

THE NATURE OF CERTAIN SELECTED PUBLIC SCHOOL PROGRAMS
IN SPECIAL EDUCATION FOR RETARDED
ELEMENTARY CHILDREN

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CHAPTER I

INTRODUCTION

If one were the production manager of a big factory producing bolts, there would be little concern shown for bolts that were too thick or too thin. These bolts would probably be thrown into the discard pile to be melted down for a new trial or used to produce a new bolt.

In mass producing education for all children the different child cannot be discarded because he does not fit the standard pattern.

The concepts of special education for educable retarded children are fairly recent to some, while others have worked in the field for many years and are acquainted with its history which far exceeds the present generation. Basically, special education for the mentally retarded has evolved into a system of segregation or grouping for instructional purposes. This allows, through the use of smaller classes and fewer group educational techniques, for recognition and adjustment to individual differences.¹

Methods of achieving social competence for special education

¹National Society for the Study of Education, The Education of Exceptional Children, University of Chicago Press, Chicago, 1950, p. 5.

adhere closely to the general objectives of education for all children.¹

When special education is spoken of in relation to concepts, objectives, and "all children" there should be some concept of who the mentally retarded are. Martens² of the U.S. Office of Education in 1950 defined the mentally retarded as the "lowest two per cent of our population." This, by Terman's 1916 revision of the Binet scale, would be those below 73 I. Q. By the 1937 scale, there would be three per cent under 70 I.Q.³ A conservative estimate, using three per cent of our most recent census or approximately 180 million, would indicate the presence of 5,400,000 persons in the United States who fall into this area. Undoubtedly, there is a great need for educational facilities for these people.

With the great number of persons who fall into this area, it is understandable that concrete methods and understanding of the problem are needed in school districts

¹Ibid., p. 4.

²Martens, Elise H., Curriculum Adjustments for the Mentally Retarded, U.S. Office of Health, Education, and Welfare, U.S. Government Printing Office, Washington, D. C., 1950, p. 4.

³Heck, Arch O., The Education of Exceptional Children, McGraw-Hill Book Co., Inc., New York, 1953, p. 349.

where special schools have become a concern of the community.

The same national trend has been shown in the community of Casper, Wyoming during recent years. Classes had increased to four special classes in the elementary system and two at the junior high level by the 1959-1960 school year. This program was followed by a new building wing with facilities for practical arts and eight classes on the elementary level during the 1960-1961 school year.

The increase in program locally in addition to the importance of education for the retarded led to the desire to undertake this study.

The Problem

Casper's expanded instructional program pointed to the need for additional help in program planning. Search of available material revealed no local formal curriculum guide or written program was in use, nor was one available in the system. Further inquiry failed to produce material of this type from the Wyoming State Department of Education, which lead the Casper system to believe there was no curriculum guide of this kind in general use in Casper nor in Wyoming.

Since no curriculum guides were available and since it was the desire to have one in the Casper system, the

chief problem of this study was to examine the nature of selected school programs in special education for retarded elementary children.

Procedures

A review of available literature concerning the history, the needs, and current trends of special education was made.

Questionnaires were sent to selected special education classes in five states to determine the nature of current programs.

Limitations

This survey was limited to five states' special education programs for the educable mentally retarded elementary child.

Definitions

Although the terminology used in special education is varied and diverse for even the same condition, for the purpose of this paper the following definitions will be used:

"Educable mentally retarded" refers to those children

whose intelligence quotient falls between 50 and 75 on a standardized individual intelligence test. It is felt that these children learn at a rate of from one-half to three-quarters the rate of the so-called normal child.

"Trainable mentally retarded" refers to those children whose intelligence quotient falls between 30 and 50 on a standardized individual intelligence test, and who are able to perform simple tasks called for in everyday life if given some training.

The first step in examining the nature of special classes for the retarded, the review of literature discussed in the next chapter, indicated the above definitions to be those most widely accepted.

CHAPTER II

REVIEW OF LITERATURE

It has been a gigantic step from pre-Christian neglect to contemporary practices in special education for the mentally deficient. It seems strange that in spite of the wealth of knowledge available children needing special education are still found in regular classes relegated to an obscure corner undertaking a non-adjusted curriculum.

