revision of the proposed "Systems Approach to Educational Planning Applied to Special Education" became evident. The planning format as presented in Chapter III of this study reflects the re-design suggested from the Leader County experience.

CHAPTER II

REVIEW OF RELATED LITERATURE

Problems in General Perspective

The Changing Nature of Special Education

It has been said that special education would never have emerged in this society had traditional education sufficiently practiced what it has long preached--the individualization of instruction based upon exhaustive and continuing differential diagnosis of every child. Some professionals (4, 10, 44) see the early return of a past era when "special education" did not exist. As all education becomes "special" no longer will any education need to be called special. Thus the cycle may complete itself but, as many fear, it may not only see the disappearance of the nomenclature and of the categories of children singled out for special education services, but the disappearance of the special services, as well. Hence, many who are concerned about special children are reluctant to surrender special designations since it seems that without special labels few efforts will be made to meet children's special needs. Yet, were a survey poll conducted, it could be shown that professional educators at teacher, administrator, and state department consultant levels, are

unable to agree on what ought to constitute Special Education. The majority of respondents would likely concede that the Mentally Retarded, Emotionally Disturbed, Blind, Deaf, Orthopedically Handicapped, Speech Correction and Home Teaching should be a part of special education, but Remedial Reading, Foreign Adjustment Classes, and programs for the Severely Retarded (0-30 I.Q.) ought not to be included within public school special education. Even within the community at large the understanding of and commitment to educational rights for all children seems not yet to be fully endorsed.

Gaps in Services to Students

Romaine P. Mackie (8) in a national survey of Special Education services provided by school systems in America reveals in her "state of the service" profile, a glimpse of professional attainments to 1966. As may be ascertained from even a cursory analysis of the data, major gaps in service, inadequate instructional provisions and inequalities of educational opportunity for all, plague and mar a record of quality and comprehensiveness in education. The total number of public school systems operating special education programs ranged from 1459 in 1948 to 6711 in 1966, yet large segments of needy pupil populations continued to be denied appropriate services. Table 1 illustrates the continuing discrepancy between needs for special programming and school systems' provisions of services.

As stated by Beekman (10, p. 18) in 1971, "As we look over this vast country we see the gaps of services, the disinterest of educators, problems of money, lack of teachers, and research stacked

TABLE 1

Pupil Enrollments in Special Education in Relation to
Need, by Area of Exceptionality: 1966 (9, p. 338).

Area of Exceptionality	Estimated Number of Children in Need of Special Education ^a	Estimates of Prevalence, (Per Cent) ^b	Estimated Enrollment 1966	Per Cent Enrolled ^c
1	2	3	4	5
Total	6,025,000	12.0	2,106,100	35.0
Visually handicapped, total	50,000	.1	23,300	46.6
Blind	16,000	.033	9,200	57.5
Partially seeing	34,000	.067	14,100	41.5
Hearing-impaired, total	301,000	.6	51,300	17.0
Deaf	50,000	.1	23,500	47.0
Hard-of-hearing	251,000	.5	27,800	11.1
Speech-impaired	1,757,000	3.5	989,500	56.3
Crippled	377,000	.75	29,500 ^b	7.8 ^b
Special health problems	377,000	.75	39,900 ^b	10.6 ^b
Emotionally and socially maladjusted, total	1,004,000	2.0	87,900	12.0
Mentally retarded, total	1,155,000	2.3	540,100	46.8
Upper range	1,005,000	---	475,300	47.3
Middle range	150,000	---	64,800	43.2
Gifted	1,004,000	2.0	312,100	31.1
Other	---	---	32,500	----

^aBased on school age population of 50,749,000 as estimated in Projections of Educational Statistics to 1974-75, OE-110030-65, Circular 790. Washington: U.S. Government Printing Office, 1965.

^bFigures and percentages are based on the number of children enrolled in local public schools and do not include those in residential institutions or in independent hospitals.

^cPercentage enrolled, when considered to be a part of all the children needing special programs and services, serves to illustrate the discrepancies and lack of services being provided for handicapped students in the U.S.

to the ceiling but never applied to the problem--one cannot help but wonder."

From a state department of education perspective, much of the "wondering" has been spurred by the realization that in many jurisdictions, Special Education legislation has developed in a hit-and-miss fashion and many needy children continue to fall through permissive gaps in services. 1970 Health, Education and Welfare reports (11) summarized that in 1958, 882,000 children were being served in special education. In 1969 this number had increased to 2,258,395 as improved services and an aware public began to demand additional special programs. As of 1970 it is estimated, however, that approximately 3,751,571 children and youth have yet to be provided for in appropriate special education classes and services.

Administrative Organization for Special Education

Existing traditional arrangements for administering schools in sparsely populated areas do not lend themselves readily to the provision of special education services. In addition to a lack of needs awareness, 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 personnel and specialized facilities and equipment. Local school districts, large in geographic area but small in enrollment (12), are not always appropriate bases for administering comprehensive special education programs. Continued district re-organization and consolidation will not substantially alter this lack of

appropriateness. There is a need for the development of new administrative patterns which can reconcile these diverse circumstances and speak to the issues of integration and segregation which have recently dominated special education literature. As the matter ceases to be viewed as either "black or white," a continuum of services with flexibility built in, will permit the placement of children in programs based upon carefully diagnosed needs (see Appendix G).

Events seem to be rapidly moving toward full state funding of state approved planning in special education. Supplemented by categorization grants in federal aid, local education agencies will be enabled and be held responsible for all exceptional children (36). While the glamour and excitement is in the new authorization bills, the power is in their funding. Beyond this, the final meaning of the legislation and the fulfillment of its promises are in the efforts of professional people, teachers, and related specialists who give it life through their successful work with children (13, p. 606).

Ray Graham, former Illinois State Director of Education (14) in an article, "Responsibility of Public Education for Exceptional Children" elaborates what for him are essential aspects of good administration in special education. Primarily, a philosophy which places educational practice at the disposal of children and their needs, must accountably give precedence to customized instruction. Leadership needs to be positive, imaginative, and pupil-centered at school building, board, intermediate district, and state levels, each co-ordinated in decision-making and in their efforts on behalf of their prime clients--students. Instructional organization becomes

purposeful in its functioning when three broad areas of provision are considered. First, behavioral instructional objectives should focus on the educational needs of pupils, with eligibility of pupils predicated upon careful individualized diagnosis and relevant program placement. Second, pupil-teacher ratios and class size should be related realistically to the capability of the professional to program appropriately for the children in question. Age range and grade placement criteria ought to be maintained on a flexible basis, allowing for variability of student educational, training, social, emotional, and handicapping conditions. Third, instructional equipment and materials need to complement a curriculum which has been suitably fitted to the student's prescribed needs profile. Both teacher and supervisor in this process, having been adequately trained to practice with competence, must be supported and guided by the out-growth of positive school-home relationships.

Toward Individualized Instruction
Through Interdisciplinary Co-
ordination

A "look ahead" into special education, requires that education become personalized for all. It must be based upon a continuum of services which will meet the needs of the whole child in order to appropriately prepare him for a future that will permit maximum contribution to society. Plans for the future must show tangible evidence of growth and goal-oriented processes. The need for an interdisciplinary approach to meeting the needs of all children as whole persons is graphically demonstrated by Elizabeth Goodman (Figure 5), (9, p. 256).

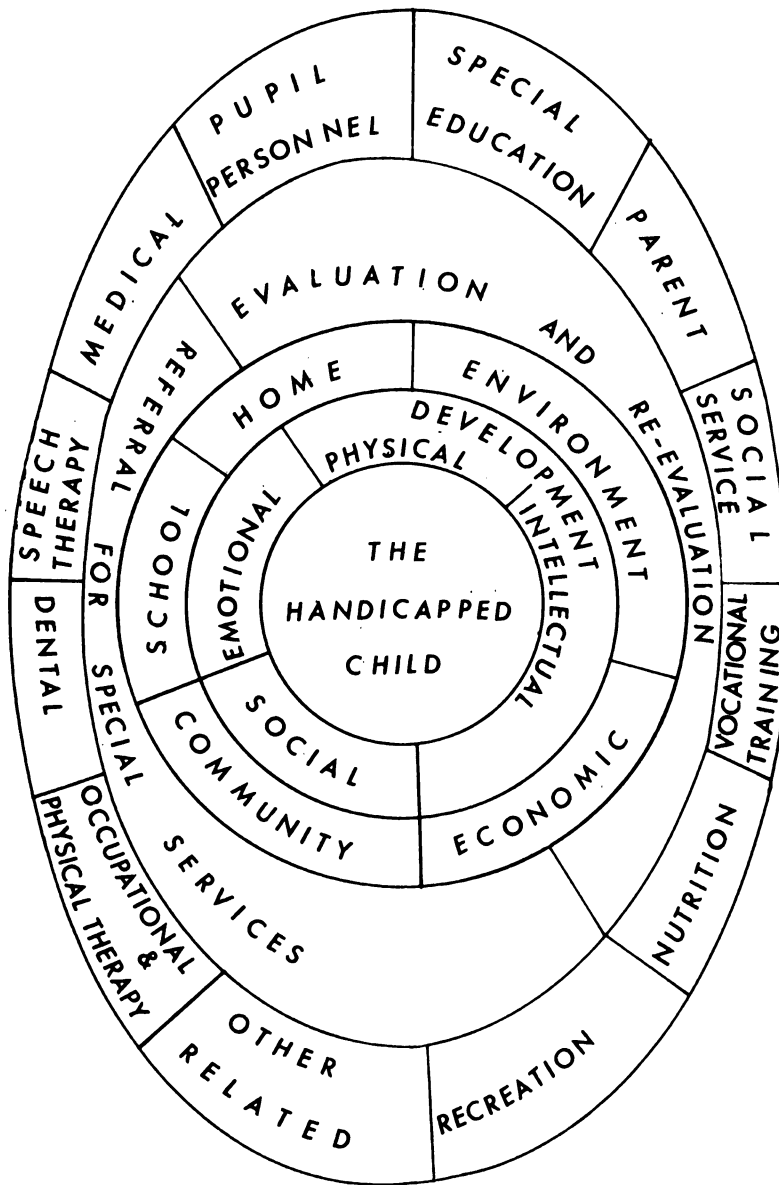


Figure 5.--Interdisciplinary Team Approach to the Development of the Handicapped Child.

The illustration focuses centrally on the handicapped child, and the developmental physical, intellectual, social and emotional characteristics are recognized as important aspects within the whole child concept. The third ring of the figure identifies key resources which may be marshalled on behalf of the student. Accompanied by individualized referral and evaluation services the dimensions of the child's needs are assessed. Based upon the resulting profile, elements of a comprehensive continuum of inter-disciplinary resources can be brought to bear as delineated in Goodman's outer ring of services.

Co-ordination of programs for the handicapped considers the effects of the many influences which are available to special education. The ultimate growth of the handicapped child is greatly dependent upon the accuracy of the diagnostic findings, relevance of the educational experience, and the reinforcement or modification of behavior. These efforts require a partnership administered and co-ordinated through federal, state, local, public and private agencies which provide facilities, interdisciplinary services, personnel training, and research. Continuous propulsion and momentum for the production of effective programs is thereby provided. Co-ordination takes place at various levels, and examples of such integrated functions, may be assumed in Goodman's model.

In connecting these elements into effective working programs which benefit people, every sector involved is increasingly dependent on the other. The interdisciplinary competencies at all professional levels, each of which has a contribution to the development of the

handicapped child, need to be co-ordinated through a system of cooperation, collaboration, and concerted effort. The creativity of application, the innovations made, and the utilization of resources achieved on behalf of our younger generation constitutes the challenge faced by today's professionals.

What is required is a well planned, balanced program for any and all who require services at all levels--primary, intermediate, and secondary school--within a total integrated and co-ordinated systems program.

Perspectives on Educational Systems Planning

Hind sight has taught the lesson of the need for planning. A new land of soothsayers--the program planners--offer services predicated on a simple thesis: man can control his destiny once he has identified all the variables related to an event and the methods for altering the variables. In the areas of general and special education, it becomes necessary to identify long range goals and a commitment to a long term strategy if we are to effectively eliminate the current pattern of patch-work programs to meet the educational needs of children (15, p. 243).

Alternatives are beginning to appear which would alter the form of educational programs and services as we have learned to identify them. With increasing attention being given professionally to individualization of instruction, education can become diagnostic, prescriptive, remedial and pupil oriented. A purposeful planning thrust, focusing on pupil performance, needs, interests and capabilities; when applied on a systems basis, will aid greatly in overcoming many of the current problems.

Marge (15, pp. 505-508) in "Planning and Evaluation for the Future" notes that " . . . industry and the business world have

accepted the efficacy of program planning, the nation has been somewhat resistant to applying such planning to educational and social issues." He maintains that " . . . it becomes necessary to identify long range goals and a commitment to a long term strategy if we are to effectively eliminate the current pattern of patch work programs to meet the educational needs of children." His perspective is for "national planning" involving the participation of all segments of our society.

Tanner (17, pp. 125-46) in a technical and statistical analysis of "Designs for Educational Planning" presents a Program Evaluation and Review Technique directed at the evaluation of specific program changes, and the effect these changes have on the proposed plans for accomplishing the stated objectives. Relating this tracking system for determining the most rapid and efficient means of attaining a given objective in education, Tanner attempts to apply cost-effectiveness analyses. Though the concepts presented contain considerable relevance to educational planning, Tanner's complex style of presentation does not lend itself to ready comprehension or applicability.

Gale Jensen (18, pp. 33-65) describes the school as a "sociopsychological habitat in which the teacher, as a sociologist, inculcates within students particular cultural ideals. In centering on the individual within the educational system, society's values become the basis for all curriculum planning and program organization.

Leonard Silvern (19, pp. 1-99) in reviewing the "Evolution of Systems Thinking in Education" depicts educational systems

planning as basically an "analyze-synthesize" situation. To Emerson's (1952) "Warm up--Presentation--Application--Testing" systems planning, is added Truxal's (1962) "Feedback" concepts. Maccia (1962) is introduced, illustrating a flow chart or general model for educational theory and finally Silvern presents his own model (1964), a "Model for Designing Instructional Systems." The elements consist of "Feasibility--Design Planning--Strategy--Production--Field Testing--Implementation--Maintenance." As such its applicability to educational planning seems feasible but the model was never fully described and amplified for publication (p. 98).

Morphet and Lesser (16) viewed educational planning as a state department of education responsibility. In America, education is a state responsibility and the funding powers allotted to state agencies endow them with unique powers of control. Systems planning with the aid of financial support is presented as a viable means of stimulating quality programs and services at the local school systems levels. Unfortunately, since local agencies continue to contribute a greater or lesser share of educational costs depending on varying districts' assessed worth, equality of educational opportunity for students in those systems also varies.

Andrew and Moir (23) place emphasis on the need for "Planned Program Budgeting, Integrated Information Systems, Data Element Classes" and quantitative data measures for input-output comparisons. Handy and Hussain (24) elaborate further on the tools available to systems planning using acronyms as follows: PPBES, CPM, and PERT.

Advocating the use of computers for network analysis, the reader is directed to consider educational planning within a technical realm of cost-efficiency.

As revealed in this review, a pronounced lack of organization and comprehensiveness characterizes the literature relative to systems planning in education.

A suggested approach to educational planning considers the following elements (see also Figure 4, Chapter I). When conscientiously applied by school systems, it will be effective in decreasing the discrepancies existing amongst programs--discrepancies which deny to all children and youth equal opportunities for appropriate instruction:

1. Survey of existing programs and services;
2. Gross determination of target population;
3. Identification of groups and individuals in need of special programs and services (Real needs assessment);
4. Determination of priority needs of the children and youth, and preparation of appropriate curricula in the light of facilities and future employment possibilities;
5. Recruitment of qualified and capable staff;
6. Research and evaluation as on-going processes to modify programs and services as indicated by results;
7. Assessment of the effective utilization of existing materials, facilities, personnel and community resources.

Perspectives on Special Education
Systems Planning

Frank Withrow, writing in Exceptional Children, 1968 (26, p. 554), hypothesized that " . . . special education may be the one catalyst in all of education which leads the way into the twenty-first century by providing imaginative, individualized, and prescribed instruction for all children, based upon their abilities and needs."

A limited number of authors have addressed themselves specifically to systems planning in Special Education outside of state planning.

A National Study Committee on Emotional and Learning Disorders in Children (20) uniquely viewed the target population of exceptional children as: the child as a student; the child as patient; the child as ward; the child as offender; and the child in residential care. Within this continuum of possible child placement, early identification was viewed as being essential. The earlier a child with educational problems can be identified, the better the prognosis for habilitation. The study committee in focusing on yet another element of overall program planning, stressed the need for frequent communications amongst staff concerning the what, why, how, when, and where of new or modified programs and services for the handicapped.

Miesgeier and King (9) emphasize the importance of inservice education for administrators and master teachers who will be asked to assume an expanded role--as supervisor, consultant, diagnostician, etc.; for principals and regular teachers who need to learn how to

function on a clinical team, working with atypical students; planning, assessing, and modifying curricula.

Andrew and Moir (23) maintain that the channels of communication between levels or departments; between special education and ancillary groups, social agencies, courts, clinics, medical personnel, parents, etc., if kept open will foster co-operative working relationships for the benefit of the students.

Yet another aspect of systems planning involves transportation arrangements for students who travel to the appropriate programs or services; for itinerant staff; and for specialized equipment (25).

In reporting on data received from state department of education respondents, Frank Hodgson (28, pp. 196-201) found a considerable spread in responses concerning desirability of varying forms of special education administration. There was a lack of consensus concerning what handicapping conditions should be included within Special Education program planning. The Gifted and Mentally Deficient were generally not conceived as being a part of special education responsibility.

A Special Study Team of the Michigan Department of Education (29) in its attempt to establish quality programs and services for handicapped children, placed emphasis on the evaluation of educational systems planning in the pupil-product dimension. Willenberg (30, pp. 1-2) on the other hand has reported a failure to find conclusive evidence of major trends or professional agreement relative to the best form or types of internal organization to serve exceptional children. He does, however, state that the unit for

educational service is the individual exceptional child. "The goal is that child's optimum education and rehabilitation." Willenberg advocated a systems plan for special education "with a flexible system of internal organization" providing an array of offerings to match the child's changing requirements throughout the course of his school years. Henley (27) proposed that this form of comprehensive provision be accomplished through the implementation of state planning for the delivery of appropriate programs and services.

Within the Special Education literature as a whole, a predominant preoccupation is with identification and diagnosis of the handicapped (28, 29, 20).

The literature generally recognizes that feedback evaluation concerning the progress of the individual student is necessary as a means for directing the needed revision of prescriptive programming (22, 20).

The diversity of recommendations dealing with a multitude of planning, diagnostic, administrative, and program detail, necessitates that organization and standardization of planning format be initiated.

A suggested approach to comprehensive planning in Special Education considers the model (Figure 4) proposed in Chapter I. School systems desirous of embarking on systems planning for special education programs and services, need to address themselves to several basic involvements:

- (a) * A precise delineation of its existing programs and services for handicapped children and youth;
- (b) A gross determination (possibly using national disability incidence ratios) of the numbers of students in need of special education within the jurisdiction; (At this point in the planning sequence, consideration should be given to certain planning constraints, program philosophies, system's goals and objectives, political-social variables, and the utilization of a data base which ought to facilitate relevant decision-making in the next stage of planning--see Figure 4, Chapter I.)
- (c) Development of a real needs assessment and a specific plan for the delivery of services based upon a realistic survey of students' needs within the system's geographical area of responsibility;

Dimensions of needs for manpower, physical facilities, transportation, supplies and equipment, and supportive services will need to be projected to serve this target population;
- (d) Establishment of system's priorities for immediate and long range implementation of programs and services dependent on available resources;

* Note: Color coding can be used in this section to parallel that used in Figure 4, Chapter I for ease of element identification and reference.

- ⑤ Allocation of resources for complete implementation of planning over a projected period of time;
- ⑥ Implementation of planned programs and services;
- ⑦ Evaluation of cognitive, affective and psycho-motor dimensions of the student-product as a self-corrective feedback for future improvement of the delivery of services.

A format within which to accomplish the afore mentioned systems planning for special education is provided in Chapter III of this study.

States' Status in Special Education Planning

Commensurate with the planning elements designated in the foregoing section an attempt to assess and compare State's special education planning in Alaska, Maryland, Michigan, Texas and Wisconsin is presented in the following tabled summaries. Due to lack of specific data or the writer's inability to locate appropriate sources of information, these analyses may be subject to a margin of error and should be considered in that light. To facilitate ready comparisons amongst systems planning elements, color coding can be carried through as presented in Chapters I and III of this study.

Contained within the literature on systems' planning in special education (37, 38, 39, 40, 41, 42, 32, 33, 35), little if any evidence was found to support the belief that emphasis was being placed on the development of program philosophies and service policies as represented by the input variables in Figure 4, Chapter I. It

TABLE 2

Identification of Systems Planning
Elements--State of Alaska [Plan
proposed by Smart (12)]

Systems Planning Elements	
(a) Delineation of System's Existing Programs and Services	Delineated in dissertation by Smart, 1970 "A Proposed Special Education Program for the State of Alaska with Emphasis on Rural Schools" (12), Michigan State University.
(b) Gross Determination of Pupil Needs for Special Education Programs and Services	United States Office of Education [Mackie, Williams and Hunter (31)], incidence data used.
(c) Real Needs Assessment	Unusually large incidence of otitis media cited, Indian education problem, overall disability rate estimated at 25.1%, social and environmental handicaps (12).
Creation of a System's Plan for the Delivery of Services at: State Level	State Plan with local accountability being devised
Local Systems Level	Planning done in 36 of 219 school systems (12)
(d) Established Priorities for Implementation of Programs and Services: Immediate long range	Priorities for programs and services to Indian population, hard of hearing students and culturally deprived.
(e) Allocation of Resources	Instructional unit funding at \$19,250. per unit is provided and full State funding has been proposed (12).
(f) Implementation of Plan	Suggested for implementation 1970 (Mandatory law in effect).
(g) Evaluation of Planning and Pupil-product	Local systems' plans for evaluation to be instituted with State Plan.

TABLE 3

Identification of Systems Planning Elements--
State of Maryland ["A Design for a Continuum
of Special Education Services" (32)]

Systems Planning Elements	
(a) Delineation of System's Existing Programs and Services	Total number (45,000) pupils enrolled in Special Education--many more are not receiving services (32, p. 3).
(b) Gross Determination of Pupil Needs for Special Programs and Services	National U.S.O.E. incidence stated but not applied to specific disabilities (32, p. 3).
(c) Real Needs Assessment Creation of a System's Plan for the Delivery of Services at: State Level Local Systems Level	"Continuum of Special Education Services" (32) designed as a State Plan for the delivery of services. Real needs assessment and directions for local systems' involvement omitted.
(d) Established Priorities for Implementation of Programs and Services: immediate long range	Priorities involve elimination of disability categories, focus on independent instruction, integration into regular classrooms, and exploration of optimum state funding patterns.
(e) Allocation of Resources	State aid to be given on a pupil-program weighted basis non-categorically; federal aid for in-service and pre-service teacher training.
(f) Implementation of Plan	Pilot program was implemented in the 1970-71 school year and extended for another year (33, p. 2).
(g) Evaluation of Planning and Pupil-Product	Evaluation of results from pilot study will determine extension of Plan.

TABLE 4

Identification of Systems Planning Elements--
State of Michigan ["State Plan for the
Delivery of Special Education Program
and Services" (36)]

Systems Planning Elements	
(a) Delineation of System's Existing Programs and Services	Achieved in a comprehensive survey of local school systems under <u>Public Act 220 of 1969 (34)</u> .
(b) Gross determination of Pupil Needs for Special Education Programs and Services	Citing U.S.O.E. incidence data, the <u>P.A. 220 Study</u> enumeration was compared and contrasted (see also Appendix F).
(c) Real Needs Assessment Creation of a System's Plan for the Delivery of Services at: State Level Local Systems Level	A partial real needs assessment is presented in the <u>Equal Quality Plan (35, p. 14)</u> . The <u>Intermediate Offices of Education</u> in co-operation with Local School systems are to complete contributions to "State Plan for the Delivery of Special Education Programs and Services" to accompany Michigan's <u>P.A. 198, 1971 mandatory special education bill</u> for November 1, 1972.
(d) Established Priorities for Implementation of Programs and Services: immediate long range	Priorities are for the development of comprehensive and quality special education programs and services for every child (36, p. 2), establish organized delivery of services, and promote understanding and acceptance of the handicapped by professionals and the public, including vocational education.
(e) Allocation of Resources	Categorical aid from state and intermediate agency levels except in areas of gifted and learning disabilities classes (37).
(f) Implementation of Plan	Preliminary State Plan due July, 1972 (mandatory law in effect). Preliminary Intermediate Plans due November, 1972.
(g) Evaluation of Planning and Pupil-Product	Under the State Superintendent's accountability plan (38) local school systems will be evaluated for effectiveness of student-product delivery services by Intermediate School Districts, and the State Board of Education will perform an evaluative function to ensure that adequate and appropriate instruction is provided by school systems at both local and intermediate levels (<u>P.A. 198, Section 252b</u>).

TABLE 5

Identification of Systems Planning Elements--
State of Texas ["State Plan for Special
Education" (39)]

Systems Planning Elements	
<p>(a) Delineation of System's Existing Programs and Services</p>	<p>State Department approved planning leaves this element of planning to local school systems--efficiency therefore varies with school systems.</p>
<p>(b) Gross Determination of Pupil Needs for Special Education Programs and Services</p>	<p>Projections of disability incidence against school populations or local surveys to establish a target population for programs and services are left to local systems' methodology (39, p. 2).</p>
<p>(c) Real Needs Assessment Creation of a System's Plan for the Delivery of Services at: State Level Local Systems Level</p>	<p>State level approach of local systems' planning is aimed at two levels: allocations based on identified handicapped pupils (Plan B); : comprehensive special education for exceptional children (Plan A).</p>
<p>(d) Established Priorities for Implementation of Programs and Services: immediate long range</p>	<p>Immediate priorities are for local districts to begin to identify needy pupils and organize appropriate instruction. Long range priorities would encourage school systems to provide appropriate programs and services for all exceptional children within a 5 year plan (40, pp. 37, 42).</p>
<p>(e) Allocation of Resources</p>	<p>Allocation of Foundation School Program resources are provided in the form of Plan A or Plan B funding, access to Instructional Materials Centers, Regional Education Service Centers (40, pp. 37-42).</p>
<p>(f) Implementation of Plan</p>	<p><u>State Plan for Special Education (1965) was implemented and revised in 1970 (39).</u></p>
<p>(g) Evaluation of Planning and Pupil-Product</p>	<p>The local school district shall provide for a systematic method of follow-up of pupils: - who no longer require special education services - who have graduated - who have left the school before completion of the program for any reason (40, p. 17). Funded school districts are subject to program reviews, monitoring, audit, and accreditation visits by the Texas Education Agency (39, p. 49).</p>



TABLE 6

Identification of Systems Planning Elements--
State of Wisconsin [Primary source:
Schreiber (41)]

Systems Planning Elements	
(a) Delineation of System's Existing Programs and Services	2700 persons are employed and working in Special Education but the need is for 4800. 106,000 handicapped children have been identified but might be 50% higher (41, p. 26).
(b) Gross Determination of Pupil Needs for Special Education Programs and Services	By 1973 it is estimated that 95% of the mentally retarded student population will be receiving services. Only 5% of the multiply handicapped and those with special learning disabilities and the emotionally disturbed are receiving adequate services (41, p. 27).
(c) Real Needs Assessment Creation of a System's Plan for the Delivery of Services at: State Level Local Systems Level	Educational decision-making is left to the local school systems in conjunction with regional co-operative Educational Service Agencies.
(d) Established Priorities for Implementation of Programs and Services: immediate long range	1) Program for the emotionally disturbed, learning disabled and multiply handicapped, 2) to achieve zero level of placement of children in isolated settings outside of public education (41, p. 27).
(e) Allocation of Resource	Under permissive legislation (1966), 70% payment is made by the state to local education agencies for special education services on a unit formula basis (42). For 1972, \$49.8 million has been requested in state aid (41, p. 26).
(f) Implementation of Plan	Implementation of special education planning varies with local-regional agencies.
(g) Evaluation of Planning and Pupil-Product	Inconsistency and lack of a standardized approach to special education program evaluation seems to be the case in Wisconsin.

TABLE 7

**Tabular Summary of Special Education Systems
Planning Elements within State Plans**

Systems Planning Elements	Alaska	Maryland	Michigan	Texas	Wisconsin
(a) Delineation of System's Existing Programs and Services	✓	partial	✓		partial
(b) Gross Determination of Pupil Needs for Special Education Programs and Services	✓	partial	✓		partial
(c) Real Needs Assessment	✓		partial		
Creation of a System's Plan for the Delivery of Services at:					
State Level	underway	✓	underway	✓	
Local Systems Level	partial		underway	✓	✓
(d) Established Priorities for Implementation of Programs and Services:					
immediate	✓	✓	✓	✓	✓
long range		✓	✓	✓	✓
(e) Allocation of Resources	✓		✓	✓	✓
(f) Implementation of Plan		✓	underway	✓	
(g) Evaluation of Planning and Pupil-Product	underway	✓	underway	✓	

Note: ✓ signifies identified existence of this element of systems planning within the State's special education planning.

Key to color-coding may be used as in Figure 4, Chapter I.

- | | |
|--|---|
| <input type="radio"/> The Program Today | <input type="radio"/> Related Input Variables |
| <input type="radio"/> Real Needs Assessment, Priority Establishment, Allocation of Resources | <input type="radio"/> Data Bank |
| <input type="radio"/> Implementation of Planned Programs and Services | |
| <input type="radio"/> Evaluation and Feedback | |

appears that these plans are proposed in accordance with enabling legislation and may not be based primarily upon a program philosophy and/or policy.

The compilation and utilization of systematic data as delineated in the Data Bank element in Figure 4, Chapter I was generally an overlooked feature of states' planning due to the fact that comprehensive information gathering surveys had not often been launched. An exception to this statement exists with the State of Michigan, however, where the P.A. 220 survey of school systems was conducted in 1969 (see Appendix F).

It is recognized that systems' planning should take cognizance of physical, manpower, and community resources as well, but lack of such specified information in state planning prevented inclusion of these elements in the tables. The allocation of resources reflected in the summaries consist, most often, of financial applications and lack reference to other physical, personnel and community resources.

School systems without planning consultative assistance appear to allow the evolution of special education to proceed in a traditional uncoordinated fashion. A real needs assessment within school jurisdictions is often undetermined and cannot be used as a basis for structuring a long range plan for special education.

Despite the excellence of the state plans and proposals reviewed, it is evident (Table 7) that comprehensiveness in planning is a limited feature and without a systematic effort in each planning area that is proposed, gaps in services, inconsistent quality, and inadequate resources are likely to continue. In many instances local

systems will be unable to accomplish systems planning without consultant services being made available to them from units with which they must deal. This fact was revealed in the pilot study conducted and depicted in Appendix M. State personnel will be required to aid intermediate and local districts, and information will be required by the State Department of Education from both intermediate and local school systems. Effective two-way planning communication in the form of expectations, procedures, and evaluation of results are essential for future modification of planned programs and services which are truly relevant to the needs of exceptional children.

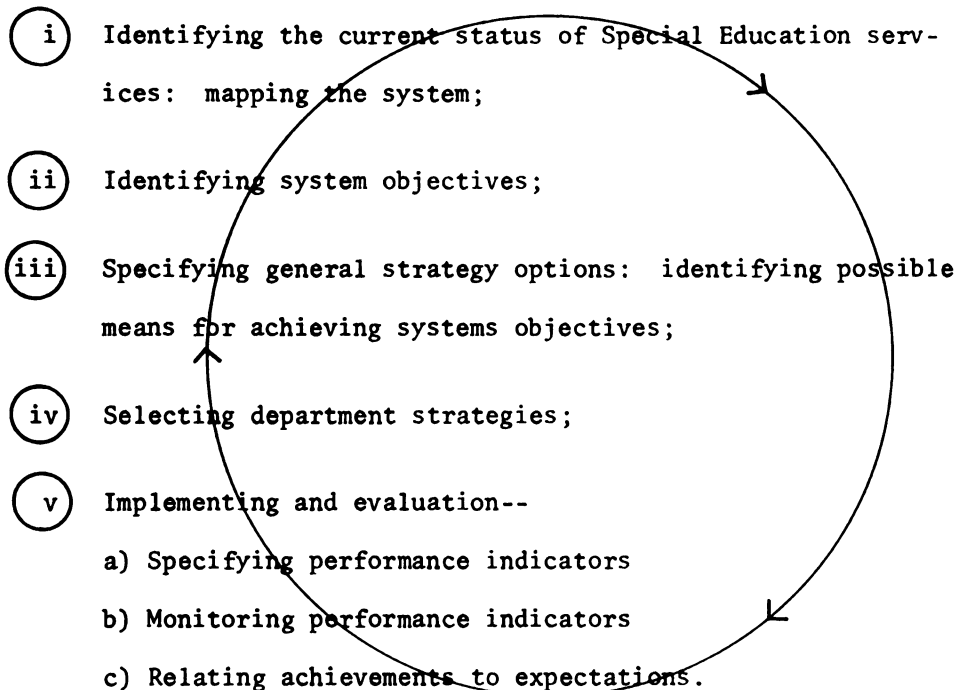
Observations and Recommendations

State Plans for Special Education

Of the five state plans and proposals reviewed, no state provides a program for each area of exceptionality. In Michigan, with one of the most extensive programs, it is also apparent that it lacks adequate program opportunities for all children in a number of areas such as Hard of Hearing, Emotionally Disturbed and Gifted (Appendix F). With increased legal activity dealing with rights of the handicapped as discussed in Chapter IV, it is mandatory that deliberate planned efforts be made to provide a form of equality of opportunity in these United States in order that all children and youth be granted their rightful heritage--an education appropriate to their needs, capabilities and interests. The achievement of this objective should be enhanced if each school jurisdiction, within a systems planning format, were to provide a continuum of interdisciplinary Special Education services.

Federal Plan for Special Education

Special Education planning literature, emanating from the federal Bureau of Education for the Handicapped (43) outlines operational steps for the planning and evaluation process. State Departments of Education in conjunction with Intermediate Office and Local School Systems are urged to follow suggested procedures. When compared with the elements of planning proposed in this study (Chapter I) the coding relationship might also apply:



Indigenous to this planning sequence are feedback evaluations (signified by the circular insert) elicited from practicing educators; to be utilized as corrective inputs thereby ensuring the ongoing relevancy of special education planning and implementation for meeting real needs of students. This form of direction as espoused by the



federal educational agency serves to buttress and enhance the systems planning stance proposed in Chapters I and III of this study, but further substantiates the earlier observation that essential elements of systems planning are generally omitted from past special education planning. As will be recognized, even in this planning recommendation, inadequate attention has been given to the application of data and statistics concerning: student population; disability incidence; manpower, physical, and financial resources; services costs; community resources; etc. The failure to recommend a real needs assessment (Figure 4), assessment of priorities, and the allocation of resources based upon those priority decisions, appears to be a serious oversight. If a plan that contained all the required elements were to be endorsed by the U.S. Office of Education, then it could be used for instigating state's planning and thereby bring standardization to planning in Special Education. For, without State Department of Education stimulation it is apparent that local school systems fail to see the need for, and therefore neglect to embark on systems planning for Special Education. It is recommended that State Departments be prompted by the United States Office of Education to serve as catalysts for local, intermediate and area special education systems planning.

Individualized Instruction in Context

In concluding this review it is necessary, that some attention be given to a dissenting point of view which claims that a new frame of reference be identified within the educative process,

and its goals must relate directly rather than tangentially to learning. Lloyd M. Dunn, in "Special Education for the Mildly Retarded--is Much of it Justifiable?" (44, pp. 12-13) takes the position that a large proportion of so called "special education" in its present form is obsolete and unjustifiable, from the point of view of the pupils so placed. He has attempted to outline a blueprint for changing this major segment of education to make it more acceptable for slow learning children who live in slum conditions educationally. He maintains that homogeneous grouping of children is detrimental to their learning welfare, and asserts that court action will likely ban special classes for certain of these students in the near future. Labeling children has a negative effect on the attitudes and expectations of teachers and on the pupils themselves. It should therefore be avoided. According to Dunn, regular school programs are able to deal with individual differences and will eventually displace Special Education entirely with adherence to the following basic instructional components made available to all children in all education depending upon their needs:

- a) Prescriptive Teaching;
- b) Itinerant and Resource Room Teaching;
- c) New Curricular Approaches;
- d) Environmental Modifications;
- e) Motor Development;
- f) Sensory and Perceptual Training;
- g) Cognitive and Language Development;
- h) Speech and Communications Training;
- i) Connotative (Personality) Development;
- j) Social Interaction Training, and
- k) Vocational Training (9, pp. 19-30).

The challenge therefore lies not in rigid student categorization or standardized curricula, but within the flexibility of

personalized instruction planned to maximize individual potentials through the application of appropriate systems' resources.

Having given credence to what might eventually become an organization for all good education it must be realized that what seemed to be dissension, is not dissenting at all if only systems planning is considered. The dissension related merely to a program delivery mechanism. Lloyd Dunn in the above, points to a redesign of the basic elements of educational programming which, if applied to all children would be very beneficial and would permit total integration. However, this has not been attained in most systems. Some unique needs of the exceptional are still more efficiently met in segregated programs, i.e. programs for the blind, deaf and for severely retarded.

When contextually considered, the individualized instruction format, extending through all public education from "Prescriptive Teaching" to "Vocational Training," might be considered as simply a variant in the systems plan for Special Education as proposed in Figure 4, Chapter I. Considered as a school system's "development of a program philosophy" and as its "determination of program categories," Dunn's proposed elimination of pupil categorization and special education per se may find its true value within the perspectives of the systems planning model proposed. When systematically applied to the learner in the classroom, the feedback evaluation element of systems planning will confirm, deny, or show cause for modifying Dunn's instructional continuum.

As a rational alternative for becoming part of the fad to do away with special classes; as a means for asserting professional independence, the examination of a dissenting point of view becomes a guide to better education. Under the light of alternatives tested in context of systems planning, the quality student-product becomes the criterion for program maintenance or modification.



CHAPTER III

PRESENTATION OF SYSTEM'S PLANNING SYSTEM

The presentation of the System's Planning Design consists of three distinct parts (see Figure 4, Chapter I):

Part A; The Program Today--Series A Forms,

Part B; A Gross Determination of Needs--Series B Forms,

Part C; Creating The Plan--Series C Forms.

Part A, as delineated on the planning forms provided, pictures for the school system, the profile of Special Education programs and services presently being provided by the system. A survey by administrators and educational planners within the system is required to reveal and provide the data for those services existing within its organization. Part B, provides a perspective by which judgments can be made concerning the adequacy of these provisions by structuring a gross needs assessment using national handicapping pupil incidence ratios. Having profiled what services exist within the system against what programs might be required to meet the needs of all exceptional children within the jurisdiction, Part C is introduced. Here the school system determines unique needs for special education peculiar to its area. Plans are made to deploy

its resources to the meeting of those needs over a projected period of time. Planning forms provided enable the planning personnel to gauge the dimensions of programs and services required to truly provide appropriate services for all the children for which the system is responsible.

To embark on systems planning to provide comprehensive programs and services in Special Education the school system may choose to utilize the following sequence of procedures.



PART A

THE PROGRAM TODAY

SERIES A FORMS

THE PROGRAM TODAY

Some school systems have a program of special education underway in some dimension. The Series A forms are designed to bring together in a concise way the quantitative description of the program presently in existence from Preschool to Grade 12 and to describe basic pupil population data which will have an influence upon any long term planning for special education as it would for any other area of the total educational plan of the school system.

The following forms are to be completed providing a data and program profile of the system's existing programs and services in Special Education.

Narrative statements clarifying the positions taken by the school system on all of the following issues should be incorporated into this planning and submitted in conjunction with the Series A, B and C forms.

Form A-1 Population Analysis

Form A-2 Existing Pupil Population Enrolled in Special
Education Programs

Form A-3 Certificated or Approved Teaching Personnel Assigned
to Special Education Programs

Form A-4 Professional Support Personnel Assigned to Special
Education Services



THE PROGRAM TODAY

FORM A1

POPULATION ANALYSIS

Date _____

A	B	
SCHOOL POPULATIONS ^a	NUMBER OF CHILDREN	
1. Birth Rate ^b 19- 1970 1969 1968 1967		
2. Projected School Population 1972 1973 1974 1975 19-	Elementary	Secondary
3. School Population Programmed for in: a. Approved Mental Health Centers b. Correctional Institutions c. Homes for Unwed Mothers d. State Hospital Schools e. State Psychiatric Hospitals f. Private Schools g. Schools of Other School Boards h. Special Schools i. Other		
4. School Population Pre-School Elementary Junior High Senior High Parts 3 & 4 TOTAL		

^aWhere a student participates in more than one program type, record his enrollment in one program only.

^bData available from Municipal Directories, County Administrative offices, Regional and Intermediate Offices of Education.

EXISTING PUPIL POPULATION ENROLLED IN
SPECIAL EDUCATION PROGRAMS

	A	B	C	D	E
PROGRAM ELEMENTS ^a	Pre-School Pupils	Elementary School Pupils	Junior High Students	Senior High Students	Enrollment TOTALS
1. Emotionally and/or Socially Maladjusted					
2. Gifted and/or Talented					
3. Learning Disabilities					
4. Mentally Handicapped a) Educable b) Trainable c) Severely					
5. Physically Handicapped					
6. Visually Handicapped					
7. Hearing Handicapped					
8. Speech Problems					
9. Multiply Handicapped					
10. Diagnostic Services					
11. Vocational Education					
12. Remedial Reading					
13. Other ^b					
TOTALS					

^aSee Appendix B for other suggested descriptions of program structure which might be used. The school system should list its program structure as it actually exists and consistently reflect this organization on both A and B forms. Throughout this chapter, the structure presented here will be used; however, it should be emphasized again that this is just one sample of a total program for exceptional children. Where a student participates in more than one program, record his enrollment in each program.

^bExample: Inner City and/or Compensatory Programs and Services
Second Language Teaching, etc.



SPECIAL EDUCATION
CERTIFICATED OR APPROVED TEACHING PERSONNEL

	Number of Teachers Approved or Certificated ^a					
PROGRAM ELEMENTS	Teacher Aides	Training Levels				Total
		Elementary	Intermediate	Specialist	Other	
1. Emotionally and/or Socially Maladjusted						
2. Gifted and/or Talented						
3. Learning Disabilities						
4. Mentally Handicapped a) Educable b) Trainable c) Severely						
5. Physically Handicapped						
6. Visually Handicapped						
7. Hearing Handicapped						
8. Speech Problems						
9. Multiply Handicapped						
10. Diagnostic Services						
11. Vocational Education						
12. Remedial Reading						
13. Other						
TOTALS						

^aReport numerically for only those preparation programs which apply to instructors employed by the system. Record each teacher once and only for highest qualification. Teachers approved or certificated in Special Education, but not functioning in the area should also be counted.

SPECIAL EDUCATION
PROFESSIONAL SUPPORT PERSONNEL

PROGRAM ELEMENTS	Number of Professionals Employed or on Contract ^a										Other ^b	Total
	School Psychologist		Social Worker		Supervisor or Consultant		Educational Diagnostician		Attendance Counselor			
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time		
1. Emotionally and/or Socially Maladjusted												
2. Gifted and/or Talented												
3. Learning Disabilities												
4. Mentally Handicapped												
a) Educable												
b) Trainable												
c) Severely												
5. Physically Handicapped												
6. Visually Handicapped												
7. Hearing Handicapped												
8. Speech Problems												
9. Multiply Handicapped												
10. Diagnostic Services												
11. Vocational Education												
12. Remedial Reading												
13. Other												
TOTALS												

^aIn a supplementary narrative indicate briefly the role that each support staff professional performs based upon designated pupil population needs. If service is contracted from the community, indicate duration of contract. Personnel listed above are suggestions only. Other role classifications are possible. The description of professional support staff should be listed as it exists presently. Where overlapping of role function occurs record personnel in one service area only.

^bList personnel not designated, such as child care worker, audiologist, visual screening technician, etc. (see also Appendix H for listing of alternative services).



PART B

A GROSS DETERMINATION OF NEEDS

SERIES B FORMS

GROSS NEEDS ASSESSMENT

The Series B Forms are used to create a gross determination of the special education needs of the Preschool-12 school population and to identify the personnel (teachers and other professional staff) required for the school division. Through the application of a series of incidence rates to the total school population, an estimate of the number of children who may possibly require special education programming can be determined.

An identification of the numbers of children expected to suffer from the various disabilities which may affect learning is essential. Studies and surveys conducted by Dunn (44); Mackie, Williams, and Hunter (31), etc. (see Table 1, Appendix D), indicate that the population incidence ratios selected for this study are reasonably accurate. This means of identifying the numbers of children in Special Education, is arbitrarily selected for purposes of gauging a gross determination of needs.

Form B-1 Pupil Population Requiring Special Education

Form B-2 Personnel Needs

GROSS
ASSESSMENT
OF NEEDS

PUPIL POPULATION REQUIRING SPECIAL EDUCATION

A	B	C	D
TARGET POPULATION BASE TOTAL (a)	PROGRAM ELEMENTS	INCIDENCE RATE (%) (c)	NEED POPULATION (b) PRESCHOOL-12
	1. Emotionally and/or Socially Maladjusted	2.0 ---	
	2. Gifted and/or Talented	2.00*	
	3. Learning Disabilities	1.0	
	4. Mentally Handicapped		
	a) Educable	2.3	} 2.54
	b) Trainable	0.24	
	c) Severely	---	
			} *
	5. Physically Handicapped	0.5	
	6. Visually Handicapped	0.1	
	7. Hearing Handicapped	0.575	} 4.675
	8. Speech Problems	3.5	
	9. Multiply Handicapped	0.07*	
	10. Diagnostic Services	---	
	11. Vocational Education	---	
	12. Remedial Reading	---	
	13. Other	---	
	TOTALS	12.285	

(a) Obtained from Parts 3 and 4 Total, Form A1 and to be applied to each Incidence Ratio to determine Needs.

(b) To find number of children, multiply the rate times school population. Round figures to nearest whole.

(c) Obtained from Table I (c), Appendix D.

*Obtained from Table I (h), Appendix D, since they were not estimated in part (c).

PERSONNEL NEEDS

	A	B	C
PROGRAM ELEMENTS	NEED POPULATION (PRESCHOOL-12) ^a	SUGGESTED PUPIL/TEACHER RATIO ^b	NUMBER OF TEACHERS REQUIRED
1. Emotionally and/or Socially Maladjusted		10:1	
2. Gifted and/or Talented		---	
3. Learning Disabilities		12:1	
4. Mentally Handicapped			
a) Educable		15:1	
b) Trainable		15:1	
c) Severely		6:1	
5. Physically Handicapped		15:1	
6. Visually Handicapped		8:1	
7. Hearing Handicapped		8:1	
8. Speech Problems		75:1	
9. Multiply Handicapped		---	
10. Diagnostic Services		---	
11. Vocational Education		---	
12. Remedial Reading		---	
13. Other		---	
TOTALS		//////	

SUPPORT STAFF ^c	GENERAL SCHOOL POPULATION PRESCHOOL-12 ^d	SUGGESTED PUPIL/ SUPPORT STAFF RATIO ^b	NUMBER OF SUPPORT STAFF REQUIRED
Psychologist		2,500:1	
Social Worker		2,500:1	
Supervisor and/or Con- sultant		1:8 teachers	
Educational Diagnostician		2,500:1	
Attendance Counselor		---	
Other (specify)			
TOTALS		//////	

^aFigures from Total column D on Form B1.

^bObtained from Table 2, Appendix D, but may be altered in accordance with local need or specific regulations.

^cList of Support Staff reflects only the personnel being employed in various school jurisdictions. Positions are listed as suggestions and not requirements (see also Appendix H for alternative positions).

^dProfessional support staff service the general school population.

As conceptually defined in The Planning Process in Special Education model in Chapter I, a series of decision-making and constraint variables need to be considered before the system embarks on a Real Needs Assessment for its jurisdiction. Part C of this planning format requires the school system to structure its systems plan for special education for a projected period of time in order that the educational needs of all exceptional children and youth may be met. Before decisions can be made relative to: pupil target population, transportation, personnel requirements, accommodation units required, materials and equipment etc., certain philosophic, immediate and long-range goals and objectives must be considered. The following narrative elements are included in the planning model to guide the system's considerations. Before proceeding to Part C, Creating The Plan for Special Education programs and services which will be unique to the system, a number of planning variables must be considered. These planning constraints when applied to the gross determination of need may result in modifications which will result in more precise ways of dealing with this system's educational problems.

Providing a Data Base

DATA BANK

The centralized source of data contains current and cumulative records about the student population of the district.

Analysis of relevant data such as test scores and dropout reports are essential for assessing trends, progress, and needs. The information elements contained in this data base will be procured during the survey of "The Program Today" and "Gross Determination of Needs." In addition, information relative to costs and funding patterns for the System's various programs and services for special education will be contained in planned program budgeting files, accounting or computer based storage. This information will be helpful in determining appropriate directions and services implementation as well as changes when devised in the planning phase: "Real Needs Assessment." When fully developed, an extensive data banking system can provide all or only selected information on demand in a reasonable period of time.

Data elements which might be stored are as follows (23, p. 40):

- (1) target populations within the district--pre-school to senior high school levels, listing names, ages, grades, services required and dates of assessment and placement;
- (2) wide range of specific pupil assessment and case history information;
- (3) lists of para-professional, teachers and support staff resources employed and available within the system;
- (4) list of facilities and accommodations available to Special Education;
- (5) transportation potentials and related maintenance, scheduling and costs data;

- (6) materials and equipment purchased and available as resources within the district;
- (7) community resource services available for utilization;
- (8) spectrum of costs for various programs and services;
- (9) funding and reimbursement patterns available and applied;
- (10) other data deemed by the system to be relevant and useful.

Planning Constraints

PLANNING CONSTRAINTS

In initiating a comprehensive planning process, the planning staff must be aware of the variety of constraints which may define and limit the planning efforts. Planning constraints for developing a comprehensive special education program include:

- (1) Legal definitions of children to be served and programs and services to be developed as outlined in State Acts and Regulations;
- (2) Policies and procedures developed by the local school jurisdiction;
- (3) Local staff planning capabilities;
- (4) Time limits for developing and implementing the local special education program;
- (5) Available resources--human, technical and financial;
- (6) Sensitivity of school staffs and principals to the needs of children.



The planning constraints must be considered at each stage of the planning process; educational planners should evaluate planning efforts in light of the constraints which affect the planning process, particularly those imposed by State law, yet assuring that necessary services are maintained.

In setting out a plan of programs and services for all children within the system's jurisdiction, equality of educational opportunity can only be provided if appropriate educational and training programs are made available to exceptional children. A number of the following variables affecting the organization, the dimensions and the quality of education, will have to be taken into account. In Creating the Plan the system should build its services reflecting the uniqueness of its jurisdiction.

Description of System's Jurisdiction:
Variables Affecting Planning

1. Economic, geographic and other demographic variables
2. Population distribution, growth or decline
3. Secondary school distribution with elementary schools served
4. Community resources available to aid with provisions for needy children
5. Factors affecting future growth or decreases in population to be served
6. Areas of cooperation and shared educational and community agency services, or lack thereof

7. Schools for Retarded Children or other handicapped children operating within system's jurisdiction
8. State institutions existing to provide services to system and which may place students in community schools
9. Inner city problems affecting dimensions of emotional disturbance among students
10. Incidence of Otitis Media, Rubella and other geographically related diseases affecting children's need for health care services
11. Regional diagnostic and assessment center available for pupil referrals
12. Regional or Intermediate Office of Education providing Program Consultant resource services
13. Special Assessment, programming and rehabilitation services available
14. Other

The potential of State departments to influence activities within Special Education will differ considerably. The department's influence in different states will depend on the legislation in a State, the historical development of Special Education Services, the administrative structure of such services, and the fiscal capability and organization for developing and financing activities.



Developing a Philosophy of Special Education

DEVELOPING PROGRAM PHILOSOPHY

A philosophy of special education should reflect the purpose of special education and its relationship to the continuum of educational services to meet the variety of individual learning needs within the area served by the school system. In general, the philosophy statement should be a consideration of educational needs rather than handicapping conditions in programming for exceptional children (see Appendix B). The philosophical statement can be translated into a set of operational objectives (see Appendix M). The development of a sound philosophical statement of special education by the system becomes an important initial step to further planning efforts. A philosophy of special education can become a primary constraint which focuses the direction of the planning effort toward exceptional children's educational needs rather than individual needs of all pupils. Special education, then, becomes only one component of the educational enterprise of the total educational program.

Describing Beliefs, Policies
and Commitment

This is the most difficult and most important part of the planning exercise. The system must set out its beliefs about the provision of special education programs and services. The text should be in the form of operational goal statements; sentences



which point to action, which are realistic, which suggest the measurement of success or failure and which demonstrate readiness to accept accountability.

There is an unavoidable looseness in any description of particular programs and services in special education. It is not an area of education which leads to hard decisions. For example; considerable controversy exists over the issue of whether pupils in special education programs should be integrated with pupils in regular classes or whether they should be grouped in special classes. This controversy tends to center around educational programs for children with cognitive defects such as mental retardation or learning disabilities. There is a general agreement that children in many categories of exceptionality such as speech handicapped children, gifted children and children with impaired vision, can be educated effectively in regular classrooms if they are provided with appropriate specialized help as needed. Proponents of integrating handicapped children with other pupils emphasize that social cohesion will be facilitated, but it has been pointed out that social cohesion will not be accomplished by integration alone; that the problems involved differ with each type and severity of handicap (45). Attention should be directed to developing flexible arrangements whereby the optimal placement of children can be accomplished, that is, that attention be directed to instructional practices and procedures rather than to grouping per se (see Appendix G).



Developing Program Policies

In order to effectively operate a comprehensive special education program, each education agency will need to develop policy statements which will guide all program personnel to coordinate their efforts for effective instruction. Policy statements should delineate the roles of administrative and supervisory personnel, supportive personnel, instructional and paraprofessional personnel. Relationships need to be established between special education and regular education personnel for effective coordination of the total education enterprise. For example, if a crisis teacher is employed:

1. What will be the relationship between this teacher and regular elementary or secondary guidance counselor?
2. What services will that teacher provide?
3. What are the limits of the teacher's responsibility?

Therefore, policy statements are required that will:

- (a) guide the individual program elements of special education, and
- (b) delineate the interface between the special education and the total educational program.

Developing Program Goals and Objectives

DEVELOPING PROGRAM GOALS AND OBJECTIVES
--

Common goals for general education consist of three major student oriented values (38):



1. Citizenship and Morality

- (a) Morality
- (b) Citizenship and Social Responsibility
- (c) Rights and Responsibilities of Students

2. Democracy and Equal Opportunity

- (a) Equality of Educational Opportunity
- (b) Education of the Non-English Speaking Person
- (c) Education of the Exceptional Person
- (d) Allocation of Financial Resources
- (e) Parental Participation
- (f) Community Participation

3. Student Learning

- (a) Basic Skills
- (b) Preparation for a Changing Society
- (c) Career Preparation
- (d) Creative, Constructive and Critical Thinking
- (e) Sciences, Arts and Humanities
- (f) Physical and Mental Well-Being
- (g) Self-Worth
- (h) Social Skills and Understanding
- (i) Occupational Skills
- (j) Preparation for Family Life
- (k) Environmental Quality
- (l) Economic Understanding
- (m) Continuing Education

Exceptional children, as peers with all students in public education, are rightful inheritants to these same educational goals. As future citizens in a democracy, they have rights to equal opportunity as indicated in goal 2 (c) above with further delineation under 3.

Comprehensive educational program planning necessitates developing goals and objectives in terms of administrative and instructional processes as well as student products. Administrative/Instructional Processes refers to the systems developed to deliver services to exceptional children. Student products are described in terms of changes in student behavior expected as a result of the processes developed to meet the educational needs of exceptional children. Goals are written in terms of what is to be accomplished and do not concern themselves with how it is to be done. For example, an administrative process goal might be: to establish an administrative organizational structure for special education services. An example of an instructional process goal might be: to increase the number of exceptional children who are placed part-time in a regular class setting.

Program objectives are developed to specify one or more stages of the more general goals. Based on the assessment of needs for program development, student products for each program component need to be developed as behavioral objectives for each year of the projected plan. Significant pupil changes in the areas of cognitive (46) affective (47), and psychomotor learning should be stated for each year of the Plan so that progress toward achievement can be measured or determined (48). An example of a behavioral objective

for student progress would be: the pupils identified as educable mentally retarded will evidence an increase in reading comprehension of at least three-quarters of a grade level as measured by achievement test scores at the end of the school year (see also Appendix K).

Program goals and objectives in terms of administrative/instructional processes and student products will form the basis for determining the necessary program elements. Again, the goals and objectives offer constructive constraints for developing the next portion of the planning model.

Political, Socio-Emotional Variables

POLITICAL, SOCIO- EMOTIONAL VARIABLES

As the influences of a variety of variables affect planning outcomes for the school system, certain social, emotional or political constraints may also affect decision-making. A constituent's social conscience, causing public demands for racial and minority group equality, may require a school system to carefully assess its priorities. Local press and mass media pressures, in the face of local and state emotionally laden crises, may indeed influence a system's delivery of services.

Political expediciencies resulting from popular support of elected candidates in public office may affect decision-making for a school jurisdiction. Pressures created by court and legislative rulings on related issues, often due to lobbyist actions, may require



discreet reactions by the public school system. General responsiveness by a publicly financed service to the will of its clients and its supporters is advocated.

Developing Program Elements

DEVELOPING
PROGRAM
ELEMENTS

Program activities and services provide the mechanism through which program funds are directed. For each goal and concomitant series of objectives, whether they deal with the administrative/instructional processes or student products, appropriate program elements should be provided.

Figure 6 illustrates the interface between program elements and program goals and objectives which matches the system for delivering special education services with the student outcomes that the system is expected to achieve.

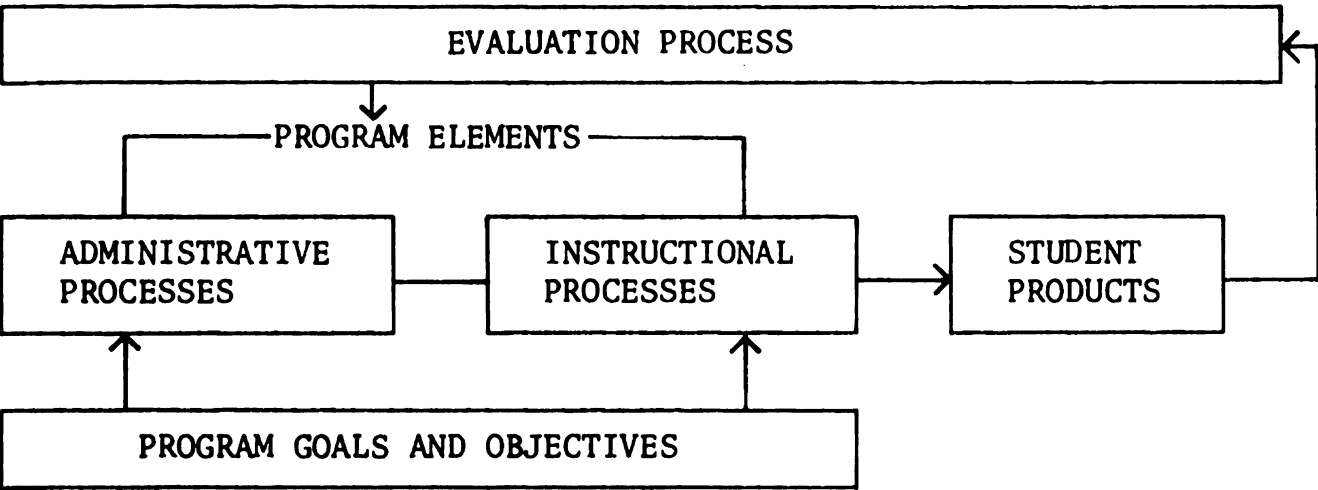


Figure 6.--Program Elements--Program Goal Interface.

A later section of this document will discuss the additional interface of the evaluation process.

To adequately develop program elements for each year of the planning document, the planning should include:

1. Human resources--the utilization of administrative and supervisory personnel, supportive professional, instructional staff, and paraprofessional personnel described in terms of numbers required and special competencies needed for each position for each of the years covered in the planning document.

The relationships and utilization of regular education program personnel should also be included. Major changes in personnel utilization for each year of the plan should be indicated. The use of consultative personnel should also be included in this part of the planning document.

2. Staff development--changes in special education services of program elements and numbers and kinds of exceptional children served necessitates analyzing personnel needs to develop or extend skills and competencies of existing or new staff members individually or in groups. The local educational planners should analyze staff capabilities to deliver special education services, identify inservice training needs, develop objectives for inservice programs and activities (on-the-job training, workshops, short courses, etc.).

The planning staff should identify area consultants such as university or college personnel, regional personnel, etc., and determine methods for utilizing such professionals where feasible.

3. Program activities and services--in describing the program activities and services to be provided by the above described personnel, the educational planners should include the following:

- (a) Major focus of the program elements (is the program of activities additional to, or different from those provided in the regular school program, see Appendices A, B);
- (b) Program location and projected needs for physical facilities on a five-year basis;
- (c) Duration and general time schedule for maintaining program elements;
- (d) Systematic adaptation or modification of teaching materials, equipment and methods for instruction of exceptional children;
- (e) Interrelation of the special education program with other program components of the system and with other community agencies, providing services to exceptional children;

(f) Instructional arrangements should be described: helping teacher, resource room teacher, etc., or combination and cooperative units to be employed for instructional purposes (see Appendix G);

(g) Local educational planners will want to determine whether additional school instructional arrangements are necessary.

4. Pupil personnel services--educational planners should indicate for each year of the planning period, the kinds of services to be initiated, developed or expanded, and indicate the educational and/or other specialists who will be involved.

Having duly considered and made decisions concerning the following variables:

- (1) Planning Constraints;
- (2) Developing a Philosophy of Special Education;
- (3) Developing Program Goals and Objectives;
- (4) Political, Socio-emotional Variables;
- (5) Determining Program Categories;

sufficient input will have been provided for the meaningful progress toward Creating The Plan in Part C of this project. Decisions that have been made concerning the four planning variables above should be recorded in narrative and preserved as a context in which further system's decisions will be made and upon which future feedback evaluations may impose revisions affecting later up-dating of special education planning.

PART C

CREATING THE PLAN

SERIES C FORMS

REAL NEEDS
ASSESSMENT

Having described the provision of programs and services of special education as they exist within the school division, and having established a quantitative target population using incidence data, the district is now ready to create a plan which will be oriented uniquely to the school jurisdiction. This part of the exercise generates a description of the school population requiring special education programs and services, identifies the manpower needs to carry out the plan, identifies related elements of services and estimates the attending costs of those provisions (see Appendices E and H).

The collation of data relating to: student target population, instructional manpower needs, physical facilities, transportation needs and potential, materials and equipment; each related to provisional costs, should be processed in a planned budgeting system, banked and utilized as a base for all future planning, revisions and predictive decisions.

Where resources exist within the community for pupil assessment, treatment or rehabilitation (see Appendices I, J) arrangements to utilize and avoid duplications of services should be made.

The following forms are provided as the format within which these decisions can be structured:

Form C-1 Pupil Population Requiring Special Education (revised)

Form C-2 Personnel Needs (revised) and Costs.

Further, the final stages of the planning should:

- (1) Estimate approximate costs for the professional development and employment of staff in special education;
- (2) Create a description of accommodation requirements for housing the proposed programs;
- (3) Analyze the transportation costs and room and board charges;
- (4) Establish costs for instructional materials; and
- (5) Identify other possible dimensions of service demands.

Form C-3 Personnel Provisions

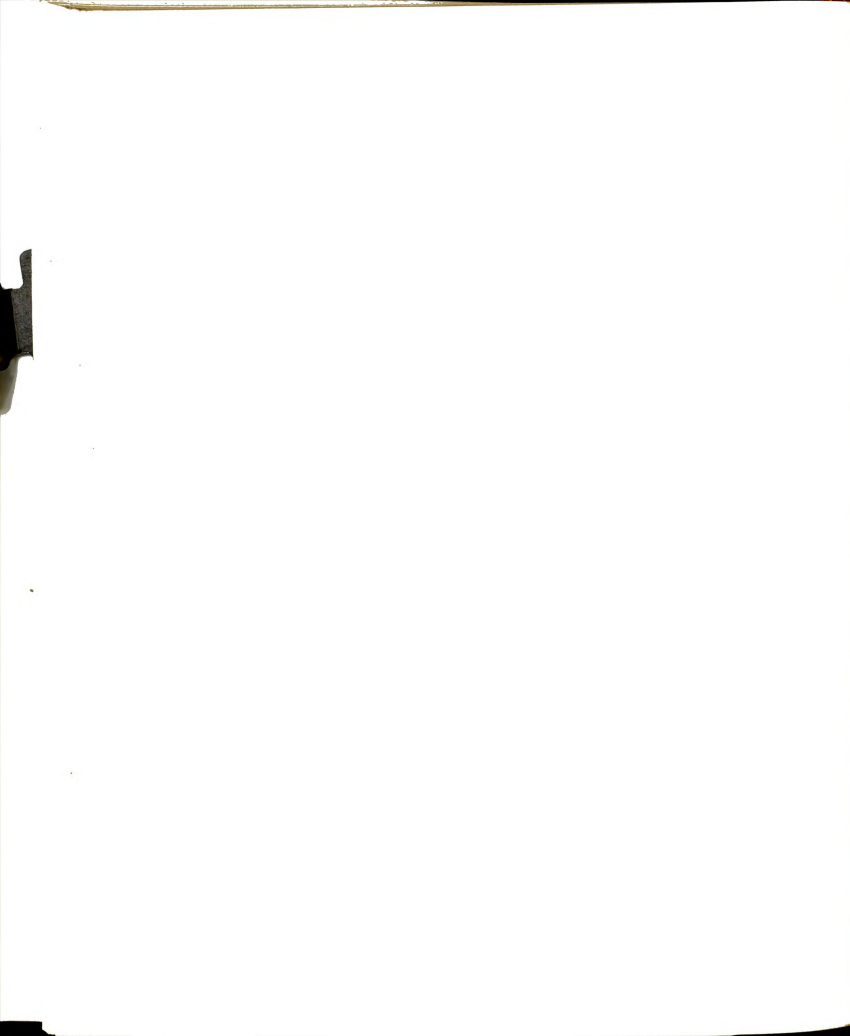
Form C-4 Program Accommodation Units

Form C-5 Transportation

Form C-6 Instructional Materials

Form C-7 Other Service Requirements.

Annual up-dating of this plan, based upon the basic elements of this plan, will enable school systems to meet changing needs. On-going evaluations made of implemented planning elements will facilitate



ASSESSMENT OF REAL NEEDS

PUPIL POPULATION REQUIRING SPECIAL EDUCATION
REVISION

	A	B	C	D
Program Elements ^a	Need Population Preschool-12 ^b	Modification factors (Designate) ^c	Revised Incidence Ratios ^d	Target Need Population with Modifications ^e
1. Emotionally and/or Socially Maladjusted				
2. Gifted and/or Talented				
3. Learning Disabilities				
4. Mentally Handicapped				
a) Educable				
b) Trainable				
c) Severely				
5. Physically Handicapped				
6. Visually Handicapped				
7. Hearing Handicapped				
8. Speech Problems				
9. Multiply Handicapped				
10. Diagnostic Services				
11. Vocational Education				
12. Remedial Reading				
13. Other				
TOTALS		//////		

^aEach school jurisdiction must determine its description of program elements commensurate with State education regulations and then categorize these consistently throughout the Series C, Forms. For alternative suggestions see Appendix B. The specified programs above serve merely as suggestions of one form of program organization.

^bTransfer data from Form B1, Column D.

^cA number of factors affecting a modification of gross population needs are listed on pp. 62-74). Other unique variables which might be identified as affecting a system's need for providing services should be supplemented, defined, and also reflected in the Revised Incidence Ratios and Need Population with Modifications. Reminder: Incidence tables must be interpreted with extreme caution. Many factors in any one county or city will influence the incidence of exceptionality. The tables merely provide a guide for the development of an assessment of the jurisdiction's needs. It is generally felt that the rates stated are base or minimum figures. In effect, the data generated in column 4 reflects a description of the number of children to be programmed for in each of the areas of exceptionality.

^dDue to unique local factors designated, Incidence Ratio figures on Form B1 Column C will be increased or diminished or retained for your jurisdiction (see Appendix C).

^eTo obtain Target Need Population multiply Need Population by Revised Incidence Ratios.

PERSONNEL NEEDS
REVISION

FORM C2

	A	B	C	D
Program Elements	Gross Teacher Requirements ^a	Program Organization ^b	Revised Pupil/Staff Ratio ^c	Revised Teacher Requirements ^d
1. Emotionally and/or Socially Maladjusted				
2. Gifted and/or Talented				
3. Learning Disabilities				
4. Mentally Handicapped				
a) Educable				
b) Trainable				
c) Severely				
5. Physically Handicapped				
6. Visually Handicapped				
7. Hearing Handicapped				
8. Speech Problems				
9. Multiply Handicapped				
10. Diagnostic Services				
11. Vocational Education				
12. Remedial Reading				
13. Other				
TOTALS		////		

	A	B	C	D
Support Staff	Gross Support Staff Requirement ^a	Performance Expectations ^b	Revised Pupil/Support Staff Ratios ^c	Revised Support Staff Requirements ^d
Psychologist				
Social Worker				
Supervisor and/or Consultant				
Educational Diagnostician				
Attendance Counselor				
Other (specify)				
TOTALS		////		

^aData transferred from FORM B2, Column C.

^bBased upon the philosophic principles for special education referred to on page 65 of this report, the pupil instructional units will be organized and a revised Pupil/Staff Ratio will be plotted which, in turn, will determine what Personnel needs will be required in the provision of the system's services to exceptional children.

^cSee Form B2, Column B.^dUse Target Population figures from Form C1, Column D.

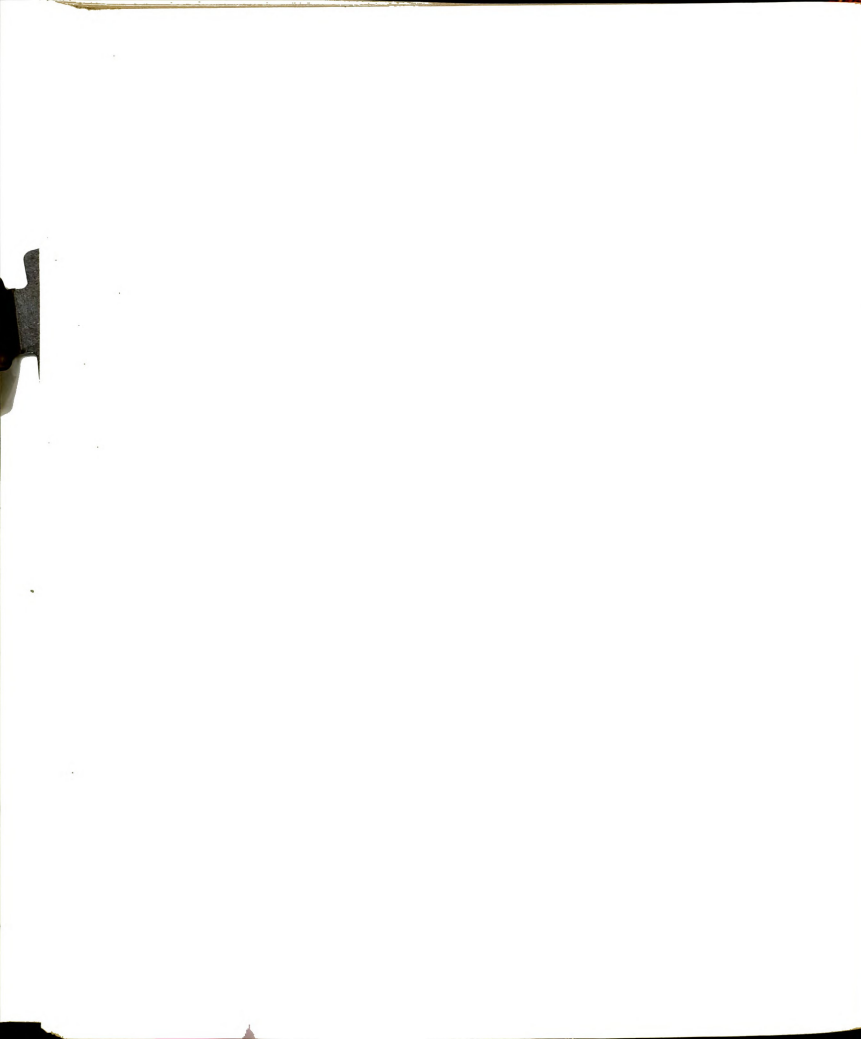
PERSONNEL PROVISION

FORM C3

Program Elements	Teacher Needs ^a	Teacher Resources on Hand ^b	Teachers Presently Employed to gain Sp. Ed. Qual. ^c	Teachers to be Employed			Net Budget Demands for Year One ^d
				Year 1	Year 2	Year 3	
1. Emotionally and/or Socially Maladjusted							
2. Gifted and/or Talented							
3. Learning Disabilities							
4. Mentally Handicapped							
a) Educable							
b) Trainable							
c) Severely							
5. Physically Handicapped							
6. Visually Handicapped							
7. Hearing Handicapped							
8. Speech Problems							
9. Multiply Handicapped							
10. Diagnostic Services							
11. Vocational Education							
12. Remedial Reading							
13. Other							
TOTALS							

Professional Support Staff	Support Staff Needs ^a	Support Staff Resources on Hand ^b		Support Staff to be Employed			Net Budget Demands for Year One ^d
		Permanent Staff	On Contract	Year 1	Year 2	Year 3	
Psychologist							
Social Worker							
Supervisor and/or Consultant							
Educational Diagnostician							
Attendance Counselor							
Other (specify)							
TOTALS							

^aData transferred from Form C2, Column D.^bData reflected on Forms A3 and A4. On accompanying narrative, specific names of personnel should be listed.^cNumbers of teachers presently employed who will become approved to teach Special Education by means of in-service programs, university attendance, and/or other forms of professional development. On accompanying narrative, specific names of personnel to be up-graded should be recorded.^dThe costing of Personnel needs for year 1, based upon current rates, might be determined by deducting from gross costs the receipts obtained from student tuitions, gifts and donations, federal aid, etc. It is not the purpose of this study to provide specific formulae for a system's calculation of instructional unit costs. Depending upon the State's "grants in aid" regulations it will be beneficial for the system to project a "provisions cost" for each of its programs and services elements. Future implementation and funding of the proposed Plan will require that the system have delineated the costs to be encountered in providing comprehensive programs and services for Special Education. Net budget demands will include professional development costs as well as salary disbursements for new staff employed (see also Appendix I).



PROGRAM ACCOMMODATION UNITS

FORM C4

Program Elements	A		B	C	D
	Existing Special Education Accommodations		Accommodations Recommended ^a	Accommodations Required ^b	Net Budget\$ Demands for Year One ^c
	Location	Number of Classrooms ^d			
1. Emotionally and/or Socially Maladjusted					
2. Gifted and/or Talented					
3. Learning Disabilities					
4. Mentally Handicapped					
a) Educable					
b) Trainable					
c) Severely					
5. Physically Handicapped					
6. Visually Handicapped					
7. Hearing Handicapped					
8. Speech Problems					
9. Multiply Handicapped					
10. Diagnostic Services					
11. Vocational Education					
12. Remedial Reading					
13. Other					
TOTALS	///				

^aIn the light of Population, Staff and Program needs shown on Form C1 and C2, the facilities or accommodation for implementing these programs will be listed.

^bIn the light of Accommodation Units already existing within the system, additional and/or modified Accommodation still required will be shown. In some cases a re-deployment of spaces already used will be feasible, particularly where those classrooms are deficient and substandard.

^cSince capital construction costs are often not included in the operating budget, figures may or may not be included here, depending upon the benefit of this information for overall system's building submissions. Costs of classroom renovations or rental charges may be included.

^dSee Form A2, Column E.

Note: A minus figure, i.e. (-2) in column D of this form would indicate that 2 classrooms will no longer be in use for Special Education.

TRANSPORTATION
REQUIRED IN PROGRAM PROVISIONS

	A	B	C	D	E
Program Elements	Program Locations ^a	Number of Students ^b	Number Pupils Requiring Transportation ^c	Number Pupils Requiring Room & Board ^d	Net Transportation Costs for Year One ^e
1. Emotionally and/or Socially Maladjusted					
2. Gifted and/or Talented					
3. Learning Disabilities					
4. Mentally Handicapped					
a) Educable					
b) Trainable					
c) Severely					
5. Physically Handicapped					
6. Visually Handicapped					
7. Hearing Handicapped					
8. Speech Problems					
9. Multiply Handicapped					
10. Diagnostic Services					
11. Vocational Education					
12. Remedial Reading					
13. Other					
TOTALS	///				

^aLocations (Schools, etc.) where special programs will operate.

^bNumbers of students involved in special programs, as per Form CI, Column D.

^cNumbers of students requiring transportation to these programs.

^dNumbers of students programmed for away from home, therefore requiring weekly room and board.

^eAverage per pupil costs of transporting pupils within the total system as reflected in system's budget accounting records may be used if specific costs of transporting special education students is not available. In light of existing expenditures involved in transporting special education pupils, a reduction or increase in costs may be reflected due to a re-organized placement of children.

INSTRUCTIONAL MATERIALS

Special Education Instructional Aids, Equipment, Materials Required			
	A	B	C
Program Elements	Program Locations ^a	Identification of Needs ^b	Net Budget Demands for Year One ^c
1. Emotionally and/or Socially Maladjusted			
2. Gifted and/or Talented			
3. Learning Disabilities			
4. Mentally Handicapped			
a) Educable			
b) Trainable			
c) Severely			
5. Physically Handicapped			
6. Visually Handicapped			
7. Hearing Handicapped			
8. Speech Handicapped			
9. Multiply Handicapped			
10. Diagnostic Services			
11. Vocational Education			
12. Remedial Reading			
13. Other			
TOTALS	////		

^aLocations (Schools) where Special Education instructional "materials" are required in the "program" areas.

^bNeeds over and above those required in regular classrooms.

^cCosts of establishment and equipping of an Instructional Materials Resource Center ought to be included. System's shared facilities of this nature for professional development, instructional materials construction, evaluation and loan may be considered to serve teacher needs within a designated area.

OTHER SPECIAL EDUCATION SERVICE REQUIREMENTS ^a			
	A	B	C
Program Elements	Location of Service	Description of Service	Net Budget Demands for Year One
1. Emotionally and/or Socially Maladjusted			
2. Gifted and/or Talented			
3. Learning Disabilities			
4. Mentally Handicapped			
a) Educable			
b) Trainable			
c) Severely			
5. Physically Handicapped			
6. Visually Handicapped			
7. Hearing Handicapped			
8. Speech Handicapped			
9. Multiply Handicapped			
10. Diagnostic Services			
11. Vocational Education			
12. Remedial Reading			
13. Other			
TOTALS	/ / / / /	/ / / / /	

^aPossible delivery of service components such as rental charges for swimming or recreational facilities, field trip expenditures, job training provisions, etc. might be delineated on this form as other elements essential to special education.

realistic annual up-dating. The system's data should be banked beginning in year one of planning in order that future revisions might be accomplished rapidly and without repeated efforts of surveying.

Real Needs Costs Analyses

ASSESSMENT OF REAL NEEDS AND COSTS ANALYSES

Finally, a summary of the five cost areas in Special Education provides the system with a concise over-view which can be used to determine the commitment to be undertaken over a suggested five-year period of implementation.

Form C-8 Program Costs for a Five Year Plan

Forms C3 to C7 have reflected Net Budget Demands for Year One in each case. Since, for various reasons a system may not have planned to fund all required services effective Year One, cost projections for Years Two to Five may be helpful in order to provide an estimate of the system's needs into the future. Due to the fact that planning will be up-dated annually, it is not anticipated that these cost projections will accurately reflect true costs of provision beyond Year One of the plan.

FORM C8

ASSESSMENT OF REAL NEEDS AND COST ANALYSES
--

PROGRAM COSTS FOR A FIVE YEAR PLAN

A

B

C

Provisional Units	Form Referral	Total Costs	Phased Costs of Implementation ^b				
			Year 1	Year 2	Year 3	Year 4	Year 5
Personnel Provision	C3						
Accommodation Units ^d	C4						
Transportation	C5						
Instructional Materials	C6						
Other Service Requirements	C7						
TOTALS							

^aSummations of estimated total costs reflected in Forms C3 to C7 to be phased for implementation over a designated 5 year period.

^bFrom the time of initial implementation of the various elements of this plan, realistically project the actual costs, at current rates, of complete implementation in 5 years. Phased costs may reflect a programming focus upon a specific target population which has been neglected in the past, therefore, projecting a profile of cost differentials unevenly measured out for the duration of this plan. Realized financing of programs and services as projected within the Plan, will depend, however, upon legislative regulations governing system's funding of various priority needs.

^cNarrative, describing in some detail the elements of the plan to be implemented in "year one" should be included and attached to this form.

^dAs noted on Form C4, complete figures may not be available for capital construction projects.



Establishing Priorities

ESTABLISHING
PRIORITIES
FOR YEAR ONE
OF PLAN

The orderly and systematic growth of a special education program requires that priorities be established for program development. Priorities need to be established for each year of the planning period. Program priorities would be in terms of what program components should be expanded or initiated, number of children to be served, personnel development, etc.

Having established priorities, within State's requirements, programs are developed based on exceptional children's educational needs and the growing capabilities of the school system to meet these needs.

Allocating Resources for Special Education

ALLOCATING
RESOURCES

"Special Education Resources" refers to the human, physical, technical, and financial resources which the system can utilize in delivering special education services to exceptional children. In the planning process, relevant student data are procured and stored reflecting dimensions of need for programming. Staff are assigned to service areas or schools where their components will be housed. Materials and equipment are also allocated to particular program elements. Costs are generated for study and decision.

Learning Resources

Education's role is to prepare each student to cope with the demands of society, in the process of living, for purposes of self-maintenance and for contributions to a better life for all. Learning's resources must focus upon individual pupil behaviors, which when modified and directed toward pre-established objectives, serve to justify schools' existence (see Appendix K). The following model, Figure 7, conceptually delineates some of the ingredients required in this resource allocation (49).

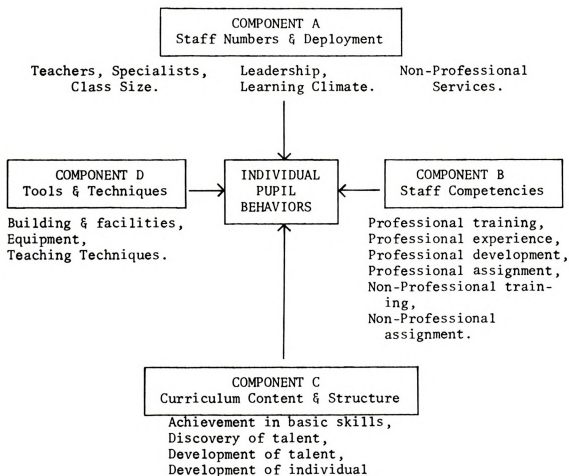


Figure 7.--Learning Resources Focused Upon Individualized Instruction.

Implement Planned Programs and
Services in Special Education

IMPLEMENT PLANNED
PROGRAMS AND
SERVICES

Based upon discrepancies reflected between existing programs and services in Special Education (Series A Forms), and an assessment of gross needs (Series B Forms), the system will create "The Plan" (Series C Forms) for instituting required additional services, or revising existing programs and services in light of the real needs assessment. Dependent upon State approval and funding stipulations the plan to provide comprehensive programs and services in Special Education may be phased for implementation over a specified period of time.

Evaluation

EVALUATION

Continual reference has been made throughout for the need to continue to plan for necessary change in the total school environment. Initial planning is imperative. However, planning for necessary changes is continuous and results only from constant evaluation of the program's effectiveness in meeting the individual needs of children. Decision-making points will require some necessary changes to improve the design. As these changes are encountered, they must be added to the present plan. Important questions to be answered are:

1. Who will be involved in the planning process?
2. What will be the instructional design?
3. What will be the evaluation procedure?

It is important at this stage in the development of a systems plan for Special Education that those participating in the formulation of the plan as well as those to be affected by its organization be provided with feedback and information relative to decisions made and directions to be taken in the future.

Decision-making is an on-going phenomenon and can only remain relevant as the process is affected by changes within the system. Evaluation procedures provide additional in-put relative to student, faculty, administration and Department of Education goals and objectives. The priorities of each of these variables are often divergent and therefore require that alternative positions be weighed and priority decisions made. For Special Education that priority should be viewed as focusing upon the handicapped student as he interacts with his learning environment and is conditioned to exhibit socially approved responses.

Evaluation Design

Figure 6 illustrated the interface between program elements and goals and objectives. The figure also suggested the evaluation design which would allow for a complete evaluation, not only of changes in pupil or student behavior, but also of the delivery system which produces those quality student products.

1. Evaluation of student product--By stating student products in terms of behavioral objectives, the major task of determining evaluation processes for student products will already have been accomplished. This section of the planning document should summarize, for each year of the Plan, the evaluation instruments which will be utilized to measure or determine student achievement in terms of stated behavioral objectives.

The learning system is characterized by controllable and semi-controllable variables affecting the learning process or interaction (Figure 8). The behavior of pupils becomes the measurement of the system's success. As desired behaviors for students are shaped through the use of

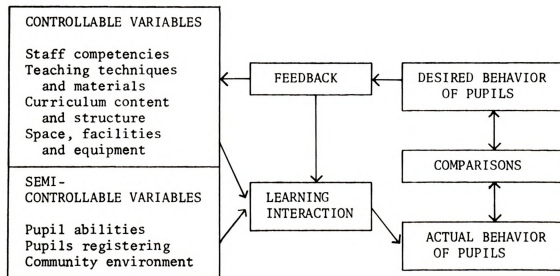
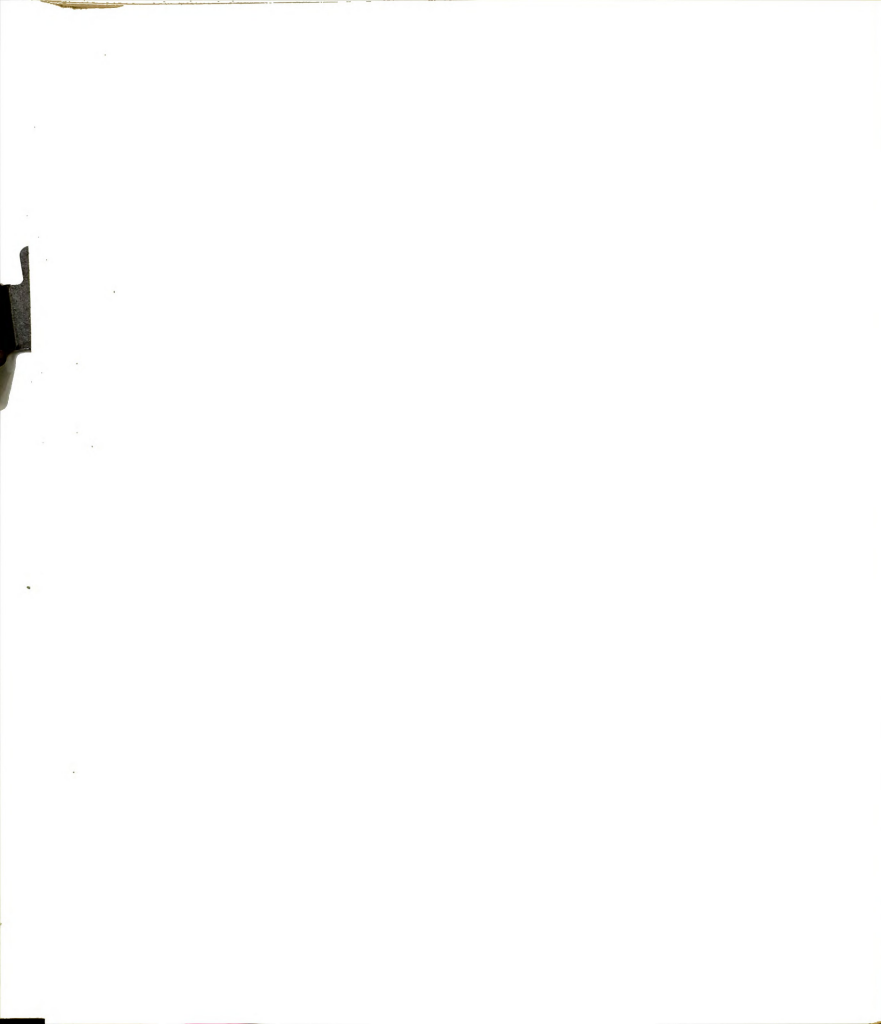


Figure 8.--Evaluation of Student Product.



behavioral objectives (see Appendix K), comparisons are made with earlier student performance to determine the progress being made by each individual. The degrees of success achieved in this process provides feedback by which the system's controllable variables may be modified in order to enhance existing effectiveness of the educational process (49).

2. Evaluating administrative/instructional processes--Whether changes in student behavior are of the magnitude and direction predicted or not, there is a need to analyze and evaluate the system through which special education services are provided. What instruments will be utilized to measure the effectiveness of program elements in terms of staff utilization, curriculum materials, and the pupil appraisal process? Effectiveness of program elements should be measured eventually by a cost/benefit ratio to determine if equally effective services for modifying student behavior can be developed through modifications of, or implementation of new program elements. To repeat, educational planners should develop and describe for each year of this document, techniques which will evaluate the administrative/instructional process in terms of student behavior and program costs.
3. Program budget--A multi-year budget projection broken down into expenditure classifications as produced in Series C Forms will facilitate further Planned Program Budgeting Systems (PPBS).



4. Research and Development--As the local planning staff analyzes the total special education needs of its district, special problems may suggest the need for experimental, innovative or pilot projects designed to test or develop new approaches for delivering special services to specific age groups such as pre-school or post-school aged children such as extended work-study programs. Research in curriculum development or innovative use of instructional materials or staff might be indicated. Comprehensive special education planning should include ongoing research and development projects. The planning document should indicate in each year-one period, the research and development projects to be initiated.



CHAPTER IV

CONCLUDING OBSERVATIONS

Planning Applications

Throughout the process of gathering information, structuring the design of a systems plan for Special Education and evaluating the applicability of such a plan, contributions have been solicited and received from interested educators.

As reviewed with officials at both State and Intermediate Office levels in Michigan, the planning procedures outlined for Special Education in this study were endorsed. As a result of the passage of Michigan Public Act 198, 1971, making the provision of special education programs and services mandatory for local school systems, comprehensive planning is required at both the Intermediate and State Educational levels. Michigan's State Plan (36) as drafted, will reflect the basic principles proposed in "A Systems Approach to Educational Planning Applied to Special Education."

In the province of Ontario, Canada, a pilot study has been conducted using a modified form of the planning model herein proposed. County school boards (Grey, Simcoe and Lakehead Separate) have initiated systems' planning which follows the format suggested.



Involvement proceeded on a voluntary basis; Provincial Department and Regional Office consultative assistance has been provided and these school jurisdictions are in the process of implementing comprehensive programs and services (see Appendix M for an example of one jurisdiction's efforts).

In implying that the proposed systems planning model is adaptable to school systems large and small, certain inherent restrictions make the application of it difficult. Although the systematic procedures outlined in this study apply universally to school systems providing Special Education, they become more functional when the size of the student target population is sufficiently large to gender an adequate base upon which differentiated programming can be structured. With an overall disability incidence of approximately 12 per cent, it would require a community population of 50,000 to produce a school population (aged 1-19 years) large enough to total 21,000 persons. Of these, approximately 12 per cent or 2,520 school age children would require Special Education services. When this number is partitioned for programming purposes, it begins to appear that a community size of 25,000 to 50,000 would be required in order to organize a system offering comprehensive programs and services. The optimum condition for providing educational services to all children within school districts may be found somewhere within the broad limits of 5,000 to 20,000 pupils (20). It should be noted that there may be a maximum size for an administrative unit measured in numbers of pupils, but when a school system tries to provide services for more than 20,000 children in a single organization, a leveling off

occurs; public participation and interest in educational matters tend to decline and administration tends to become increasingly bureaucratic. A community with a population of between 25,000 and 50,000 could provide a school system that would have a range of educational choices open to children with different abilities and needs and a variety of special consultants to help the teacher meet these needs (20). Such a unit would also be small enough to be responsive to the needs of people. In certain situations it may be desirable for school systems to co-operate in the delivery of services to achieve these ends.

With this perspective in mind, and considering the geographical organization for education in the State of Michigan, it becomes apparent that the appropriate level for systems planning for comprehensive programs and services in Special Education is at the Regional or Intermediate District. Citing Ingham County as the example, only Lansing School District with 96 Type I, Physically Handicapped students, has a large enough disability base upon which programs for physically handicapped could be meaningfully organized. Similar situations are encountered when other disability populations are enumerated per local school district. Only if the Intermediate District Board of Education were to organize and administer special education programs and services, or if local districts were to work co-operatively, would an adequate student population base be provided upon which meaningful program planning might evolve.

Information Centralization

A major area of influence on the operating activities of educational services to the handicapped is the centralization of information within the State's Department of Special Education. The development of a useful and meaningful information system provides a great potential for the State to interact more systematically with the various providers and users of educational services to the handicapped. For many ongoing activities, such information is essential to the development of effective operations. If a State Department provides and maintains such information, it is in a strong position to influence behavior. The data base created through the use of this planning thrust will enable the state system to meaningfully make decisions on behalf of school systems and the children so affected. Co-operative input of data from and by intermediate and local school systems will aid greatly in realizing this centralization.

State Control vs Local Autonomy

Provincial or state departments of education, should continue to have the right of inspection, the duty to ensure that standards are being maintained, and that the public money is being well spent on education. They should be advisers rather than merely dictators of policy. Curriculum development should be rooted in the school community in order that it not become sterile and divorced from the needs of the community and its students (20).

Organization, policies and practices in education differ from state to state because each has the authority and responsibility for developing its education system as it sees fit. Except for certain



special categories of children, i.e. deaf and blind, most departments of education do not directly operate schools. School law provides for the establishment and operation of schools by local education authorities who are held responsible both to the education department of the state government and to the local ratepayers. Thus education has become a state-local partnership.

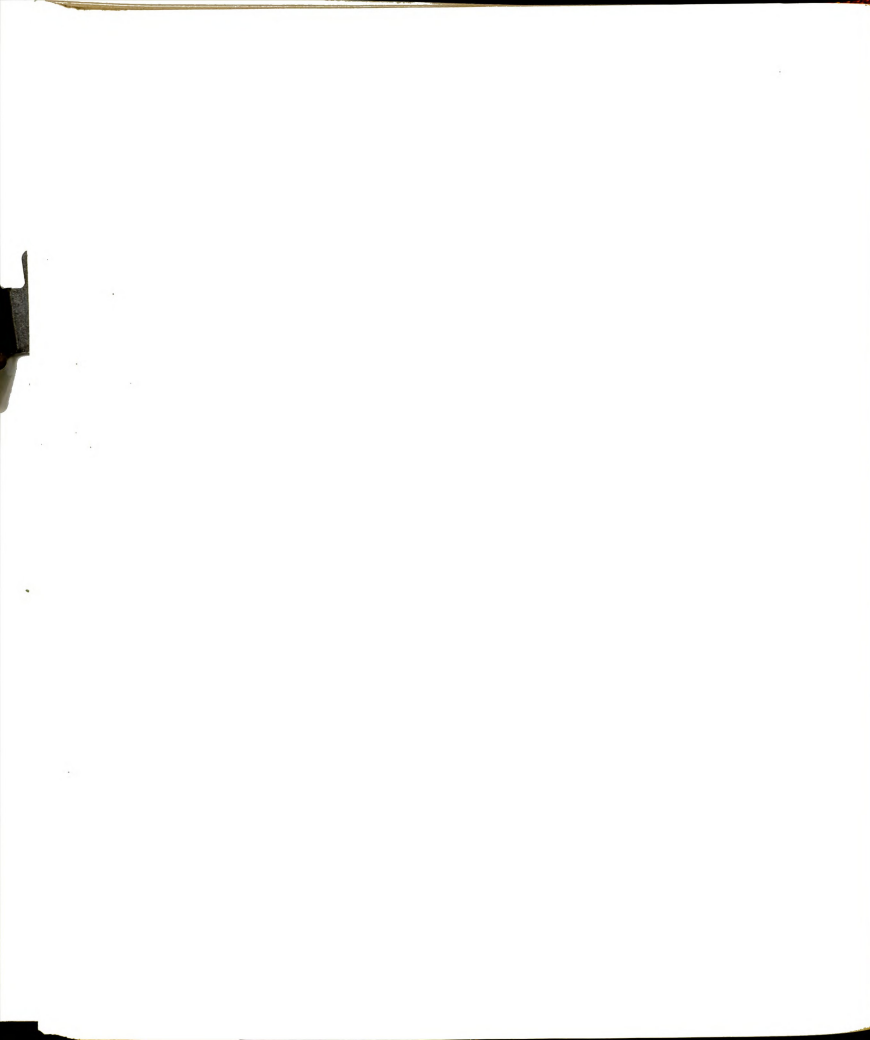
Each state establishes the legislation under which its schools operate. These laws and their associated regulations, written and unwritten, have a significant effect on the quality and quantity of education offered within the state. State departments make a significant contribution towards the local costs of education through a variety of grants (37). Some such funds are covered by federal aid. It has been found that grants mold educational policy to a marked degree and not always in ways that are most advantageous locally. If grants are forthcoming for certain programs or certain specialized services, districts tend to establish these programs. Regulations therefore that govern grants to local communities will not meet the special education needs of handicapped children unless they are written in such a way that they have a positive effect on the range of educational opportunities open to students.

Local autonomy seems to be dependent upon government control over funding. To assure that sufficient flexibility is maintained at the local level to provide services within a continuum of special education program organization, perhaps State funding for Special Education should be broken out for distribution purposes as a discrete element. Federal aid might then be directed through the

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State Department and apportioned to local districts through Intermediate Office authority. Accountability at the local level might be assured through funding sanctions based upon quality evaluated program provisions.

State Plan Approval and Funding Implications

Mandatory Special Education legislation such as has been passed to go into effect in Michigan for the school year 1973-74, requires that State and Intermediate District Plans be formulated (36).

Sec. 252b. (1), of Michigan Public Act 198, 1971 (50) states: For the 1973-74 school year and thereafter the state board of education shall:

- (a) Develop, establish and continually evaluate and modify in co-operation with intermediate school districts, a state plan for special education which shall provide for the delivery of special education programs and services designed to develop the maximum potential of every handicapped person. The plan shall coordinate all special education programs and services;
- (b) Require each intermediate school district to submit a plan pursuant to subdivision (a) of section 298c, in accordance with the state plan and approve the same.

Utilizing the systems planning format proposed in this study, micro-planning unit submissions (local education systems) are able to

contribute to macro-planning units (intermediate district system) and therefrom the state plan can be formulated.

In this manner the "co-ordination" charge to the State Department can be complied with. Similarly, as intermediate planning becomes an amalgamation of realistic local needs, the "approval" charge to Intermediate District Boards can be facilitated. To culminate this sequence of planning within the principles of participatory democracy, the State Department should fund local school systems for special education according to the approval of plans submitted through the Intermediate District.

Equality of opportunity is thereby afforded to all children requiring special services since discrepancies inherent in certain local systems can be compensated for as a result of plan-approved differential State funding.

Compatibility with State and Federal Planning

Improving Special Education: A Planning and Evaluation

Manual (51) is a publication of The Bureau of Education for the Handicapped. Part 11 of the document "Developing A State Plan for Federal Program Funds" outlines the sequence of steps and ingredients of such a plan. The planning stages consist of:

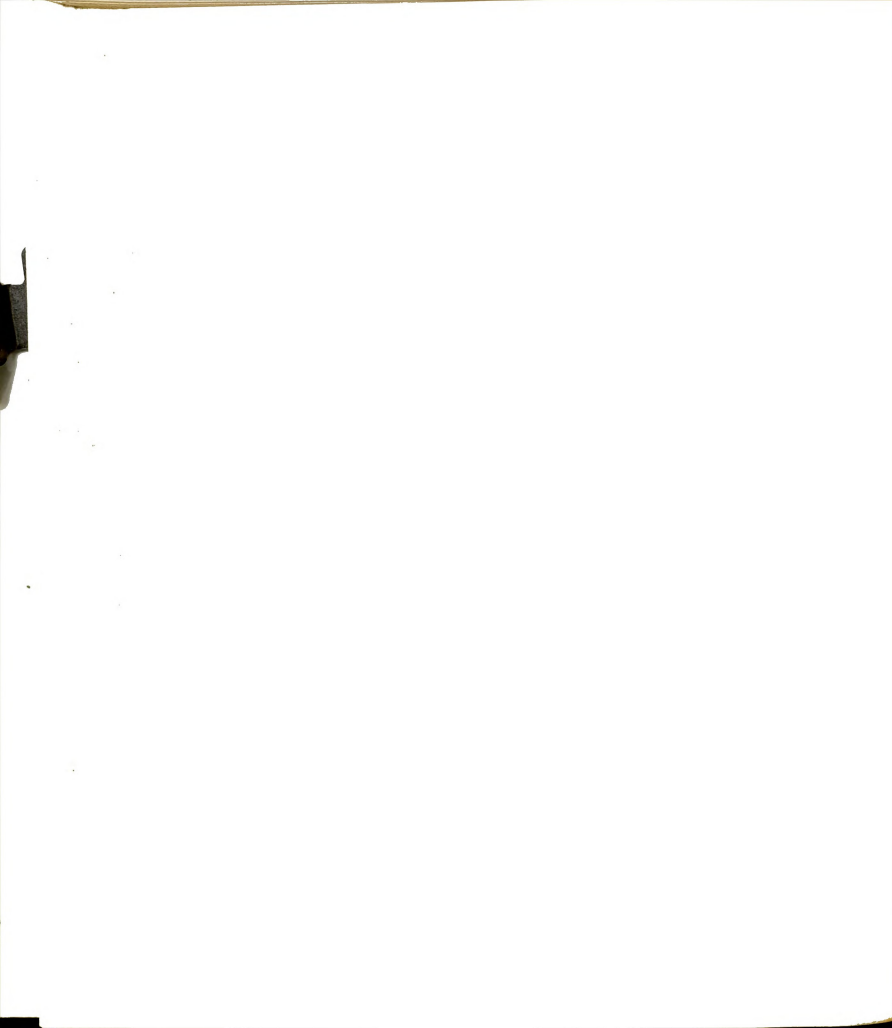
- (1) List of the Special Education Department's systems objectives along with relevant data;
- (2) Description of the potential of federal contributions to the system's objectives;

(3) Description of the relationship between each proposed project and the overall objectives of the State Department; each project's operational objectives are specified, projects are described in terms of expenditures involved; each project's performance indicators are specified as a basis for evaluation;

(4) The last step of the development of the State Plan describes the evaluation process.

These components make an appropriate format for State plans around specific programs. These are to be revised each year as a result of project and program evaluations. These specific project plans then become the basis for the department's general planning and evaluation effort.

As proposed in this dissertation's "Systems Approach to Educational Planning Applied to Special Education," a similar position is taken regarding the formulation of goals and objectives, with program implementations and future revisions based upon evaluation feedback. As suggested in the State Plan Approval and Funding Implications section of this chapter and in agreement with stage (2) above, system's planning at the State level should incorporate federal aid as a means for meeting overall needs of Special Education according to local systems' planned submissions.



Recommendations for Further Study

1. The National Educational Finance Project (42) under the directorship of Rossmiller and Hale (1970) published Special Study Number 2, "Educational Programs for Exceptional Children: Resource Configurations and Costs." As one of a series of publications relating to financing education, this document speaks to the concept of providing equality of educational opportunity. As the pot of gold at the end of the rainbow, this attainment has proven to be elusive. "As the concept of equality of educational opportunity increasingly came to be viewed as requiring that every child should be educated to the limit of his ability, there developed apace a recognition that the public school system should accept responsibility for providing educational programs for exceptional children (42, p. 21)." Only recently have studies been directed specifically to the problems of financing special education programs for exceptional children. Reimbursement formulae fall into two categories: unit and per pupil formulae. Rossmiller's study of funding patterns in the states of California, Florida, New York, Texas and Wisconsin produced sufficient data upon which per pupil costs for various program elements in special education (mentally retarded, intellectually gifted, auditorily handicapped, etc.) could be produced.

The programs studied in these states were not randomly selected, however, and they could not be described as representing average current practice in special education. The

fiscal, personnel, and pupil records maintained by the school districts sampled were not maintained on a programmatic basis. Arbitrary decisions were made in order to provide sufficient data upon which program costs and cost indices were based (see Appendix L).

Having noted earlier that the number and standards of special education programs depend largely upon the amount of financial aid received for such services, it becomes increasingly important that further studies be conducted of the type reported by Rossmiller, Hale and Frohreich (42).

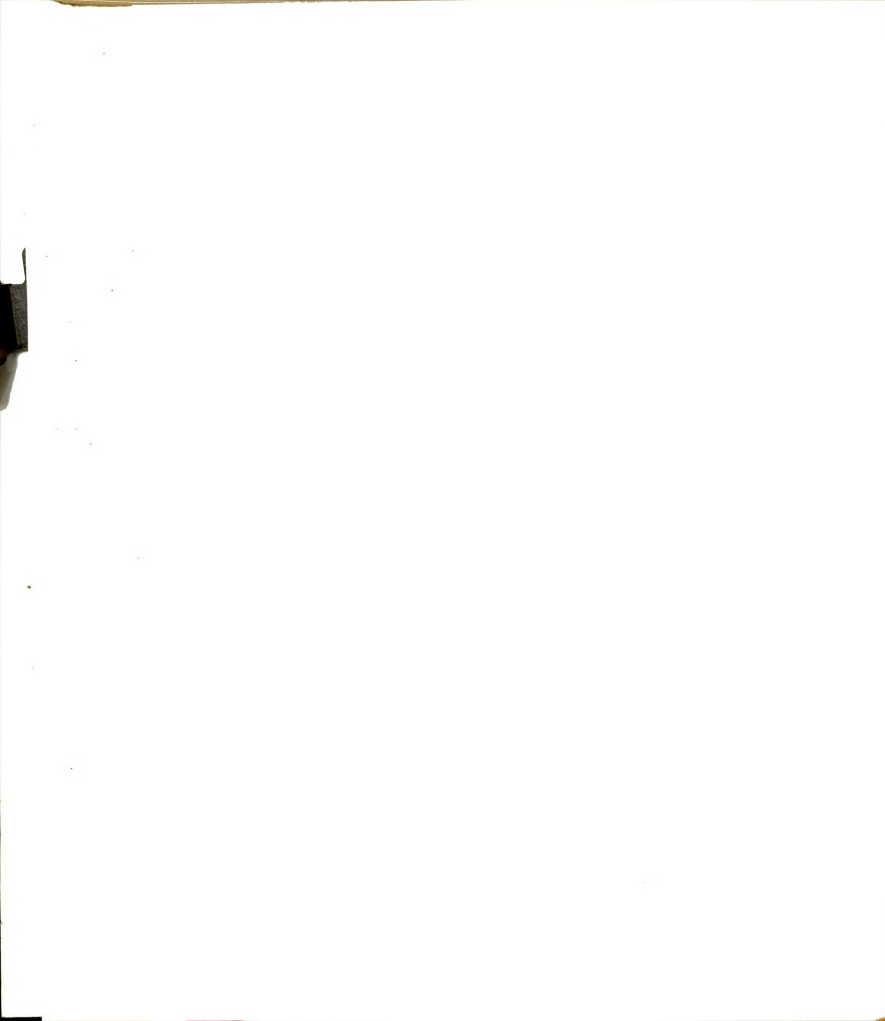
Questions begging to be answered are:

- (a) What prevalency rates for exceptional children provide a sound basis upon which program costs can be determined;
- (b) What standard of programming and service measures quality education and/or training for various disability categories;
- (c) What cost indices will reflect a standard of special education which will provide equality of educational opportunity;
- (d) What forms of data and record keeping will enable school systems to predict true costs of programs for exceptional children;
- (e) What program/personnel organizational arrangements will produce optimum cost-quality-product accountability?