The literature of the field has been reviewed in terms of historical background, need for special education, and current trends in education for the mentally retarded.

Historical Background

During and prior to the sixteenth century the mentally deficient could only look to the church for help as this organization was the only agency available interested in their well-being. With the beginning of the Christian era there was emphasis upon the brotherhood of man and as a result it became the responsibility of religious groups to care for handicapped children.

During the Middle Ages the church continued as the responsible agency. Institutions for the deaf, for the mentally deficient, and for other groups were established

in Europe in the seventeenth and eighteenth centuries.¹

Following the eighteenth century physicians and psychologists became interested in the care and education of mentally retarded individuals. Itard, Seguin, Montessori, Decroly, and Binet made outstanding contributions and better understanding and education were assured. This was a far different attitude than that exhibited during the pre-Christian era according to the National Society for the Study of Education: " During the pre-Christian era, the handicapped were persecuted, neglected, and mistreated. Survival of the fittest was the code." ²

Itard's contribution to special education. Itard's contribution to special education evolved from methods first used with the deaf. Many special education methods were being successfully used with the deaf during the eighteenth century. Itard, a French philosopher and physician, felt some of the same methods could be used in the training of the feeble-minded.³ He believed education and environment

¹National Society for the Study of Education, The Education of Exceptional Children, University of Chicago Press, Chicago, 1950, pp. 7-8.

²Ibid., p. 7.

³Kirk, Samuel A., and Johnson, G. Orville, Educating the Retarded Child, Houghton Mifflin Co., Chicago, 1951, p. 70.

were the determining factors in mental development.¹

Itard's efforts to educate a wild boy found wandering in the forest stimulated interest in the mentally retarded and helped to establish educational methods which were to some extent successful in spite of the animal-like behavior described by Kirk and Johnson:

This boy resembled a wild animal more than a human being since he was unable to speak, selected his food by smell, attempted to escape, and in general did not respond like a human being.²

The nature-nurture controversy was being waged hotly and Itard felt the education of the "Wild Boy" would resolve a philosophical question. He agreed with the sensationalists and felt that the wild boy of Aveyron was a good example of a human being who was completely untutored, and that with proper educational procedures applied to the training of the senses this untutored boy could be made human. Itard undertook the education of the boy in spite of advice from Pinel, a French psychiatrist, who felt the boy was capable of little learning according to Kirk and Johnson:

Pinel diagnosed the boy as an idiot and, leaning toward the nativist point of view, asserted that the boy could not be educated and that it was

¹Ibid., p. 70.

²Ibid., p. 71.

useless to try.¹

Itard tried for five years to educate Victor, the boy, and then gave up declaring the experiment a failure.² Later the French Academy of Science decided that a significant contribution had been made and requested a report of Itard's efforts. The book which resulted, The Wild Boy of Aveyron, has become a classic in the history of the education of the mentally deficient.

Itard's training was based on sensory stimulation and discrimination through the education of each sense separately. He demonstrated that even idiots could be improved to some degree since this boy had learned to read a few words and had developed some control of emotions through the training received. This was the first extensive record of training an idiot. Much sensory training is still used today especially at pre-school levels under the term "experiences."

Seguin, Itard's student and follower. Seguin, a medical and surgical student under Itard, became inspired with the potentialities of mentally defective children and devoted his life to their training and treatment. Seguin

¹Ibid., p. 71.

²Ibid., p. 71.

believed the same learning process would teach both central and peripheral nervous system defects as pointed out by Kirk and Johnson:

To educate the type of feeble-minded person having peripheral nervous system defects, Seguin believed that specific training of the peripheral nervous system through muscle and sense training would strengthen the receptors, thereby allowing impulses to reach the central nervous system more readily.