2. One of the criteria for the design of a comprehensive plan for programs and services in special education must be; to provide for linkage to community agencies other than the school; to identify and utilize agencies which can provide supportive resources as aids in the understanding of child development and in diagnosis, treatment and placement of children with learning problems and in preparation for employment. In the face of this kind of interdisciplinary communication demand, a special education teacher training experience focusing on such skills and orientation should be devised and provided as a mandatory element of teacher preparation curricula.

Educational planning must be developed by co-operative systems techniques within the school jurisdiction and the community; techniques which involve teachers, parents, supervisory officers, trustees, employers and unions. Further research is required to evolve a communications model which will effectively provide the means whereby decision-making can be responsive to such a diversity of interested respondents.

3. A systems plan for Special Education must take adequate provision for administration and supervision of programs and services. In addition, performance based evaluation of programming is critical to the successful institution of personalized, prescriptive instruction. Leadership in the field of Special Education exists as the relevant variable in the

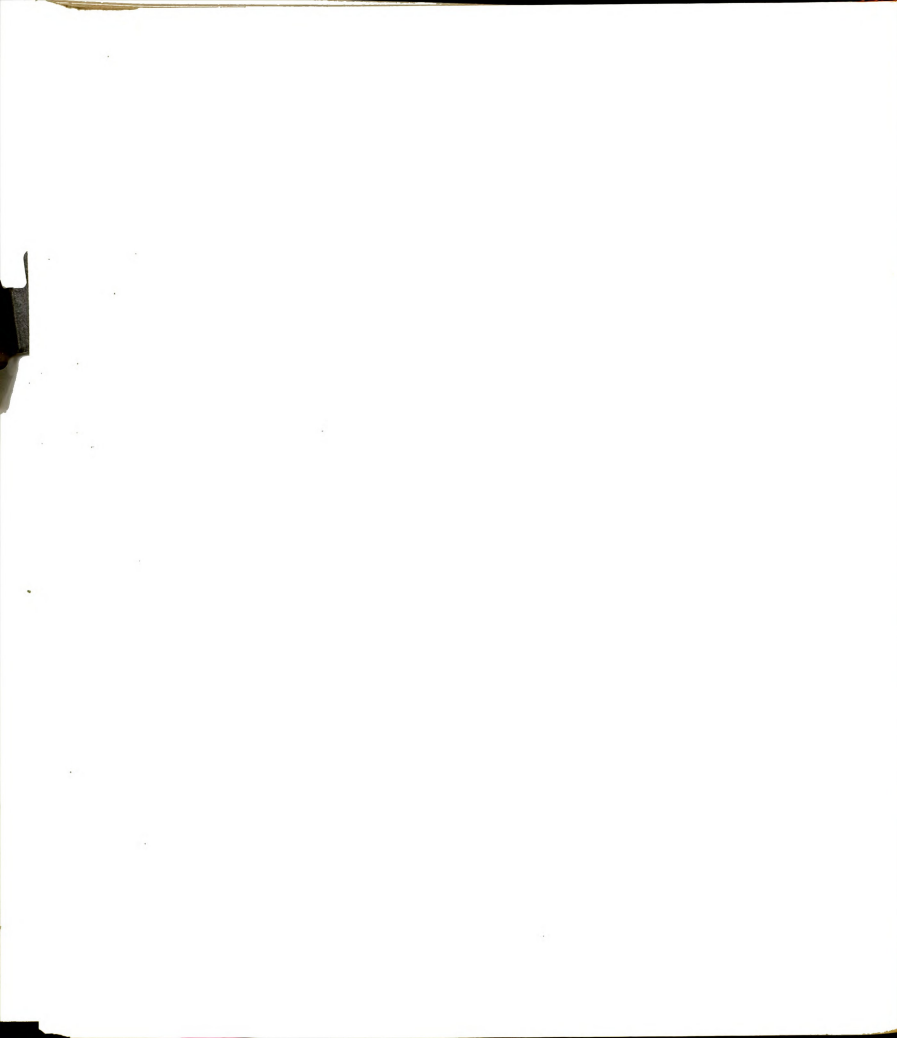


establishment and maintenance of outstanding programs for exceptional children. Further study is required in order to: (a) identify the criteria essential to creative leadership in Special Education, (b) structure effective ways of training such leadership utilizing performance based criteria (52).

4. On May 4, 1971 a report entitled, "Study of Special Education Transportation: Ingham Intermediate School District" was published under the auspices of Dr. David Haarer, Assistant Superintendent of Special Education for the Intermediate School District, Mason, Michigan. Prepared by Dr. Charles Henley and student associates from Michigan State University (25), this study was conducted with three basic objectives in mind:

- (a) To obtain a composite picture of the present transportation system for the handicapped as it is presently constituted in the Intermediate District and in each local constituent district,
- (b) To identify major problems with the present system,
- (c) To develop a plan or a set of suggestions for the improvement of the present system of transportation.

Recognized in the Report as the most persistent and vexing problem facing special education administration, transportation of exceptional children was viewed from several points of view: bus drivers, teachers, and administrators.



Scheduling of buses and irregular times of student arrival and departure emerged as the major problem cited. For 1969-70 total special education transportation costs were \$351,924.87, shared almost equally between State and Intermediate districts. Physically handicapped, educable and trainable retarded, emotionally disturbed and blind children were transported. The districts of: Dansville, East Lansing, Haslett, Lansing, Leslie, Mason, Okemos, Waverly, Webberville and Williamston provided contracted services for 723 students at a cost of \$295,448.15. District owned vehicles were utilized to transport 196 students at a cost of \$56,467.72. The per capita costs ranged from \$65.10 to \$1,554.00 per year. Although the least was expended for transporting educable mentally retarded students, no consistent pattern of expenditures per disability program was evident.

The need for further study in this area is evident particularly since transportation services for exceptional children are required and stand as a major cost item. Aside from predicting resource requirements based upon annual per pupil costs of transportation expended for all public school students, other criteria for gauging special education transportation needs are lacking. Further, there is a need for research to determine what is the most economical means of transportation under varying conveyance demands.



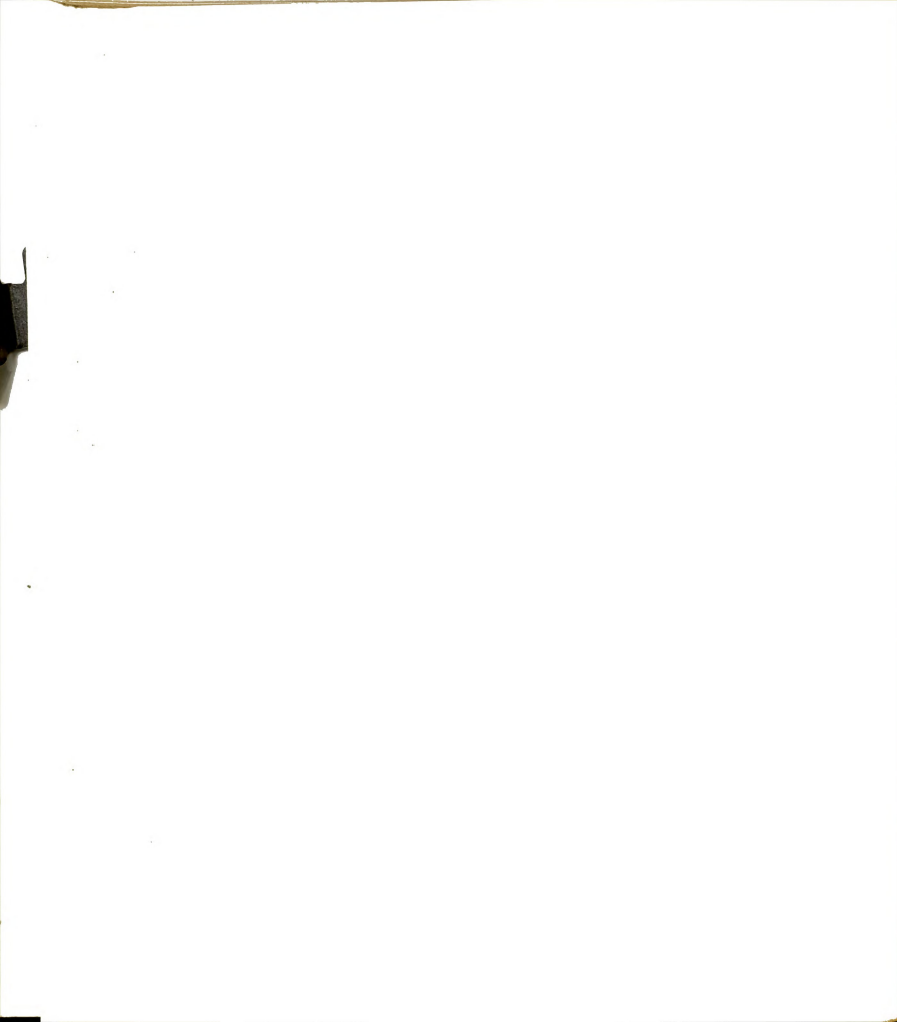
5. As reflected in school systems' "gross and revised assessment of needs," instructional and supportive services will be required for greater numbers of students within an individualized mode of programming. The personnel requirements for deployment within a continuum of services ranging from complete segregation to totally integrated pupil placement in regular classes are varied. The preparation of teachers and support staff, competent to deal with the needs of exceptional children and youth in sufficient numbers to equip school systems' services, emerges as the primary challenge for training institutions. The need for immediate and continuing study by teacher training institutions into preparation programs which will be effective in equipping its graduates, as professionals, to cope with the challenge is critical. To the degree that those in positions of leadership, are able to adapt professional training styles consistent with changing needs will determine the success or failure of systems' attempts at meeting the needs of exceptional children. The need for empirical evidence to guide such evolution is contemporary.

Conclusion of Study

1. The move toward accountability in education is prompting school systems to consider and publicize common goals for quality student-centered learning (38). Performance objectives are being structured for students based upon their

interests, needs and capabilities. Analyses of existing programs and services are being made in an attempt to evaluate educational delivery systems against a profile of real student needs. Recommendations are being formulated on the basis of this feedback for the improvement of cognitive, affective and psycho-motor learning programs (Appendices G and K).

2. To enhance the potential of effecting an efficient delivery system, State Departments of Education are looking to administrative reorganization. The formation of regional school districts, in an attempt to generate an adequate pupil population to warrant the establishment of comprehensive programs and services is receiving much attention (53). Local school districts, in an attempt to offer quality educational programs for all children within their jurisdictions, are negotiating co-operative delivery services. In some cases performance contracting is providing communities with an alternative for unsuccessful past achievement.
3. The evaluation of instruction in many parts of our nation has taken on new importance. Within a common understanding of a mutually accepted philosophy of education, over-all goals for schools are being devised. Renewed emphasis on the dignity and worth of the individual is prompting the establishment of performance based evaluation of both students and instructors (49).



4. Recently, suits have been brought against public schools for inappropriately placing certain children in special classes for the educable mentally retarded and denying to others the right to a publicly supported education. Through the courts parents are challenging the administration and use of standardized tests, placement procedures, and the effectiveness and harmful impact of special class labeling. Special educators are urged to initiate immediate reform in testing and program placement criteria. The possibility of punitive damage suits may stimulate these changes. The litigation being levied against current rights, placement, testing, and programming procedures may be summarized as follows:
 - (a) Every child has the right to a publicly supported education and the criteria for placement do not accurately measure the educational potential of the public school child (54).
 - (b) The administration of tests is performed incompetently (55).
 - (c) The level of special education training is inadequate (56).
 - (d) The personal harm created by improper placement is irreparable (57).
5. The goal of the Michigan Department of Education is to resolve the issue of the diagnosis, placement and educational

programming for the "functionally mentally handicapped" in order that children receive educational programs and services designed to meet their needs. A "Special Task Force" has been appointed to study the problem and develop preliminary guidelines for school districts to follow regarding referral, diagnosis, placement and programming for the educable mentally handicapped (58). Alternative forms of special education program organization are being explored and the elimination of detrimental labeling of children and youth is receiving important attention.

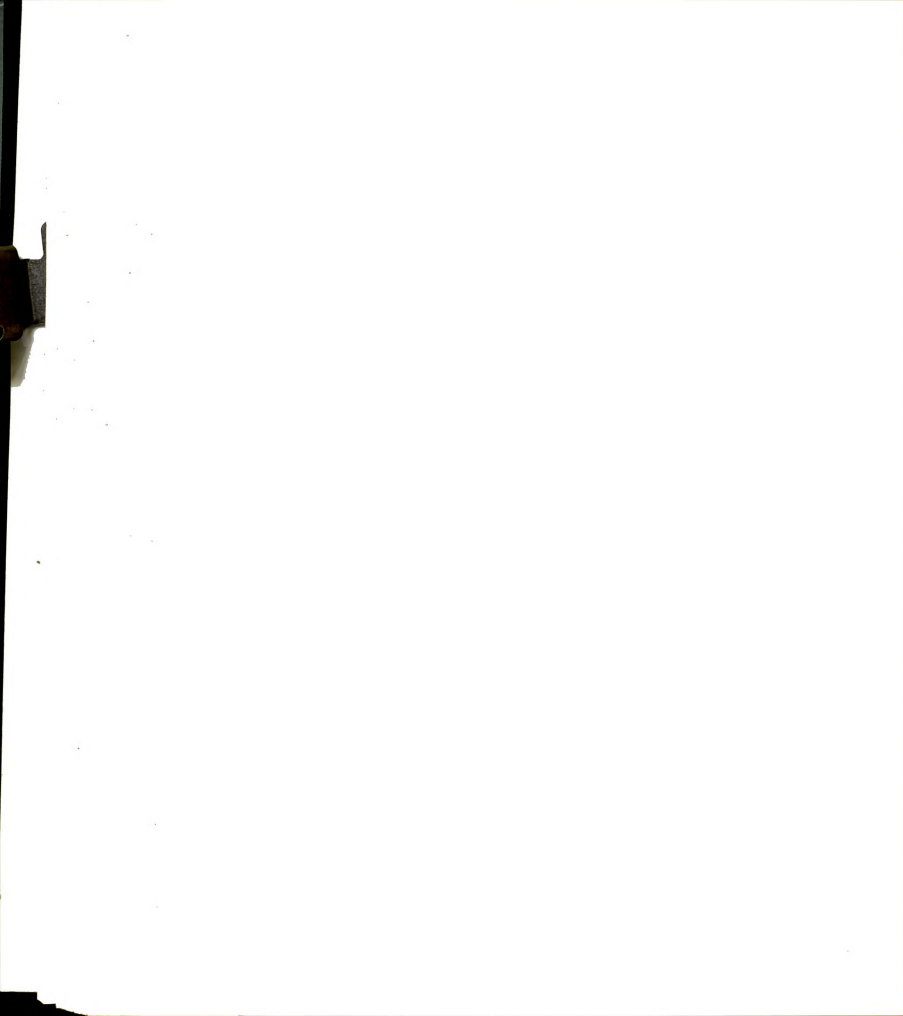
6. Michigan Public Act 198 (1971), Section 771(a), part 1 states that the board of a local school district may provide, and for the 1973-74 school year and thereafter shall provide, special education programs and services designed to develop the maximum potential of all handicapped persons in its district in accordance with an intermediate school district special education plan. At the State Department level such planning will take the form of a "State Plan for the Implementation of P.A. 198 of 1971." "Michigan Statutes Governing Special Education Programs and Services" will be amended to comply with P.A. 198, 1971 (36). Unfortunately, many school systems in other states have yet to embrace their responsibilities to all children.

7. The merits and de-merits of full state control of educational financing is receiving due consideration by many states in the Union and in Canada.
8. Contemporary priorities in education call for a re-evaluation of school systems' delivery of services for the well-being of prime-student clients. The need for systematic long range planning that will assure future equality of educational opportunity is obvious. Exceptional children are recipients of a comparable heritage of such opportunity and there is a desire amongst professional educators to meet the challenge (29).

The utilization of A Systems Approach to Educational Planning Applied to Special Education will facilitate the realization of the afore mentioned goals.

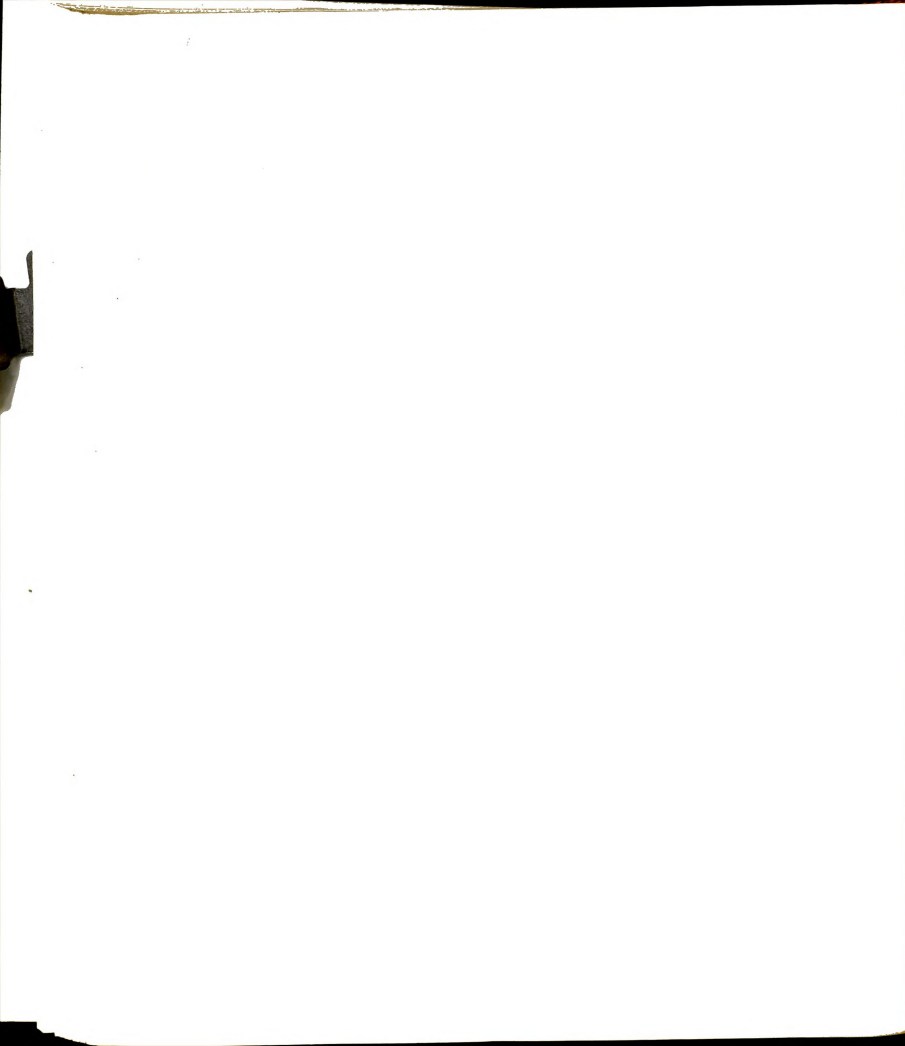
Continuing study, at this point in time, already begins to reveal future planning dimensions which Special Education is likely to take. As educators become increasingly more professional and are adequately trained to approach the instruction of all children based upon their individual needs, interests and capabilities; as inter-disciplinary diagnosis and assessment capabilities are marshalled on behalf of exceptional children, and as regular education becomes able, with specially trained resource assistance, to program for all children within the integrated setting, Special Education as such will cease to exist. Funding for

education is likely to be based upon reimbursement for personnel who will share the responsibilities for all good and appropriate instruction for all children. As such, categorical aid based upon disability classifications of children is likely to terminate in favor of full State funding for education. In this case, the special education program structure of this study will be enhanced in its relevancy. It is at this point in time that local, intermediate, and area school systems will demand a systematic planning format by which uniquely structured special education, meeting the needs of an exceptional student population, will qualify those systems for special reimbursement, yet within the arena of respected local integrity.



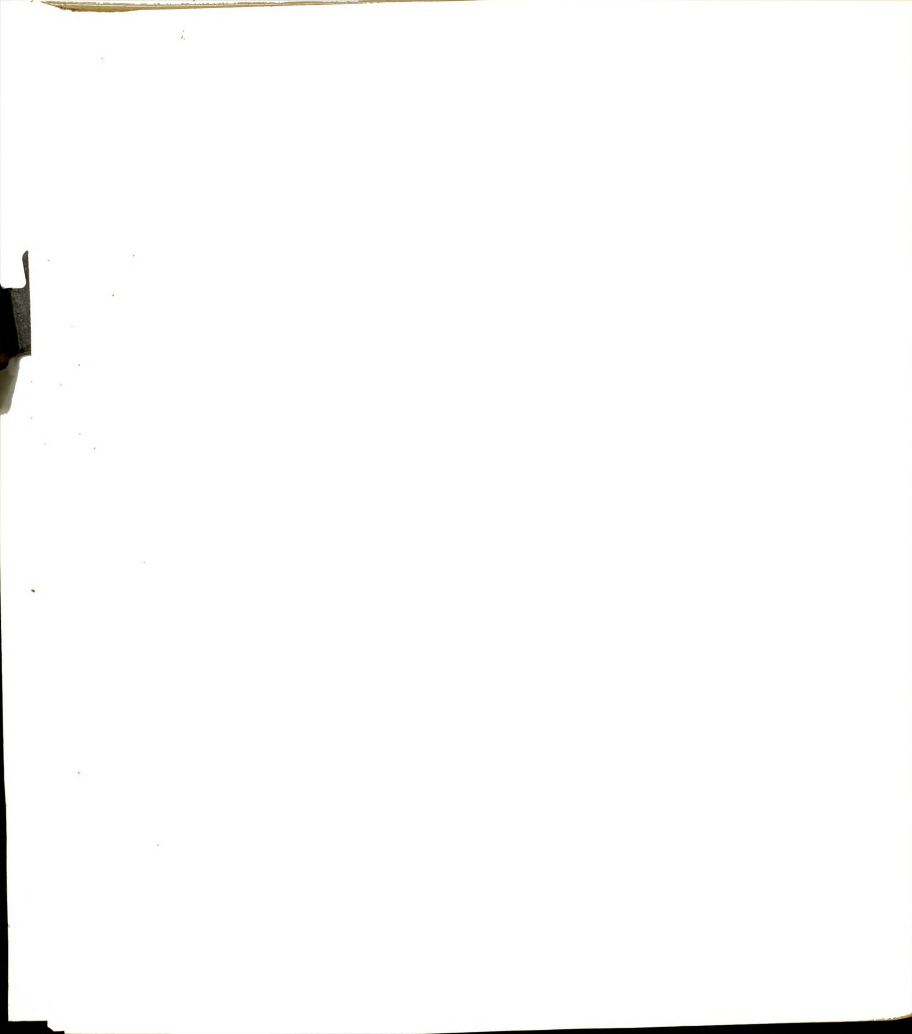
APPENDICES

INFORMATIONAL RESOURCES, DEFINITION OF
PROGRAM CATEGORIES AND ADDITIONAL
PLANNING AIDS



APPENDIX A

THE LANGUAGE OF SPECIAL EDUCATION



APPENDIX A

THE LANGUAGE OF SPECIAL EDUCATION

The increasing development of programs and services in special education and the emerging point of view in education which would have special education programs created outside of a restrictive, clinical and segregating approach, have created a need for a concise statement and definition of terms in special education as an aid to effective planning and communication. Taking into consideration State Department regulations in this regard, the following Program Categories are suggested:

<u>Planning Terms and Definitions</u>	<u>Includes these terms formerly used in Department of Education Regulations</u>
1. Emotionally and/or socially maladjusted	emotionally disturbed
2. Gifted	creative talented
3. Learning disabilities	educationally retarded perceptually handicapped neurologically impaired second language instruction ^a
4. Mentally handicapped	educable retarded trainable retarded slow learners
5. (a) Physically handicapped	orthopedically handicapped
(b) Visually handicapped	blind limited vision

^aAcquiring adequate skill in the language of instruction which differs from a pupil's first language, thus including Indian, ghetto, immigrant children, etc.

- | | |
|-------------------------|-------------------------|
| (c) Hearing handicapped | deaf
hard of hearing |
| (d) Speech problems | speech problems |

Each of these five broad areas can be defined as a program using a definition which has been accepted nationally and internationally to a great degree by educators.^b

1. Emotionally and/or Socially Maladjusted

refers to students who demonstrate one or more of the following:

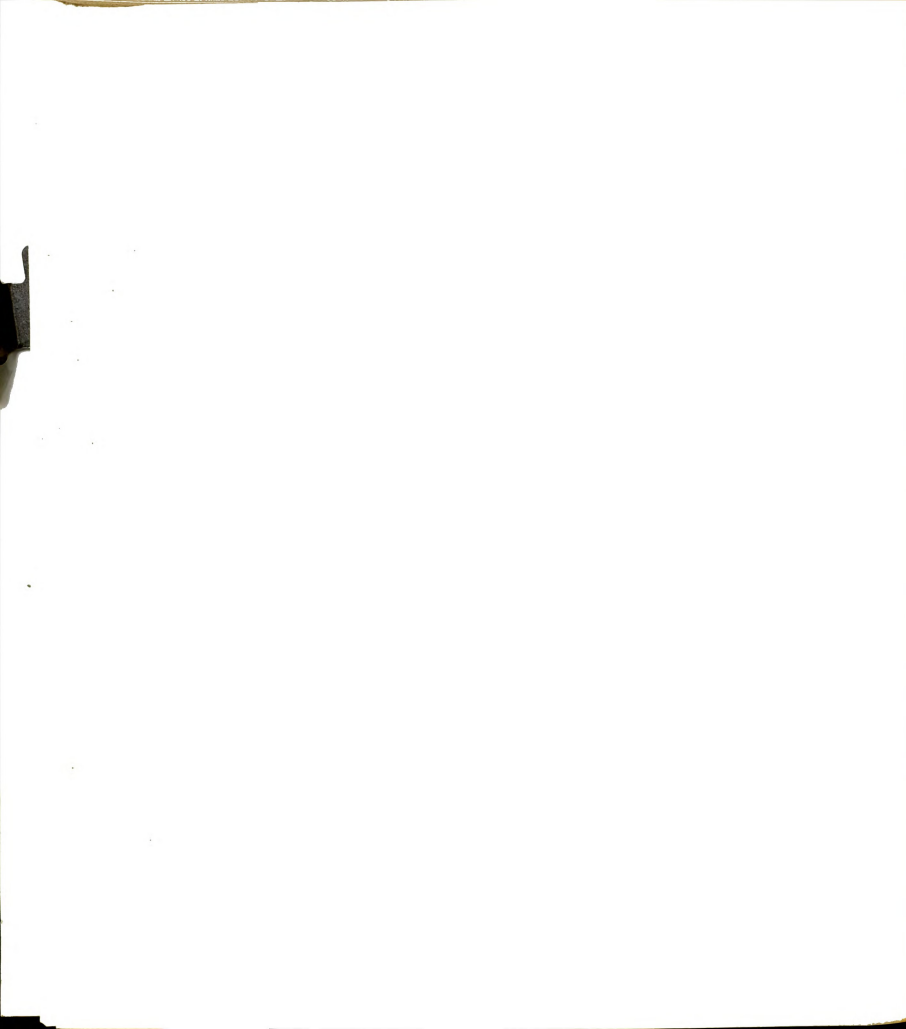
- (a) an inability to learn which cannot be explained by intellectual, sensory or health factors;
- (b) an inability to maintain satisfactory interpersonal relationships;
- (c) inappropriate behavior or feelings under normal conditions;
- (d) a general, pervasive mood of unhappiness or depression;
- (e) a tendency to develop physical symptoms, speech problems, pains or fears associated with personal or school problems.

This category includes the emotionally disturbed child who displays anxiety, neuroticism, or psychotic behavior, and the socially maladjusted child who displays truant, delinquent, or other socially unacceptable behavior. Perhaps the major problem in dealing with emotionally and/or socially disturbed pupils is that of identifying the underlying cause of their deviant behavior as a prerequisite to treatment.

Social maladjustment may manifest itself in a number of ways, i.e. linguistic, behavioral and/or cultural abnormalities. Compensatory education, mental health and/or behavior modification program elements might be required in varying degrees for students in these areas.

Provisions for children who are behavioral deviants involve the question of the school's responsibility for mental health of pupils, as well as the school's relationship to other social institutions--the home, the church, the courts, the welfare agencies, the penal institutions, etc. Programs for helping behavioral deviants range from special services for children in regular classes (e.g. psychologists and social workers) through special classes or schools to residential schools.

^bOntario Department of Education, Special Education Advisory Handbook, Toronto: 1971, with modifications incorporated.



A study of public school programs for emotionally and socially handicapped children indicated that the overall goal of such programs was to attain normal educational development leading to the pupils' return to regular classes.

2. Gifted

refers to students who have outstanding intellectual ability or creative talent and/or demonstrate consistently superior performance in any socially useful endeavor.

The term "gifted" is generally used in reference to the upper 1 to 3 per cent of the school population with the most common cut-off points in term of IQ at 130. There is mounting evidence, however, that superior performance cannot be explained on the basis of intellectual potential alone. Thus, attention recently has been directed to non-intellective characteristics--for example, attitudes, aspirations and values--in an attempt to better understand superior performance.

Thus, most gifted or talented students come under the following categories:

- (a) Of very high intelligence, interested in abstract ideas and principles, enjoy learning from books, and able to marshal thoughts and draw conclusions from what has been learned.
- (b) Of equally high intelligence but preferring to deal with the concrete solution of problems, enjoy making things manually, inventive, and able to construct desired apparatus.
- (c) Creative, above average intelligence with some special ability, especially in the arts other than painting.
- (d) Of high intelligence, coupled with social maturity and the ability to get on with others without sacrificing own ideas. (Unlike those in the above three categories, this group makes no attempt to over-organize their disciples, and, perhaps for this reason, tend to be elected as leaders whose authority is respected without any sense of threat by their (probably discretely concealed) exceptional aptitudes.

3. Learning Disabilities

refers to students who have a disorder in one or more of the basic psychological processes involved in understanding or using language which shows itself as an imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations. The disorders include such conditions as perceptual handicaps, dyslexia and developmental aphasia.

Each of these learning disabilities requires special instructional treatment. Students with severe problems need the sheltered environment of a special class. Students with mild

problems can be maintained in regular classes if the teacher receives consultative help. Students with moderate learning disabilities often benefit from a regular, frequent supplemental program in addition to the regular class situation.

4. Mentally Handicapped Children

refers to students who demonstrate impaired or incomplete mental development. The intellectual functioning is described developmentally as being sufficiently below average so as to result in impairment in learning, maturation and/or social adjustment. The impairment may range from mild to severe.

The slow learner generally can function reasonably well in a regular classroom although typically he will progress at a slower pace than the average child. Educable mentally handicapped students may be unable to function satisfactorily in a regular classroom without special help but do have the potential for acceptable adjustment in academic, social and occupational areas when given special educational attention. Trainable mentally handicapped pupils have potential to learn self-care skills in certain routine life activities (e.g., eating, dressing, toileting, etc.); to adjust to home or neighborhood (but not to a total community); and to develop limited economic usefulness in simple and closely supervised work activity. Totally dependent retarded children, as the term suggests, are unable to survive without close supervision and assistance in the most routine life activities.

5. Physically Handicapped Children

- (a) refers to students who are restricted in their physical activity because of neurological, musculoskeletal or other organic defects.

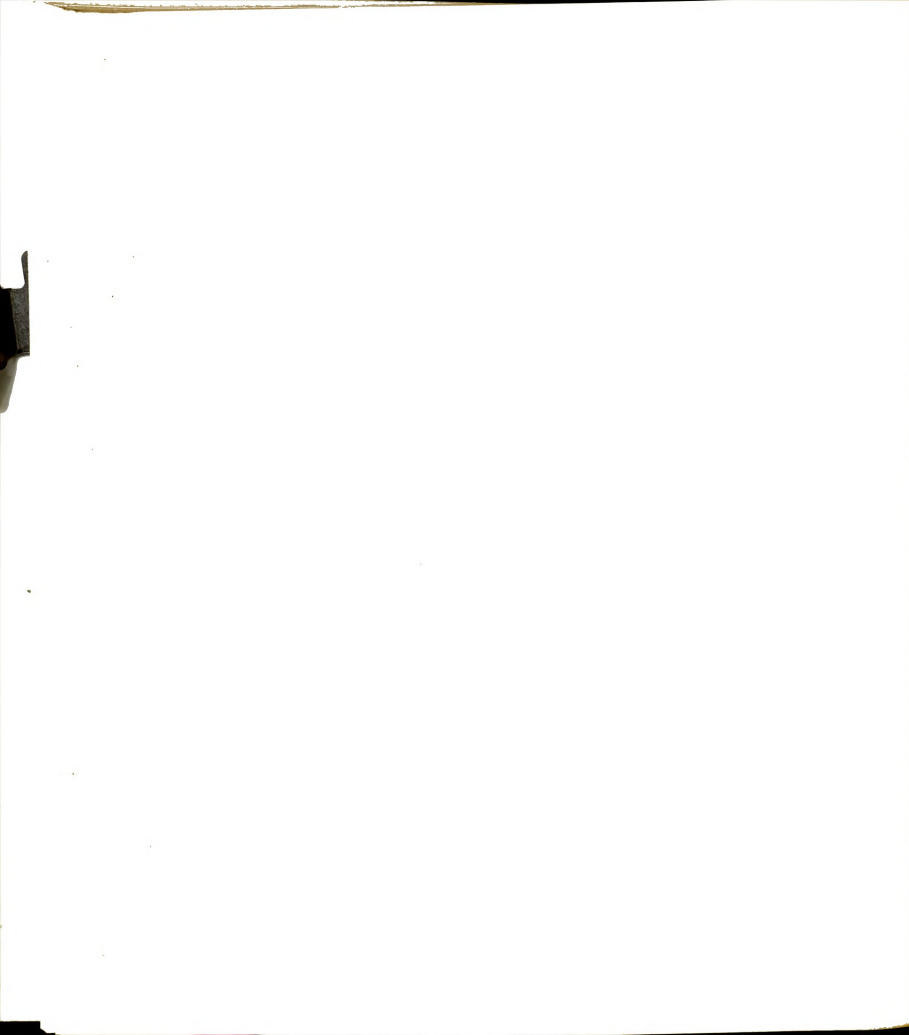
Visually Handicapped Children

- (b) refers to partially sighted and/or blind students whose eyesight after correction or treatment is so impaired that they require special facilities and assistance to progress satisfactorily in school.

Hearing Handicapped Children

- (c) refers to students

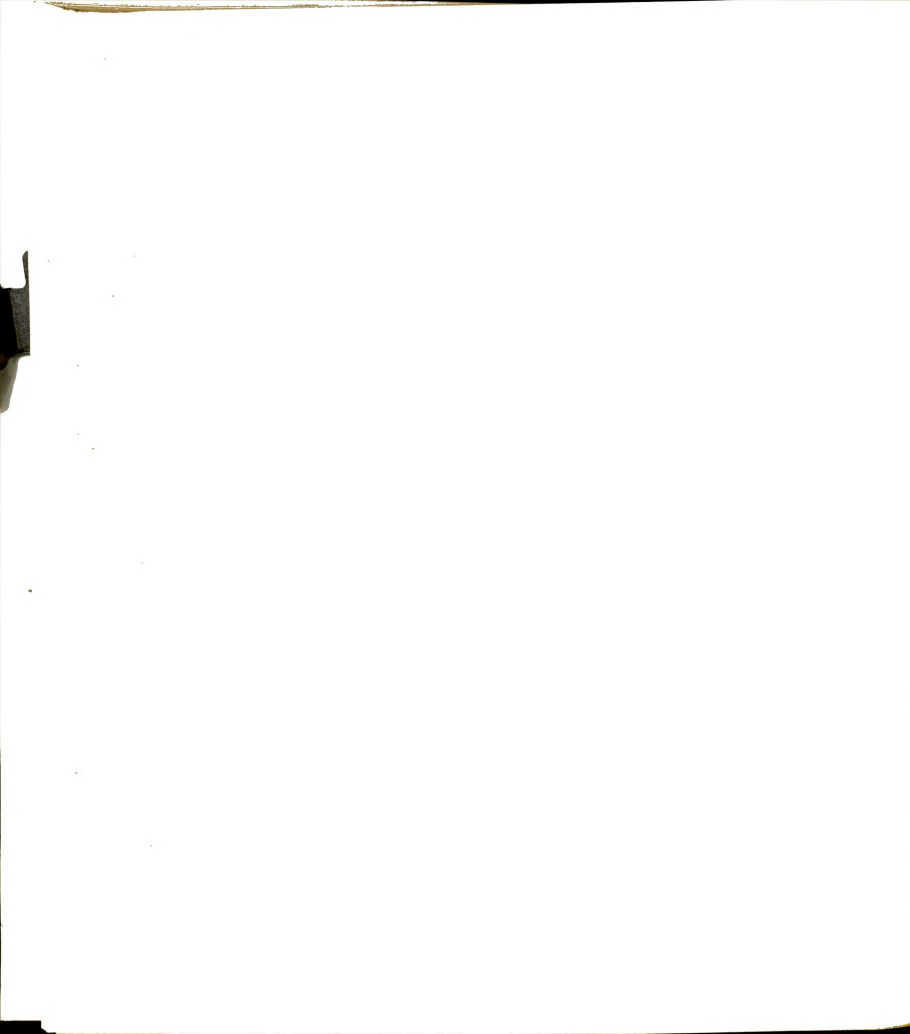
- (i) who are hard of hearing and have a hearing loss of a degree which holds back the development of clear speech and language, but which is not so severe as to prevent the development of speech and language, with or without amplification;



- (ii) who are deaf and have a hearing loss in the better ear to such a degree that they cannot understand and acquire speech and language through the sense of hearing, even with sound amplification.

Speech Problems

- (d) refers to students whose speech is so different from the speech of others that it calls attention to itself, interferes with communication or causes emotional and/or social maladjustment arising from problems of articulation, rhythm, voice tone or language usage.



APPENDIX B

ALTERNATIVE PLANNING TERMS AND DEFINITIONS

APPENDIX B

ALTERNATIVE PLANNING TERMS AND DEFINITIONS^a

Increasing professionalism in Education has tended toward the abandonment of labeling children according to traditional medically oriented classifications. As an alternative to the five previously designated areas of exceptionality, the following program terms and definitions may be used for purposes of a system's organization of programs and services in special education, dependent upon restrictions imposed by State Acts and regulations.

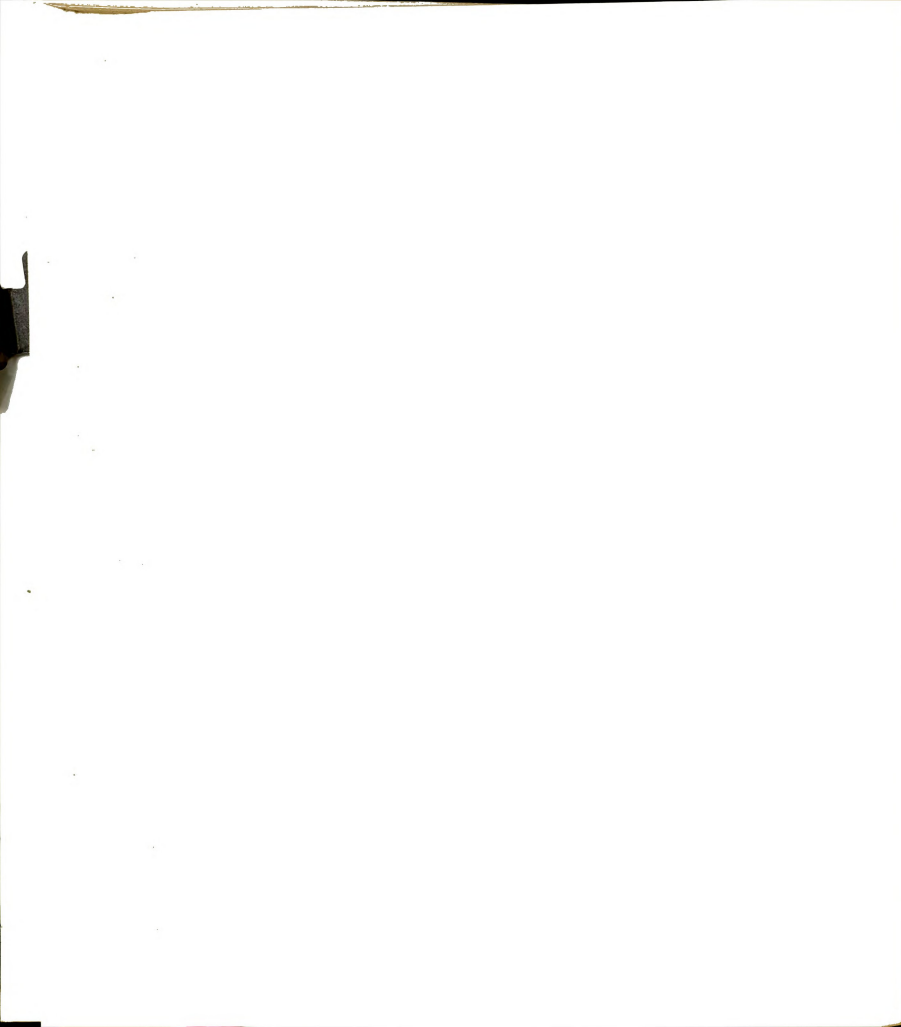
The Council for Exceptional Children, in its 1966 report on Professional Standards, defined exceptional children as "... those children who have physical, intellectual, communicative, social, or emotional deviations to such a degree that curriculum modifications and/or special services must be provided for them in schools. The Council for Exceptional Children made the following policy statement regarding the objectives of special education:

The purposes of special education are no different from those of regular education in a democratic society. The focus is on the individual and his optimal development as a skilled, free, and purposeful person able to manage himself in an open society. When life in open society is not feasible and special residential placements are required, the aim is still one of maximum development and freedom of the individual. The school programs play a crucially important role in the end.^b

Utilizing the above definition for children requiring special education, the "Program Elements" columns of forms A to C would be altered to correspond with these educational categories.

^aOntario Department of Education, Special Education Advisory Handbook, Toronto, 1971.

^bLeo Connor, "The Proposed CEC Policy Statement on Government Affairs," Exceptional Children, XXXVI, No. 7 (March, 1970).

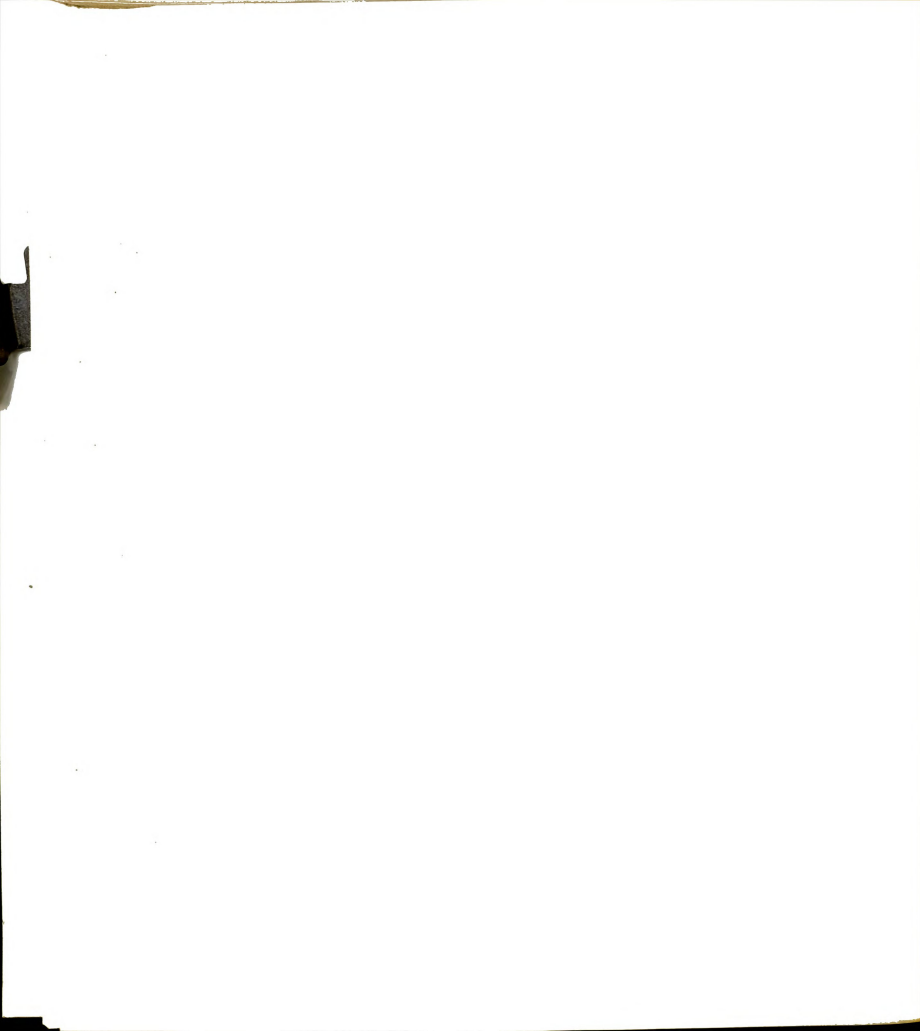


The following suggestive re-classification of children requiring programs and services in Special Education could result:

1. Communicative Disorders
To include children with speech, hearing, linguistic or perceptual limitations.
2. Emotional Deviations
To include children diagnosed as being emotionally disturbed, or presenting extreme behavioral problems.
3. Intellectual Deviations
To include children assessed as being gifted, slow learners, or educable and trainable mentally handicapped.
4. Physical Impairment
To include those children being orthopedically handicapped or visually impaired.
5. Social Maladjustment
To include those children assessed as being socially disadvantaged or requiring compensatory education.

Other Suggested Areas of Programming

1. Behavioral Handicaps, including:
 - emotional disturbance
 - pregnant unmarried students
 - social maladjustment
2. Communicative Handicaps, including:
 - hearing impairment
 - learning disabilities (perceptual handicaps, neurological impairment, etc.)
 - learning of the language of instruction (English as a Second Language, etc.)
 - speech correction
3. Intellectual Exceptionalities, including:
 - gifted or talented
 - mildly to moderately mentally handicapped (educable mentally retarded, slow learners)
 - severely mentally handicapped (trainable mentally retarded)
4. Physical Handicaps, including:
 - limited vision
 - orthopedic and physical handicaps



Alternative Forms for Administrative Program Organization^a

The range or continuum of programs and services into which exceptional children may be placed consists of the following alternatives. An evaluation of each alternative is included.

Type	Advantages	Possible but not inevitable disadvantages
Special school	1 Total program geared to needs of specific group(s).	1 Few opportunities to mingle with peer groups in general population (segregation and isolation).
	2 Centralized professional skills and specialized equipment.	2 Stigma often attached to facilities for atypical students.
	3 Research possibilities.	
	4 Planned architectural modifications and provisions.	
	5 Specialized non-academic curricular areas.	
	6 Possible community center for continued training and guidance.	
	7 Residential or non-residential.	
Self-contained Special Classes	1 Curriculum geared to specific group.	1 Few students can be served by skilled personnel and special equipment.
	2 Special equipment and classroom modifications.	2 Disadvantages of a special school continue to be possible.
	3 Research possibilities.	
	4 Relatively homogeneous groupings for instruction.	

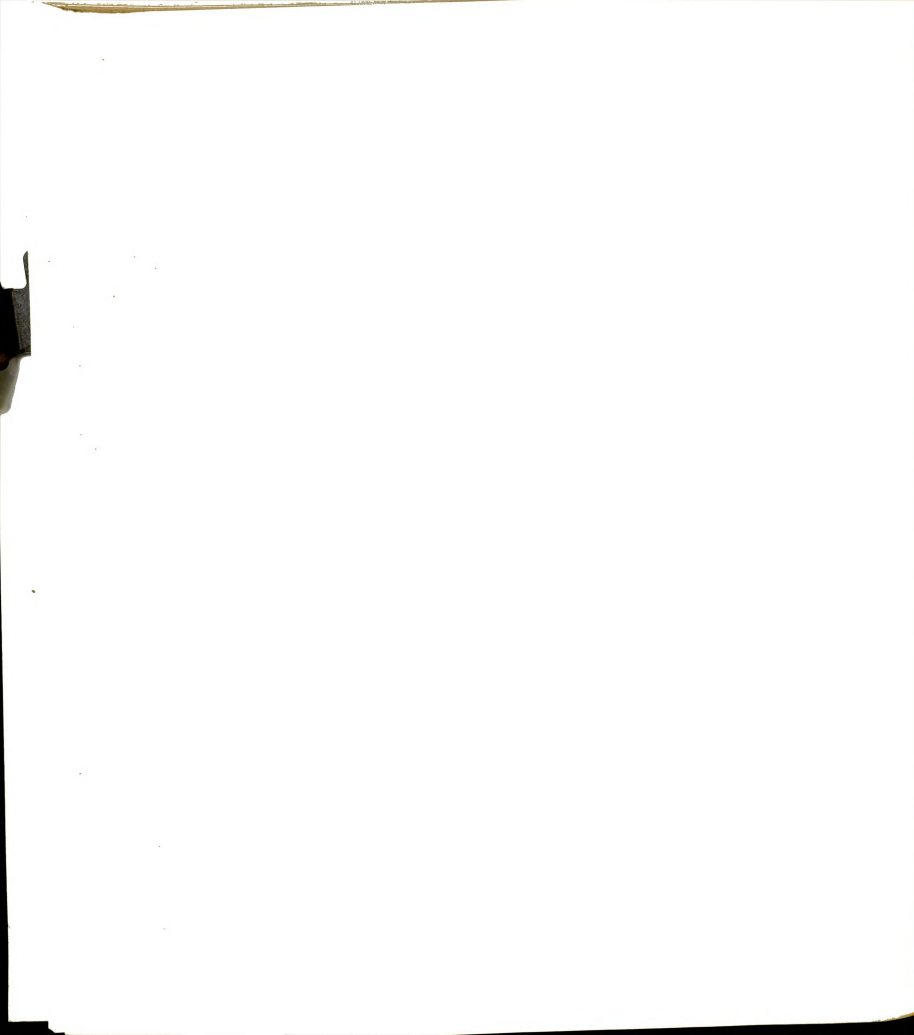
^aOntario Department of Education, Special Education Advisory Handbook, Toronto, 1970, pp. 15-30.



Possible but not inevitable misuses	Comments
<p>1 Substandard educational programs due to negative expectations and the predominance of medical treatment procedures.</p>	<p>May be necessary for more severely or multihandicapped students.</p>
<p>2 Excessive sheltering which inhibits habilitation.</p>	
<p>3 Lack of specific provisions for interaction with chronological peer groups in general population.</p>	
<p>1 A dead-end for problem children.</p>	<p>1 May be necessary for some students.</p>
<p>2 Heterogeneous groups too wide for teacher's skills.</p>	<p>2 Use a developmental curriculum specifically for needs of students--not remedial adaptation of regular programs.</p>
<p>3 All the deficits of a special school.</p>	

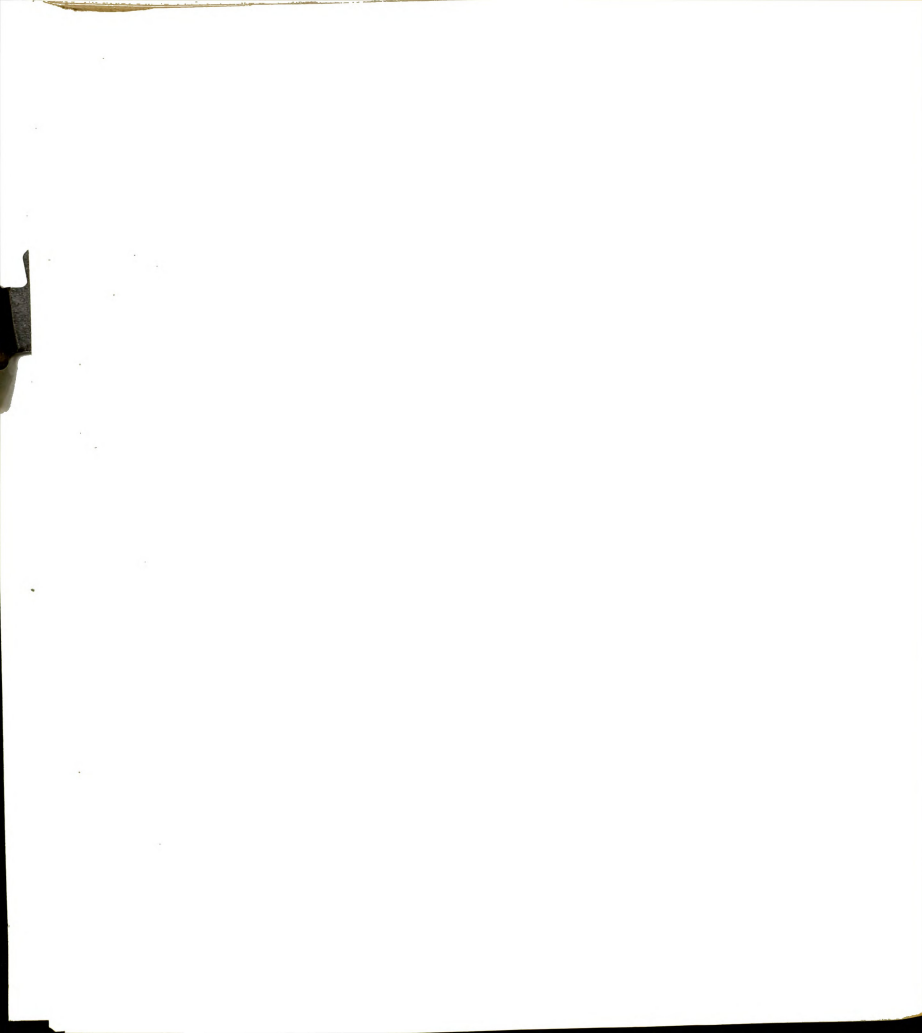


Type	Advantages	Possible Disadvantages
Modified Special Class (Partially integrated with regular programs for chronological peer groups.)	1 Planned interaction with peer groups.	1 Relatively few children or youths served by skilled personnel and special equipment.
	2 Decreased segregation.	2 Inappropriate planning may increase stigma and resentment.
	3 Curriculum and scheduling geared to individual strengths and weaknesses.	3 Unwillingness of some teachers to accept atypical students--even on a part-time basis-- and destructive psycho- logical isolation or segregation.
	4 Often better self-concept development than in segregated settings.	
	5 Teachers frequently give higher ratings of school adjustment than in other settings.	
	6 More realistic vocational aspirations and more after-school jobs are commonly found than in other settings.	
	7 May be adapted to open- concept, ungraded situations.	

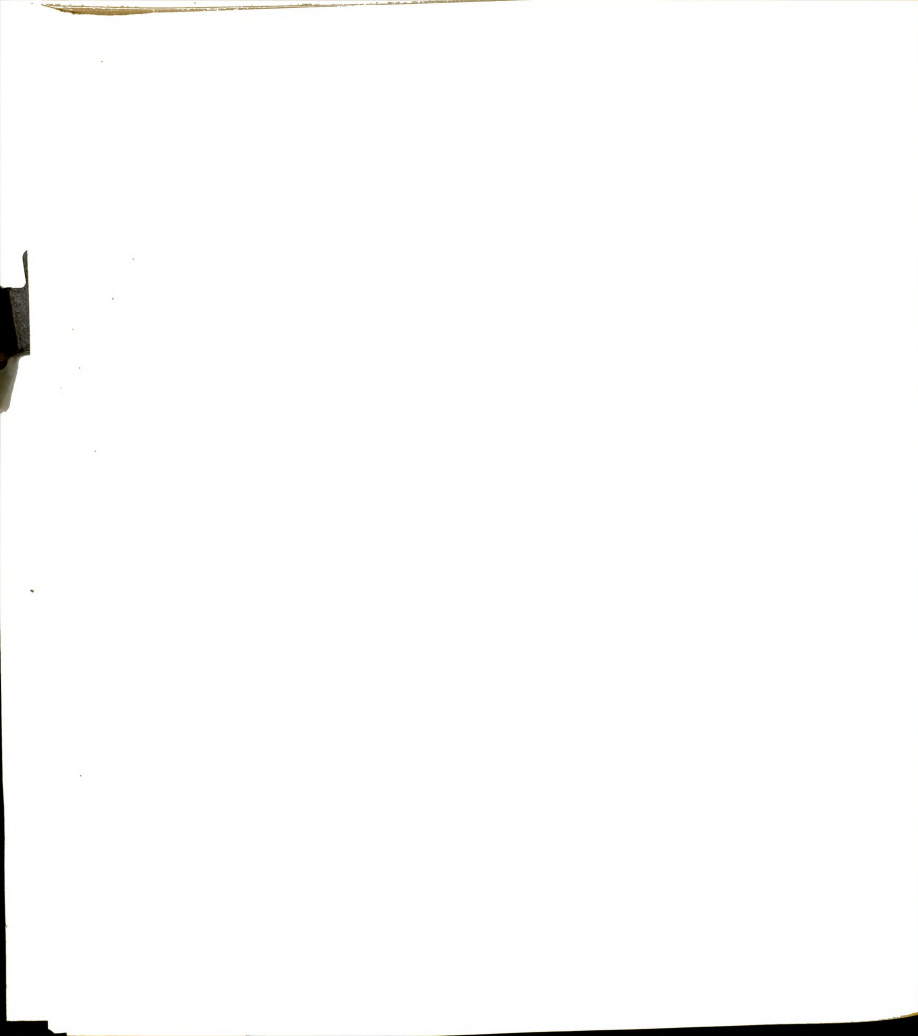


Possible but not inevitable misuses	Comments
1 Inappropriate goals or programs (unwise choice of teachers, age-group, and/or activity for integrated portions of program).	1 A step in educating an entire staff to accept handicapped children and youth.
2 Use of integrated activities to replace rather than to supplement the special education programs.	2 May be necessary for some students on a long-time basis.
	3 Supply concurrent in-service opportunities to discuss concrete problems as they arise.

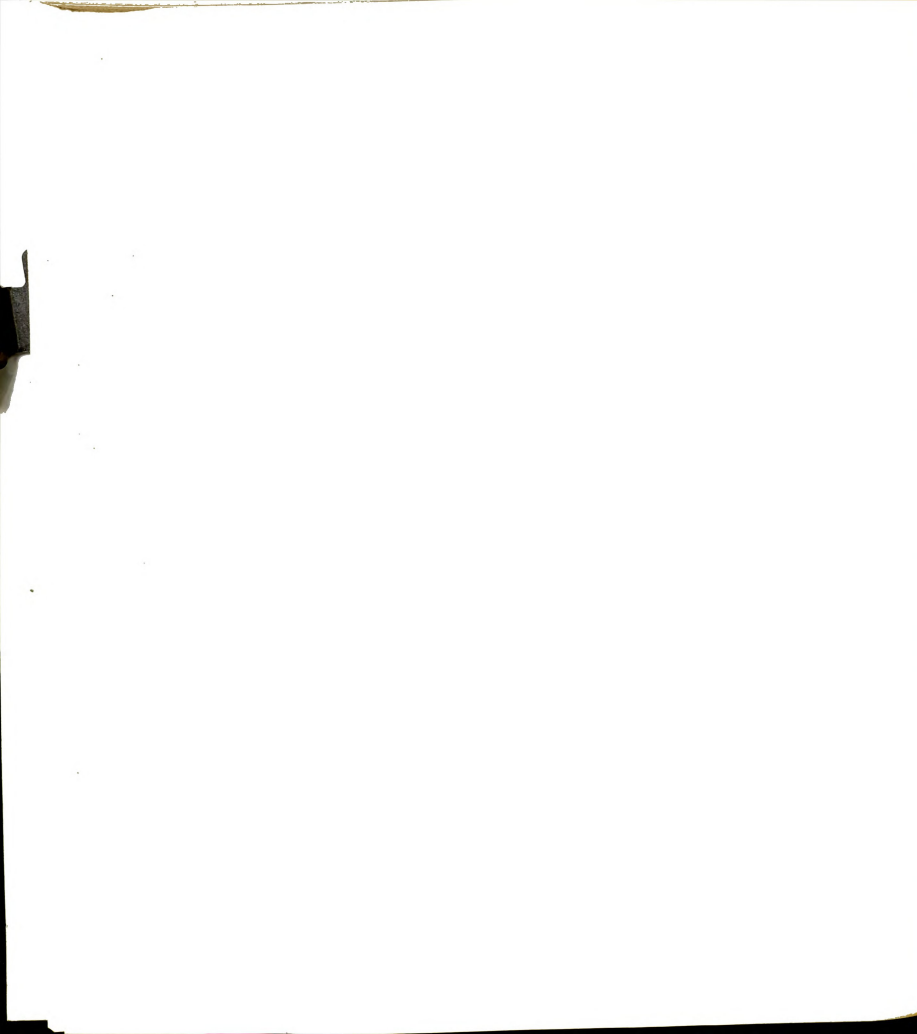
Type	Advantages	Possible disadvantages
Modified Regular Class (Plus support of itinerant special resource teacher, supervisors, consultants, etc.)	1 Frequent association with peer chronological groups.	1 Unwillingness of some teachers to accept atypical students and to work as member of a multidisciplinary team for planning individualized programs.
	2 Skilled, highly trained personnel may serve many more students.	2 Stigma and rejection may be active in absence of appropriate teacher attitudes and preparation.
	3 May be adapted to open-concept, ungraded situations.	3 Provision of time for in-service education.
	4 Facilitated by recent trends toward flexible scheduling, continuous progress, auto-instructional materials, etc.	4 Obtaining adequate personnel and facilities for smaller regular classes and for supportive services.
	5 Every teacher involved in education of all students including those who are handicapped; in-service education benefits all students eventually.	
	6 Higher academic achievement common.	
	7 Behavioral patterns may be set by average in chronological peer groups.	
	8 Less need to label children.	



Possible but not inevitable misuses	Comments
1 Over-dependence of teachers upon ancillary personnel.	1 Adequate preparation, in-service teacher education and sup- portive supervision are necessary.
2 Lack of continuous, overall planning and adequate communications.	2 Each student must be able to cope with the regular class situation.
3 Excessive departmentalization.	3 Present skilled special class teachers need some retraining for new role as consultative master-teachers, teacher- diagnosticians, etc.
4 Failure to schedule adequate time for team planning.	
5 Temptation to use supportive personnel as substitute teachers, etc.	
6 Overburdening of regular class teachers, etc.	



Type	Advantages	Disadvantages
Regular Class	1 Administrative ease and (false) economy if not the final stage or goal of rehabilitation programs, classes and services.	1 Without assistance, exceptional children and youths usually are rejected and psychologically isolated as undesirable by both teachers and fellow pupils.
	2 The goal of all special education programs and services.	2 Programs meet the needs of the majority and ignore or actively condemn the educationally handicapped.
Home Instruction	1 A basic education for severely handicapped students who cannot attend school for physical or behavioral reasons.	1 Few opportunities for association with chronological peer groups.
	2 Assists students in maintaining academic status during prolonged absence due to illness, accident, or personal crisis.	2 Segregation; isolation.
	3 A supplement to part-time school attendance during treatment or during program of gradual instruction to full-time attendance.	3 Skilled teacher may serve very few students.



Possible but not inevitable misusesComments

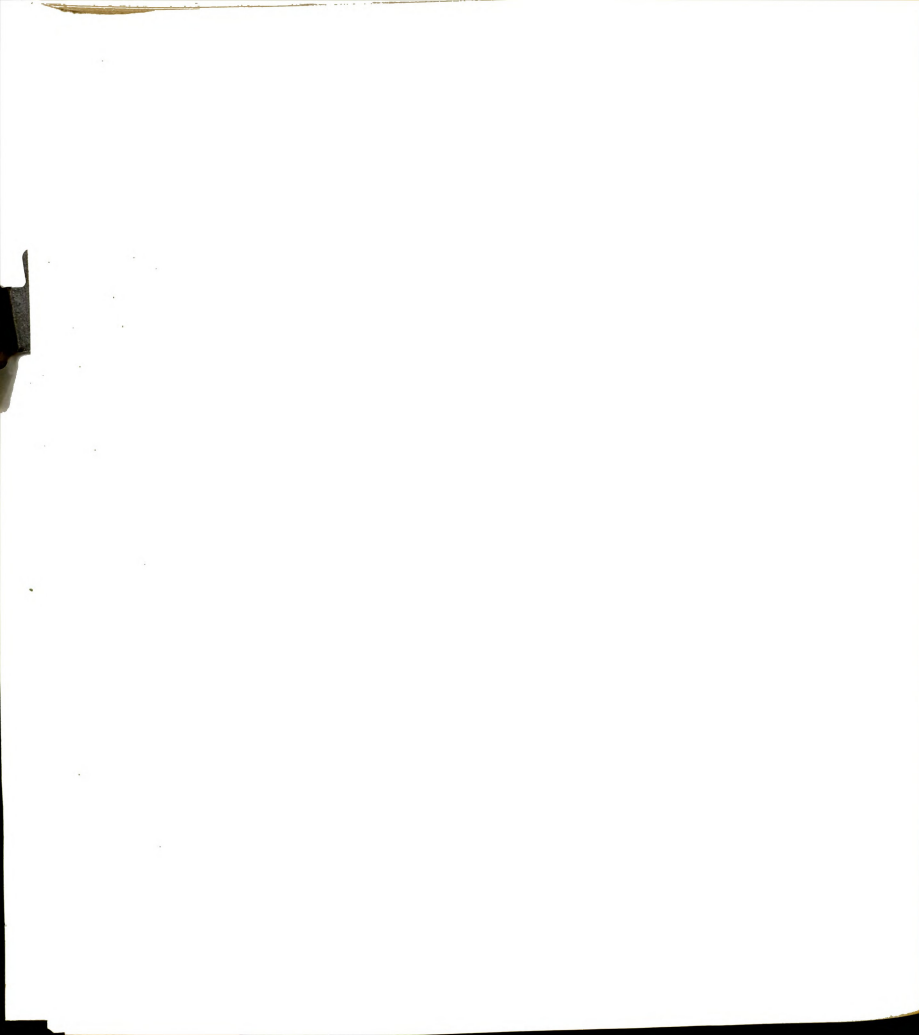
Failure to recognize and to meet the needs of atypical children.

A retrogressive approach, unless it is achieved through a special program, class, or service, which is no longer necessary.

To avoid exclusion of problem students--solving a classroom problem without actually ameliorating the child's problem.

1
A necessary, expensive program to be used only when actually necessary.

2
May be supplemented by home-to-school telephone systems, teleclasses, special frequency radio, and education television.



APPENDIX C

ASSESSING NEEDS FOR SPECIAL EDUCATION PROGRAMMING



APPENDIX C

ASSESSING NEEDS FOR SPECIAL EDUCATION PROGRAMMING

Within the constraints--legal and philosophical--which surround the planning process, an effort of the planning activity is to develop a strategy for the assessment of program needs for providing comprehensive special education services.

Total needs assessment for special education program planning include:

Educational needs--demographic data needs to be secured for the population in terms of numbers of children and youth to be served. The detailed planning approach developed in this publication uses incidence data to establish a benchmark for modification after actual appraisal procedures for the system yields data characteristic of the system. The use of incidence data, as stressed in this study, is a technique not a blueprint. Pilot systems contributing to this planning exercise have found the probable definition of need by incidence to be a useful facet of the planning design.

Additional demographic data which need to be secured and analyzed include:

- .. A breakdown of the number of children to be served according to instructional level for pre-kindergarten, kindergarten, elementary (grades 1 through 8, inclusive), and secondary (grades 9 through 12).
- .. A description of the socio-cultural characteristics of the population to be served, noting any special characteristics which might require program modifications such as ethnic distribution, socio-economic status, etc.



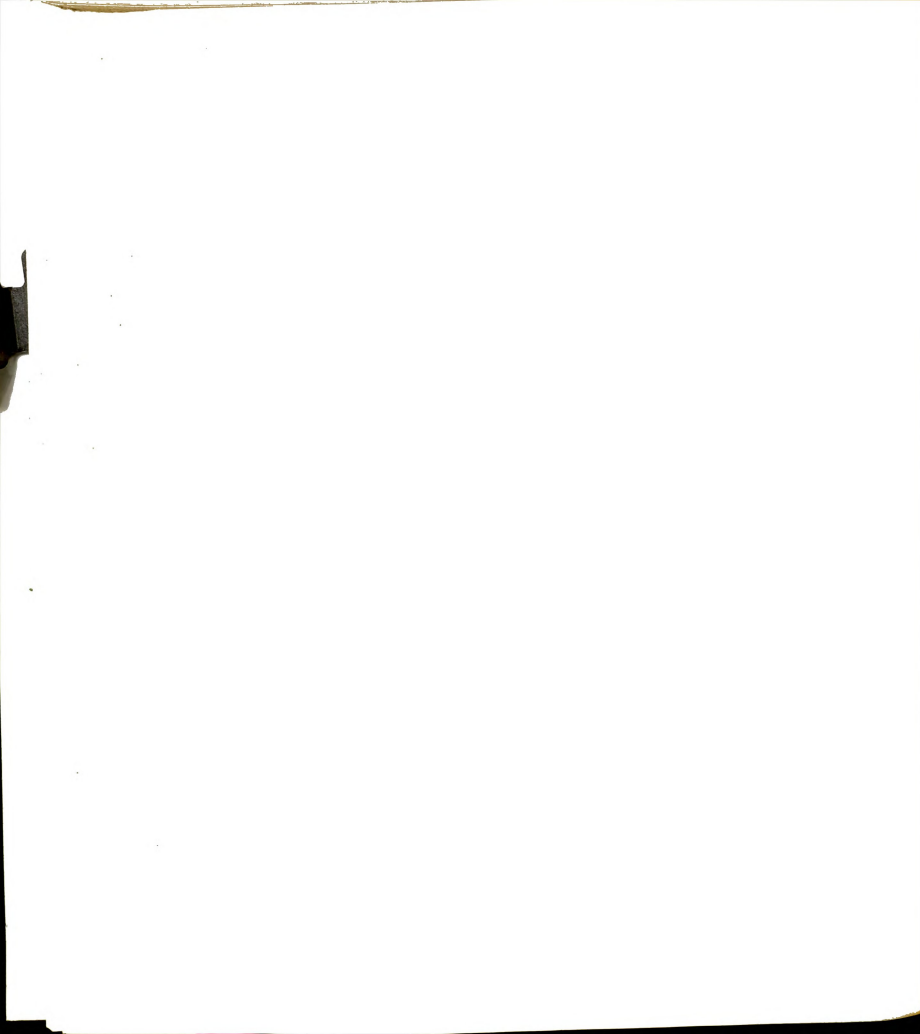
- .. An indication of the numbers of exceptional children to participate in the special education program according to handicapping condition. The total number of children to be served should be an unduplicated count, i.e. not accounted for in another program.

Personnel needs--Considering the numbers of children to be served, the personnel needs for a comprehensive special education program in the local school division should be determined for administrative, supportive professional, instructional, and paraprofessional staff.



APPENDIX D

TABLES OF INCIDENCE



APPENDIX D

TABLES OF INCIDENCE

The following tables of incidence are provided in addition to the data included on Forms B1 and B2 as an indication of the variability that exists from area to area and amongst studies. For the purpose of compiling revised incidence ratios and revised pupil-staff ratios on Forms C1 and C2, this appendix may serve as a useful source of information. Insomuch as an attempt has been made to move away from special class organizations except for the severely handicapped, these ratios ought not to be interpreted as an advocacy of segregated special class models.



TABLE D.1.--Estimates of the Prevalence of Various Types of Exceptionality in the United States.*

Category of Exceptionality	Estimates of Prevalence (%)								
	a	b	c	d	e	f	g	h	Av.
Gifted	2.0	2.0	N.E.	N.E.	N.E.	N.E.	2.70	2.00	2.18
Educable Mentally Retarded	2.0	2.3	2.3	2.0 - 4.0	1.30	1.28	1.10	1.30	1.82
Trainable Mentally Retarded				0.2 - 0.3	0.187	.18	0.24	0.24	.219
Auditorily Handicapped	1.5	0.075	0.575	0.5 - 2.0	0.10	.08	0.10	0.10	.441
Visually Handicapped	0.2	0.093	0.1	0.05- 0.25	0.05	.03	0.05	0.05	.09
Speech Handicapped	2.0	3.5	3.5	3.5 - 7.8	1.98	2.40	3.60	3.60	3.27
Physically Handicapped	1.5	1.0	0.5	0.1 - 1.0	0.028	0.028	0.21	0.21	.51
Neurological and Special Learning Disorders	N.E.	N.E.	1.0	0.3 - 2.0	0.50	0.026	1.12	1.12	.811
Emotionally Disturbed	2.0	2.0	2.0	1.0 - 2.2		0.05	0.58	2.00	1.46
Multiple Handicapped	N.E.	N.E.	N.E.	N.E.	0.07	0.029	0.029	0.07	.049
Total	11.2	10.968	9.975	7.65-19.55	4.215	4.103	9.729	10.69	9.3

Note: N.E. = No estimate.

- a = Estimates by Romaine P. Mackie and Lloyd M. Dunn, COLLEGE AND UNIVERSITY PROGRAMS FOR THE PREPARATION OF TEACHERS OF EXCEPTIONAL CHILDREN, USOE Bulletin No. 13, Washington, D.C., GOP, 1954.
- b = Estimates by Romaine P. Mackie, Harold M. Williams and Patricia P. Hunter, STATISTICS OF SPECIAL EDUCATION FOR EXCEPTIONAL CHILDREN AND YOUTH, 1957-58, USOE Bulletin OE-35048-58, Washington, D.C., GOP, 1963.
- c = Estimates prepared for Bureau of Education for the Handicapped, U.S. Office of Education, "Estimates of Current Manpower Needs in Education for the Handicapped, 1968-69," Washington, D.C., December, 1968. (Mimeographed.)
- d = Estimates provided by eleven states to Operations Research in conjunction with "State Survey and Information Flow Analysis" Project for Bureau of Education for the Handicapped, U.S. Office of Education (Letter from Carl M. Koch, Principal Staff, Operations Research, Inc., 1970).
- e = Estimates developed from information contained in "Statewide Summary of Annual Reports on Handicapped Minors Not Participating in Special Education Programs," California State Department of Education, 1968. (Mimeographed.)
- f = Estimates developed from information contained in "1969-70 Summary of Special Education Services of Bureau for Special Education," Division for Handicapped Children, Wisconsin Department of Public Instruction, 1970. (Mimeographed.)
- g = Estimates based on data regarding pupils enrolled and pupils eligible but not being served in the school districts which comprised the sample in this study.
- h = Estimates used as a basis for population and cost projections in this study.
- av. = Estimates based on a calculated average of incidences "a" to "h."

*Rossmiller, Hale, Frohreich, Resource Configurations and Costs, National Educational Finance Project--Special Study No. 2, Madison, Wisc.: 1970, p. 121.

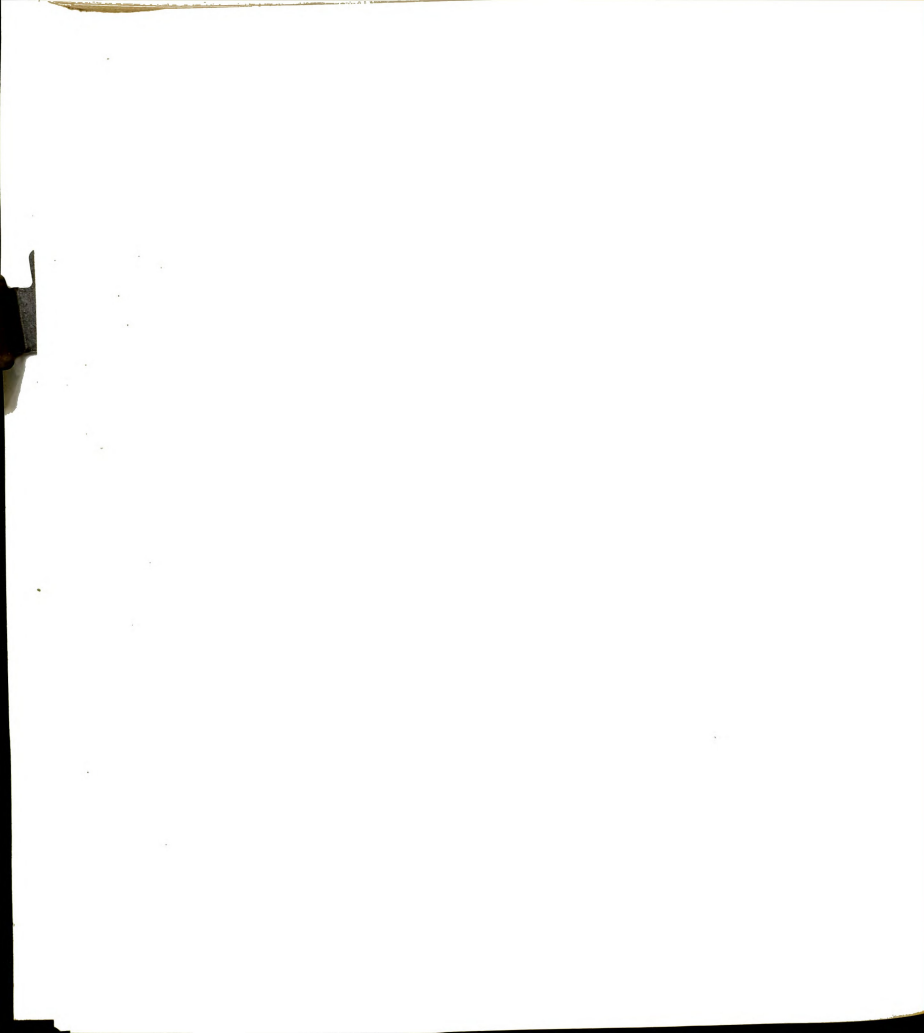


TABLE D.2.--Michigan State Department of Education^a--A guide to maximum amount of special education programs and services which [might] be [structured] within any given organizational area.^b

BASIC CLASSROOM PROGRAMS		
	Alternative #1 Present	Alternative #2
Mentally Handicapped		
Educable M.H.	1 per 15 identified E.M.H.	1 per 1,000 school pop.
Trainable M.H.	1 per 15 identified T.M.H.	1 per 5,000 school pop.
Severely M.H.	1 per 6 identified S.M.H.	1 per 1,500 school pop.
Physically Handicapped		
Hearing Impaired	1 per 8 identified H.I.	1 per 5,000 school pop.
Visually Handicapped	1 per 8 identified V.H.	1 per 2,000 school pop.
Crippled and Other- wise Physically Handicapped	1 per 15 identified C.O.P.H.	1 per 3,000 school pop.
Emotionally Disturbed		

^aSpecial Education Services, Tentative State Plan for the Implementation of P.A. 198 of 1971, pp. 29-30.

^bAny district or combination of districts may employ additional professional personnel for approved programs beyond the number authorized, upon demonstration of need to the Superintendent of Public Instruction.

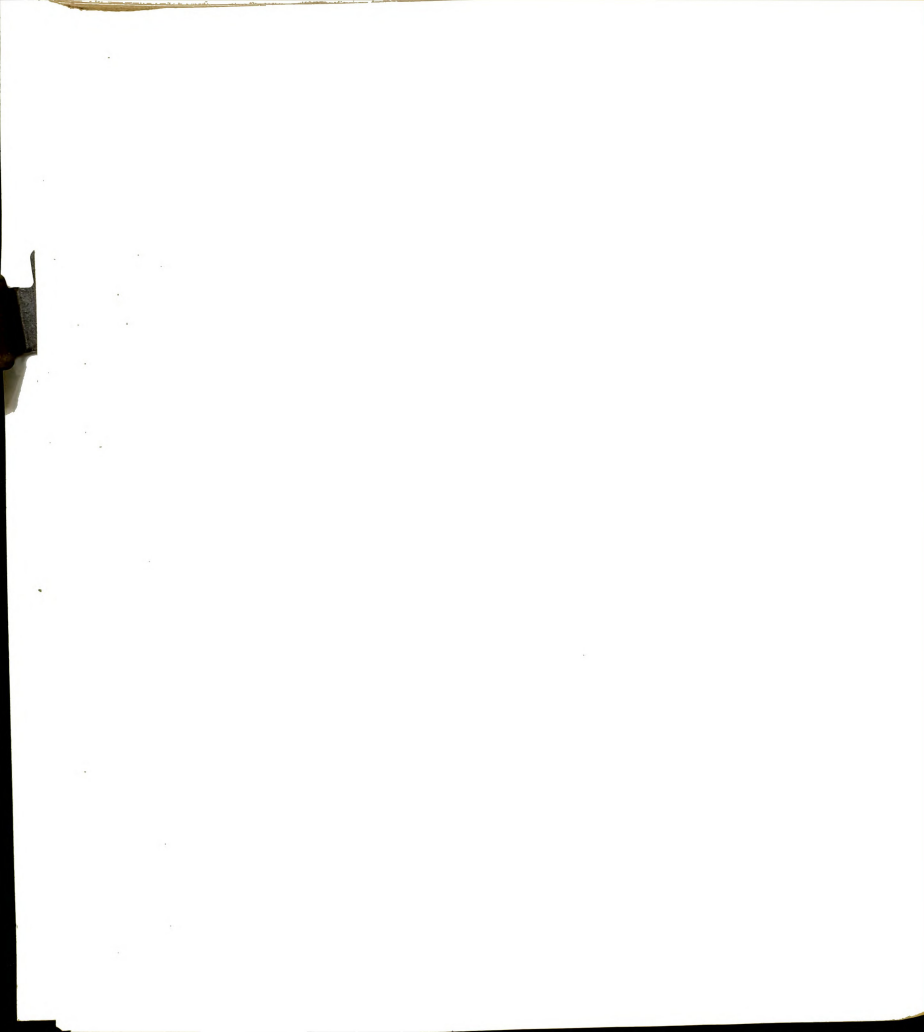


TABLE D.2.--Continued.

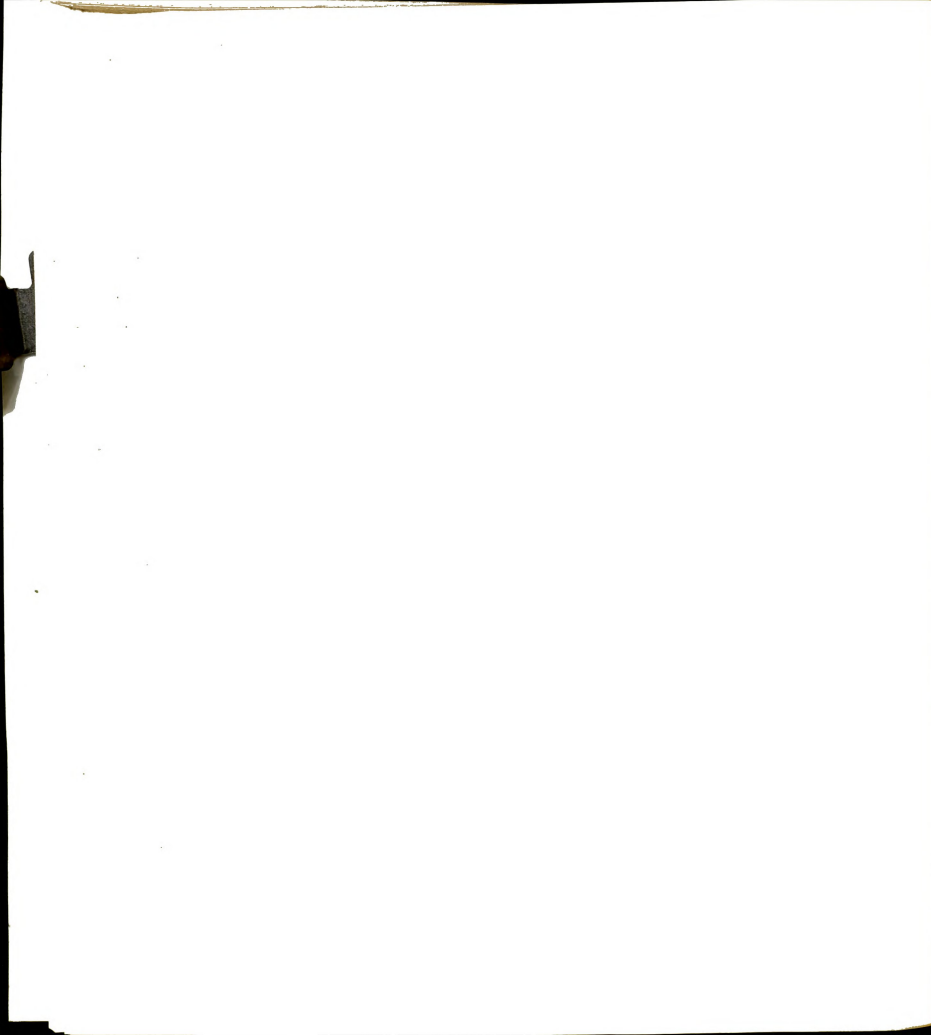
SUPPORTIVE SERVICES		
	Alternative #1 Present	Alternative #2
Teacher Counselor for:		
Mentally Handicapped	1/2,500 or 1/30 identified	1/1,500 school pop.
Hearing Impaired	1/2,500 or 1/20 identified	
Visually Handicapped	1/2,500 or 1/20 identified	
Crippled and Other- wise Physically Handicapped	1/2,500 or 1/20 identified	
Emotionally Disturbed	1/1,500 or 1/20 identified	
Speech Correction	1 per 75-100 identified	1/2,000 school pop.
School Social Work	1/2,500	1/2,000 school pop.
School Psychologist Diagnostician	1/5,000	1/2,500 school pop.
Homebound and Hospitalized	1/10 identified	1/16,000 school pop.
Occupational Therapy	---	1/30,000 school pop.
Physical Therapy	---	1/15,000 school pop.
ADMINISTRATIVE		
Directors of Special Education	At least 1 per Region or 1 per I.S.D. At least 1 per local school district with more than 10,000 school population	
Supervisors of Special Education	1 supervisor with minimum of 8 teachers, consultants, etc. supervised.	

Draft 3/30/72



APPENDIX E

CHECK LISTS OF SYMPTOMS WHICH MAY INDICATE A NEED FOR SPECIAL EDUCATION



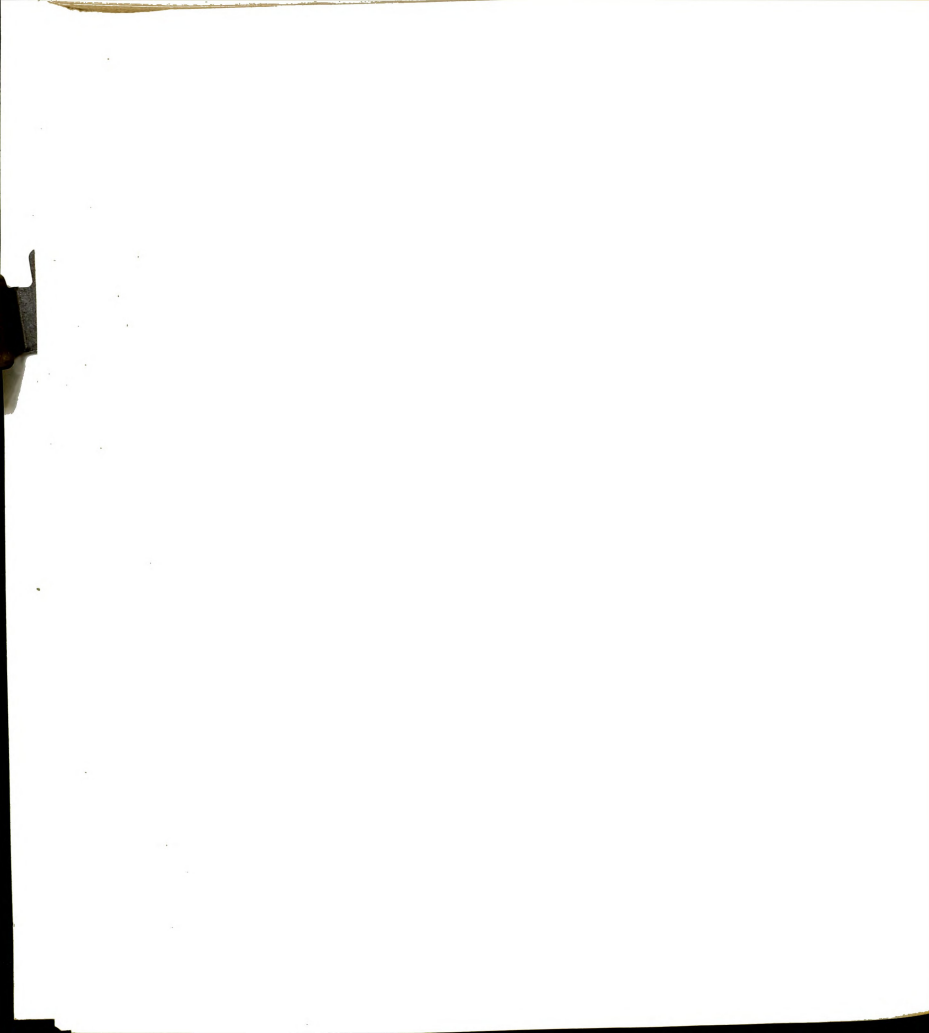
APPENDIX E

CHECK LISTS OF SYMPTOMS WHICH MAY INDICATE A NEED FOR SPECIAL EDUCATION

There are many issues involved in examining the total school population. In order to determine the most appropriate direction for a school system to follow in its development of a proposed developmental project in special education, the school division should carefully examine its entire school population.

Throughout the planning exercise, the application of techniques is valid at the individual school level, the micro-planning point, and at the total systems level, the macro-planning point. The strength of the latter obviously depends upon the strength of planning preceptiveness and expertise developed at each school building level.

Some systems will find it useful to employ group techniques with school staffs to stimulate an awareness of the special education situation in the jurisdiction and the dimensions which may be involved. This section contains reaction guides designed to carry out this activity.



Some of the issues to be explored are:

1. What are the strengths of the school division in educational programs planning and provision?
2. What are the weak areas of educational programming within the entire school population?
3. What are the economic and ethnic distributions within age groups and within certain school populations that would require program considerations?
4. Are there currently age or ethnic groups that need more intensive program planning because of indicated educational need?
5. What are the academic achievement standards on group achievement tests by age group in the school division?
6. Do any of these achievement standards point the division to an area more sensitive to needing special attention than some other area?
7. In the school division's population which students have "dropped out," and are there program changes that could be instigated so that the holding power of the public school might be greater for these students?
8. What are the means of identifying and developing services for the age group 3 through 5?



GUIDELINES TO PUPIL PLACEMENT

SUGGESTED SURVEY TO ASSIST PRINCIPAL IN DETERMINING HOW MANY
CHILDREN IN THE SCHOOL NEED HELP FOR VARIOUS REASONS^a

GENERAL SURVEY QUESTIONNAIRE FORM

Name of School _____ Teacher _____ Grade _____

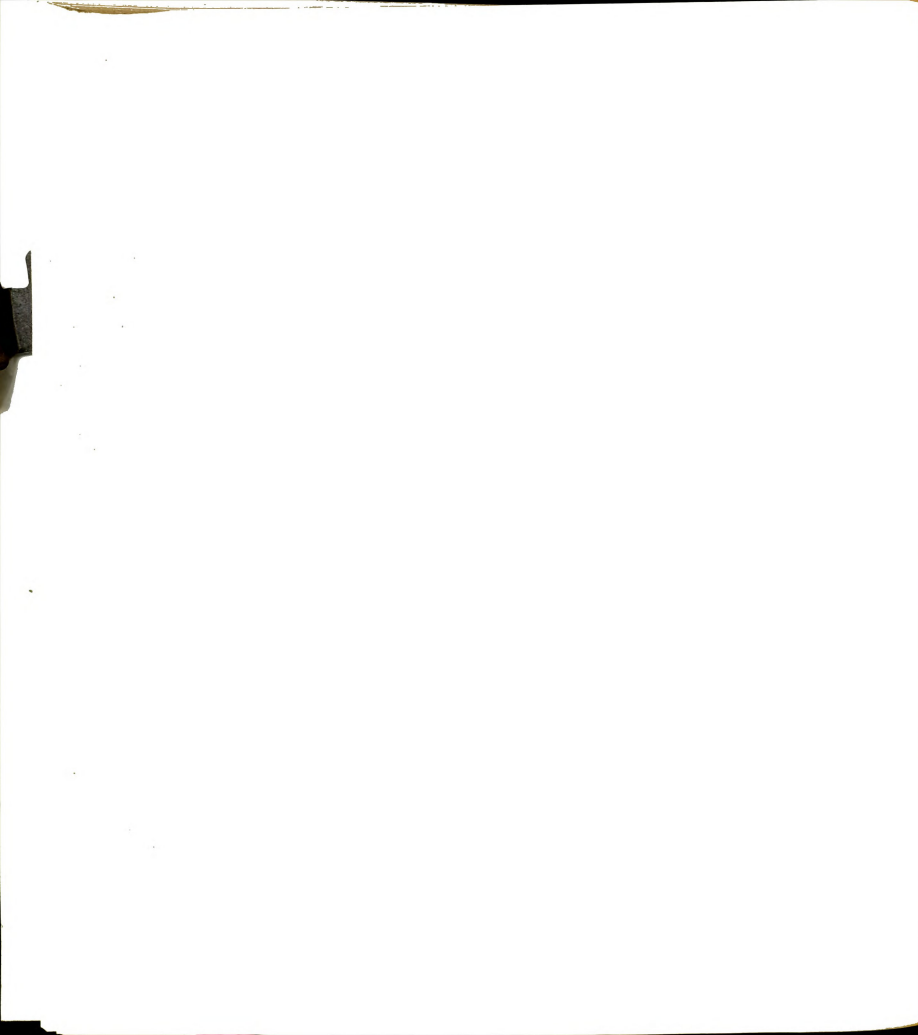
How many children do you have in your
classroom who:

NUMBER OF

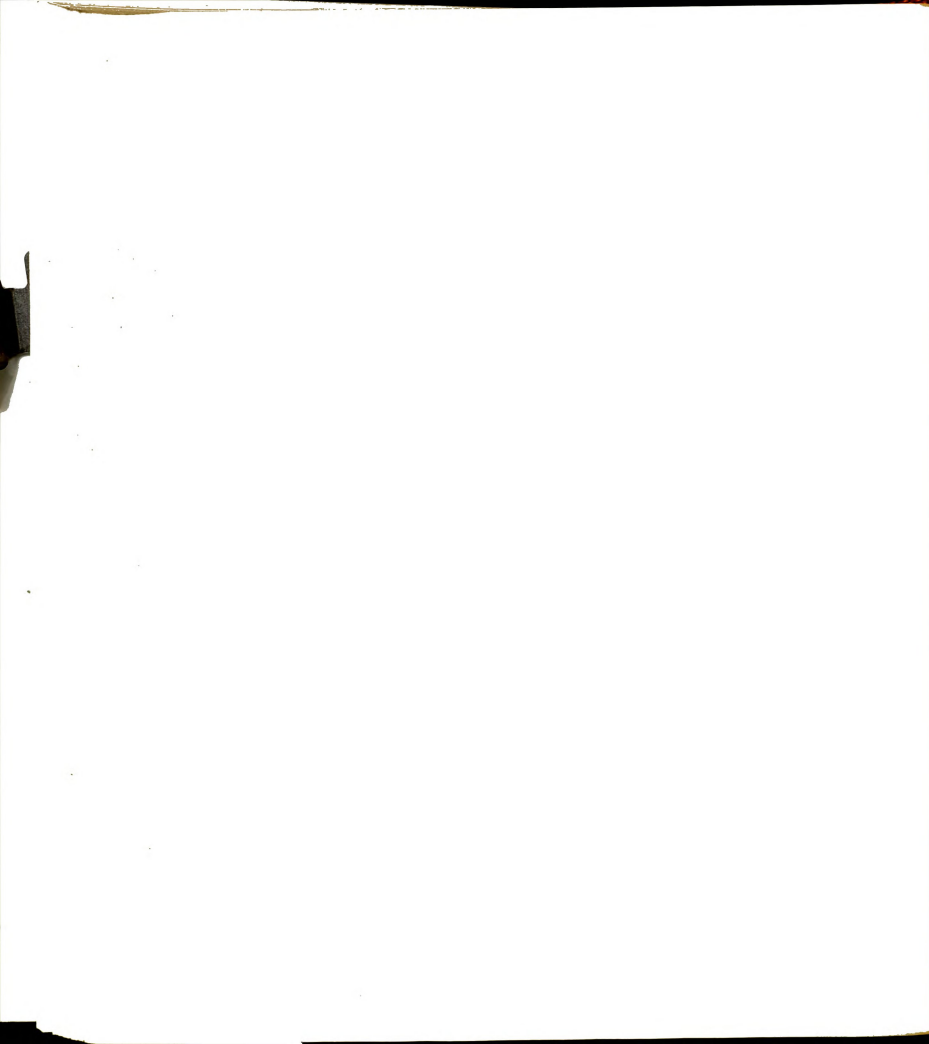
BOYS GIRLS

- | | | |
|--|-------|-------|
| 1. Are known or appear to have a physical disability which is interfering with school progress? | | |
| a) Vision | _____ | _____ |
| b) Hearing | _____ | _____ |
| c) Speech (incoherence, stuttering, baby talk, lisping, etc.) | _____ | _____ |
| d) Gross Coordination Problems | _____ | _____ |
| 2. Are known or appear to have below average intelligence (approximately below I.Q. 90) and as a result are not progressing satisfactorily. | _____ | _____ |
| 3. Are known or appear to have average intelligence (approximately between I.Q. 90 - 110) yet for reasons unknown and unidentified are not progressing satisfactorily. | _____ | _____ |
| 4. Are known to have above average intelligence (approximately above I.Q. 110) yet are not progressing satisfactorily. | _____ | _____ |

^aLakehead District Separate Schools, "Guidelines to Pupil Placement," Thunder Bay, Ontario: 1971.



	NUMBER OF	
	<u>BOYS</u>	<u>GIRLS</u>
5. Are known or appear to have a behavioral problem which is affecting satisfactory school progress (this could include a child with a serious negative attitude towards school; an immature child; a <u>withdrawn</u> , <u>isolated</u> student, etc.).	_____	_____
6. a) Have been identified in a psychological and/or medical report as having a specific learning disability (e.g. visual or auditory perceptual handicap, aphasia, dyslexia, etc.).	_____	_____
b) You believe are suffering from a specific learning disability but who have not been professionally assessed.	_____	_____
TOTAL BOYS in class with problem	_____	
TOTAL GIRLS in class with problem		_____



SOME OF THE BEHAVIORAL AND PERFORMANCE CHARACTERISTICS
THAT MAY BE EXHIBITED BY PUPILS LIKELY TO BE REFERRED
FOR DIAGNOSTIC TESTING^a

- ___ 1. Low reading ability, at least one year below grade level (primary levels) at least two years below (junior to senior levels).
- ___ 2. Very poor scholastic performance in all areas.
- ___ 3. Underachievement.
- ___ 4. Chronic disturbance of other persons' activities.
- ___ 5. Withdrawal.
- ___ 6. Very low self esteem; lack of self confidence.
- ___ 7. Past history of poor school adjustment.
- ___ 8. General lack of interest in schoolwork, apathy.
- ___ 9. Unsatisfactory school attendance.
- ___ 10. Unsatisfactory communication due to speech impairment.
- ___ 11. Unsatisfactory communication due to hearing impairment.
- ___ 12. Hyperactivity (inability to concentrate or be still).
- ___ 13. Distractability.
- ___ 14. Inadequate motor coordination.
- ___ 15. Impulsivity.
- ___ 16. Short attention span.
- ___ 17. Inconsistent or illogical pattern of behavior.
- ___ 18. Lack of "stick-to-it-iveness."

^aSpecial Education Branch, Special Education Advisory Handbook, Ontario Department of Education, Toronto: 1971.

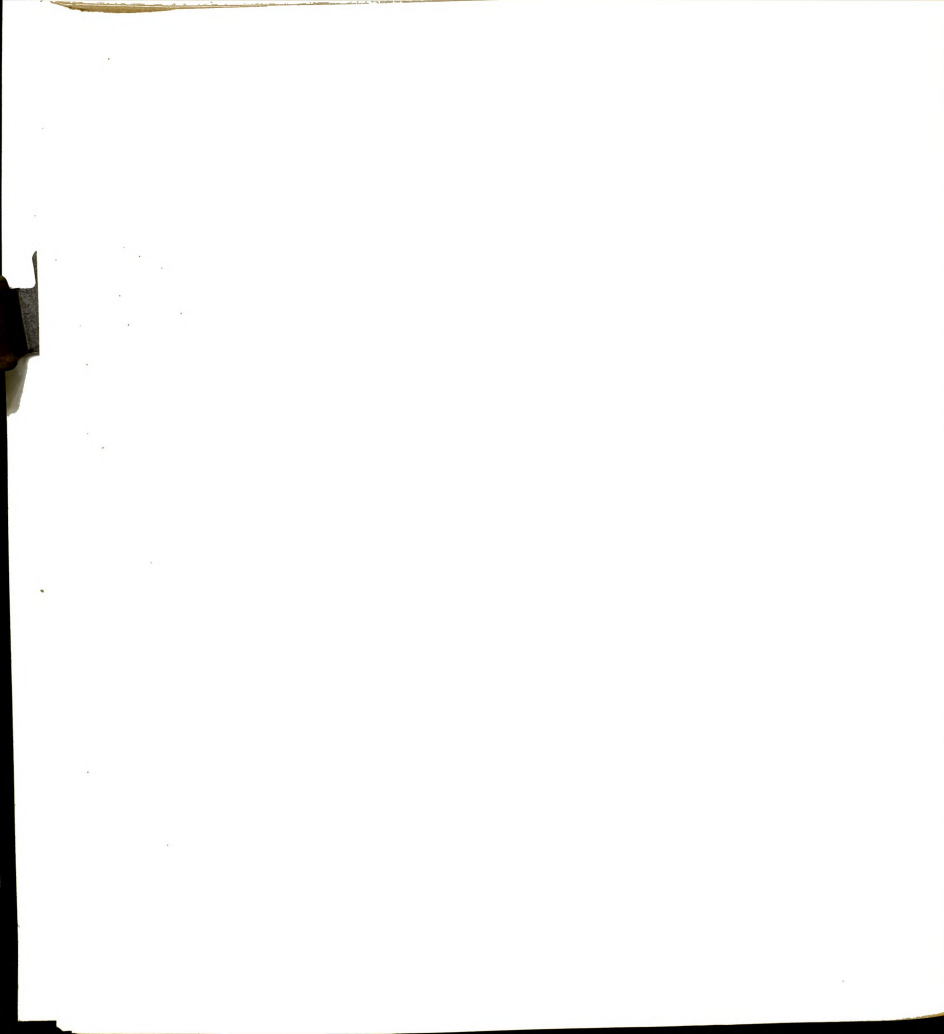
- _____ 19. Aimless wandering, apparently concerned with everyone else's business.
- _____ 20. Frequent failure to consider consequences of behavior.
- _____ 21. Rapid changes in mood and temperament.
- _____ 22. Inconsistent performance and marked variability in various school subjects.
- _____ 23. Excessive daydreaming.
- _____ 24. Excessive bullying, fighting, and similar aggressive behavior.
- _____ 25. Frequent, recurring instances of theft.
- _____ 26. Frequent crying.
- _____ 27. Malingering.
- _____ 28. Prolonged sadness or depression.



A CHECK LIST OF SYMPTOMS WHICH
MAY INDICATE A NEED FOR SPECIAL EDUCATION^a

1. Lack of academic progress
 - a. inadequate reading or inability to read at all
 - b. reading below the lowest in the group
 - c. inadequate or no number concepts
 - d. arithmetic work below lowest group in class
 - e. failure in one or more grades
2. Emotional and social maladjustment
 - a. Aggression
 1. little or no ability to control temper
 2. intensive physical or verbal activity against others
 3. behavior counter to group
 - b. Withdrawal
 1. extreme shyness in all social situations
 2. refusal to participate in classroom activity
 3. progressive avoidance of socio-academic situations
3. Physical problems
 - a. structural anomalies, i.e., dental deviations, unusual facial characteristics, any abnormal congenital body development
 - b. cerebral palsy
 - c. unacceptable toilet habits
 - d. inadequate general condition
 1. inadequate hand skills
 2. inadequate hand-eye coordination
 3. clumsy with feet
 - e. listless
4. Possible history of brain damage
 - a. unusually high fever during infancy
 - b. severe childhood diseases in infancy

^aEducation Service Center, A Systematic Guide for the Measurement and Correction Special Education Program Needs, Region V, Beaumont, Texas: 1971.



5. Poor language development

- a. inadequate language comprehension--of own or adopted language
- b. limited verbal expression in own or adopted language

6. Inadequate speech habits

- a. infantile speech
- b. speech defect
- c. slovenly speech

7. Excessive immaturity

- a. infantile behavior
- b. interests two or three years below age level

8. Other symptoms

- a. extremely short attention span
- b. erratic behavior--illogical acts, incoherent speaking
- c. lack of self-evaluation: is not aware of own inadequacies
- d. hyperactivity



SUGGESTED TEACHER REFERRAL FORM FOR
THE IDENTIFICATION OF HANDICAPPED CHILDREN^a

Pupil's Name _____ Birthdate _____

School _____ Grade _____ Age _____ Sex _____

Teacher's Name _____ Date _____

Individual Intelligence Test _____
(test) (score) (date)

Group Intelligence Test _____
(test) (score) (date)

Achievement Test Scores: Reading _____ Arithmetic _____ Spelling _____

School Achievement (grades): Reading _____ Arithmetic _____ Spelling _____

Speech: and Language Yes No

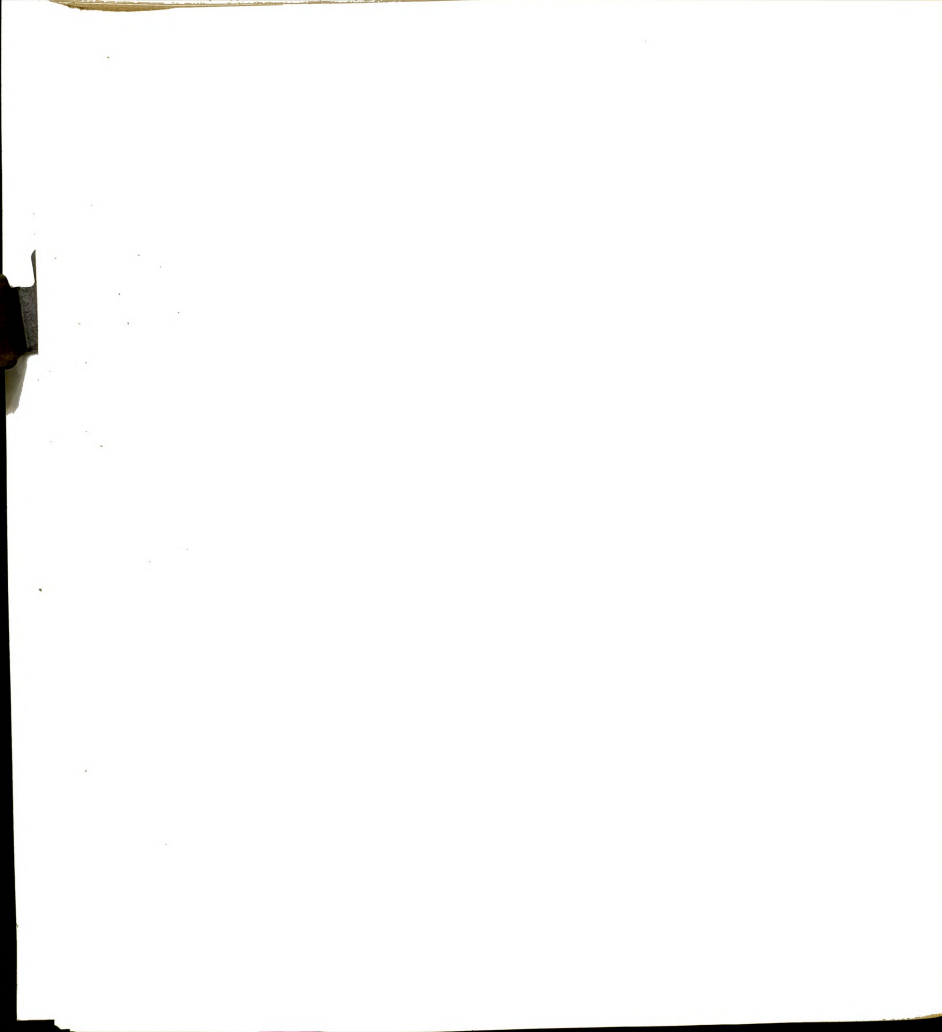
- | | | |
|---|-------|-------|
| 1. Is his speech unclear and difficult to understand? | _____ | _____ |
| 2. Does he stutter? | _____ | _____ |
| 3. Is there anything unusual about his rate, pitch, and/or quality of speech? | _____ | _____ |
| 4. Is it difficult for him to comprehend what you are saying? | _____ | _____ |
| 5. Does he speak or answer in one or two word sentences? | _____ | _____ |
| 6. Does he have difficulty expressing his thoughts? | _____ | _____ |

Affirmative responses to the above indicate a need for further investigation and possible speech therapy.