In the profound type of feeble-mindedness, where the central nervous system was thought to be damaged, the same treatment prevailed since Seguin believed that the bombardment of the central nervous system through the receptors would stimulate the nerve cells of the cortex to greater mental functioning.¹

Seguin's approach to education was one that is acceptable yet today. He believed that activities must be those which satisfy the child's own needs, desires, and capacities. The exercises must come from the daily activities and games common to all children.²

Montessori and Decroly, followers of Seguin. Montessori and Decroly, physicians, found Seguin's work of great interest.

Montessori was an assistant at a psychiatric clinic in Rome and after studying the work of Itard and particularly the work of Seguin, she concluded that the problem of

¹Ibid., p. 76.

²Ibid., p. 78.

mental deficiency was primarily a pedagogical one rather than a problem for medicine. She organized the Orthophrenic School for the Cure of the Feeble-minded.¹

Montessori's system was an attempt to combine home and school. Activities in the school were designed to duplicate some of the home activities. She agreed with Seguin in placing great importance on sense and muscle training as part of the early education of children. "Auto-education" or self-teaching was central to the Montessori system. Activities and materials were so organized and designed that the children taught themselves while the teacher withdrew into the background supervising the activities.²

Another physician, Decroly, concluded the best treatment for the mentally defective was an educational program. Decroly, working in Brussel, Belgium, in the early part of the twentieth century was faced with the treatment of the mentally defective. He believed that the education of the mentally defective child must center around the child and his needs.³

Binet, the classifier of the mentally retarded. A contribution of a different nature was made by Binet. Binet,

¹Ibid., p. 78.

²Ibid., p. 79.

³Ibid., p. 81.

an experimental psychologist, obtained his doctor's degree in science, rather than in medicine. He was one of the few earlier contributors in the field who was not himself a physician. Binet is known for constructing the age scale for testing intelligence.¹ He did not organize an educational program for the mentally defective. His major work was to diagnose public school children, to differentiate the higher-grade mentally defective from the average child, and to assist in the organization of special classes within the public schools in France.

During the nineteenth century in the beginnings of education of mentally defective children the major contributors, with the exception of Binet, were physicians. Doctors and psychologists accepted the responsibility for the development of methods and techniques in the education of the mental defectives.²

Special education in America. In America, stimulated by Seguin's lectures on behalf of special classes, Massachusetts, under the leadership of Howe, established a school for indigent feeble-minded youths in 1848. Providence, Rhode Island, provided a special class for children of low

¹Ibid., p. 83.

²Ibid., p. 84.

intelligence in 1896.¹

About 1900, according to Williams,² public school classes for the upper range or educable group were established. He also indicated that the majority of public school day classes for the middle range or trainable group have been established since 1950.

No one is sure exactly how many mentally handicapped children are in need of special educational facilities in the United States. Estimates vary from two to three per cent of the population depending upon the definition of mental handicap. Yet almost every elementary school grade and most high school classes are likely to have one or more children so handicapped intellectually that the instructional program will need to be modified. The presence of children in need of a special instructional program in our schools constitutes a major problem.

Need for Special Education

Many authorities interested in the mentally retarded have felt that no complete census of the number of exceptional

¹DeYoung, Chris A., Introduction to American Public Education, McGraw-Hill Book Co., Inc., New York, 1955, p. 325.

²Williams, Harold M., The Retarded Child Goes to School, U.S. Department of Health, Education, and Welfare, U.S. Government Printing Office, Washington, D.C., 1960, p. 12.

children in the United States has ever been completed as indicated by Cruickshank.¹ There was also the feeling that the lack of skilled interviewers involved in the census would point to the inaccuracy of the census figures. In addition to the reticence of parents to admit they have handicapped children the data are too threatening to parents to be released to unfamiliar and non-professional personnel. Cruickshank² estimated the per cent of incidence of educable mentally retarded in 1954 at two per cent of the population or 680,000 school-age children in round numbers.

Williams advanced a somewhat larger figure as indicated in his statement:

It is estimated that about two to three per cent of school-age children are mentally retarded. This means 1 to 1½ million school children in the United States. If one includes cases where the mental retardation is complicated by brain damage, emotional disturbance, or social deprivation, the larger figure is probably more accurate.³

Services, at best, are only provided for one-fourth of the children needing them and states where the programs

¹Cruickshank, William M., "The Development of Special Education for Exceptional Children" in Education of Exceptional Children and Youth, Prentice-Hall, Inc., Englewood Cliffs, N.J., 1958, p. 32.