Hearing Impaired

- | | | |
|--|-------|-------|
| 1. Is there a history of hearing loss in his family? | _____ | _____ |
| 2. Does the child appear to be inattentive most of the time? | _____ | _____ |

^aAdaption of teacher check list appearing in Arkansas Valley Project on Teacher Identification of Handicapped Children, Denver, Colorado: Colorado Department of Education, 1969.

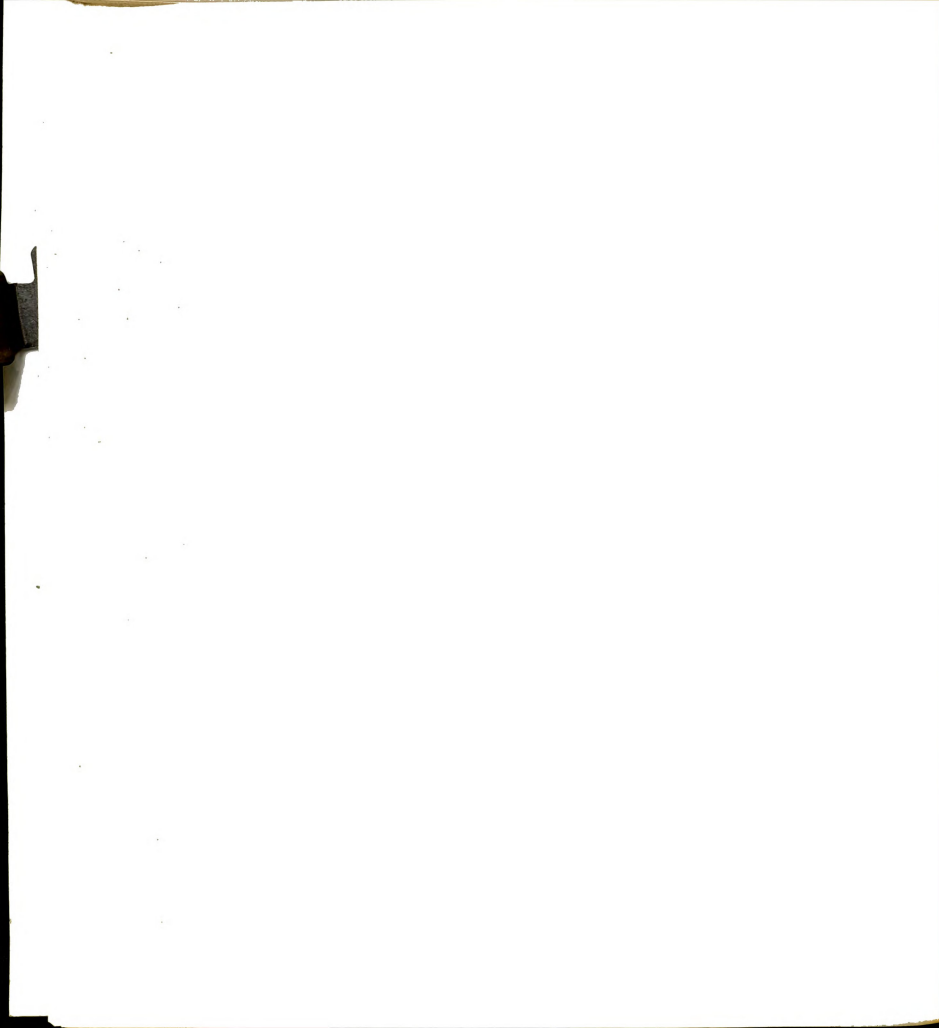


	<u>Yes</u>	<u>No</u>
3. Does he appear to hear some things and not others?	—	—
4. Does he have language and articulation problems which are immature for his age?	—	—
5. Does he speak in either an extremely loud or extremely soft voice?	—	—
6. Does he complain of earaches or running ears?	—	—
7. Does the child attain consistently higher scores on performance sections of achievement tests than on the verbal and written sections?	—	—

Affirmative responses to the above section indicates a need for further investigation and possible special educational provisions made.

Educable Mentally Retarded

1. Compared with the other children in your class, does he appear to be physically less mature?	—	—
2. Does he generally have to be told more than once how to do things?	—	—
3. Does he find it difficult to remember or retain what he has learned?	—	—
4. Does he have difficulty understanding what he reads?	—	—
5. Does he have difficulty drawing simple geometric designs?	—	—
6. Does he have difficulty grasping and controlling the pencil or crayon when printing, writing, or drawing?	—	—
7. Is it impossible for him to print or write his first name or nickname?	—	—
8. Is he unable to print most letters or numbers correctly without a model?	—	—

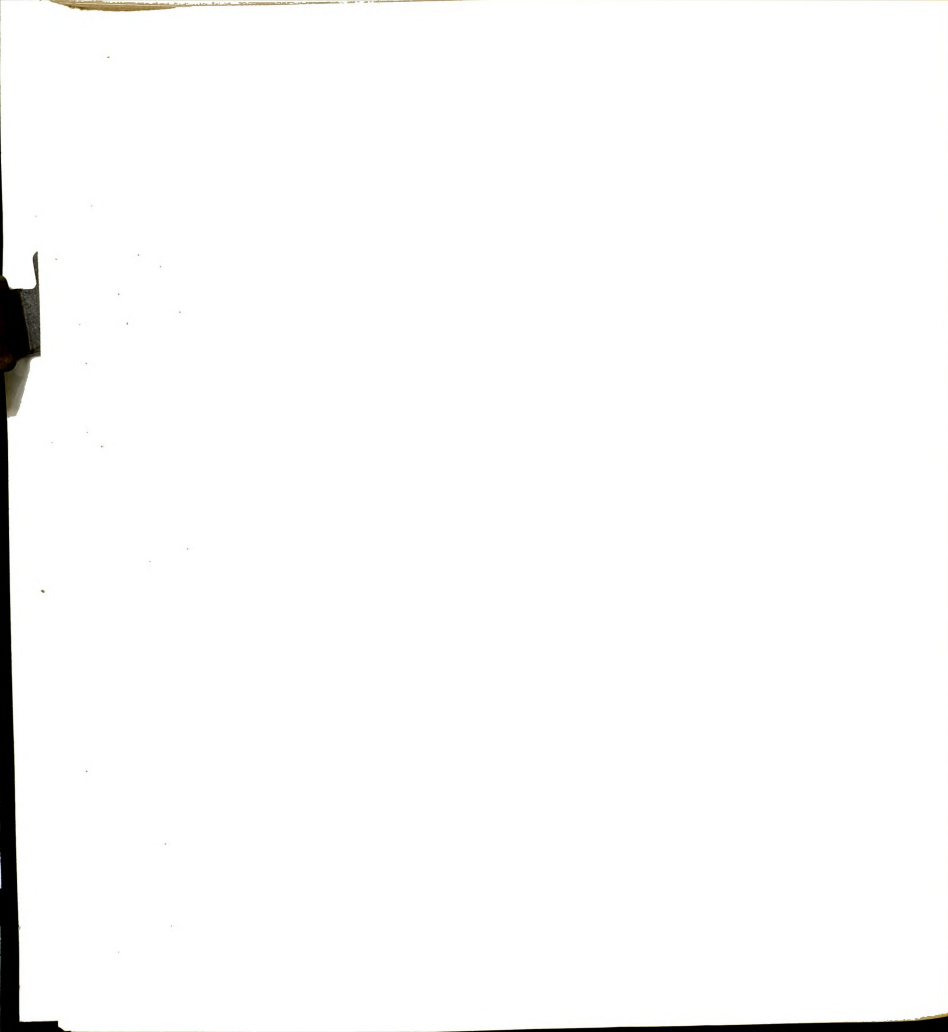


	<u>Yes</u>	<u>No</u>
9. Is it difficult for him to hold scissors and cut correctly?	—	—
10. Is it difficult for him to name common classroom objects? (blackboard, globe, etc. . . .)	—	—
11. Does he find it impossible to write numbers up to five?	—	—
12. Is it difficult for him to name or identify all of the letters of the alphabet when not in sequence?	—	—
13. Does it seem to take him longer to figure things out?	—	—
14. In printing letters and numbers does he start at the bottom of the figures and work up?	—	—
15. In walking and at play does he appear awkward and clumsy?	—	—
16. Does he lack the ability to think and reason abstractly?	—	—

Affirmative responses may indicate a need for a psychological evaluation and special placement.

Specific Learning Disabilities

1. Has difficulties with reversals, and progressions in writing and language	—	—
2. Does not learn from reading, but can learn by listening	—	—
3. Loses place easily while reading	—	—
4. Writing is cramped, crowded, and laborious	—	—
5. Does not grasp concepts of numbers, space, or time	—	—
6. Overactive, uncontrolled, impulsive behavior	—	—
7. Inability to concentrate--short memory span	—	—
8. Eyes wander--jerky eye movements--difficulty in focusing	—	—

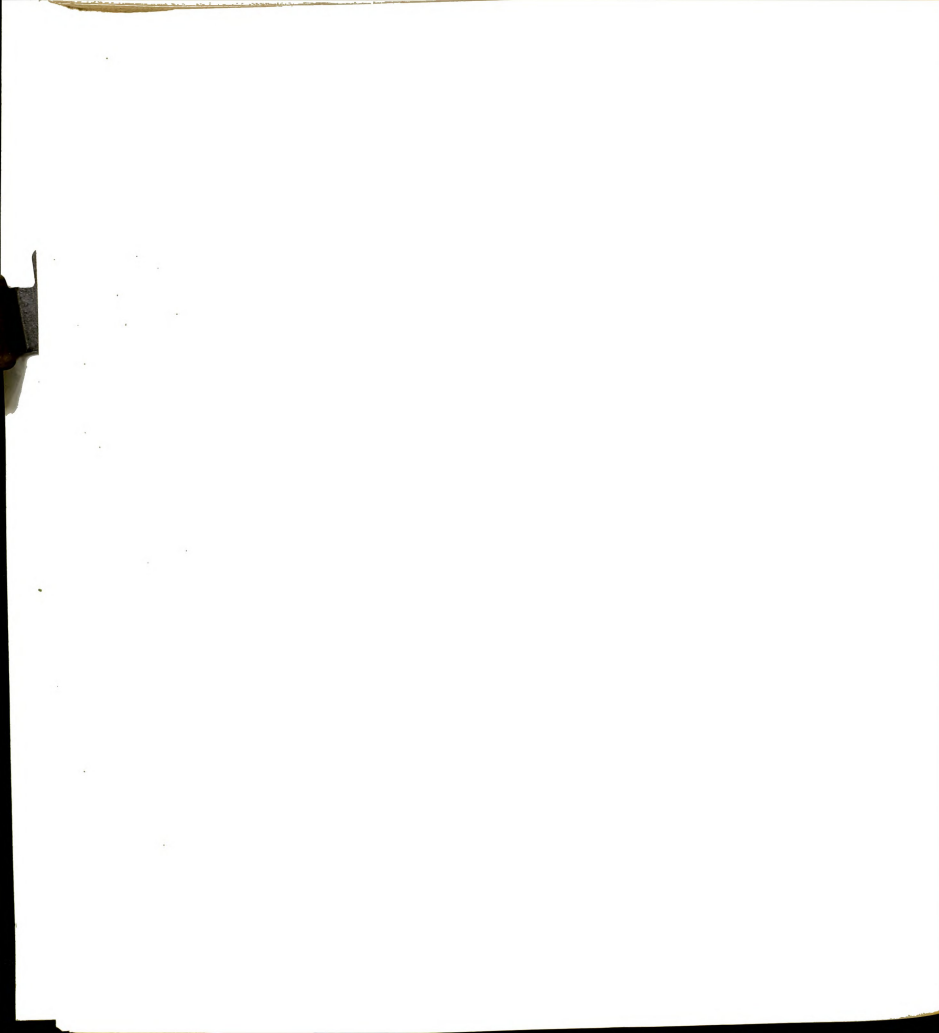


	<u>Yes</u>	<u>No</u>
9. Frequently tired, lacking in energy or strength	—	—
10. Is easily distracted by extraneous noise or movement	—	—
11. Behavior varies from day to day; has good and bad days	—	—
12. Can verbally express himself far above his written level	—	—
13. Child can perform tasks with objects far better than his verbal abilities would indicate	—	—
14. Child can perform verbally far better than he can with tasks concerning objects	—	—
15. Child has difficulty in finding his way or locating objects	—	—
16. Does he know his left from his right or up from down?	—	—
17. Can he follow written instructions but not verbal ones?	—	—
18. Does he have problems in determining similarities and differences?	—	—
19. Is he clumsy or awkward?	—	—

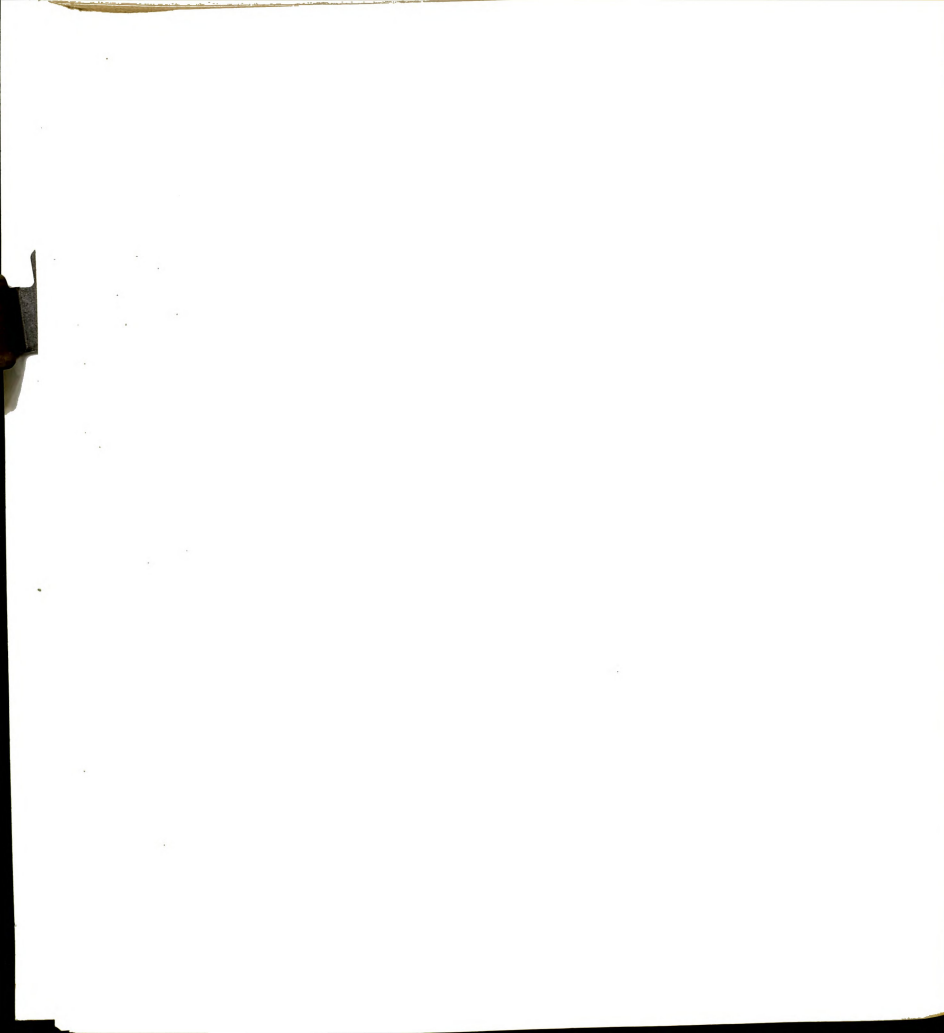
Affirmative answers in this section may indicate a child with specific learning disabilities if his problems are not caused by emotional illness, environmental disadvantage, or generalized mental retardation. Either itinerant, resource, or special class provisions may be appropriate upon completion of a psychological evaluation.

Emotionally Disturbed

1. Does the child become easily upset?	—	—
2. Is the child hyper-active, impulsive, or easily distracted?	—	—
3. Is the child often irritable?	—	—



	<u>Yes</u>	<u>No</u>
4. Does he daydream excessively?	—	—
5. Does the child appear sad most of the time?	—	—
6. Does the child lack self confidence?	—	—
7. Does he withdraw from social contact with adults and peers?	—	—
8. Does the child have a speech problem such as stammering, stuttering, etc.?	—	—
9. Does the child develop a "tic," eye blinks, or facial and body movements when confronted with a difficult situation?	—	—
10. Is the child frequently absent?	—	—
11. Does the child often complain of being sick or nauseous?	—	—
12. Does the child annoy others frequently?	—	—
13. Is he often uncooperative?	—	—
14. Does the child often lie, cover up, or blame others?	—	—
15. Does he steal from peers or adults?	—	—
16. Does he excessively seek help and reassurance?	—	—
17. Is he overly submissive to peers, adults, or authority?	—	—
18. Is he defiant of authority?	—	—
19. Does he behave in a bizarre manner?	—	—
20. Does he threaten others verbally or physically?	—	—
21. Does he prefer to play with younger children?	—	—
22. Does he often get himself into situations which may hurt or frighten him?	—	—
23. Does not want to share	—	—



	<u>Yes</u>	<u>No</u>
24. Does the child often cry?	—	—
25. Is the child irresponsible?	—	—
26. Is the child undependable?	—	—
27. Does the child appear anxious and tense when confronted with school work?	—	—
28. Does the child seem unable to concentrate?	—	—
29. Is he easily frustrated or confused?	—	—
30. Does he lack interest?	—	—
31. Is the child often a scapegoat?	—	—
32. Is the child overly affectionate?	—	—
33. Is the child overly generous?	—	—
34. Does the child resist competition?	—	—

Affirmative responses may indicate a child with emotional problems in need of counseling, modified education in the regular class, or special provisions of itinerant, resource, or special class placement.

Visually Handicapped

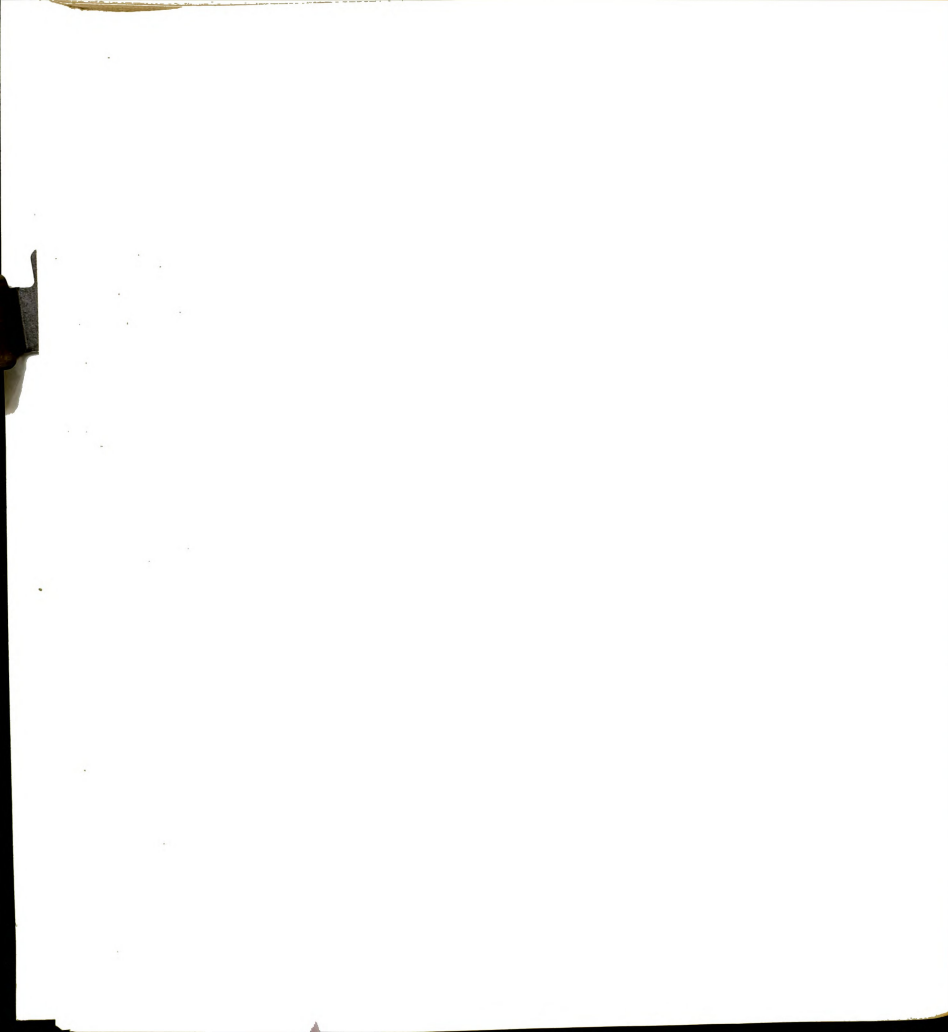
1. Has trouble reading written work on the chalk board	—	—
2. Leans very close when reading at his desk	—	—
3. Rubs eyes, blinks often or has other odd mannerisms of the eye	—	—

Physically Handicapped

1. Any physical or health problem that in any way interferes with his performance in the classroom	—	—
--	---	---

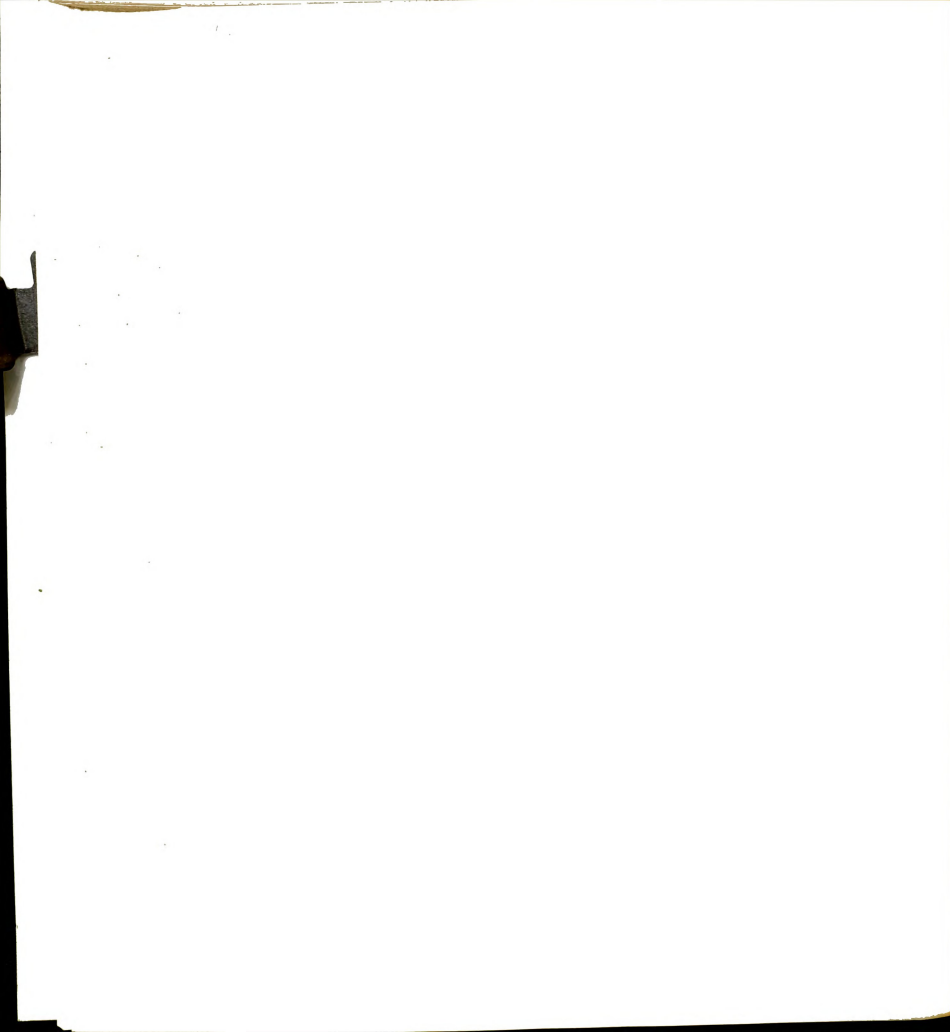
Recommended placement for this child

- ☐ Speech Therapy
- ☐ Class for Hearing Impaired
- ☐ Class for Educable Retarded
- ☐ Class for Trainable Retarded
- ☐ Class for Specific Learning Disabilities
- ☐ Class for Emotionally Disturbed
- ☐ Class for Visually Handicapped
- ☐ Class for Physically Handicapped
- ☐ Regular class with itinerant or resource services
- ☐ Regular class without additional services



APPENDIX F

MICHIGAN SURVEY OF HANDICAPPED
CHILDREN AND YOUTH



APPENDIX F

MICHIGAN SURVEY OF HANDICAPPED

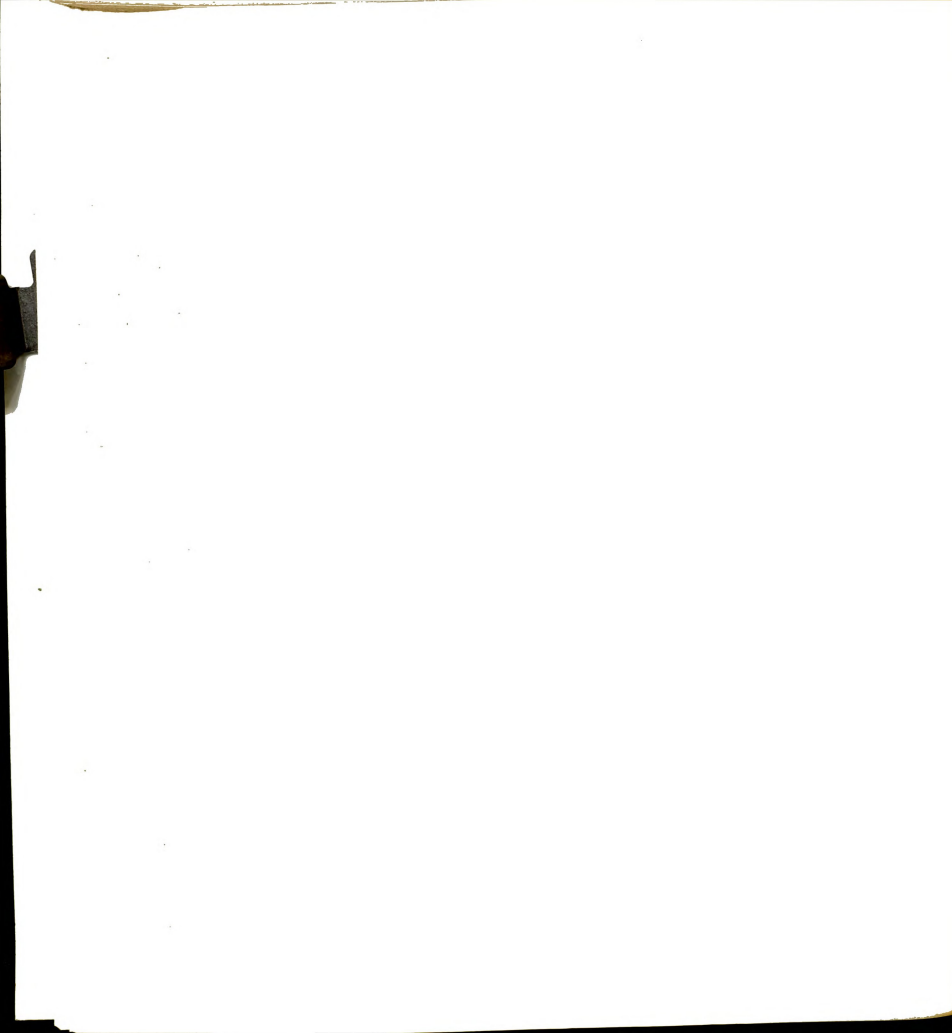
CHILDREN AND YOUTH

In August, 1969, the Michigan Legislature enacted Public Act 220. This Act required local school districts in cooperation with intermediate school districts to conduct a survey of the handicapped children and youth in their communities and to develop a comprehensive plan to meet the educational needs of these handicapped persons.

The purpose of Public Act 220 was twofold.

The first purpose was to provide the Michigan Legislature with accurate information concerning the number and type of handicapped children and youth in Michigan and the services currently being provided for them. The information is to aid the Legislature in formulating statutory changes which will provide for adequate organization, programs, services and funding to meet the needs of the handicapped children in Michigan.

The second purpose of Public Act 220 was to insure that local school districts had the opportunity to assess the educational needs of their handicapped children and to develop educational plans to meet the needs of these children in their own communities.



This study serves as an example of the type of survey which may be conducted by a school system; identifying the number of students within the system's jurisdiction requiring special education programs and services. This information may then be utilized for revised incidence ratios on Forms C1 and C2.

SURVEY DATA

The survey information submitted by local intermediate school districts was processed by the Data Processing Section of the Michigan Department of Education in the summer and fall of 1970. Statewide summary information was available in printout form in mid-November, 1970.

Table F.1 contains the total number of students, ages 5-19, with each type of handicap reported in the Public Act 220 survey. The incidence rate based upon the Public Act 220 information was obtained by dividing the total number of children, ages 5-19, identified in each handicap area by the Michigan population for ages 5-19 obtained from the U.S. Census Bureau in Detroit. The U.S. Office of Education incidence rate was obtained from the publication "Programs for the Handicapped" (U.S.O.E. September 4, 1970).

IMPLICATIONS OF SURVEY DATA

When comparing the incidence rates obtained from the Public Act 220 data with the U.S. Office of Education incidence rates only ages 5-19 were used so that direct comparisons could be made. The Public Act 220 data at both extremes of the age range 0-4, and 20-25 was sketchy and would seriously distort the comparison. In addition,

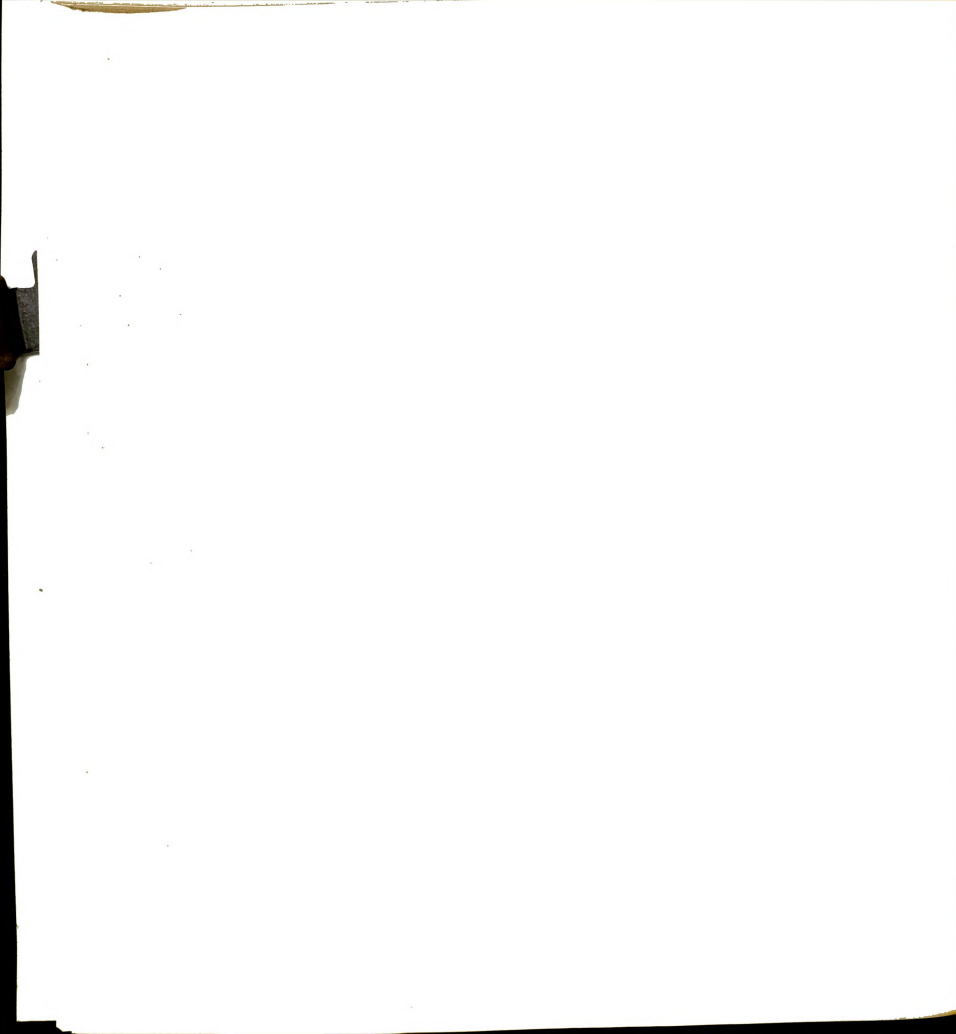
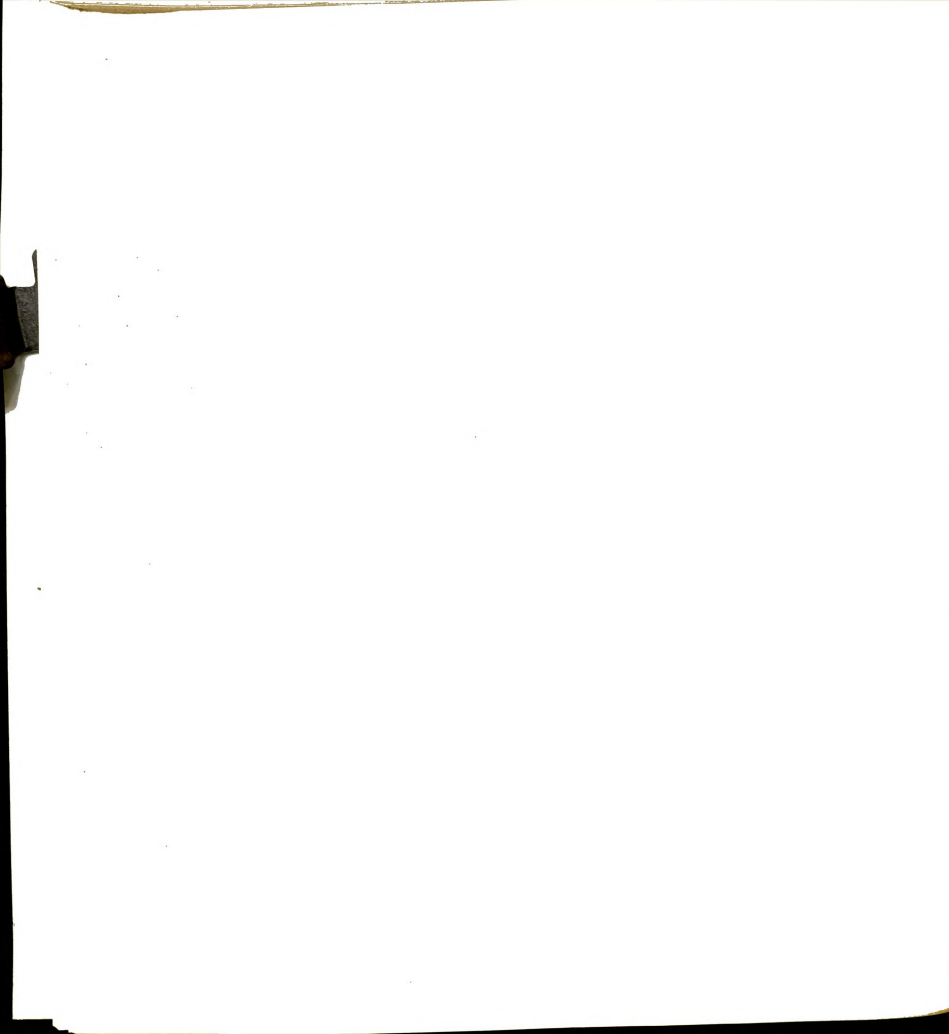


TABLE F.1.--Comparison of Public Act 220 and U.S. Office of Education incidence rates.

Disability Type	Public Act 220 Total (ages 5-19)	P.A. 220* Incidence Rate	U.S.O.E. Incidence Rate
Mentally Handicapped			
Educable Mentally Handicapped	51,935	.023749	.02
Trainable Mentally Handicapped	6,482	.002964	.003
Severely Mentally Handicapped	1,815	.000829	.001
Physically Handicapped			
Visually Handicapped	4,809	.002199	.001
Blind	1,237	.000565	
Partially Seeing	3,572	.001633	
Hearing Impaired	6,757	.003089	.005
Deaf	1,540	.000704	
Hard of Hearing	5,217	.002385	
Crippled and Otherwise Health Impaired	11,725	.005361	.005
Crippled	10,847	.004960	
Otherwise Health Impaired	878	.000401	
Emotionally Handicapped	32,874	.015033	.02
Emotionally Disturbed	27,927	.012770	
Socially Maladjusted	1,529	.000699	
Personal Adjustment Problems	3,418	.001563	
Multiply Handicapped	281	.000128	.0005
Deaf-Blind	23	.000010	
Blind-Mentally Handicapped	41	.000018	
Deaf-Mentally Handicapped	41	.000018	
Crippled-Mentally Handicapped	176	.000080	
Other Conditions			
Speech Defective	131,901	.060316	.035
Learning Disabled	10,146	.004639	.01
Perceptually Handicapped	15,570	.007120	
STATE TOTAL	274,304	.125437	.10035

*Based on U.S. Census Bureau estimated Michigan age 5-19 population for 1969 of 2,186,777.



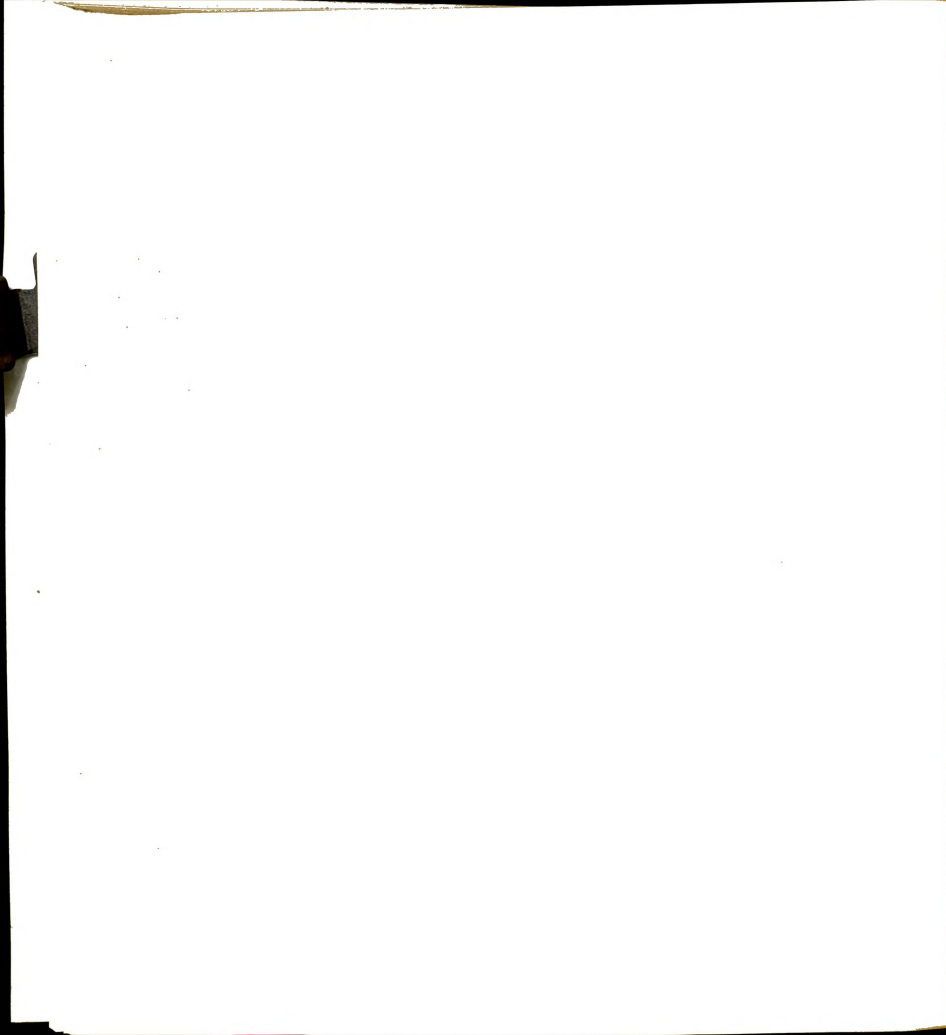
the U.S. Office of Education incidence rates were based only on ages 5-19.

The number of students identified as mentally handicapped in the Act 220 survey was very close to the number expected when the U.S. Office of Education incidence rate is applied. This data suggests that the incidence of mental retardation in Michigan is basically the same as the National incidence.

The number of visually handicapped children in Michigan appears to be double the number expected when the National incident rate is applied. This discrepancy may be due to any one or a combination of the following factors:

1. An excellent vision screening system in Michigan schools.
2. Differences in definition of "visually handicapped" between National and state agencies.
3. Epidemicalogical phenomenon affecting the vision of Michigan children differently than the Nation's children as a whole.

The Michigan Department of Public Health's estimate of visually handicapped children agrees with the P.A. 220 study. Further investigation of the discrepancy between Michigan and National incidence rates for visually handicapped children is needed. In addition, the questions of what services are needed to meet the educational needs of visually handicapped children identified in the Act 220 study should be investigated.

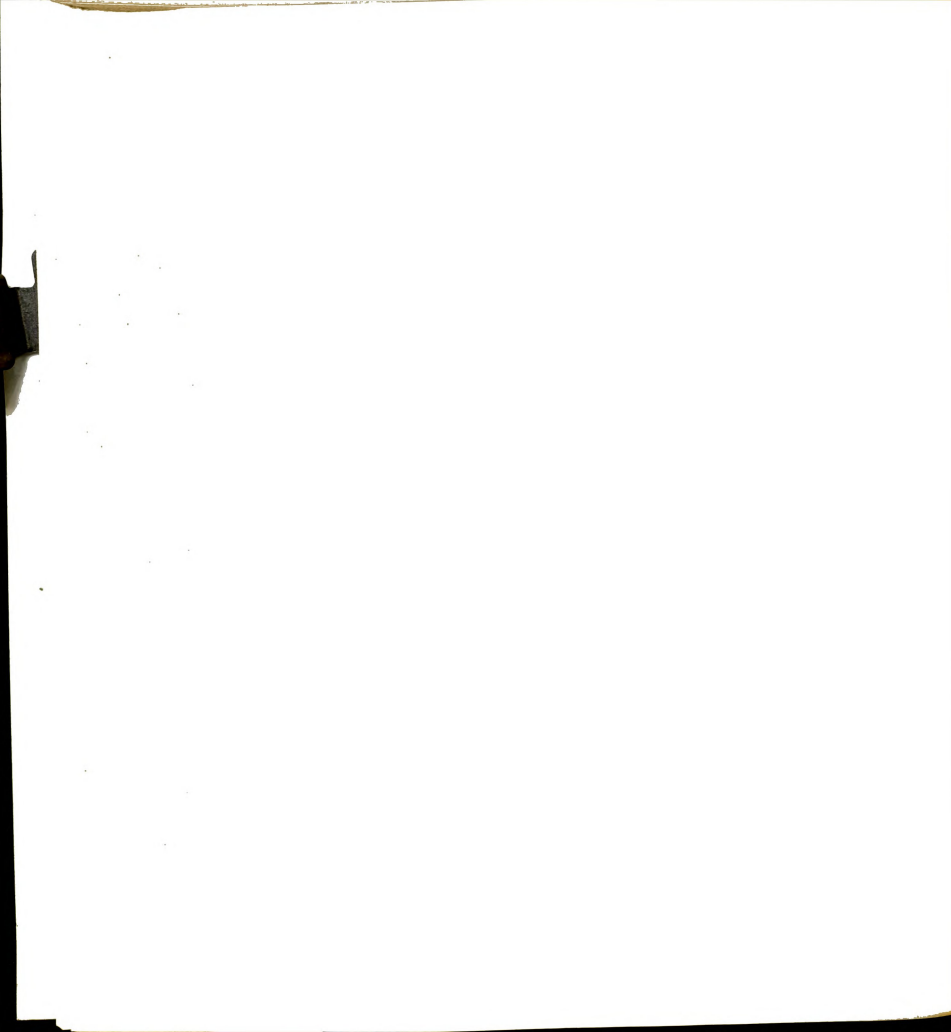


The number of hearing impaired children identified by the Act 220 survey is approximately 60 per cent of the number expected when the National incidence rate is applied. In addition, recent studies have suggested that the incidence rate for hearing impaired may be as high as 1.3 per cent. Due to the discrepancies between these incidence rates, a careful study should be made of the rationale behind each incidence rate, and the types of educational services needed by children with varying degrees of hearing impairment.

The Michigan and National incidence rates for crippled and otherwise health impaired are nearly the same. This indicates that the number of crippled and otherwise health impaired children in Michigan is nearly the number expected when applying National incidence rates.

The number of emotionally handicapped children indicated in the Public Act 220 survey was drawn from the combination of three categories, i.e., emotionally disturbed, socially maladjusted, and personal adjustment problems, used by local schools to identify children with related problems. When these three categories are combined the incidence rate for emotionally handicapped children in Michigan is approximately three-fourths of the National incidence rate. The reasons for this discrepancy need further investigation.

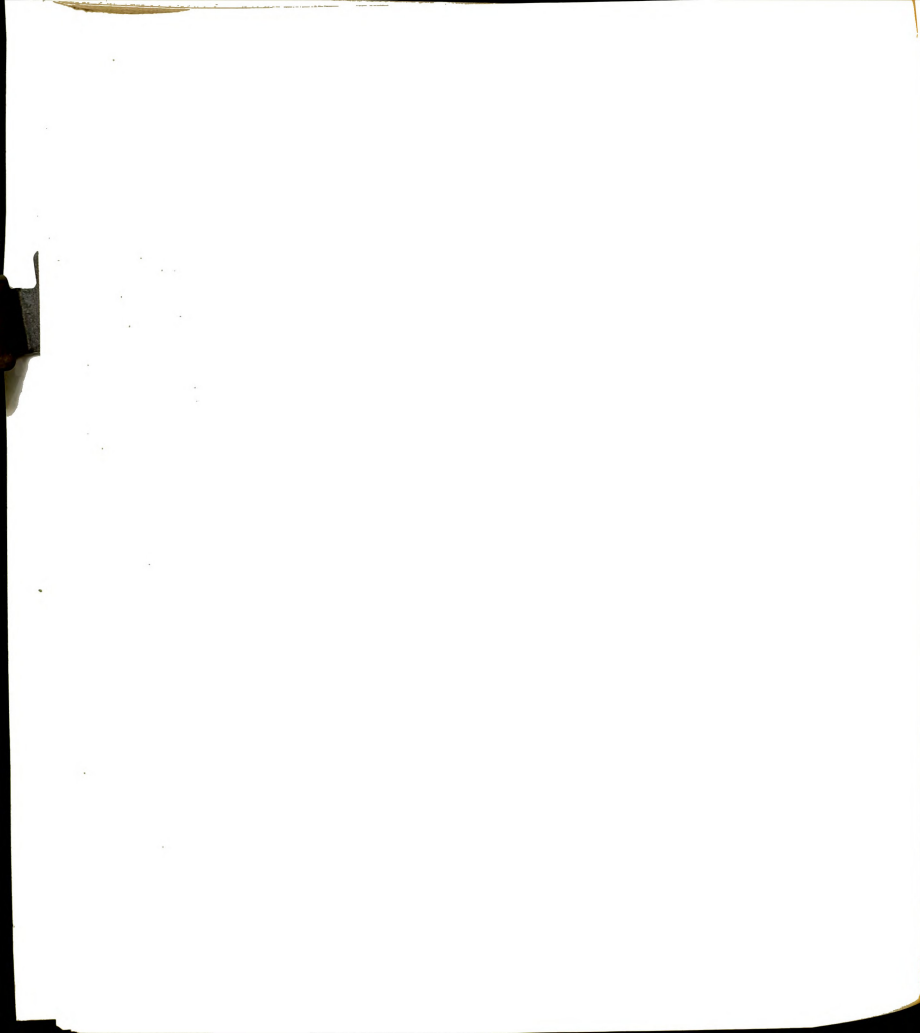
Multiply-handicapped children are those children who have more than one major disability such as the deaf-blind, blind-retarded, deaf-retarded, crippled-retarded, etc. The incidence rate for multiply-handicapped children from the Act 220 study appears to be only one-fifth of the National incidence rate. However, this



discrepancy can be accounted for by the fact that all districts did not use the sub-categories under "Multiply Handicapped." As a consequence, children who should be listed as multiply-handicapped were listed under "Physically Handicapped" and "Mentally Handicapped." A more carefully controlled survey of the multiply-handicapped children in Michigan is needed to determine the extent of the educational services needed for these children.

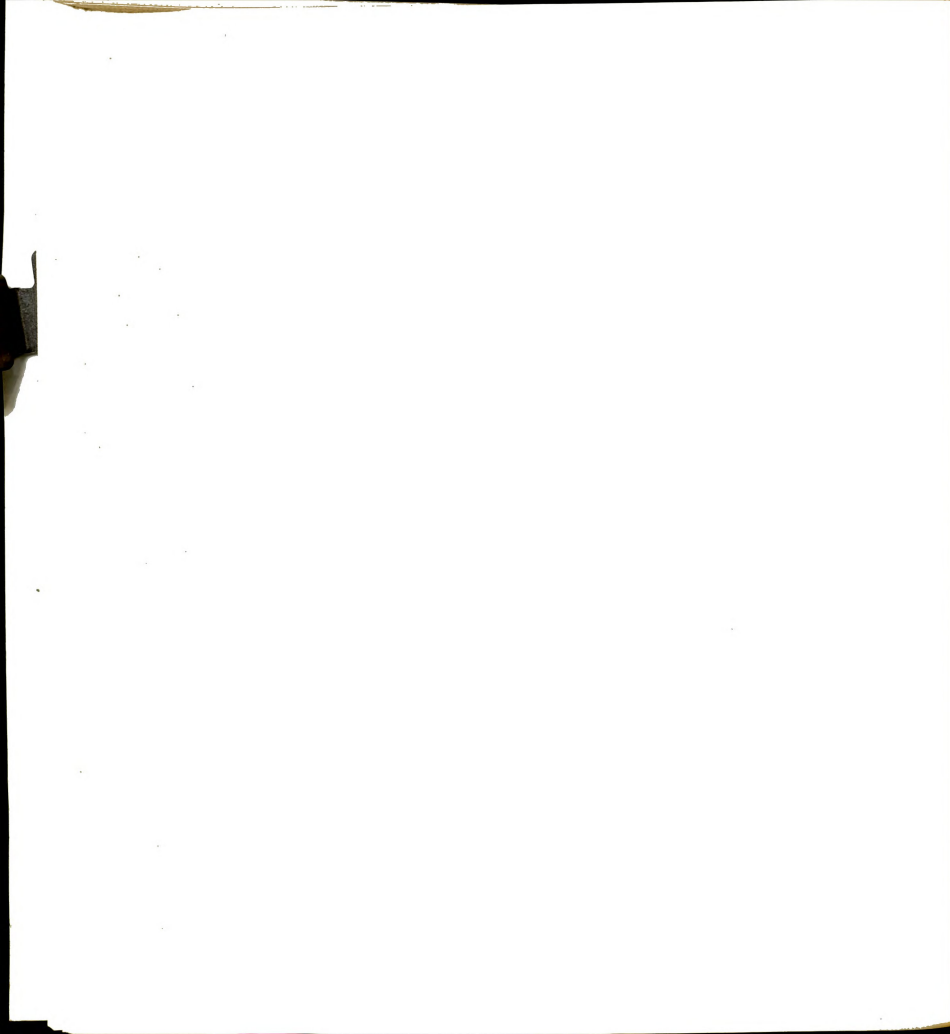
Under the heading of "Other Conditions" the number of speech defective children supposedly identified on the Act 220 survey greatly exceeds the number expected when the National incidence rate is applied. This large discrepancy needs further explanation.

The categories of "Learning Disabilities" or "Perceptually Handicapped" are currently the subject of much controversy. The Act 220 figures in these categories reflect the lack of agreement on a definition for these categories. The State Board of Education has recently approved the study of the controversial area of learning disabilities which will result in recommendations for future action.



APPENDIX G

INSTRUCTIONAL ARRANGEMENTS



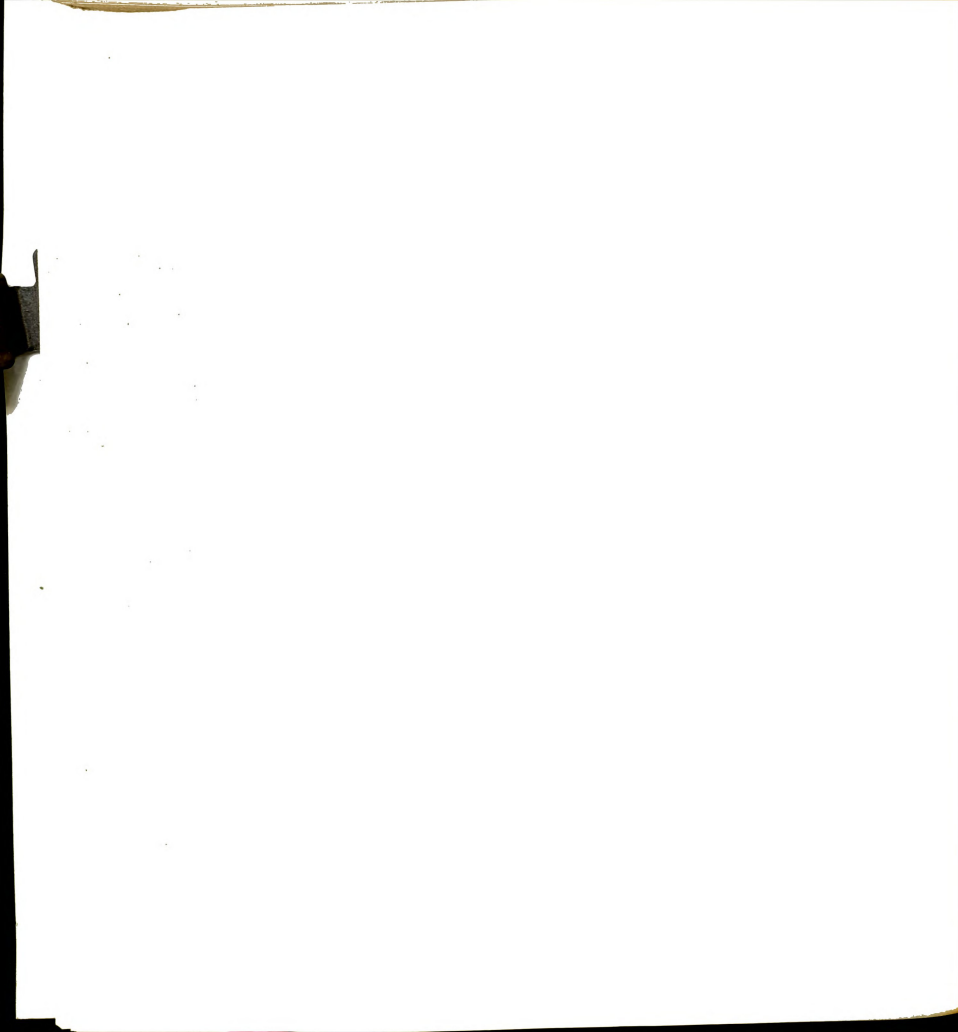
APPENDIX G

INSTRUCTIONAL ARRANGEMENTS

The variety of instructional arrangements offered in the programs of special education are very numerous and flexible. They automatically encourage the use or discovery of new staffing patterns and methods for delivering services to children. Several issues which must be explored are as follows:

1. What space is available to house the necessary additional teaching positions?
2. If present facilities are not sufficient, what plans does the board have for securing and equipping such additional teaching stations?
3. Is there adequate space available to house the additional supportive professional personnel so that they may adequately carry out the assigned responsibilities?
4. If the present space is restricted, will this limit the full implementation of the design? How soon will this situation be rectified?
5. If several school boards are planning to enter into one aspect of the plan cooperatively, can some classes be housed more effectively in one division? Can suitable transportation be arranged?
6. Is there sufficient space available for itinerant personnel who may be moving between two or more school locations or between two or more school divisions?

In addition to these, school systems may wish to consider the following as possible titles for instructional arrangements in their plan.



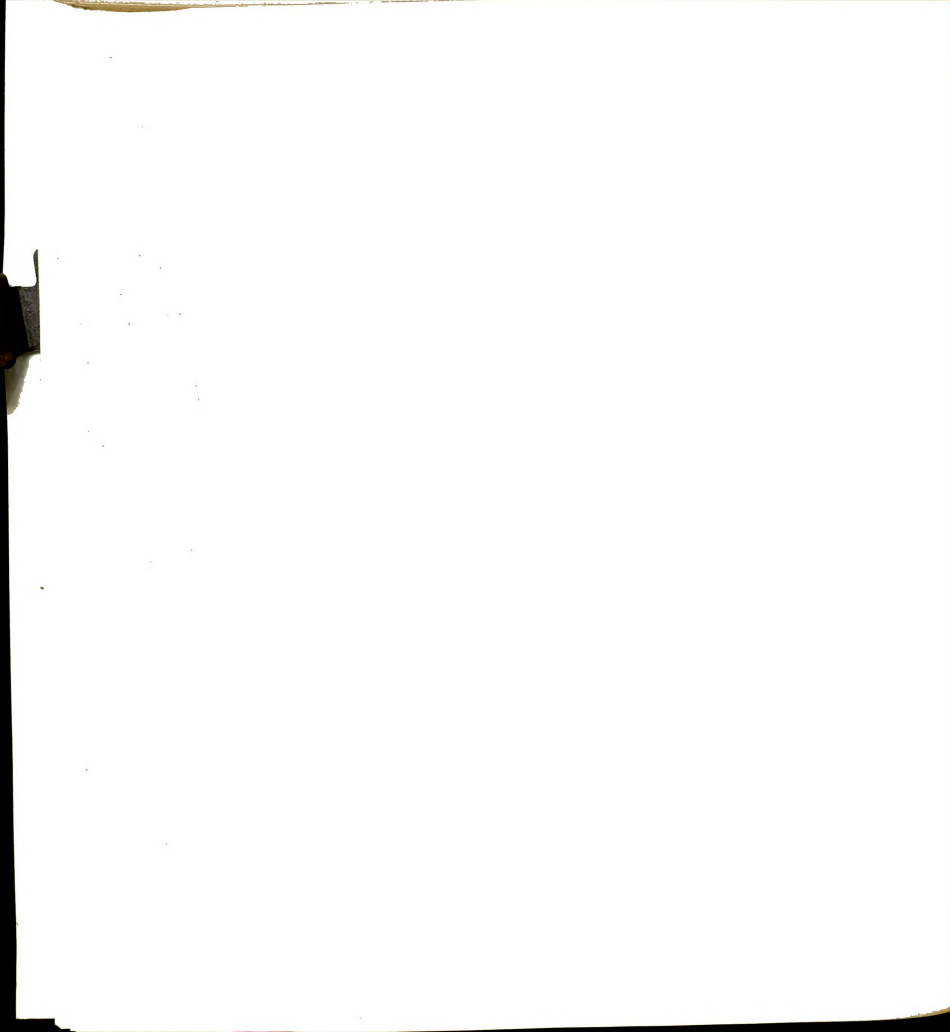
1. integrated vs. self-contained classes
2. team teaching
3. departmentalized instruction (Rotary)
4. cooperative teaching arrangements
5. special teaching stations (Resource Room)
6. other possible staffing patterns and/or instructional arrangements.

RECOMMENDATIONS

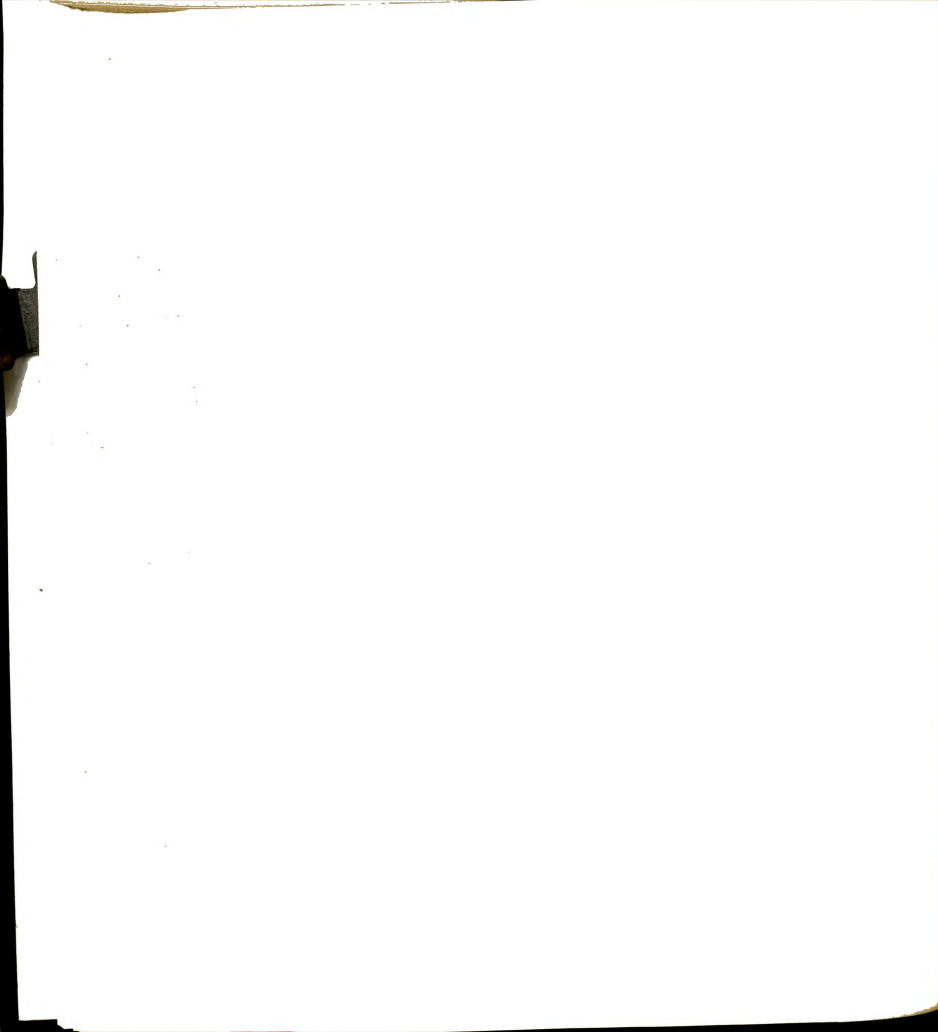
As a result of the year long examination of the issue of services and programs for the educable mentally handicapped by the Eight Man Task Force and the State-Wide Study Committee,^a the following recommendations are made:

1. DISCONTINUE THE USE OF CATEGORICAL LABELS AS A PRE-REQUISITE FOR SPECIAL EDUCATION SERVICE.
2. AS A PRE-REQUISITE FOR SPECIAL EDUCATION SERVICE, THERE WILL BE DOCUMENTATION OF AN EDUCATIONALLY RELEVANT DESCRIPTION OF THE CHILD, WHICH IS BASED ON A DEVELOPMENTAL MODEL.
3. RECOGNITION MUST BE GIVEN TO TWO CONDITIONS: A) SAFE GUARDS BE ADOPTED TO ELIMINATE DISPROPORTIONATE MINORITY GROUP REPRESENTATION IN SPECIAL CLASSES; AND, B) THAT A QUOTA SYSTEM FOR MINORITY GROUP REPRESENTATION MIGHT ALSO DISCRIMINATE AGAINST A CHILD IN NEED OF SPECIAL CLASS SERVICES. IN THIS FRAME OF REFERENCE, IT IS RECOMMENDED THAT ANY MINORITY REPRESENTATION IN A SPECIAL CLASS, DISPROPORTIONATE TO SCHOOL DISTRICT RESIDENCE PROPORTIONS, BE SUBJECT TO INTENSIVE REVIEW BY THE SUPERORDINATE EDUCATIONAL AGENCY. ANY JUSTIFICATION FOR SUCH DISPROPORTION WILL BE BASED ON INDIVIDUALLY PRESCRIBED INSTRUCTIONAL PLANS RELATED TO EDUCATIONAL NEED ONLY.
4. THE CHILD'S PARENT OR GUARDIAN HAS A RIGHT TO AND WILL BE GIVEN ACCESS TO FULL PARTICIPATION IN THE EDUCATIONAL PLANNING PROCESS.
5. SOCIAL/EDUCATIONAL BENEFIT (PROGRAM IMPACT) BECOME THE PRIMARY CONDITIONS FOR CONTINUED PROGRAM APPROVAL.
6. WIDER LATITUDE IN LOCAL OPTIONS IN PLANNING AND DEVELOPING EDUCATIONAL SERVICES FOR EXCEPTIONAL CHILDREN.

^aSpecial Task Force and Statewide Study Committee, Guidelines for the Development of Services and Programs for the Educable Mentally Handicapped, Lansing, Michigan, June 12, 1972.

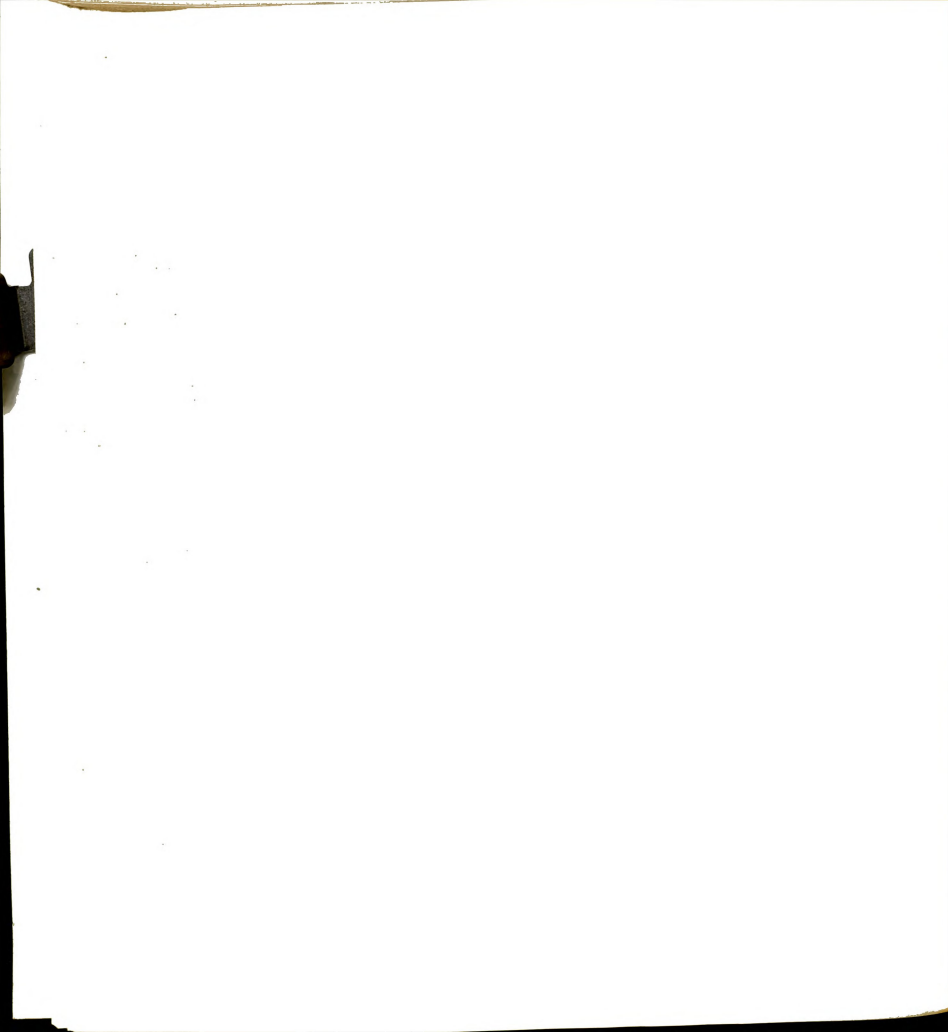


7. THE STATE DEPARTMENT OF EDUCATION ADOPT THE INDIVIDUALIZED INSTRUCTION MODEL AS A BASIS FOR PROVIDING SPECIAL EDUCATION SERVICES FOR ALL EXCEPTIONAL CHILDREN.
8. THE EDUCATIONAL PLAN MUST REFLECT THE EXCEPTIONAL CHILD'S RIGHT OF ACCESS TO REGULAR EDUCATIONAL EXPERIENCES AND INTERACTION WITH NON-HANDICAPPED PEERS TO THE FULLEST EXTENT OF HIS CAPABILITIES.



APPENDIX H

ORGANIZATIONAL MODELS--PERSONNEL



APPENDIX H

ORGANIZATIONAL MODELS--PERSONNEL

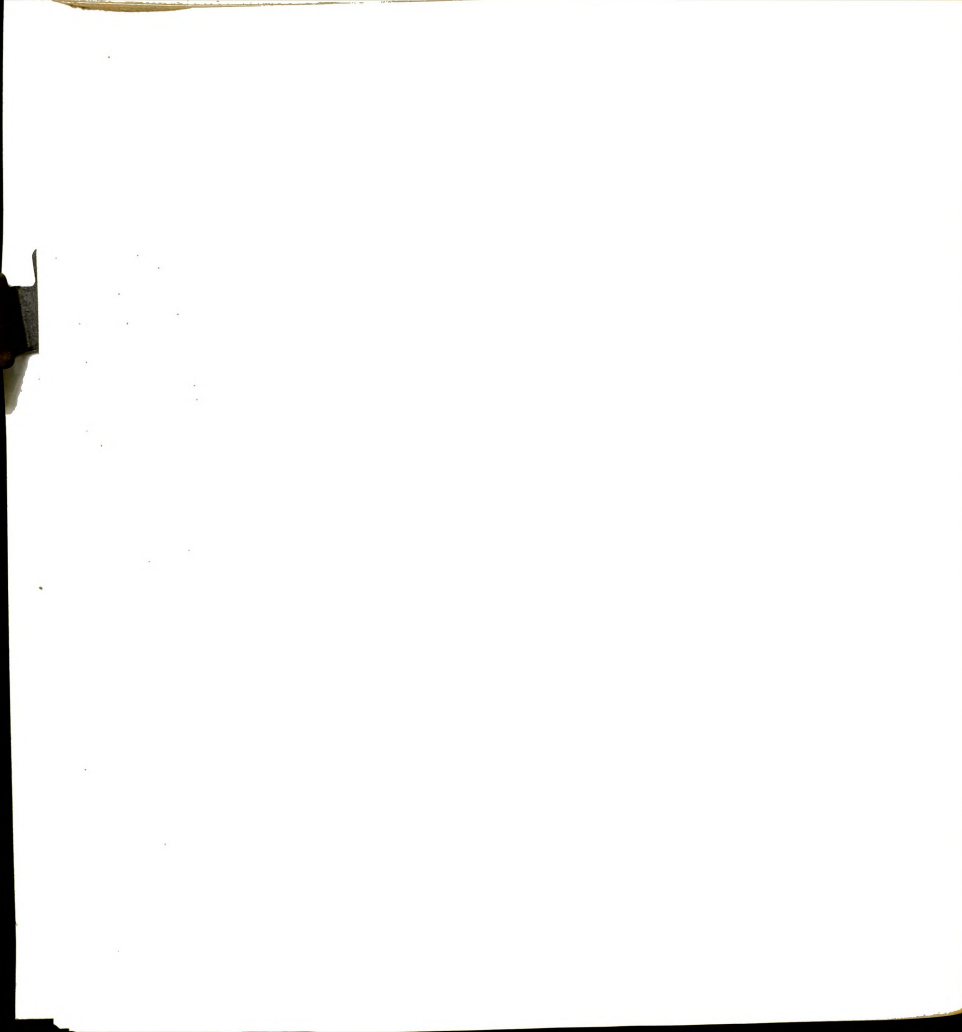
Organizational models or patterns in special education are numerous. Jordan, for example, has described a structure based upon:^a

- (a) The Teacher
- (b) The Supervisor or Director of Special Education
- (c) The School Nurse
- (d) The Reading Specialist
- (e) The Speech and Hearing Therapist
- (f) The Vocational Rehabilitation Counselor
- (g) The Social Worker
- (h) The Psychological Worker

Jordan suggests also that new roles may describe the most effective use of personnel in special education in the future; for example:

- 1. The Communications Expert
- 2. The Screening Technician
- 3. The School Diagnostician
- 4. The Supervisor
- 5. The Executive

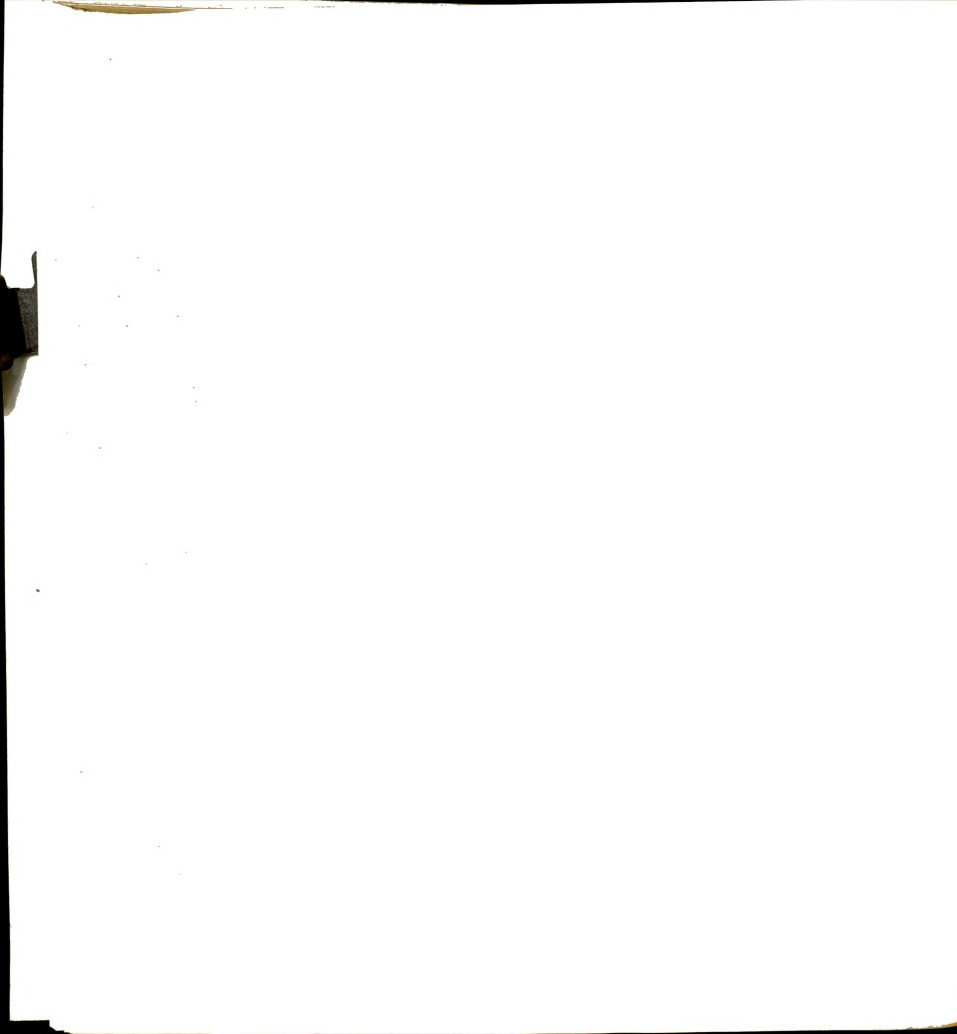
^aThomas E. Jordan, The Exceptional Child (Columbus, Ohio: Charles E. Merrill, 1961).



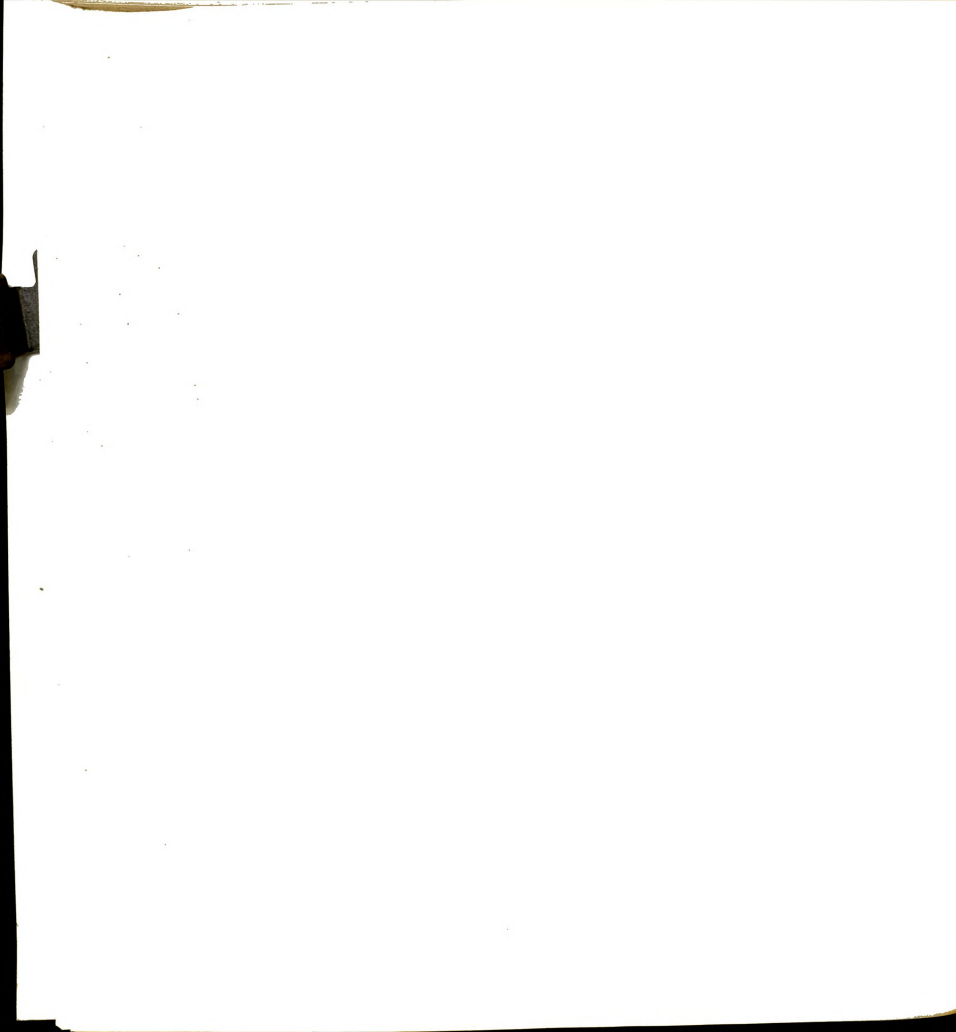
Types of Personnel Services to assist students might consist of the following, depending upon the System's Program-Personnel organization. Evaluations for each alternative are provided for guidance and consideration.^a

Type	Facilities	Possible advantages
Resource Teacher	1 Resource room.	1 Stimulation of improved instructional programs through cooperative planning and teaching.
	2 Wide variety of materials and equipment.	2 Students remain with peer groups and receive supplementary assistance according to individual needs.
		3 Extended use of resource materials and equipment.
		4 Development of instructional materials and programs.
		5 All students with educational difficulties regardless of labels may be assisted.
Itinerant Special Education Teacher	1 Central depot for supplies.	1 Service in less densely populated regions.
	2 Wide variety of portable material and equipment.	2 One teacher may serve more than one school.
	3 A mobile unit may be useful in some situations.	3 The advantages listed under Resource Teacher.

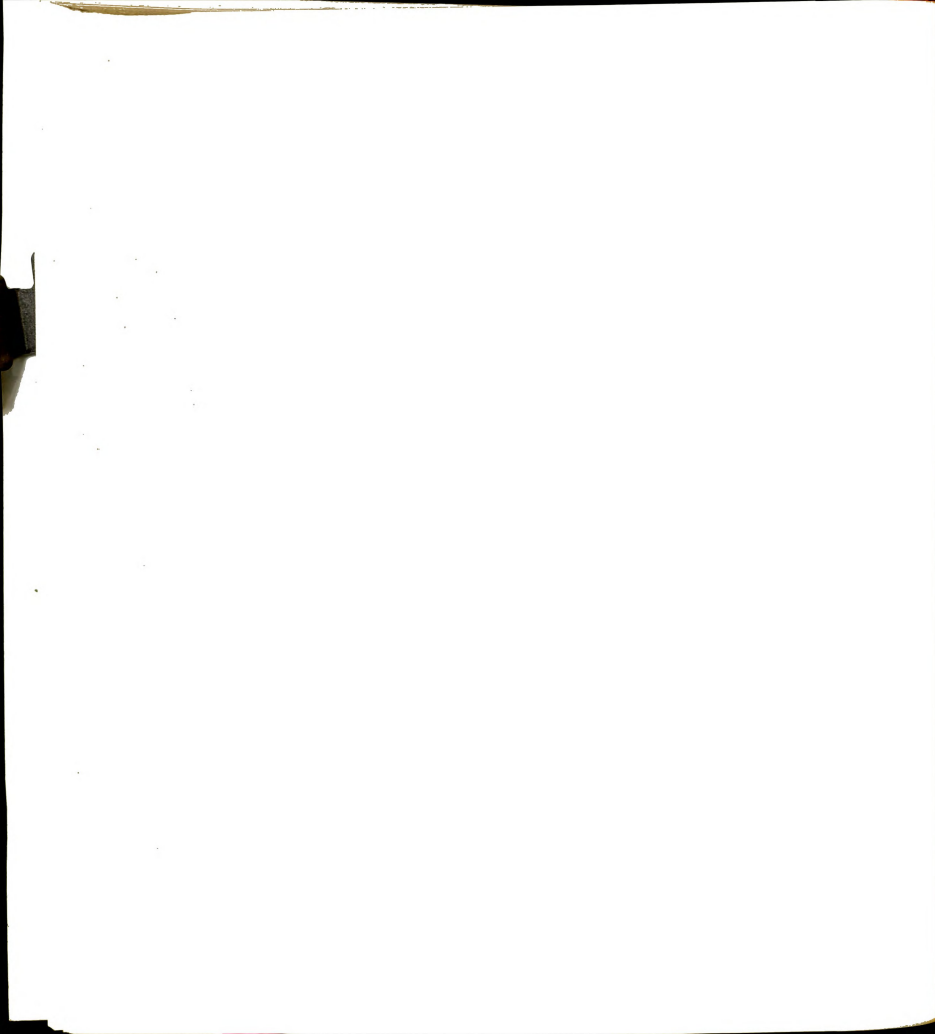
^aSpecial Education Branch, Special Education Advisory Handbook, Toronto: Ontario Department of Education, 1971.



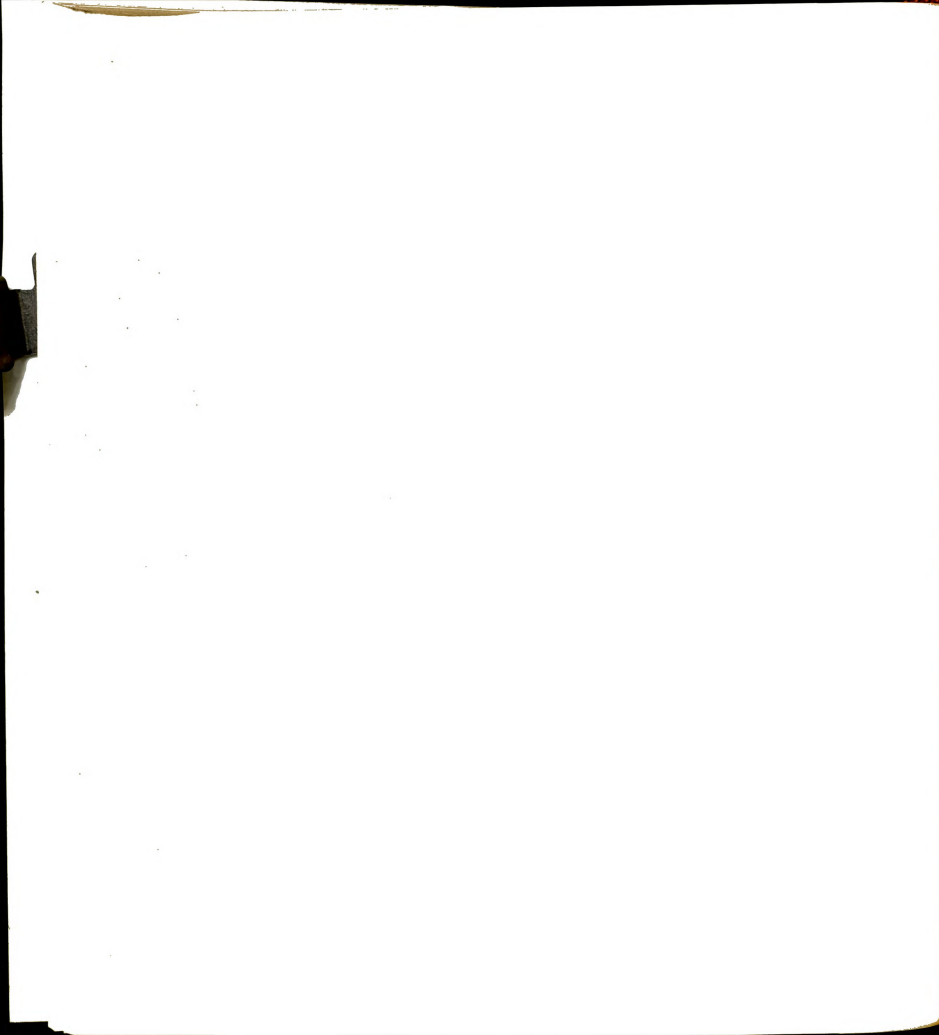
Possible weaknesses	Comments
1 No overall program; excessive departmentalization; fragmentation.	1 Need to establish lines of communication and of responsibility beforehand.
2 Tutoring in specific academic problems only.	2 Teacher must be creative; varied in talents, interests; tactful; adaptable; flexible; and able to work well with fellow staff members.
3 Some teachers unwilling to plan and teach cooperatively.	
4 Tendency to overburden resource teacher.	
1 Teacher-Transportation (time, expense, and movement of equipment).	Same as under Resource Teacher.
2 Weaknesses listed under Resource Teacher.	



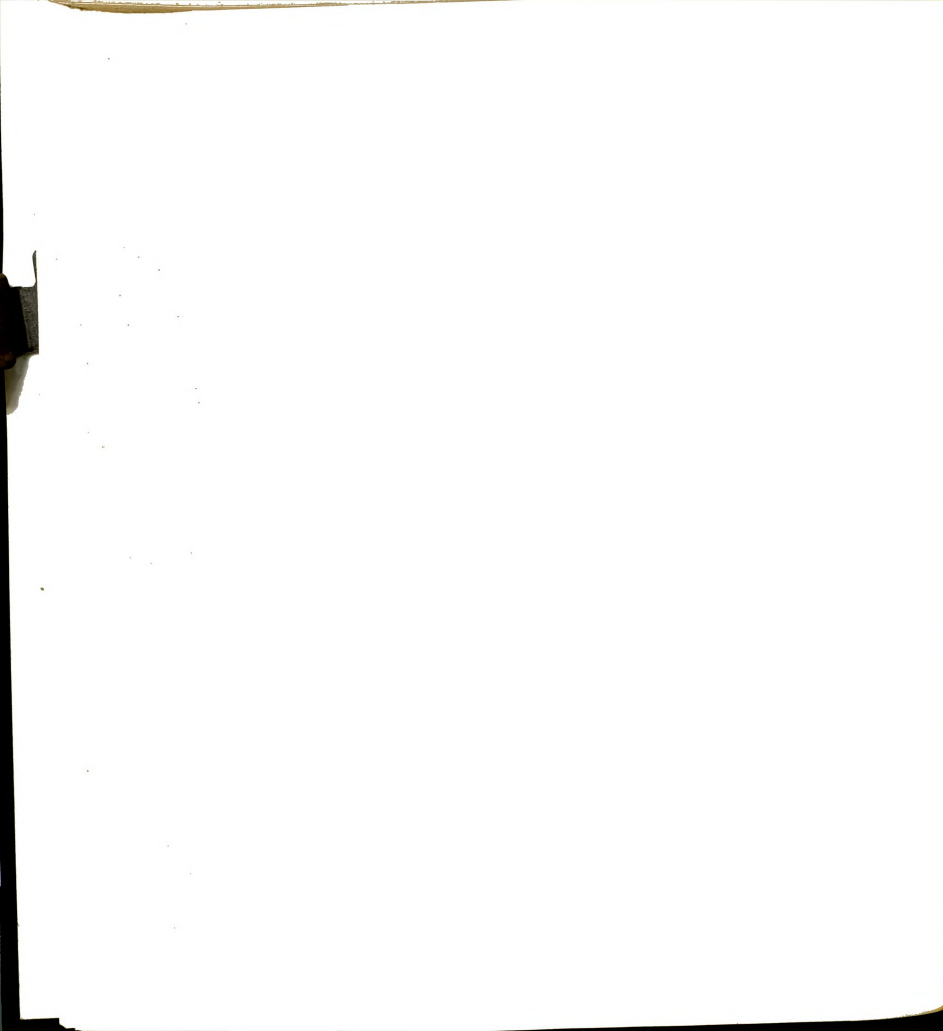
Service	Facilities	Possible advantages
Remedial Teacher (reading, mathematics, foreign language adjustment and learning disabilities).	1 Wide variety of materials and equipment.	1 Diagnostic and remedial individualized or small-group instruction in basic skills of reading, mathematics or the language of instruction.
	2 Appropriate space--fixed or mobile--for instruction and learning.	2 Rehabilitation for effective participation in regular school programs.
Teacher-Diagnostician	1 Testing and diagnostic materials.	1 Master special education teacher assists all teachers in cooperative planning of programs for individual children and youth.
	2 Office.	2 Possible in-service education of teachers.



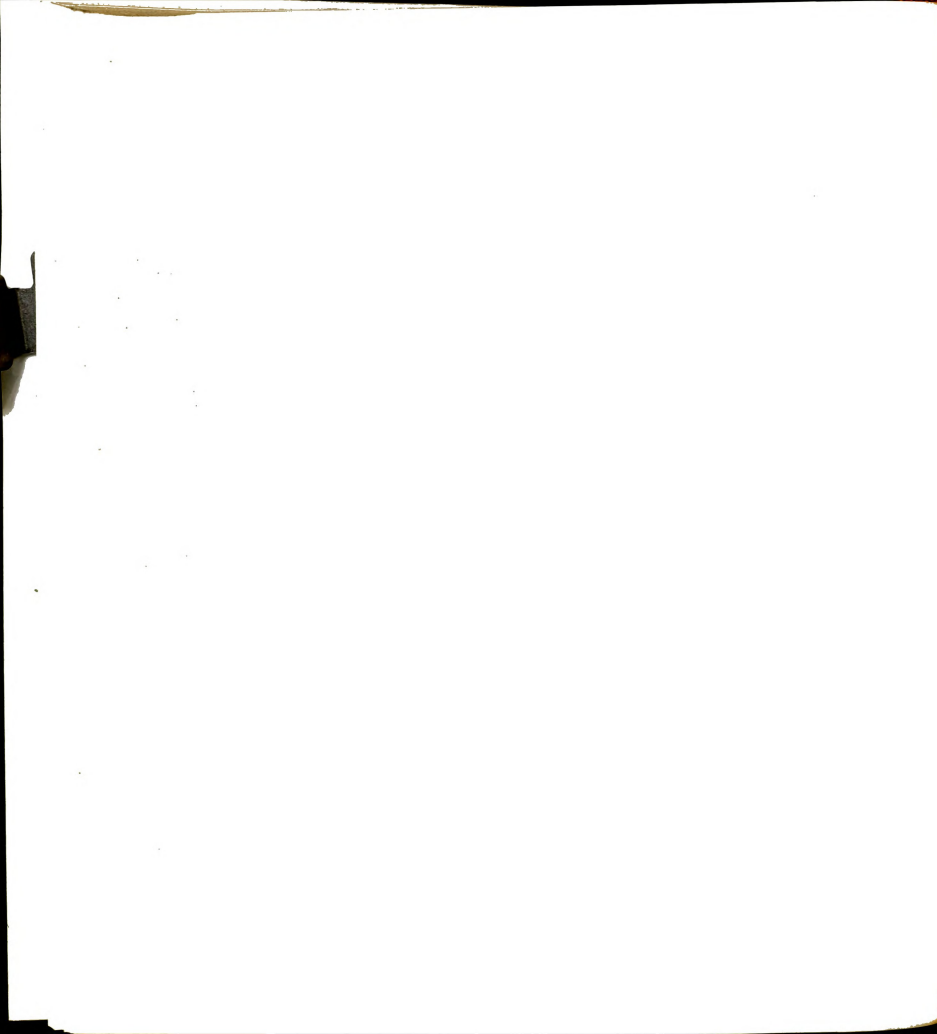
Possible weaknesses	Comments
1 Failure to diagnose skills in need of remediation.	Heavy emphasis placed on language development and skills in oral and written communication.
2 Hazy identification of candidates for remedial instruction.	
3 Complicated scheduling.	
1 Inadequate staff to provide service quickly.	Teacher trained in testing procedures is more familiar with classroom situation than some other ancillary personnel.
2 Inadequate personnel to provide follow-up.	



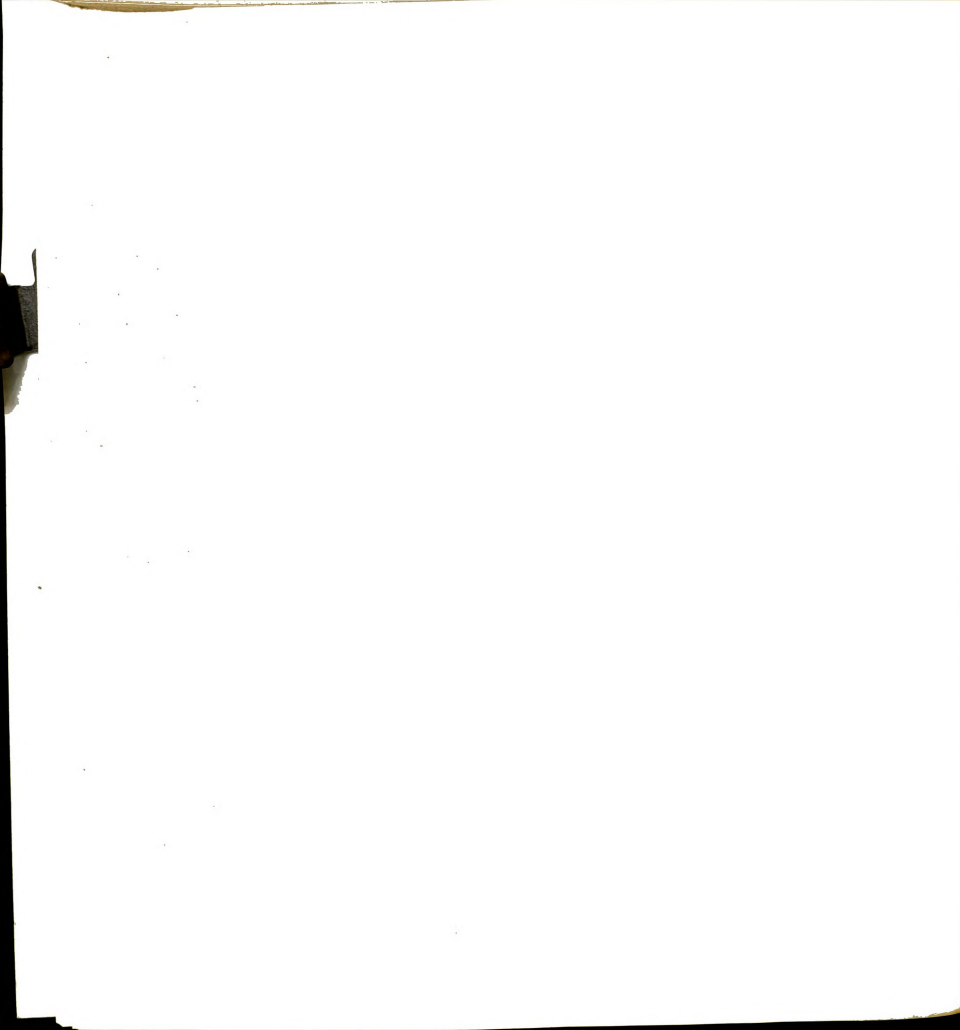
Service	Facilities	Possible advantages
Teacher-Consultant, Special Education	1 Wide range of instructional and learning materials and equipment.	1 Supportive assistance or professional consultation for teachers who work with exceptional students.
	2 Central supply depot and office.	2 In-service teacher education.
		3 Liaison with other consulting specialists (physical education, arts and crafts, music, speech and language, reading, primary methods, hearing handicaps, guidance, etc.).
		4 Counseling of parents, pupils and teachers.
		5 Extended use of resource materials and equipment.



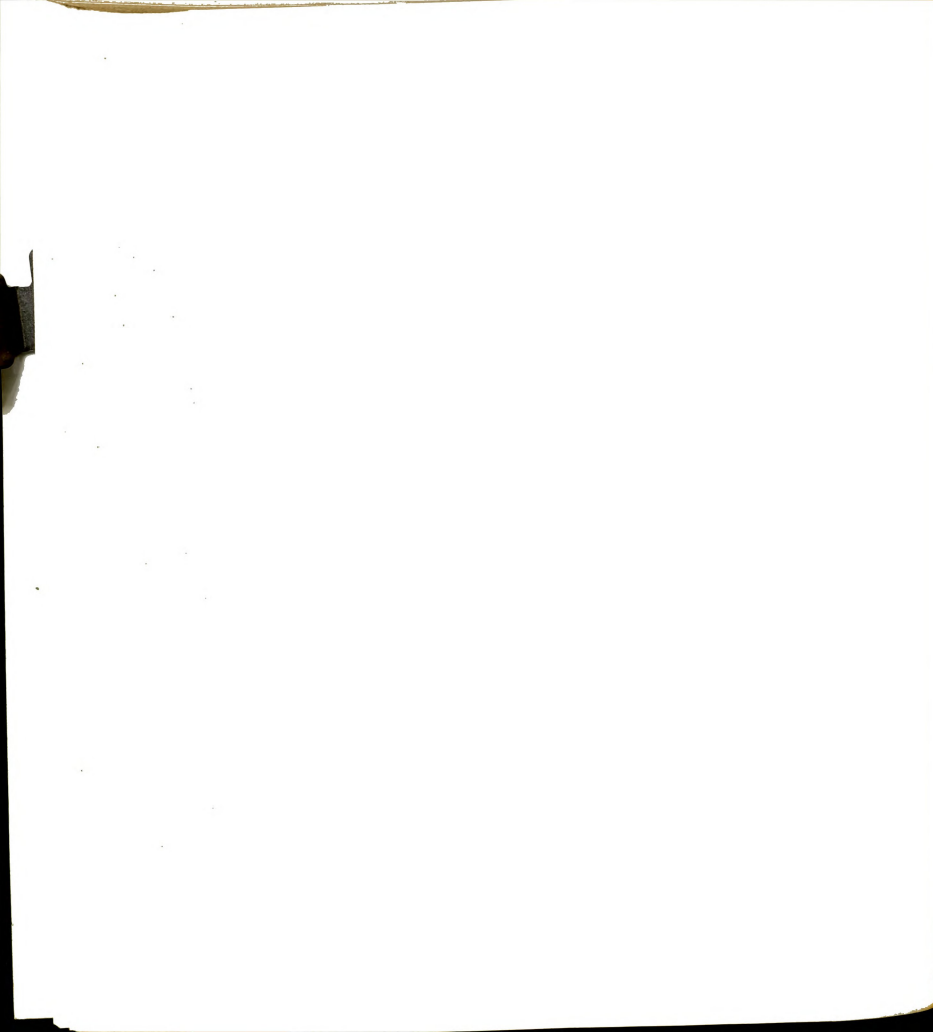
Possible weaknesses	Comments
Little or no direct assistance for individual children.	A consultant must be skilled in elementary school techniques and knowledgeable concerning retardation and learning disabilities.



Service	Facilities	Advantages
Consulting Specialists	Psychologist Psychiatrist Pediatrician Social Worker Public Health Nurse Physician Vocational Habilitation Counselors Audiologist Ophthalmologist Speech Correctionist Therapists Recreational Directors, etc.	Identification and possible amelioration of physical, emotional or social handicaps.
Counselors	Usual guidance department facilities.	1 Assistance in understanding for both parents and pupils. 2 Liaison with Manpower facilities, etc.

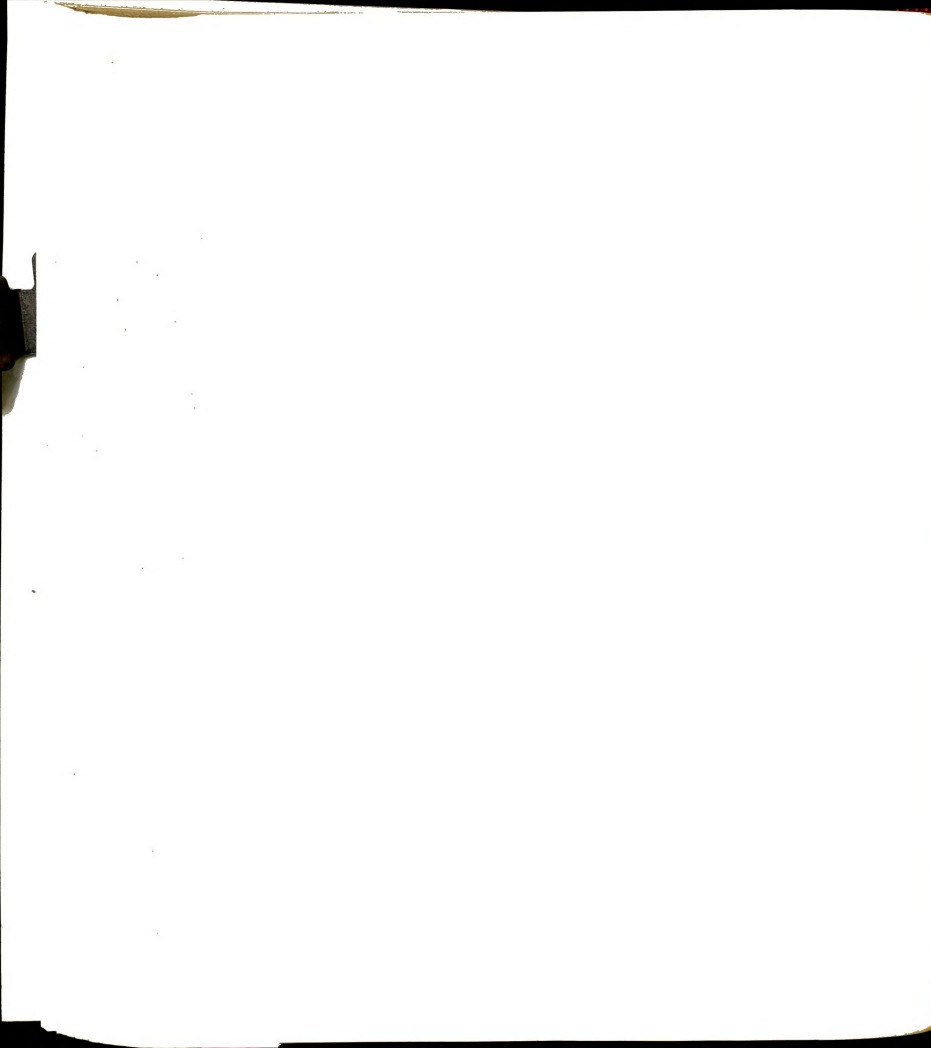


Weaknesses	Comments
<p>1 Professionals from other disciplines may not be sufficiently knowledgeable concerning school system programs and services.</p>	<p>The teaching staff must retain the final say concerning educational planning and programs.</p>
<p>2 Teachers have not learned to draw out from these professionals the information needed for educational planning.</p>	
<p>Few school counselors have a basic training in the psychology of exceptional children and youth and of their parents.</p>	



APPENDIX I

RESOURCES TO BE CONSIDERED IN PLANNING FOR
SPECIAL PROGRAMS AND SERVICES FOR
EXCEPTIONAL CHILDREN



APPENDIX I

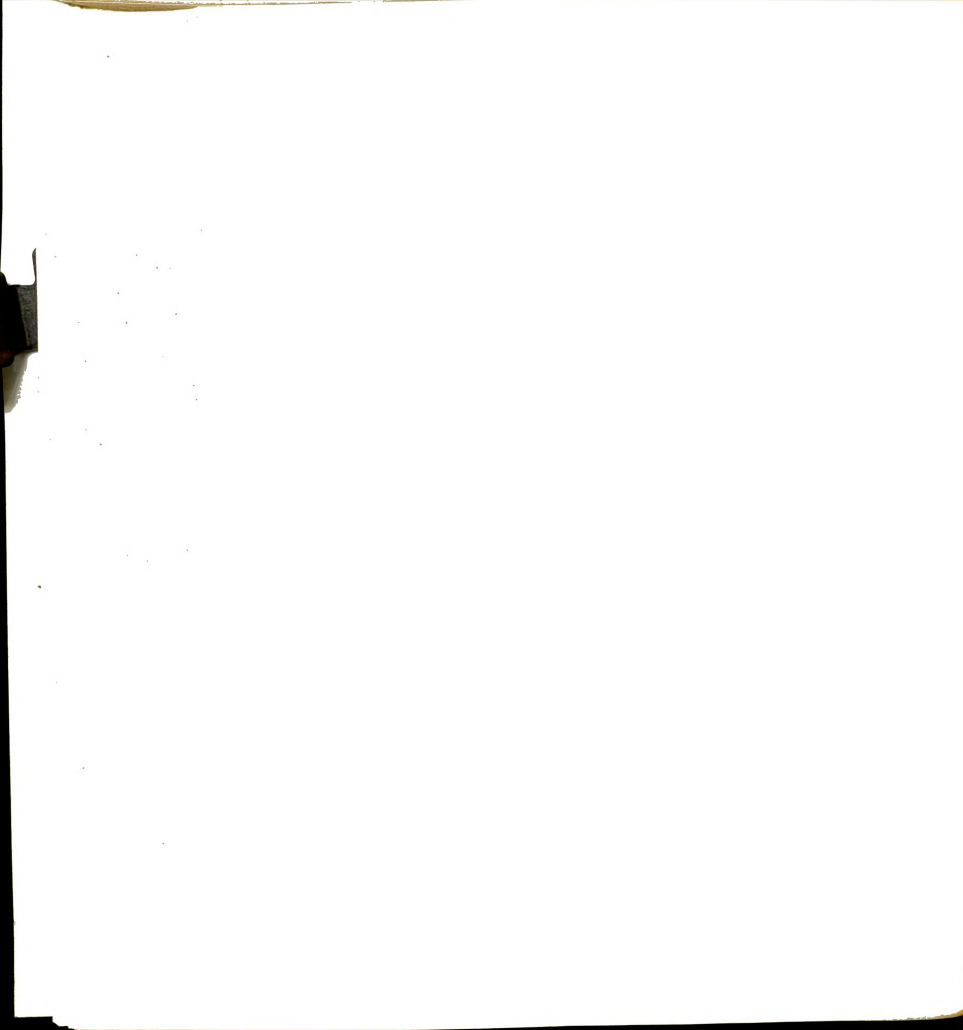
RESOURCES TO BE CONSIDERED IN PLANNING FOR
SPECIAL PROGRAMS AND SERVICES FOR
EXCEPTIONAL CHILDREN

"The exceptional child is that child who deviates from the average or normal child in mental, physical, or social characteristics to such an extent that he requires a modification of school practices, or special educational services, in order to develop to his maximum capacity."^a

In focusing upon the needs of children as individuals a variety of program placement variables are required to appropriately meet those needs. Within a special education continuum of services for exceptional children, diagnostic and treatment, residential, mental health institutions and special day school programs at local and provincial levels are required.

Exceptional children who may suffer from "behavioural disabilities," communicative disabilities, intellectual limitations and/or physical disabilities may be accommodated outside of the

^aSamuel A. Kirk, Educating Exceptional Children (2nd ed., Boston: Houghton Mifflin Co., 1972).



regular school system, because of a variety of factors not necessarily related to educational need, within any one of the settings which follow.

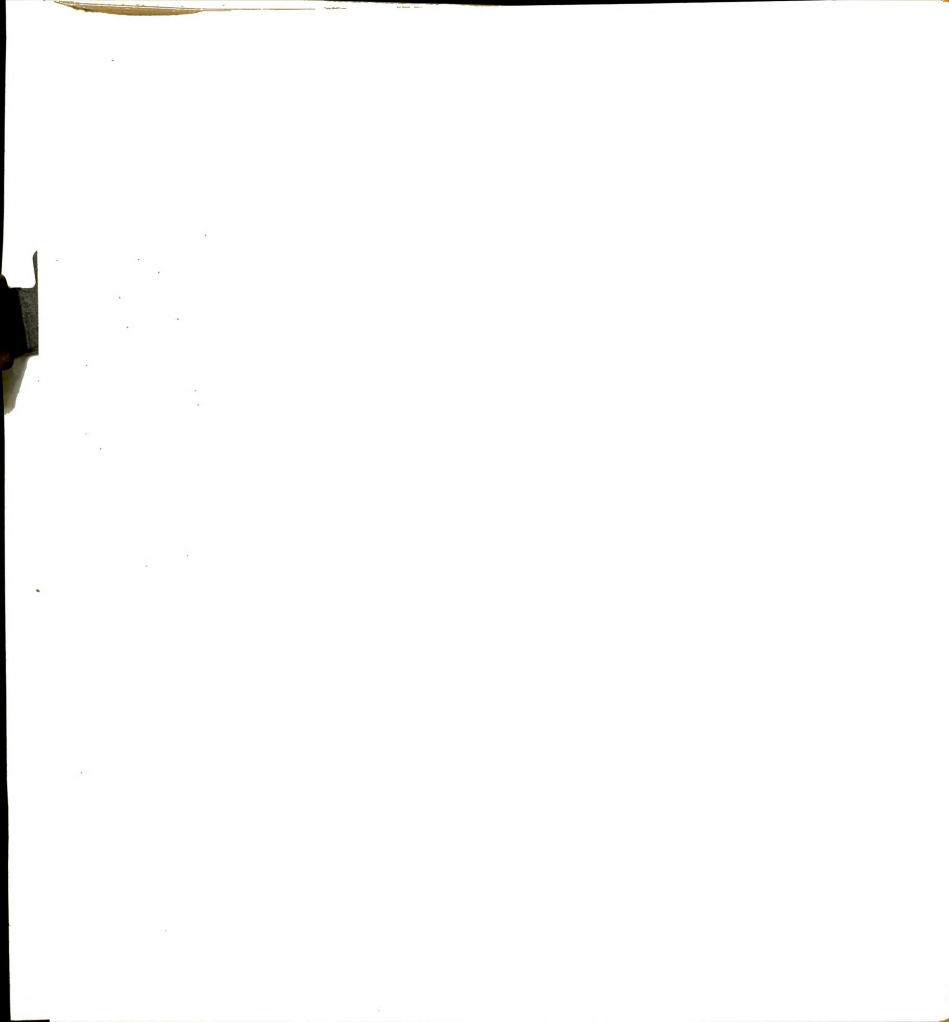
The Provision of Education to Pregnant Students

The development of plans for the uninterrupted education of a pregnant student should be the concern of the school principal and the teachers of the girl. The decision about the length of stay of the girl in the school before confinement should be made by the principal in consultation with the girl, her physician and her parents or husband. When a girl withdraws from school, the school authorities have a responsibility for the continuance of the girl's education through home instruction, correspondence courses or the provision of informal assistance from her teachers.

Education for Homebound and Hospitalized

An educational program for children and youth who are hospitalized or homebound is intended to be a means of inclusion in, rather than exclusion from, the total range of programs and services provided by education.

(For further information write for: The Provision of Education for Pupils who are Homebound or Hospitalized from the Regional or Intermediate Office of Education in your area.)



Education for Students in Detention Homes and Correctional Institutions

For complete listing of facilities providing educational and training programs write to: Department of Correctional Services, c/o Provincial or State Government Offices.

The Residential Schools for the Deaf and Blind as a Resource for the Establishment and Operation of Programs and Services by School Boards for Deaf and Hearing Handicapped Children, and Blind and Visually Handicapped Children

The residential schools for the deaf and blind function as regional resource centers for school boards as they plan and implement, at the local level, programs and services for the deaf and blind or for children with hearing or visual difficulties.

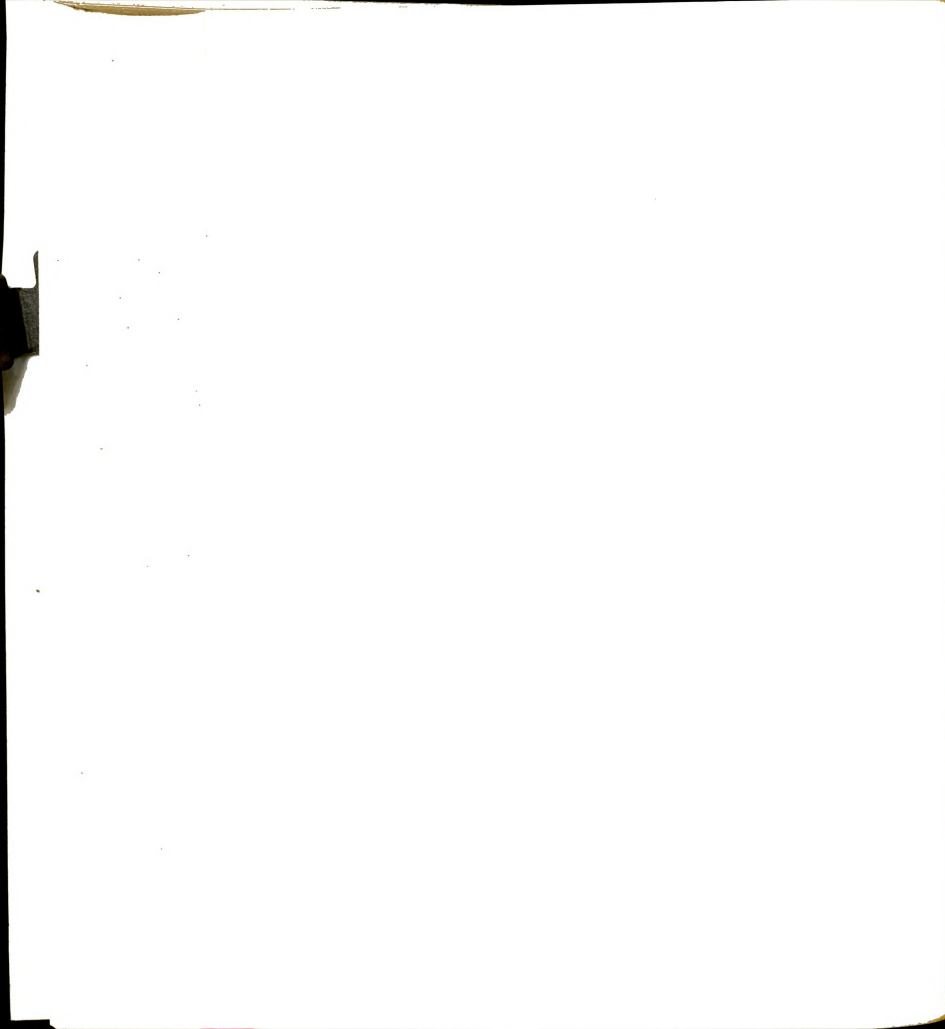
It has been recognized for some time that these children benefit markedly from living at home and participating in local special education programs designed to meet their particular needs.

The residential schools for the deaf and blind provide a resource of experience and skill for school boards. Many centers have undertaken new programs with the counsel and help from the residential schools.

Assistance from the regional schools serving your region can be secured through your regional or intermediate office of education.

Regional Diagnostic Assessment and Treatment Centers

Regional Education Consultants function as members of a clinical team at Regional Diagnostic, Assessment and Treatment Centers. Each child referred to a Regional Clinic receives a



complete educational diagnosis in addition to medical, psychological and social work assessment.

A remedial program is devised to meet the individual needs of referrals and upon rehabilitation, the education consultant assists the student's receiving teacher to appropriately follow-up the necessary programming.

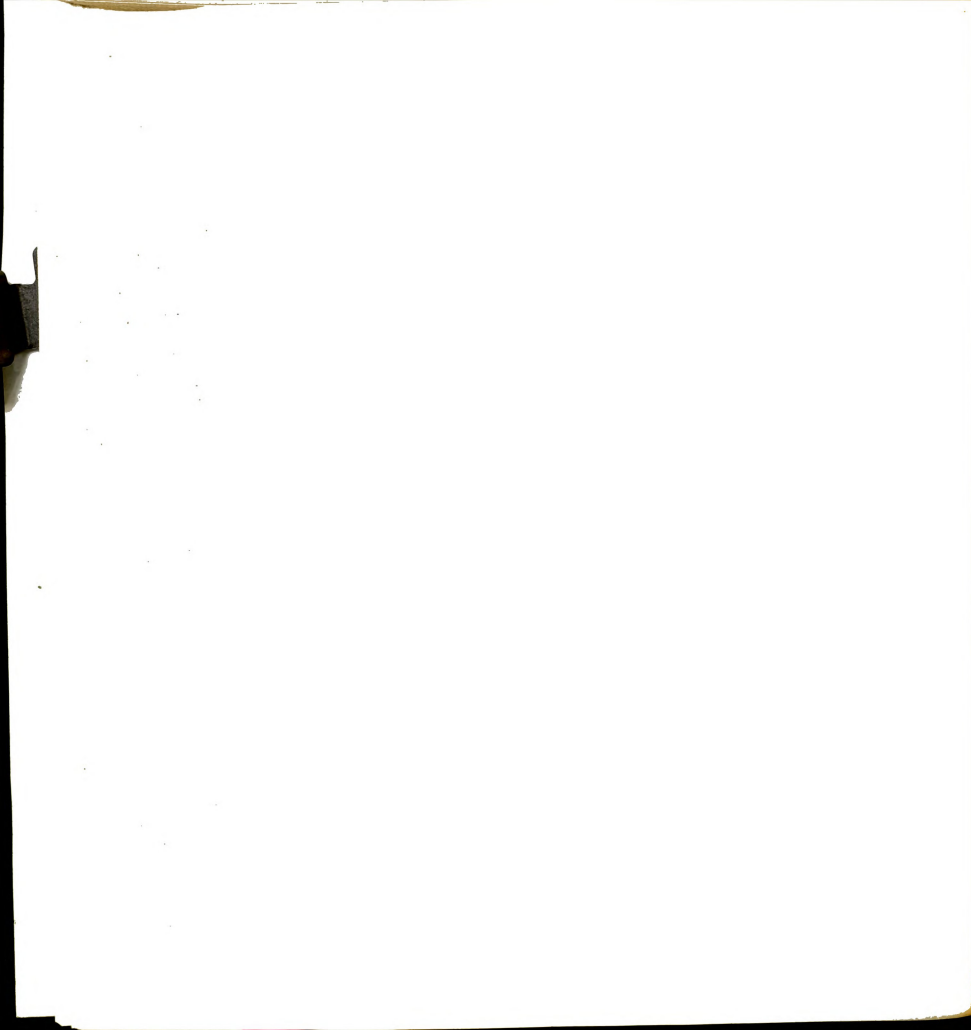
The teacher is provided with help in integrating the recommendations of the clinic with the regular instructional program of the school.

Residential Schools for Retarded and Multihandicapped Children;
Provincial or State Hospital Schools

The objectives and aims toward which educators work in the Hospital Schools are basically the same as those for normal children in the regular schools. School programs are suited to the individual needs of mentally retarded and multihandicapped students so that they may develop to the maximum of their capabilities: intellectually, physically and socially.

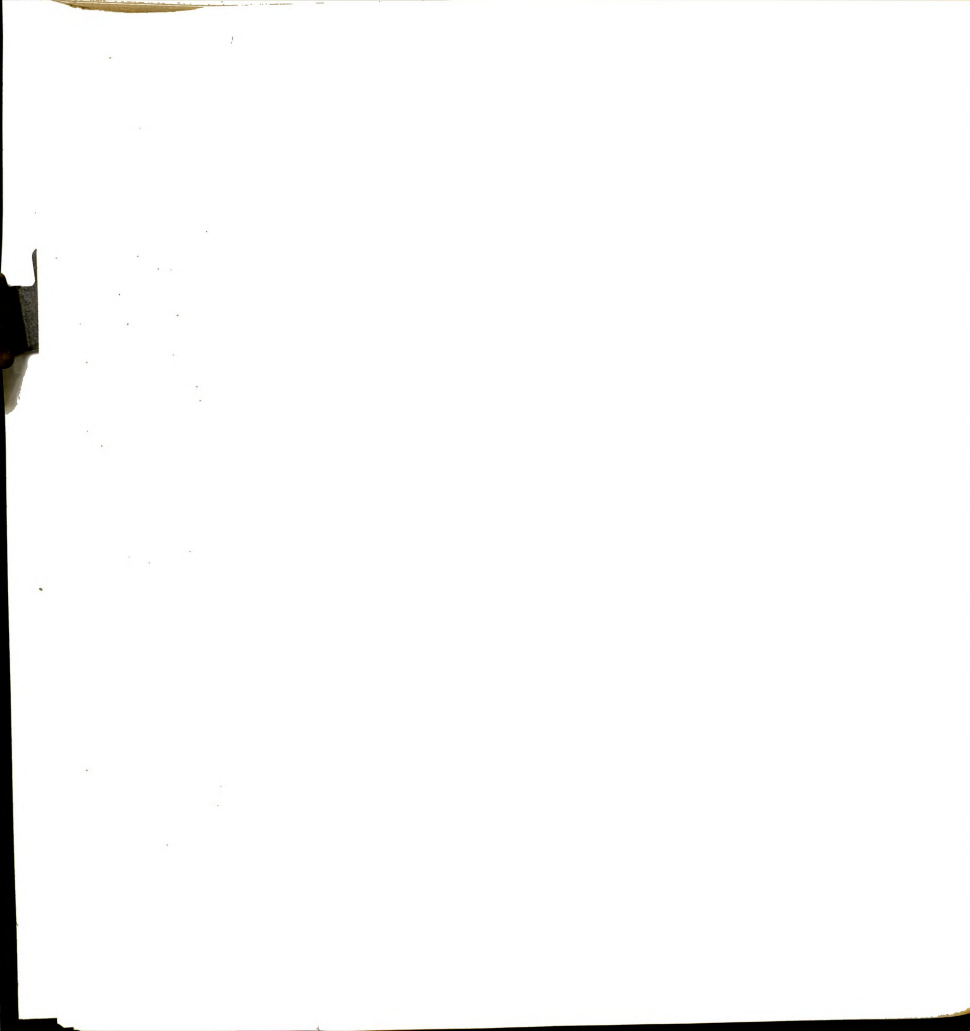
The emphasis of the school program includes training for educable and trainable mentally handicapped students.

Referrals are made through a family physician.



APPENDIX J

COMMUNITY RESOURCES AS PLANNING FACTORS



APPENDIX J

COMMUNITY RESOURCES AS PLANNING FACTORS

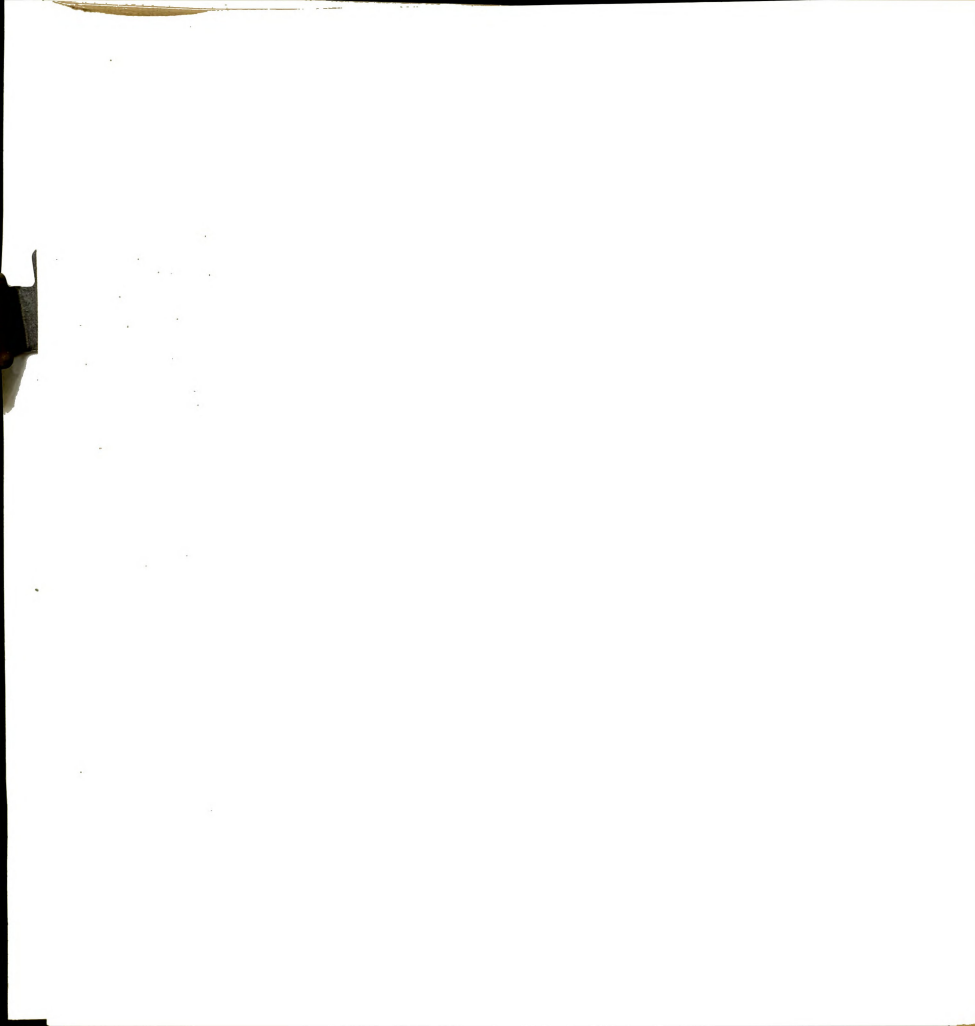
The involvement of various professional disciplines from the local community, county, region, state or province is an area which has been substantially neglected. A school division needs to avail itself of the many resources available from the community. These community disciplines represent an array of services which may eliminate the need for the board to provide such services from its own staff or, by-pass securing needed information because the local staff lacks the expertise to such services.

Some of the issues which need to be explored in the use of community organizations or agencies are:

1. What efforts have been made to involve such organizations in the planning stage of the division's developmental design?
2. What procedures have been established for the dissemination of information on a regular basis to keep such agencies informed about progress of the school projects?



3. What commitment are these agencies willing to make to the school to assist in the area of appraisal service, consultant service, or inservice training for the staff of the school?
4. What role will the following organizations be able to follow in the school division's effort to implement the plan for special education?
 - a. County and/or City Medical Society
 - b. County and/or City Welfare Office
 - c. County and/or City Health Department
 - d. Child Guidance Clinics
 - e. Community Mental Health/Mental Retardation Centers
 - f. Private Practicing Psychologists
 - g. Local universities, teachers' colleges, or colleges of education (if none are available, how can this be accomplished from some other geographically appropriate institution?)
 - h. Parent organizations such as Home and School and Parent-Teacher Associations, Association for the Mentally Retarded, Association for Children with Learning Disabilities, and others.
 - i. News media or other forms of community information dissemination services
 - j. Other



APPENDIX K

AN ACCOUNTABILITY MODEL FOR THE INSTRUCTION OF CHILDREN AND YOUTH



APPENDIX K

AN ACCOUNTABILITY MODEL FOR THE INSTRUCTION OF CHILDREN AND YOUTH

Within the instructional arrangements made for a variety of exceptional children, provisions should ensure that individualized instruction ensues. As prescribed by the Michigan State Board of Education, an accountability model may be utilized for a system's approach to improved elementary and secondary services to children and youth. Using a performance objectives approach educators are encouraged to meet the needs of all children and youth--preparing them for adolescence and later for adulthood. Within the cognitive, affective and psychomotor domains, the delivery of services and assignment of personnel attempts to personalize each student's learning with an eye to maximizing his or her interests and capabilities.



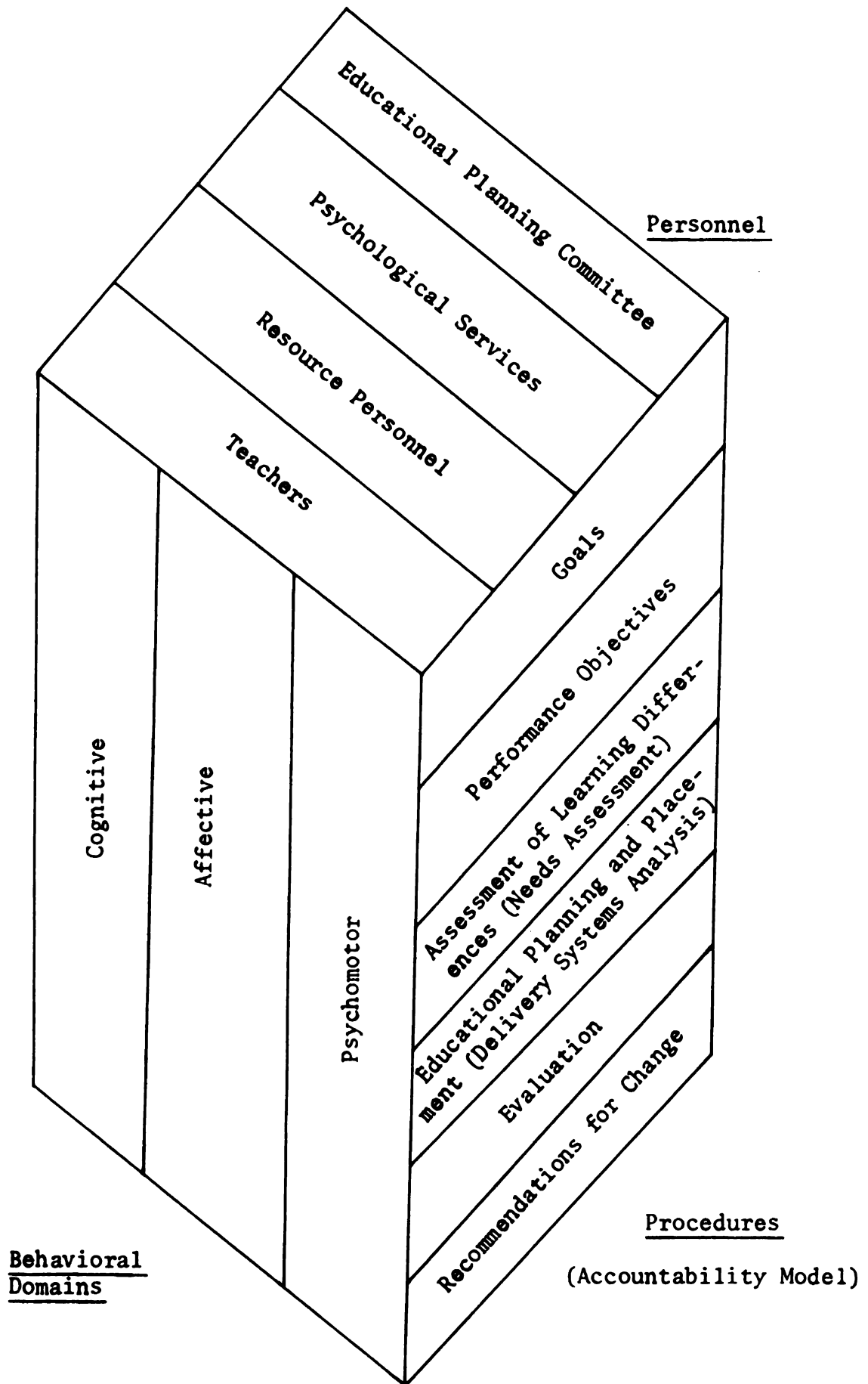


Figure K.1.--A Graphic Presentation of the Individualized Instructional Model (58).

Dr. M. C. Reynolds (1962) formulated the following diagram to illustrate a similar range of program organization including an indication of the numbers of children to be so placed.

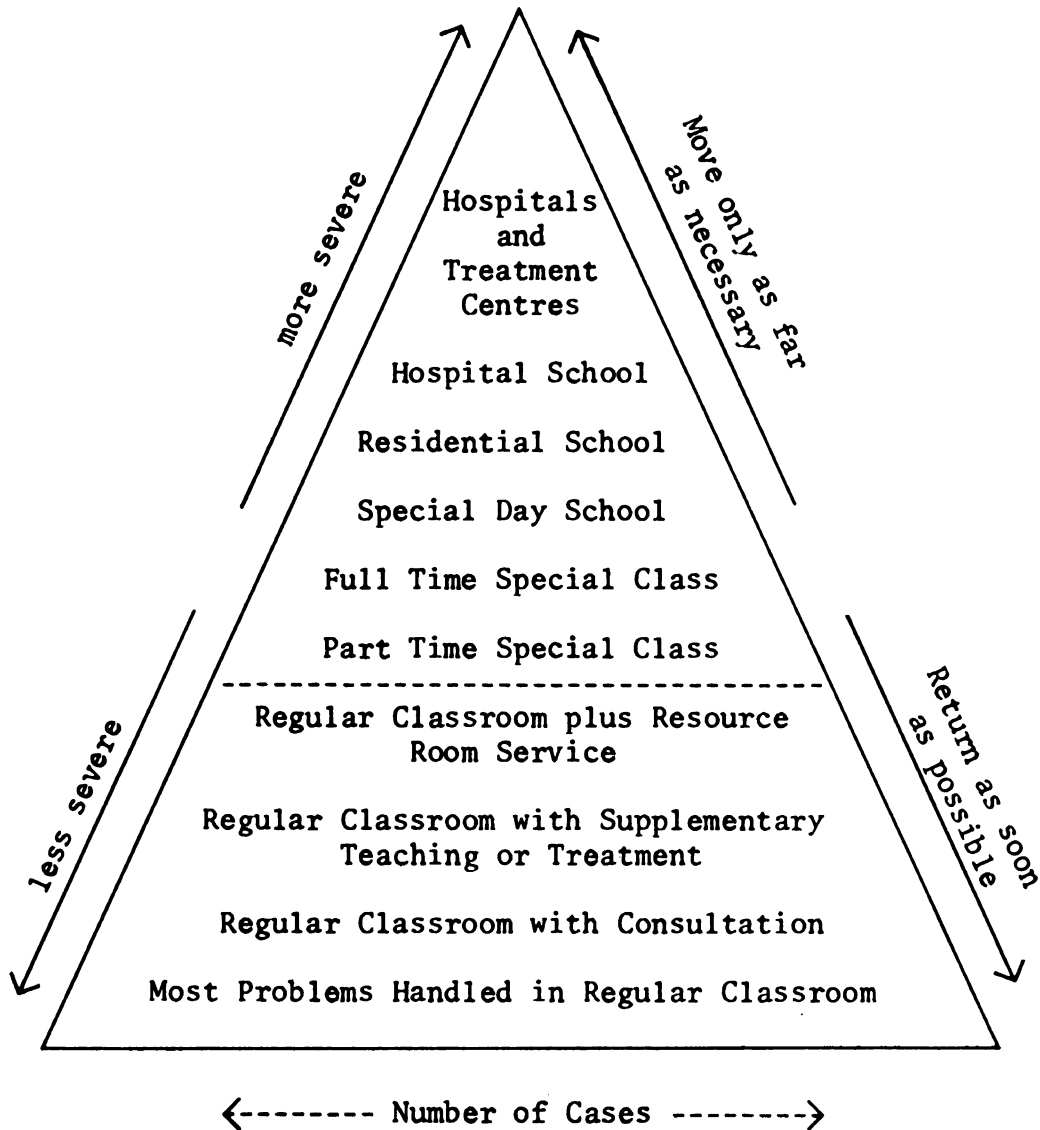


Figure K.2.--Program Organizational Framework.^a

^aSamuel A. Kirk, Educating Exceptional Children (2nd ed., Boston: Houghton Mifflin Co., 1972), p. 31.



WRITINGPERFORMANCE OBJECTIVES:^a

Elements and Example

There are four basic elements to be considered in developing a performance objective. They are the person, behavior, instruction and measurement. However, to develop a complete objective two additional elements must be considered. These added elements are the time needed to attain the objective and the proficiency level that can be expected.

Numbered below are the six elements of a complete performance objective.

1. Institutional Variable (Student, Teacher, etc.)
2. Instructional Variable (Content, etc.)
3. Behavioral Variable (Cognitive, etc.)
4. Measurement (Tests or Method, etc.)
5. Time Needed (One year, One term, etc.)
6. Proficiency Level (Grade Equivalent, etc.)

The following is an example of a complete performance objective for a child's educational program in reading.

At the end of one year,⁵ the student¹ will demonstrate facility³ with selected reading skills² with a minimum of 80% accuracy⁶ when measured by Gray's Oral Reading Test.⁴

^aRobert Mager, Preparing Instructional Objectives, Palo Alto: Fearson Pub., 1962.



M I C H I G A N
S T A T E B O A R D
O F E D U C A T I O N

State approach to improved
elementary and secondary services
to children and youth



BUILDING ACCOUNTABILITY
INTO THE
EDUCATION SYSTEM

- I Common Goals
- II Performance Objectives
- III Needs Assessment
- IV Delivery Systems Analysis
- V Evaluation & Testing
- VI Recommendations for Improvement



M I C H I G A N
D E P A R T M E N T O F E D U C A T I O N
meeting the needs of all children and youth

3	6	9	12	15	18
PRE-SCHOOL	PRIMARY SCHOOL GRADES 1,2,3	ELEMENTARY SCHOOL GRADES 4,5,6	MIDDLE (JUNIOR) SCHOOL GRADES 7,8,9	SENIOR HIGH SCHOOL GRADES 10,11,12	GRADUATE SCHOOL GRADES 10,11,12
Ages 3-4-5	Ages 6-7-8	Ages 9-10-11	Ages 12-13-14	Ages 15-16-17	
CHILDREN					YOUTH
adulthood					
- job openings					G
- marriage					O
- college					A
- continuing education					L
- citizenship					178



Panel 4

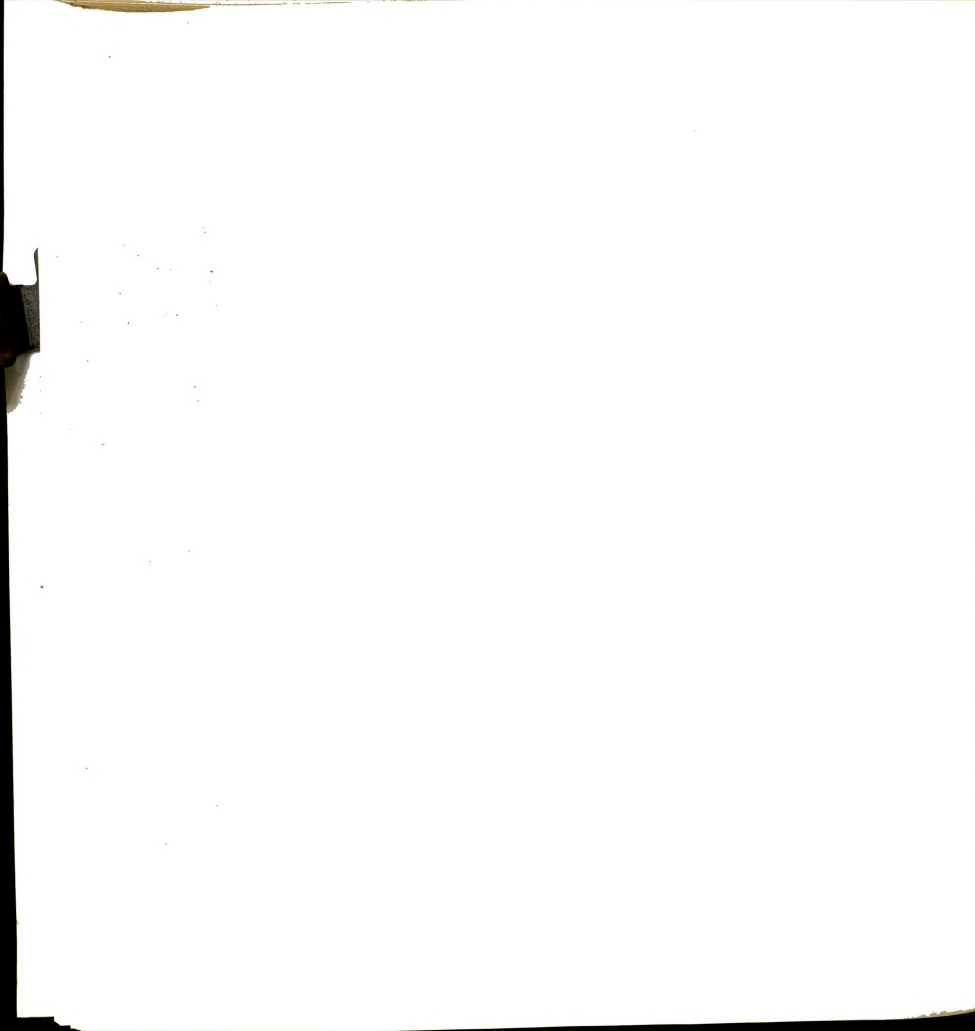
P R E P A R I N G C H I L D R E N F O R A D O L E S C E N C E

STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6
	PERFORMANCE-OBJECTIVE AREAS		NEW DELIVERY SYSTEM PLANS		
GOALS FOR CHILDREN	COGNITIVE DOMAIN	<ul style="list-style-type: none"> - Communication Skills - Mathematics Skills - Natural Science Skills - Social Science Skills - Fine Arts Skills - Health Skills - Physical Education Skills - Industrial Arts Skills 	<ul style="list-style-type: none"> - Compensatory Education - Experimental and Demonstration Schools - Year-Around Schooling - Pre-School Education - School Meals Improvement - Performance Contracting 	IN-SERVICE PROFESSIONAL DEVELOPMENT PROGRAM	RECOMMENDATIONS TO LOCAL DISTRICT AND STATE BOARD OF EDUCATION
	PSYCHO-MOTOR DOMAIN	CHILD-SCHOOL NEEDS ASSESSMENT		EVALUATION	
	AFFECTIVE DOMAIN	<ul style="list-style-type: none"> - Creativity - Tolerance - Morality - Honesty - Self-Discipline 			
	- Social Awareness				

GOALS

FOR

CHILDREN



P R E P A R I N G Y O U T H F O R A D U L T H O O D

STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6
GOALS FOR YOUTH	PERFORMANCE-OBJECTIVE AREAS		NEW DELIVERY SYSTEM PLANS		
	<ul style="list-style-type: none"> - Developing Effective Communications - Understanding the Political Process - Understanding the Economic System - Understanding the Natural Sciences - Preparing for the World of Work - Preparing for Continuing Education - Developing Effective Health and Nutrition Understandings - Developing Aesthetic Appreciations 	<p>YOUTH-SCHOOL NEEDS ASSESSMENT</p>	<ul style="list-style-type: none"> - Performance Contracting - Alternative Occupational Scheduling - Coordinated Career Education - Year-Around Schooling - Student Financial Assistance - Expanded Utilization of Facilities - Neighborhood Education Centers 	<p>IN-SERVICE PROFESSIONAL DEVELOPMENT PROGRAM EVALUATION</p>	<p>RECOMMENDATIONS TO LOCAL DISTRICT AND STATE BOARD OF EDUCATION</p>

A G E S 12 - 18



APPENDIX L

ESTIMATED SPECIAL PROGRAM COSTS FOR
A HYPOTHETICAL SCHOOL DISTRICT



APPENDIX L

ESTIMATED SPECIAL PROGRAM COSTS FOR A HYPOTHETICAL SCHOOL DISTRICT

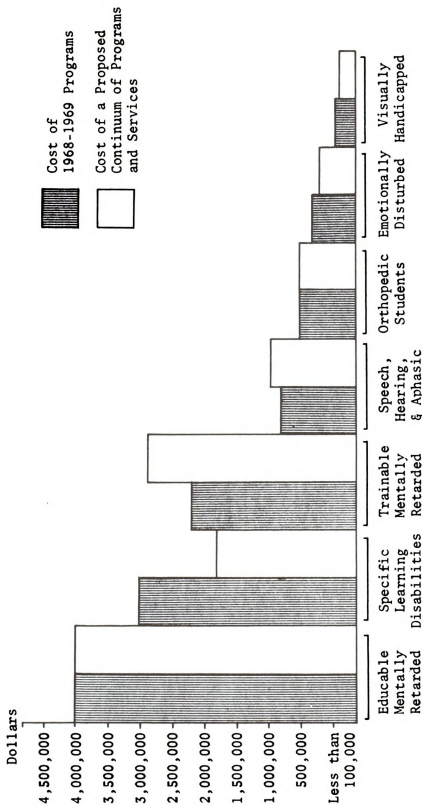
TABLE L.1.--Estimated special program costs for a hypothetical school district having 20,000 pupils in average daily membership and a regular program expenditure of \$655 per pupil.^a

Category of Exceptional Program	A Prevalence Rate (%)	B District ADM	C Special Program Population (AxB)	D Special Program Cost Index	E Expenditure Pupil in Regular Program	F Special Program Cost (CxExE)
Educable Mentally Retarded	1.30	20,000	260	1.87	\$655	\$318,461
Trainable Mentally Retarded	0.24	20,000	48	2.10	655	66,024
Auditorily Handicapped	0.10	20,000	20	2.99	655	39,169
Visually Handicapped	0.05	20,000	10	2.97	655	19,453
Speech Handicapped	3.60	20,000	720	1.18 ^b	655	556,488
Physically Handicapped	0.21	20,000	42	3.64	655	100,136
Special Learning Disorders	1.12	20,000	224	2.16	655	316,915
Emotionally Disturbed	2.00	20,000	400	2.83	655	741,460
Homebound/Hospital	0.22	20,000	44	1.42	655	40,924
TOTAL			1,768			\$2,199,030

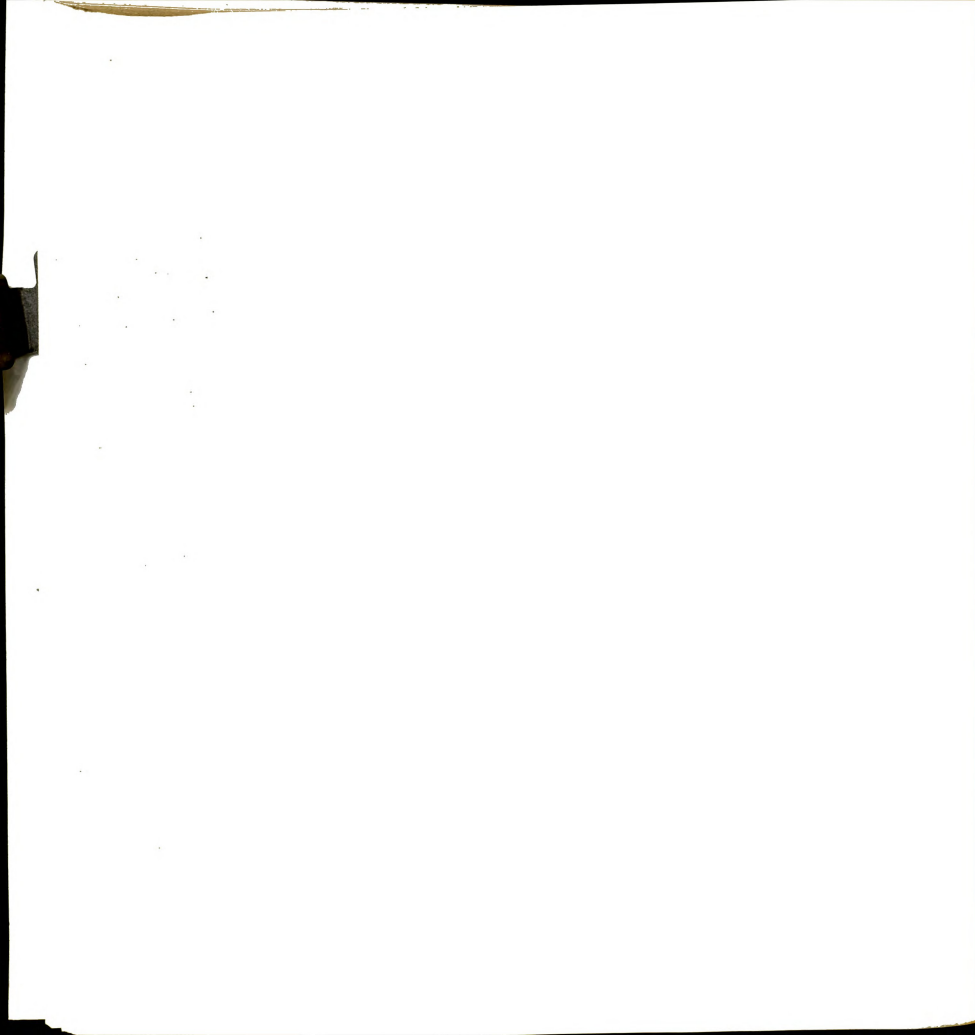
^aRossmiller, Hale, Frohriech, *Resource Configurations and Costs*, National Educational Finance Project--Special Study No. 2, Madison, Wisc.: 1970, p. 129.

^bIt should be noted that speech handicapped pupils are typically enrolled in regular class programs. The additional costs to provide clinical speech services are approximately 18 per cent of the regular program per pupil costs.



TABLE L.2.--Program cost comparisons in the State of Maryland.^a

^aMaryland State Department of Education, A Design for a Continuum of Special Education Services, Silver Spring, Maryland, 1969.



APPENDIX M

SAMPLE PLAN COMPLETED FOR LEADER COUNTY



APPENDIX M

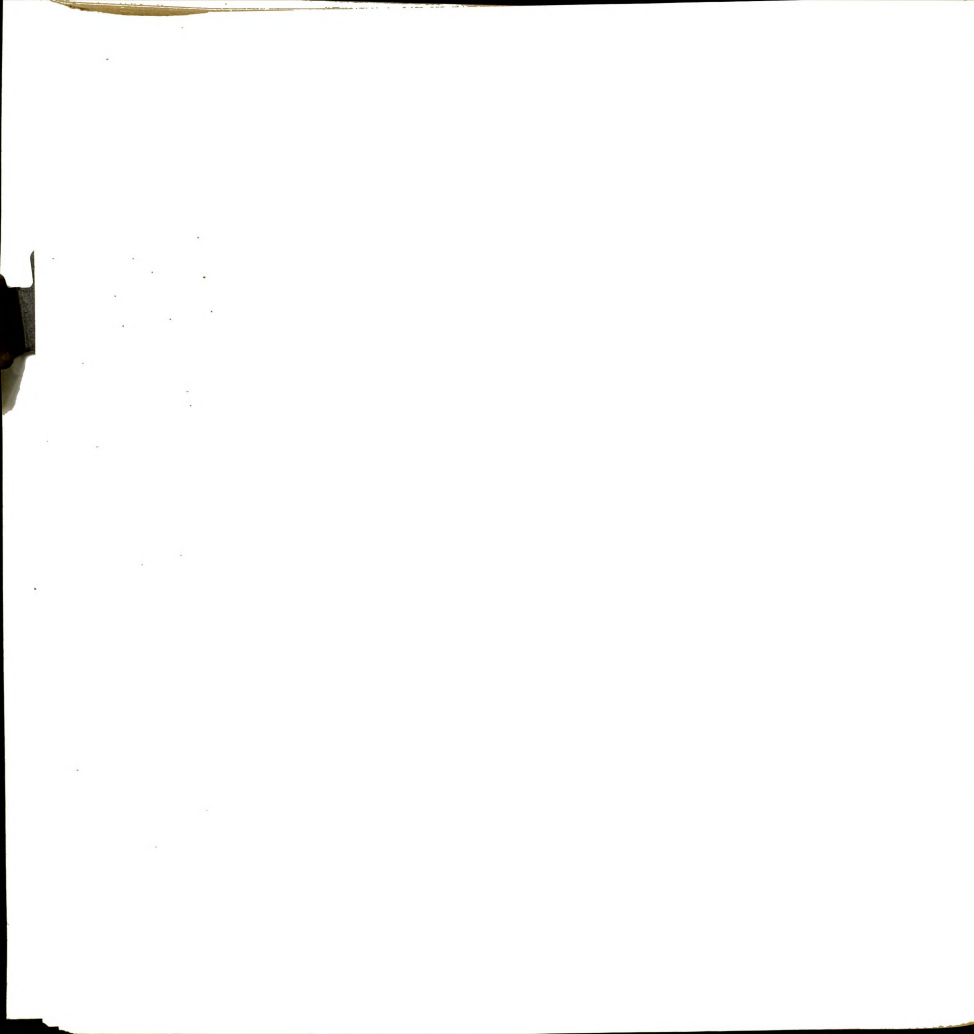
SAMPLE PLAN COMPLETED FOR LEADER COUNTY

In this section an attempt has been made to reproduce, in part, a sample plan to provide comprehensive programs and services for Special Education for a school system based upon a pilot study conducted in the Province of Ontario, Canada.

A portion of the narrative which would accompany the planning instrument is included to provide an example of the type of explanations which would be essential to complement the data forms.

It should be noted that the statistics incorporated into this section for the Leader County Board of Education are in no way a true reflection of any other board's programs and services in Special Education.

As a result of the experiences encountered in this application of a systems planning format in Special Education, the need for a number of revisions became apparent. The Systems Approach to Educational Planning Applied to Special Education, as proposed in Chapter 3 of this study, has benefitted from information gained from this pilot study.



DEV. PROGRAM
PHILOSOPHY &
POLICIES

PERSONNEL/INSTRUCTIONAL ARRANGEMENTSLeader County Board of Education

Special education instructional personnel may be utilized in any of the ways described below in keeping with program purposes, educational needs of pupils, the planned program of the local district, and the teacher's qualifications and certification.

(1) A Special Education Teacher in a Self-Contained Classroom

A special education teacher in a self-contained classroom is a teacher who works with special education pupils on a full-day basis. The pupils receive all of their instruction from the special education teacher or other special education personnel.

(2) A Special Education Teacher in an Integrated Special Education Program

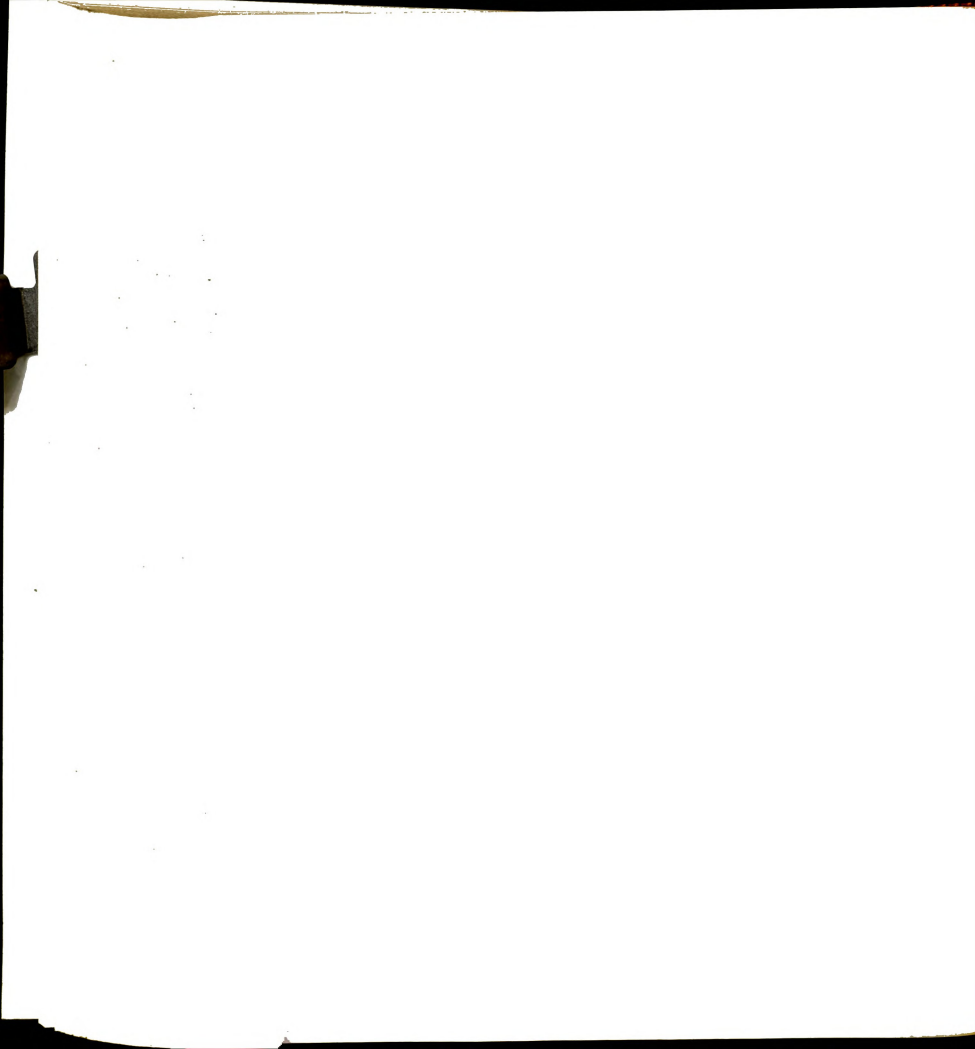
A special education teacher in an integrated special education program is a teacher who works with special education pupils who may be integrated into a regular class for less than one-half of the school day. The special education pupil receives the majority of his instruction from the special education teacher.

(3) A Special Education Teacher in a Resource Special Education Classroom

A special education teacher in a resource special education classroom is a teacher whose special education pupils may come from regular classrooms to the resource room for special instruction.

(4) Helping Special Education Teacher

A helping special education teacher is one who is assigned to several classrooms and is scheduled to assist each teacher in providing individual and group instruction to handicapped pupils.



(5) Itinerant Special Education Teacher

An itinerant special education teacher is one who provides instructional programs to handicapped pupils at more than one school location. A minimum of one hour of instruction per week is required for each pupil.

Travel reimbursement for itinerant special education teachers should be on the same basis as other itinerant school personnel.

(6) Homebound Teacher

A homebound teacher is one who carries out the instructional program in the home of the handicapped pupil. A minimum of four hours of instruction a week is required for each pupil.

The purpose of the homebound program is to provide a continuation of education programs for pupils who because of physical or emotional reasons cannot attend a regular or special class.

To determine medical eligibility the school district secures a diagnosis and recommendation from the family physician or a medical clinic. It must state that the child is unable to attend a regular or special class; give a diagnosis of the handicapping condition; give recommendations that the physician wants observed in the home, such as the amount of restricted activity and amount of rest required; and indicate that homebound service will be needed for at least four weeks.

(7) Hospital Class

A hospital class is one in which instruction is provided in a hospital setting for children who cannot attend classes in the public schools because of illness or a crippling condition.

The guidelines for the program for the hospitalized is the same as the program for the homebound except that instruction is in a hospital.

(8) Classes in Community Facilities

Children whose mental or physical condition prevent them from attending public school classes may be provided instruction in community facilities which are appropriate to their needs.



(9) Diagnostic Class

A diagnostic class is one in which children are placed for a period of time not to exceed two months for a diagnosis of learning difficulties so an educational program can be developed and applied in other types of instructional settings.

The objective of the diagnostic classroom is to discover and define those educational techniques and materials which will best serve to assist children who are seen as having problems in learning and/or behavior; to determine the nature of the learning environment best suited to their needs; to develop specific, practical educational plans for children; and to assist teachers in implementing these plans.

The diagnostic teacher serves as the teacher in a classroom for children who are "marginal identification referrals"; that is, children whose instructional needs are not obvious to the screening committee and for whom comprehensive pupil appraisal may not seem to be required; or for pupils for whom appraisal recommendations have not been effective.

During this time the diagnostic teacher, working with additional appropriate personnel as needed, applies various instructional strategies, and frequently reassesses achievement and/or adjustment.

(10) Other Instructional Arrangements

Upon approval by the Special Education Branch of the State Department of Education in co-operation with the local agency, other special types of programming and instructional arrangements may be provided for handicapped children whose needs cannot be met by any of the arrangements outlined above.



DEV. PROGRAM GOALS AND OBJECTIVES

LEADER COUNTY BOARD OF EDUCATIONREGION XI--GOALS AND OBJECTIVESIN SPECIAL EDUCATION

1. To direct attention to the capabilities of the exceptional child, rather than to his disabilities.
2. To invite the active participation of parents in special education programs and services and to provide the best possible parental training and guidance.
3. To make education for our exceptional children an effective local program, one which is viewed and operated as an integral part of the education system, administered and maintained at the local school level.
4. To co-ordinate at the local school level all supportive and relevant services available to children, youth and their families so that the skills of all specialists may be directly focused upon the needs of the child or youth.
5. To provide for our exceptional children, the status, security and educational success which every child has the right to expect from our school system.



DET. PROGRAM CATEGORIES

SPECIAL EDUCATION PERSONNEL STATEMENTLEADER COUNTY BOARD OF EDUCATIONIntroduction

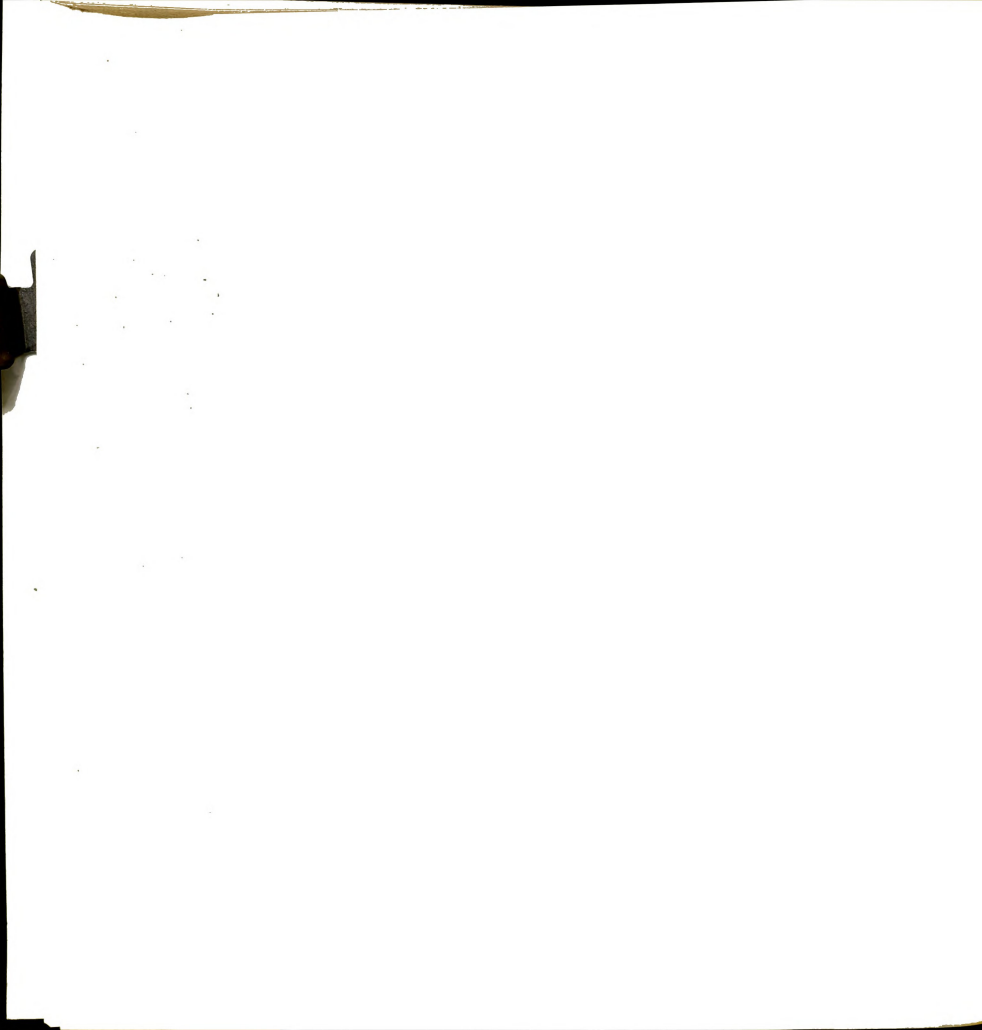
Special education personnel may be employed and/or utilized on a full-time, part-time, or consultative basis as authorized by the Board. Such personnel may be provided in the following categories:

1. Teachers (instructional);
2. Supportive professional personnel, including
 - a. Special education supervisors
 - b. Special education counselors
 - c. Special education visiting teachers
 - d. Educational diagnosticians
 - e. Psychologists
 - f. Psychometrists
3. Special education teacher aides; and
4. Consultative personnel

The teachers of exceptional children, supportive professional personnel, and teacher aides may be employed for 10, 11, or 12 months, provided such personnel have qualifications approved by the Board.

The teachers of exceptional children may be utilized in the most advantageous teaching arrangements in keeping with administrative procedures and as described in the Board's Plan for Special Education Programs and Services.

Upon approval by the Board and in keeping with the Acts and Regulations other types of programming for instructional services may be made for exceptional children whose needs cannot be met by any of the instructional arrangements described.



A. TEACHERS

Teachers of exceptional children are employed and utilized in accordance with the provisions of the Acts and Regulations governing education in Ontario and the administrative procedures adopted by the Board.

Because special education services are considered an integral part of the total school instructional program, the duties of a special education teacher may be assigned in a similar manner as duties of other teachers in the school. In addition to the teaching load, the teacher may be assigned to a share of the routine responsibilities of operating the school provided his group is supervised at all times.

B. SUPPORTIVE PROFESSIONAL PERSONNEL

Supportive professional personnel are employed in accordance with the provisions of the Acts and Regulations governing education, and the administrative procedures as adopted by the Board.

(1) Special Education Supervisor

A special education supervisor meets certification standards as established and is assigned full time to special education program supervision.

The primary purpose of the special education supervisor is to provide leadership for instructional improvement of exceptional children through working with teachers and other school personnel.

The special education supervisor shares the responsibility for the teaching-learning process and the maintaining or changing of the instructional program to maximize impact upon the learner.

(2) Special Education Visiting Teacher

A special education visiting teacher meets certification standards as established and is assigned full time to special education programs.

The primary purpose of the special education visiting teacher is to provide liaison between the school, home, and community, and particularly to provide assistance and counseling to pupils and parents concerning problems arising out of a child's handicapping condition.



(3) Special Education Counselor

A special education counselor meets certification standards as established and is assigned full time to special education programs.

The particular purpose of the special education counselor is to provide pupil and parent counseling, individually and in groups, concerning problems arising out of a child's handicapping condition. The special education counselor may serve as liaison between parents, school, and community agencies.

(4) Educational Diagnostician

An educational diagnostician meets qualification standards as established by the board and is assigned full time to special education programs. This teacher diagnostician will assess, diagnose, test or evaluate students' performance. A profile of strengths and weaknesses would be formulated and used to prescribe an instructional program to meet individual student's needs for educational purposes. Having instituted a personalized program and experienced success with a student, the educational diagnostician would assist in rehabilitation by consulting with receiving teachers and ensuring that continued support is provided in the best interests of the pupil concerned.

C. SPECIAL EDUCATION TEACHER AIDES (Paraprofessional Personnel)

Teacher aides are employed to work the same number of days as instructional personnel.

An aide trainee, a student who has shown an aptitude for working with children, may be provided work experience and training in preparation for duties as a teacher aide. He assists the teacher with routine tasks in a special education class.

D. SUPPORTIVE PROFESSIONAL PERSONNEL POSITIONS

Supportive professional personnel positions are normally authorized for the same number of months of work as are instructional personnel. When a plan justifies the extended work period, these positions may also be authorized for an 11 or 12 month assignment.



In addition to the duty assignment of special service personnel, they may be assigned a share of the routine responsibilities of operating the school provided this does not prevent the effective functioning of their major responsibilities to handicapped pupils.

E. CONSULTATIVE SERVICES PERSONNEL

Professional consultants are utilized as needed to provide comprehensive special education planning and programming.

Medical consultative services personnel may furnish diagnosis, evaluation, consultation, and assistance in inservice training.

Psychological consultative services personnel may provide appraisal services and assistance in inservice training.

Physical therapy consultative services personnel may provide direct and indirect services to pupils.

Occupational therapy consultative services personnel may provide direct and indirect services to pupils.

Other professional consultants may be utilized as needed to provide comprehensive special education programming.



THE PROGRAM TODAY

POPULATION ANALYSIS

FORM A1

TYPE	NO. OF CHILDREN			
1. School Population				
Elementary	11,249			
Secondary	5,376			
TOTALS	16,625			
2. School Population Programmed for in:				
a. Approved Mental Health Centres	-			
b. Correctional Institutions	7	Ranier Reformatory		
c. Homes for Unwed Mothers	10			
d. Ontario Hospital Schools	48			
e. Ontario Psychiatric Hospitals	-			
f. Private Schools	16			
g. Schools of Other Boards	-			
h. Special Schools	-			
i. Other Boards	6	Trainable Retarded-- Clarence County		
TOTALS	87			
3. Birth Rate ^a				
1970	410			
1969	909			
1968	934			
1967	1055			
1966	1041			
4. Projected School Population	Elementary	Secondary	Totals	
1971	11,386	5,376	16,762	
1972	11,396	5,390	16,786	
1973	11,211	5,150	16,361	
1974	10,970	5,001	15,971	
1975	10,612	4,989	15,601	

^aData available from Municipal Directories, County Administrative Offices and Regional Offices of Education.



EXISTING PROGRAMS

PROGRAM ELEMENTS ^c	A		B		C	
	Elementary Classes	Pupils	Secondary Classes	Pupils	TOTALS Classes	Pupils
1. Emotionally and/or Socially Maladjusted	-	1			-	1
2. Gifted and/or Talented	17	128			17	128
3. Learning Disabilities	15	198			15	198
4. Mentally Handicapped						
a. Educable ^a	-	-	16	248	16	248
b. Trainable	-	-	(Occupations)		-	-
5. a. Physically Handicapped	-	-			-	-
b. Visually Handicapped	-	1			-	1
c. Hearing Handicapped	-	1			-	1
d. Speech Problems	-	29			-	29
6. Others ^b e.g. Remedial Reading	18	210			18	210
TOTALS	50	568	16	248	66	816

^aIncluding the mildly mentally handicapped or slow learning.

^bExamples: Inner City Compensatory Programs
Second Language Teaching
Pre-School Early Identification Programs
Remedial Reading Units, etc.

^cSee Appendix B for other suggested descriptions of program structure which could be used. The school board should list its program structure as it actually exists and consistently reflect this organization on both A and B forms. Throughout this pamphlet, the structure presented here will be used, however, it should be emphasized again, that this is just one sample of a total program for exceptional children.



THE TEACHING FORCE

Course Qualifications	No. Teachers Successfully Completing
1. Elementary Special Education	16
2. Intermediate Special Education	
Options: 100 Limited Vision	
101 Orthopaedic	
102 Secondary Schools	2
103 Home & Hospital Instr.	2
104 Remedial Reading	5
105 Educable Retarded	10
106 Speech	
107 Hearing Impairment	6
108 Gifted	2
109 Neurologically Impaired	
111 Individual Intell. Assess.	
210 Emotionally Disturbed	
202 Sec. School Advanced	
205 Educable Retarded Advanced	4
206 Speech Advanced	
207 Hearing Impaired Advanced	
209 Neurol. Impaired Advanced	
Other	
Int. Total	31
3. Specialist Special Education	7
4. Elementary Trainable Retarded	-
5. Intermediate Trainable Retarded	-
6. Under-graduate Special Education - University	-
7. Post-graduate Special Education	-
8. Other (list on back or separate page)	-
TOTAL - Teachers with Special Education Qualifications	54
TOTAL - No. of Teachers Employed by the Board in all Programs	590



OTHER PROFESSIONAL SUPPORT STAFF

Service Area ^c	No. Employed		Position Title	Role Expectations ^a
	Full Time	Part Time		
1. Psychology or Psychometric Services	1	1	School Psycholog. (full-time) Educational Psychologist (part-time)	Testing and Counseling pupil referrals and staff professional development - pupil testing.
2. School Social Worker				
3. Supervisor or Consultant				
4. Supervisory Officer	1		Superintendent - Special Services	Co-ordinate and administer all programs of Special Education, K to 13
TOTALS	2	1		

^aAs a social worker, psychologist, etc., indicate briefly the role that each support staff professional performs based upon designated pupil population needs.

^bList personnel not designated, such as child care worker, attendance counselor, educational diagnostician, etc.

^cPersonnel listed here are suggestions only. Other role classifications may be used. The description of professional support staff should be listed as it exists presently. Each role should be defined and the definitions included as part of the board's planning package, on separate, attached pages.



PUPILS REQUIRING SPECIAL EDUCATIONGROSS NEEDS
ASSESSMENT

1		2	3		4		
Population El.	Base Sec. (a)	Program Elements	Incidence Rate		Population Needs (b)		
TOTALS			El.	Sec.	El.	Sec.	
		1. Emotionally and/or Socially Maladjusted	.01 .03	}	.04	112 337	54 161
		2. Gifted and/or Talented	.02			225	108
		3. Learning Disabilities	.01		112	54	
		4. Mentally Handicapped					
		a. Educable	.02	}	.022	225	108
		b. Trainable	.002			22	-
		5. a. Physically Handicapped	.001	}	.0566	11	5
		b. Visually Handicapped	.0006			7	3
		c. Hearing Handicapped	.005			56	27
		d. Speech Problems	.05			562	269
		6. Other (specify) Remedial Reading	.10		1,125	538	
11,249	5,376	TOTALS	.2486		2,794	1,327	

(a) Obtained from Form A1

(b) To find number of children, multiply the rate times school population. Round figures to nearest whole.

Reminder: Incidence tables must be interpreted with extreme caution. Many factors in any one county or city will influence the incidence of exceptionality. The tables merely provide a guide for the development of an assessment of the jurisdiction's needs. It is generally felt that the rates stated are base or minimum figures. In effect, the data generated in column 4, reflects a description of the number of children to be programmed for in each of the 5 areas of exceptionality.



MANPOWER NEEDS

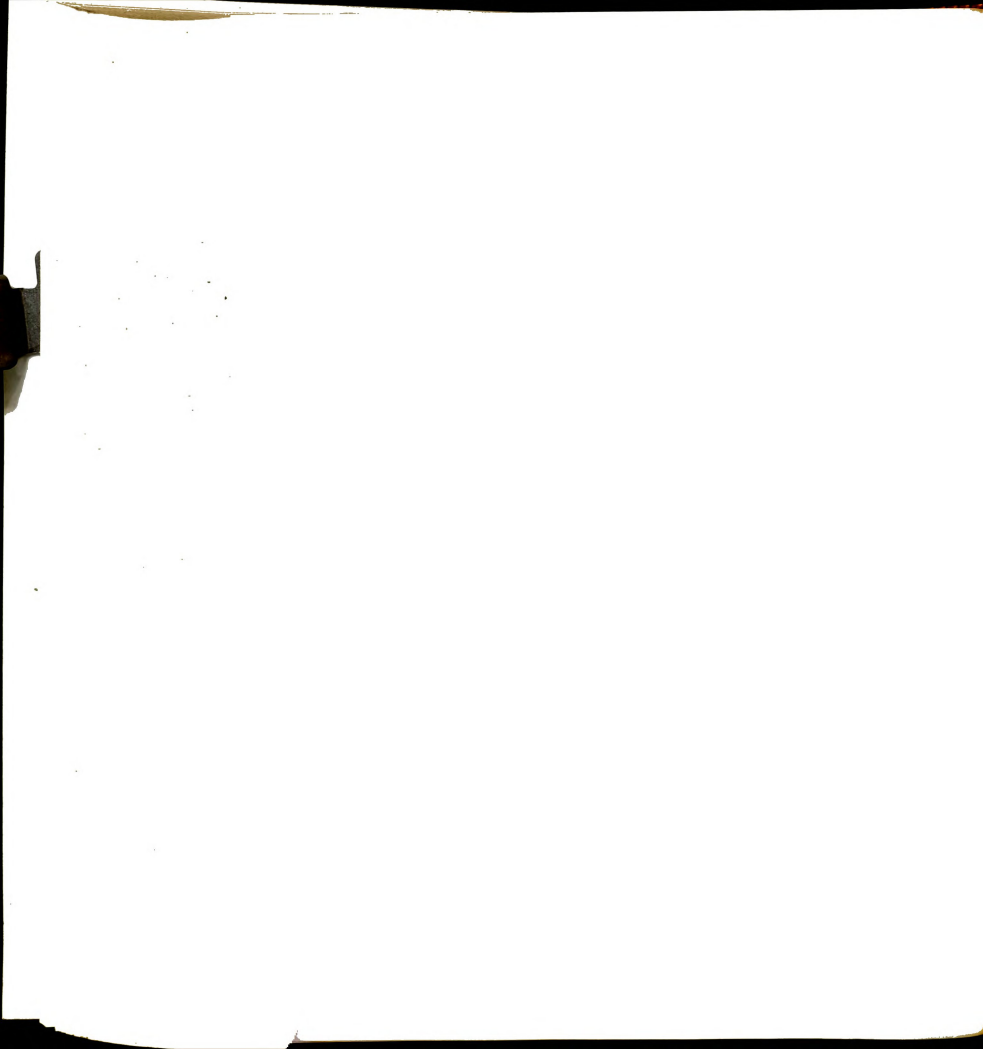
FORM B2

	A	B	C
Program Elements	Need Population K to 13 ^a	Suggested Pupil/Teacher Ratio	No. Teachers Required
1. Emotionally and/or Socially Maladjusted	166 498	8:1	21 62
2. Gifted and/or Talented	333	25:1	13
3. Learning Disabilities	166	8:1	21
4. Mentally Handicapped			
a. Educable	333	16:1	21
b. Trainable	222	10:1	2
5. a. Physically Handicapped	16	12:1	1
b. Visually Handicapped	10	12:1	1
c. Hearing Handicapped	83	10:1	8
d. Speech Problems	831	5000: 6-9	2
6. Other (specify) Remedial Reading	1,663	75:1	22
TOTALS	4,121	/ / / / /	174

Support Staff ^b	Pupil Population Need Projection	Suggested Pupil/Support Staff Ratio	No. Support Staff Required
Administrator	/ / / / /	15,000:1	-
Psychologist	/ / / / /	5,000:1	1
Social Worker	/ / / / /	4,000:1	1
Supervisor	/ / / / /	5,000:1	1
Other (specify) Educational Diagnost.	/ / / / /	500:1	9
TOTALS	4,121	/ / / / /	12

^aFigures from Total column 4 on Form B1

^bList of Support Staff reflects only the personnel being employed in parts of the province. It is not a Department of Education suggestion that these are approved or recommended appointments.



ASSESS. OF
REAL NEEDSPUPILS REQUIRING SPECIAL EDUCATION
REVISION

FORM C1

Program Elements ^f	A Population Need ^a		B Modification factors ^c (Designate)	C Revised Incidence Ratio ^d	D Target Population Needs with Modifications ^e		
	El.	Sec.			El.	Sec.	Total
Base Population ^b	11,249	5,376	//////	//////	//////	//////	//////
1. Emotionally and/or Socially Maladjusted	112 337	54 161		.01 .03	112 337	54 161	166 498
2. Gifted and/or Talented	225	108		.02	225	108	333
3. Learning Disabilities	112	54	reading problems discovered in survey - an increase is reflected.	→ .02	225	108	333
4. Mentally Handicapped							
a. Educable	225	108		.02	225	108	333
b. Trainable	22	-		.002	22	-	22
5. a. Physically Handicapped	11	5		.001	11	5	16
b. Visually Handicapped	7	3		.0006	7	3	10
c. Hearing Handicapped	56	27	decrease due to actual testing results obtained in county.	→ .002	23	11	34
d. Speech Problems	562	269		.05	562	269	831
6. Other (specify) Remedial Read.	1,125	538	up to 32% in some classes below grade expected levels.	→ .20	2,250	1,075	3,325
TOTALS	2,794	1,327	//////	.3556	3,999	1,902	5,901

^aObtained from Form B1, Column 4.^bObtained from Form A1, Section 1.

^cFactors affecting a modification of gross population needs are listed in Part C "Creating Our Plan." Other unique variables which might be identified as affecting a board's need for providing services should be supplemented, defined and reflected in the Revised Incidence Ratios and Population Needs with Modifications.

^dDue to unique local factors designated, Incidence Ratio figures on Form B1 will be increased or diminished or retained.

^eTo obtain Population Needs multiply Population Need by Revised Incidence Ratio.

^fEach school jurisdiction must determine its description of program elements and then categorize these consistently throughout the Series C Forms. For Alternative suggestions of program organizations see Appendix B. The "boxed" programs above serve merely as suggestions for one form of program organization.



MANPOWER NEEDS

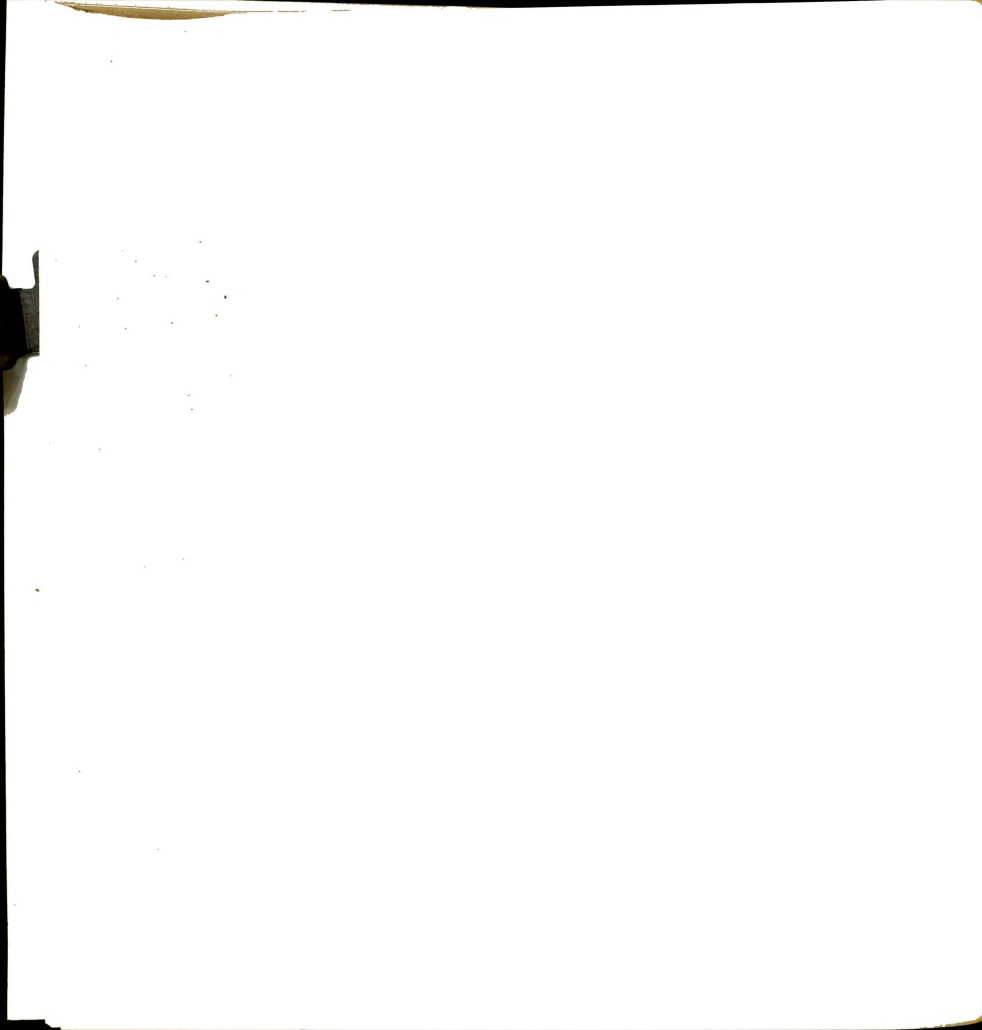
FORM C2

REVISION

Program Elements	A Gross Teacher Requirements ^a	B Program Organization ^b	C Revised Pupil/Staff Ratio ^c	D Revised Teacher Requirements ^d	E Budget Demands \$
1. Emotionally and/or Socially Maladjusted	21 62 2	Special E.D. classes others integrated with no consultant	10:1 -	16 0	160,000 -
2. Gifted and/or Talented	13	integrated into reg. classes with consultant	100:1	3	30,000
3. Learning Disabilities	21	special classes	8:1	42	350,000
4. Mentally Handicapped					
a. Educable	21	Opp. Classes	16:1	21	210,000
b. Trainable	2	Special Schools	10:1	2	20,000
5. a. Physically Handicapped	1	integrated into regular classes	-	-	-
b. Visually Handicapped	1	with consultant assistance	100:1	1	10,000
c. Hearing Handicapped	8		-	8	80,000
d. Speech Problems	2	handled with van service & itinerant correctionist	800:1	1	10,000
6. Other (specify) e.g. Remedial Reading	22	Withdrawal basis	75:1	22	160,000
TOTALS	174	//////	//////	116	1,030,000

	A	B	C	D	E
Support Staff	Gross Support Staff Requirements ^a	Performance Expectations ^b	Revised Pupil/Support Staff Ratios ^c	Revised Support Staff Requirements ^d	Budget Demands \$
Administrator			-		
Psychologist	1	student testing and prof. development	4000:1	1	15,000
Social Worker	1	parent relationships	2000:1	2	20,000
Supervisor	1	co-ordinate total Spec. Ed. services	4000:1	1	15,000
Other (specify) e.g. Educational Diagnostician	9	Diagnose, Prescribe and follow-up	800:1	5	50,000
TOTALS	12	//////	//////	9	100,000

^aData transferred from Form B2, Column C.^bBased upon the philosophic principles for special education referred to in this report, the pupil instructional units will be organized and a revised Pupil/Staff Ratio will be plotted which, in turn, will determine what Personnel needs will be required in the provision of the system's services to exceptional children.^cSee Form B2, Column B.^dUse Target Population figures from Form C1, Column D.

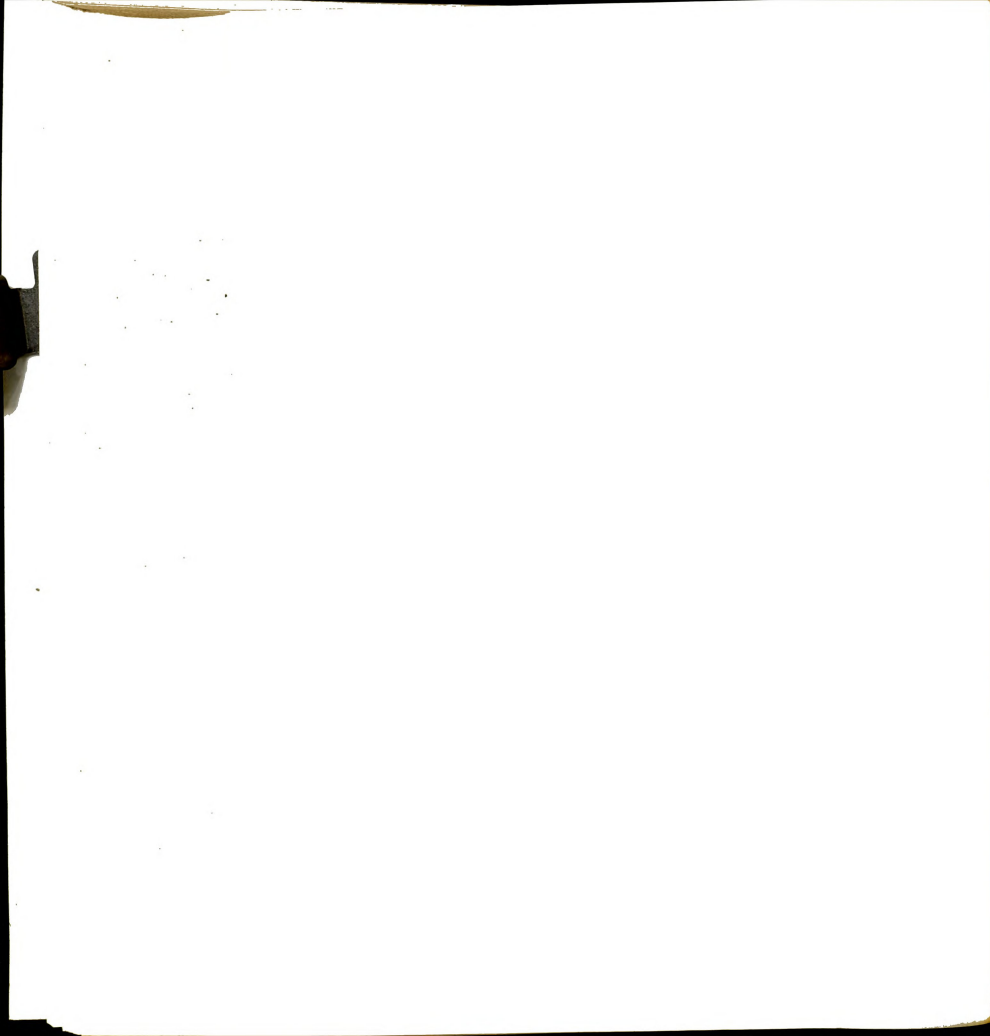


PROFESSIONAL DEVELOPMENT PROGRAMS

Program Elements	MANPOWER NEEDING PROFESSIONAL DEVELOPMENT ^a							Budget Demands \$
	In-Service Local	Summer/Winter Courses-	Visiting Special Education Programs and/or Facilities	Bursaries for Extended Training	Conference Attendance	Educational Program Investigations	Other Profess. Support Staff Up-grad.	
1. Emotionally and/or Socially Maladjusted	25	4	-	-	1	2		1,200.00
2. Gifted and/or Talented	20	1	2	-	-	2		1,100.00
3. Learning Disabilities	75	9	10	1	2	2		5,600.00
4. Mentally Handicapped	21	5	-	-	22	-		1,100.00
a. Educable	2	1	-	-	-	1		1,000.00
b. Trainable								400.00
5. a. Physically Handicapped	20	-	-	-	-	-		200.00
b. Visually Handicapped	10	-	1	-	-	1		500.00
c. Hearing Handicapped	10	-	2	-	-	1	6 Educat. Diagnost. for further University preparation	700.00
d. Speech Problems	50	1	-	1	-	-		9,000.00
6. Other (specify e.g. Remedial Reading)	250	5	-	-	1	4		2,000.00
TOTALS	483	26	15	2	6	13	6	22,800.00

^aNumbers of personnel to be involved in professional development programming. This information relates significantly to needs and policies for hiring personnel.

With reference to Forms A3 and A4, various forms of professional development may be required for Teachers, Principals, Supervisors and/or Administrators to appropriately equip a board's Manpower base to staff the programs and services in Special Education as determined on Form C2.



PROGRAM ACCOMMODATION UNITS

Program Elements	A		B		C		D		E	
	Existing Accommodations		Accommodations Recommended ^a		Accommodations Required ^b		Budget Demands ^c			
	Location		No. of Classes						\$	
1. Emotionally and/or Socially Maladjusted	-		-		16 classrooms		16 classrooms		-	
2. Gifted and/or Talented	10 in St. James Sch. 7 in St. Lukes Sec.		17		1 consultant office		-16 classrooms office renov.		5,000.	
3. Learning Disabilities	disp. through-out El. Sch.		15		35 classrooms		20 classrooms		250,000.	
4. Mentally Handicapped	All in North Central Sec. School		14 Opport. Cl. 7 Occup. cl.		5 classrooms		62,500.			
a. Educable			16							
b. Trainable			2 room school		2 classroom school		2 classroom school renovations		20,000.	
5. a. Physically Handicapped	-		-		-		-		-	
b. Visually Handicapped	-		-		1 consultant office		1 consultant office		12,500.	
c. Hearing Handicapped	-		-		2 consultant offices		2 consultant offices		25,000.	
d. Speech Problems					1 speech corr. van		1 speech corr. van		5,000.	
6. Other (specify)	All classes to be prog. for in trav. read. van									
e.g. Remedial Reading										
e.g. Materials Resource Center at St. Thomas School			1 rdg.v. 4 room school		2 reading vans 4 rooms		1 remedial reading van renovations of existing 4 room school		5,000. 40,000.	
TOTALS			55		85 units		36 units		425,000.	

^aIn the light of population staff and program needs shown on Form C1 and C2, the facilities or accommodation for implementing these programs will be listed. Part C, "Developing Program Elements," will provide the rationale upon which program organization will demand accommodation units for administrative assessment and programming dimensions.

^bIn the light of Accommodation Units already existing within the system, additional and/or modified Accommodation still required will be shown. In some cases a re-deployment of spaces already used will be feasible.

^cSee Form A2, Column C.

Note: A minus figure, i.e., (-2) in column D of this form would indicate that 2 classrooms will no longer be in use for special education.



TRANSPORTATION
REQUIRED IN PROGRAM PROVISIONS

Program Elements	A Locations ^a	B No. Students ^b	C No. Pupils Requiring Trans. ^c	D Annual Per Pupil Trans. Costs ^d	E Total Trans. Costs ^e \$
1. Emotionally and/or Socially Maladjusted	16 classrooms in 10 El. Schools	166	45	400.00	18,000.00
2. Gifted and/or Talented	integrated into home schools	333	0		
3. Learning Disabilities	35 cl. in 20 El. and 2 Sec. Schools	333	50	500.00	25,000.00
4. Mentally Handicapped a. Educable b. Trainable	14 Opp. classes in 10 El. Schools 7 Occ. classes in Kennedy School Sunshine School	333 22	150 20	400.00 800.00	60,000.00 16,000.00
5. a. Physically Handicapped	integrated into home schools	16	0		
b. Visually Handicapped	"	10	0		
c. Hearing Handicapped	"	34	0		
d. Speech Problems	Van service	831	0		
6. Other (specify) e.g. Remedial Reading	Van service	3,325	0		
TOTALS	/ / / / /	5,901	265	/ / / / /	119,000.00

^aLocations (Schools, etc.) where special programs will operate.

^bNumbers of students involved in special programs, as per Form C1, Column D.

^cNumbers of students requiring transportation to these programs.

^dAverage per pupil costs of transporting pupils within the total system as reflected in board's budget accounting records.

^eIn light of existing expenditures involved in transporting special education pupils, a reduction of costs may be reflected due to a reorganized placement of children.



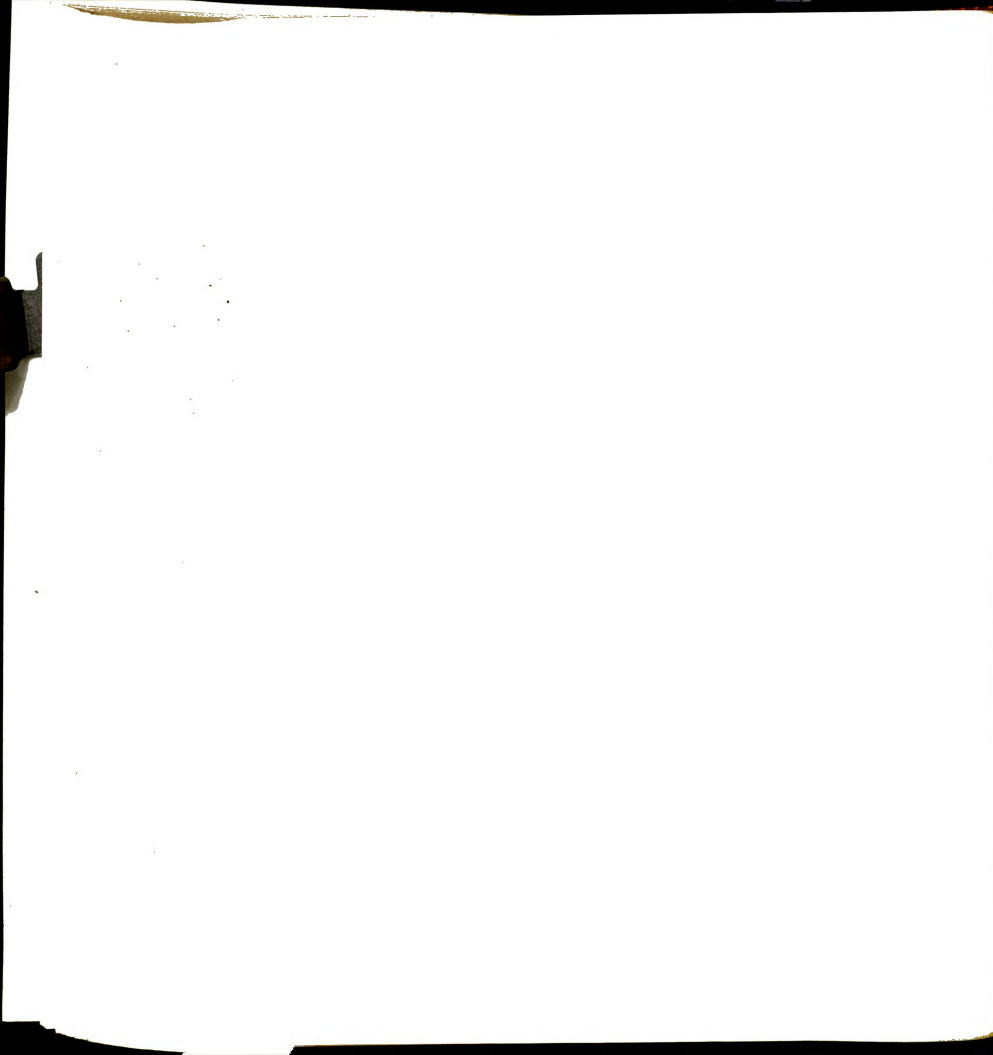
INSTRUCTIONAL MATERIALS

Special Education Instructional Aids, Equipment, Materials Required			
	A	B	C
Program Elements	Locations ^a	Identification of Needs ^b	Budget Demands ^c \$
1. Emotionally and/or Socially Maladjusted	10 different El. Schools	study Karrels	5,000.00
2. Gifted and/or Talented	home schools	-	
3. Learning Disabilities	20 El. Schools 2 Sec. Schools	motor development equipm.	6,000.00
4. Mentally Handicapped	7 Occ. classes 14 Opp. cl.	Kennedy Sch. Gen. Shops equ.	280,000.00 7,000.00
a. Educable	Sunshine School	playground equipment	1,600.00
b. Trainable			
5. a. Physically Handicapped	home schools	ramps, wheel chairs, walkers, holding bars, typewriters,	10,000.00
b. Visually Handicapped	home schools	large print texts, photo lamps	nil
c. Hearing Handicapped	home schools	3 induction loop systems	4,800.00
d. Speech Handicapped	van service	equipping speech correction van	10,000.00
6. Other (specify)			
e.g. Special Education Materials & Resource Center	Renovated 4 rms St. Thomas Sch.	audio, visual, tactile, testing, textual & progr. resources (list to be att.)	20,000.00
e.g. Remedial Reading Van Service		equipping remedial reading van	10,000.00
TOTALS	/ / / / / / / /	/ / / / / / / /	354,400.00

^aLocations (Schools) where Special Education instructional "materials" are required in the "program" areas.

^bNeeds over and above those required in regular classrooms.

^cCosts of establishment and equipping of an Instructional Materials Resource Center ought to be included. Boards' shared facilities of this nature for professional development, instructional materials construction, evaluation and loan may be considered to serve teacher needs within a designated area.



ASSESS. OF REAL
NEEDS

PROGRAM COSTS FOR A FIVE YEAR PLAN

FORM C7

C

Provisional Units	Form Referral	Total Costs ^a	Phased Costs of Implementation ^b				
			Year 1 ^c	Year 2	Year 3	Year 4	Year 5
Manpower	Form C2	1,130,000.	300,000.	228,000.	228,000.	228,000.	146,000.
Professional Development	Form C3	22,800.	6,000.	4,700.	4,700.	4,700.	2,700.
Accommodation Units	Form C4	425,000.	93,000.	100,000.	80,000.	80,000.	72,000.
Transportation	Form C5	119,000.	30,200.	31,200.	29,000.	28,600.	
Instructional Materials	Form C6	354,400.	70,880.	80,880.	70,880.	70,880.	60,880.
TOTALS		2,051,200.	500,080.	444,780.	412,580.	412,180.	281,580.

^aSummations of estimated total costs reflected in Forms C2 to C6 to be phased for implementation over a designated 5 year period.

^bFrom the time of initial implementation of the various elements of this Plan, realistically project the actual costs, at current rates, of complete implementation in 5 years. Phased costs may reflect a programming focus upon a specific target population in any one year, therefore, projecting a profile of cost differentials unevenly measured out for the duration of this plan.

^cNarrative, describing in some detail the elements of the plan to be implemented in year one should be included and attached to this form.



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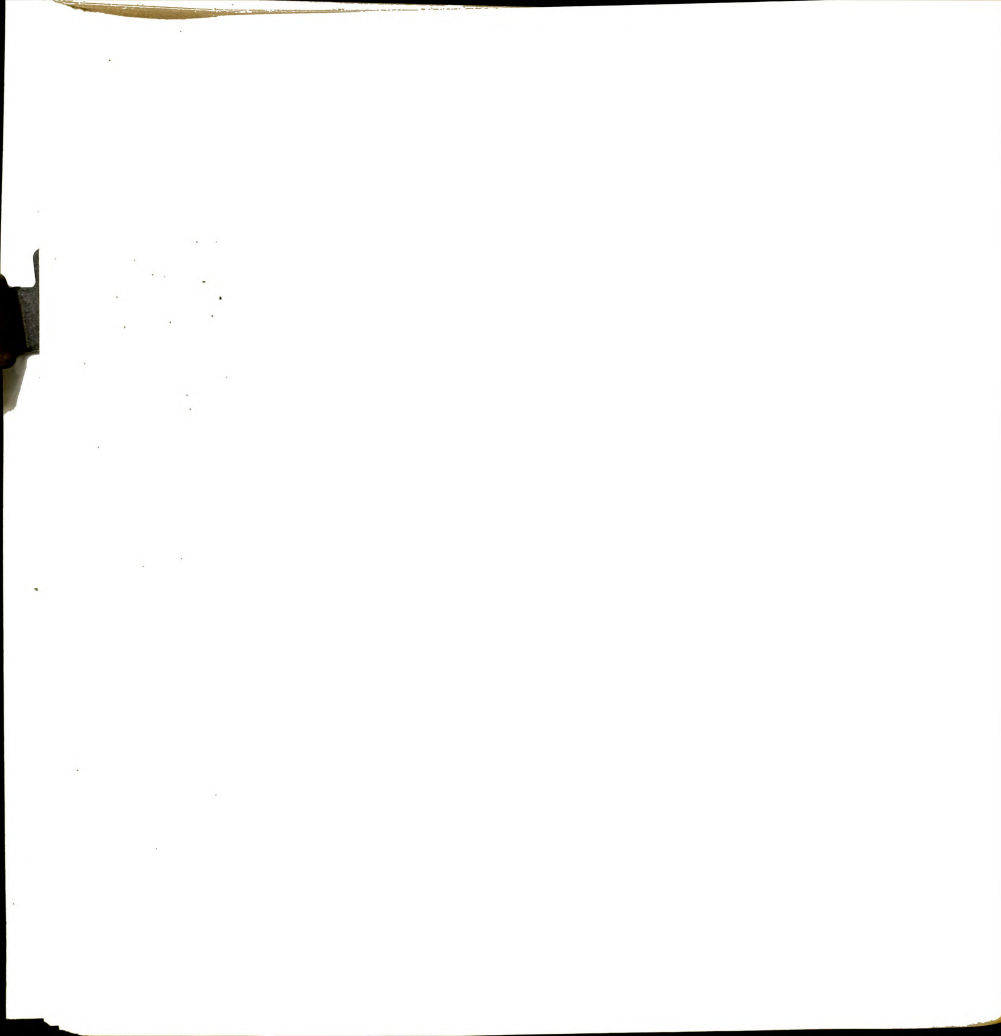


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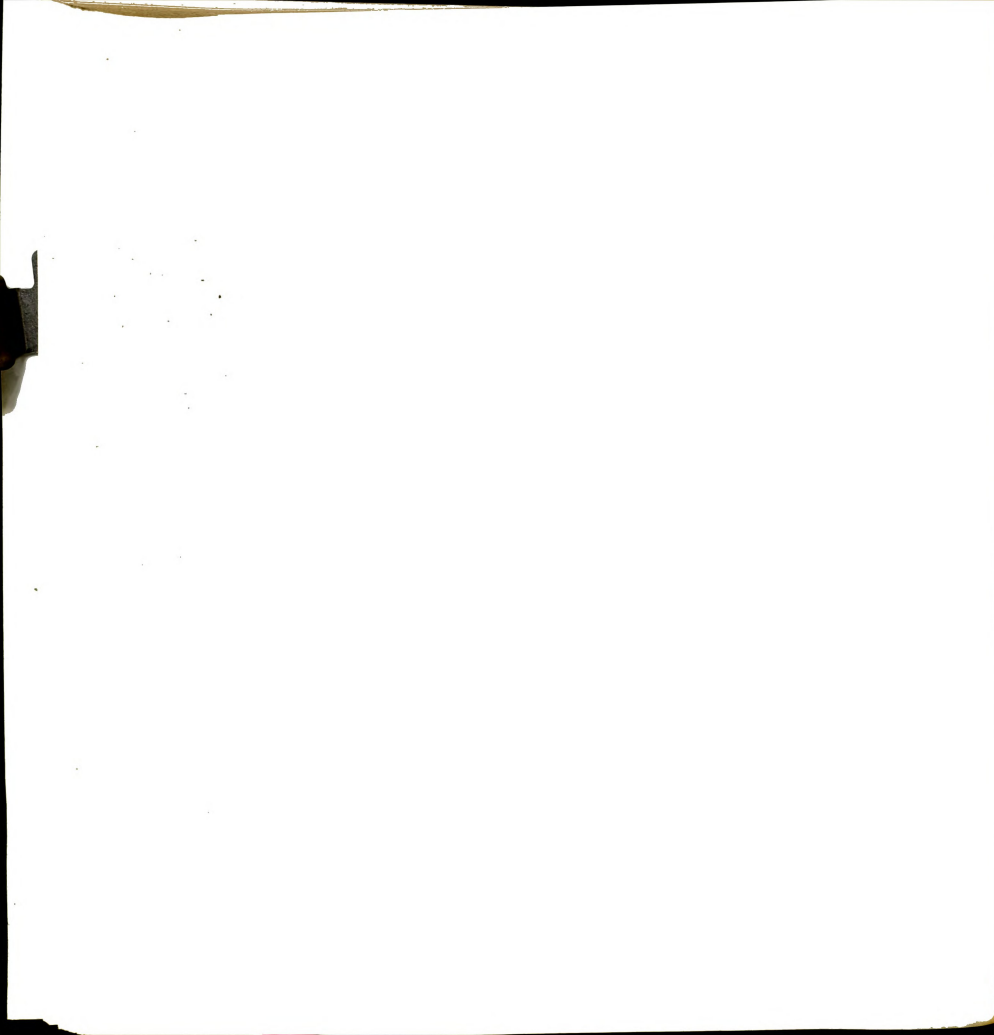
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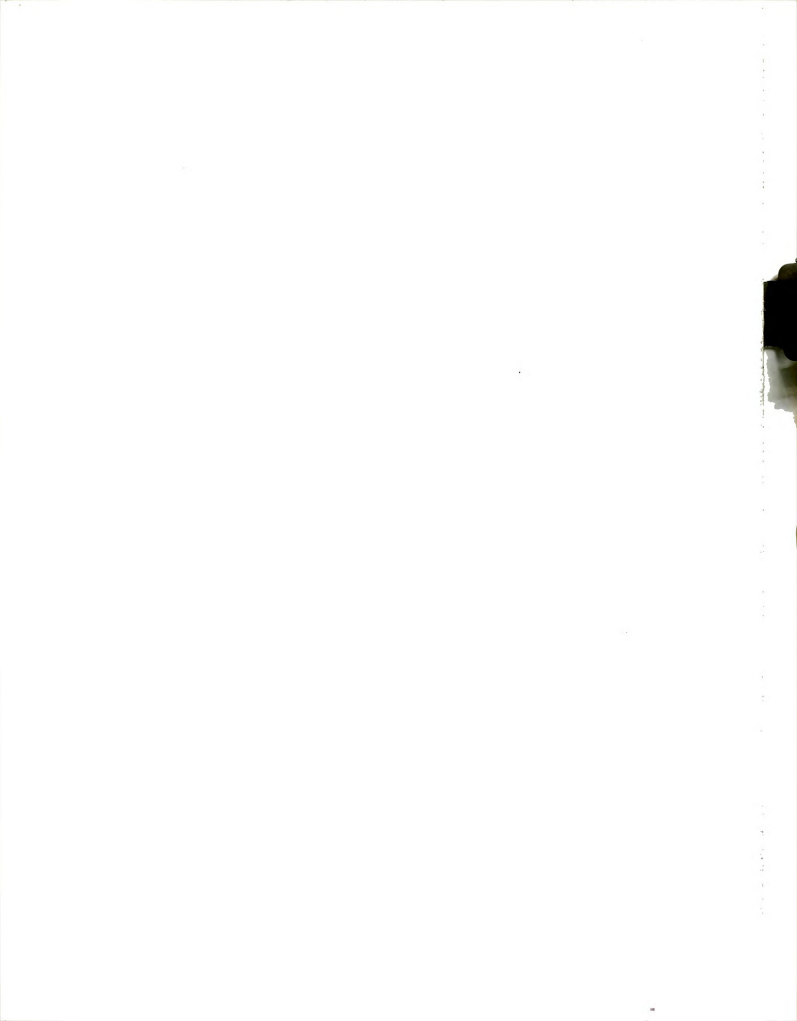


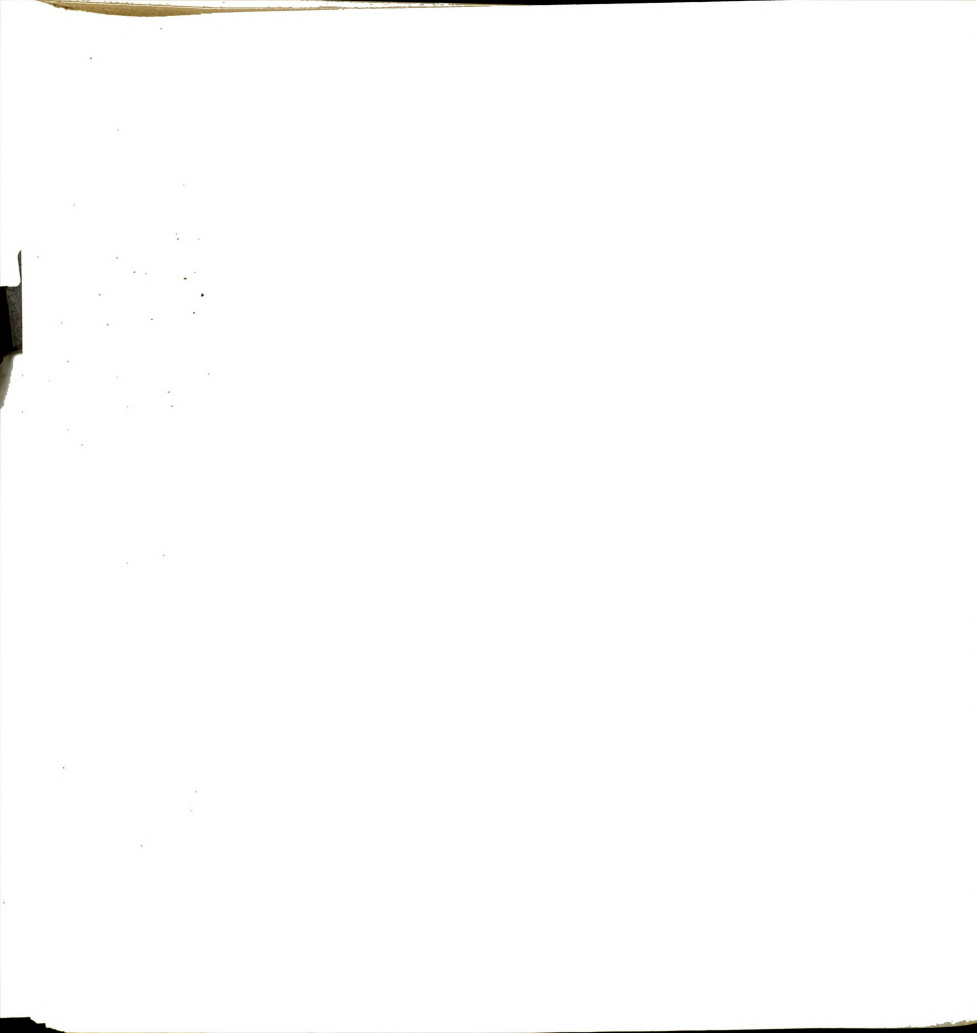
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