²Ibid., p. 32.

³Williams, op. cit., p. 6.

for the mentally handicapped were most extensive have provided services for only a small per cent of the children requiring them according to Johnson.¹

It is commonly accepted that the majority of the mentally handicapped children are still found in the regular classroom receiving an "education" from a teacher unfamiliar with their problems and following a curriculum that is not designed in terms of their needs. In addition, lack of time for needed individual attention further depreciates the program.

The mentally retarded child will be seriously deficient in all or most of the school subjects. This can cause problems for the teacher and for the child particularly if the school program is strongly oriented in the direction of traditional, academic school subjects. Reading is almost certain to present a serious problem, and as a consequence the child may be unable to do the work in the various subject matter areas.²

¹Johnson, G. Orville, "The Education of Mentally Handicapped Children" in Education of Exceptional Children and Youth, Prentice-Hall, Inc., Englewood Cliffs, N. J., 1958, p. 191.

²Birch, Jack W., and Stevens, Godfrey D., Reaching the Mentally Retarded, Bobbs-Merrill Co., Inc., Indianapolis, Indiana, 1955, p. 17.

Pollock and Pollock have described the problem of mental retardation in terms of a dynamo geared to a slower speed:

The dynamo is there, but it is geared to a slower speed than the normal. The process of teaching must be a slower pace and the tool subjects must be taught before the social subjects.¹

Baldwin² in her study on the social position of educable mentally retarded children in regular classrooms concluded that there was a low degree of social acceptance of mentally retarded by classmates in the regular class and that a high percentage of the mentally retarded were not accepted socially by their classmates. The normal pupils resented most the anti-social behavior of the mentally retarded.

It is admittedly difficult for a teacher to assist in adequate adjustment of the mentally handicapped children in the regular grades. When the child is unable to meet acceptable standards of academic performance, it is soon obvious to the other children. The constant pressures from the other children tend to intensify his maladjusted behavior.³

¹Pollock, Morris P., and Pollock, Miriam, New Hope for the Retarded, Porter Sargent, Boston, 1953, p. 30.

²Baldwin, Willie Kate, " The Social Position of the Educable Mentally Retarded Child in the Regular Grades in Public Schools," Exceptional Children, November, 1958, p. 108.

³Birch and Stevens, op. cit., p. 18.

It is a physical impossibility for children developing at a slower rate mentally to compete with children of their chronological age. The normal pattern for retarded children is that they grow mentally five to eight months in twelve calendar months.¹

Depending upon the retention policy of the particular school system, the child may be as much as two or three years retarded for his grade. In general, this is likely to produce serious social problems in the room.

The child may acquire undesirable methods of adjusting to the pressures of the room. He may resort to bullying and fighting, or to serious withdrawal behavior.²

Graham and Engel contended regular class placement is criminal when they pointed out:

A child cannot be more cruelly segregated than to be placed in a room where his failures separate him from other children who are experiencing success. The non-reader, the deaf, or the mentally retarded may be segregated by placement in a regular classroom where his needs are not understood or met.³

¹Pollock and Pollock, op. cit., p. 8.

²Birch and Stevens, op. cit., p. 18.

³Graham, Ray and Engel, Anna M., "Administering the Special Services for Exceptional Children" in The Education of Exceptional Children, University of Chicago Press, Chicago, 1950, p. 24.

Available studies show that the child in need of special education is not rare. He is found in most schools. Principals and teachers must realize that if special services are not provided for exceptional children they will of necessity be enrolled in regular classes.¹

Magnifico's study² of unskilled workers selected at random revealed an average I.Q. of 68 and that those who had had special class training were considered by their employers to be more alert and more personally adequate workers. In addition they appeared to be leading more stable home lives. Approximately 35 per cent of those who had not had special education classes were judged by employers to be not very stable or reliable. They seemed to lead unsatisfactory home lives, were bad credit risks, and had absenteeism, drinking, and police records.

Magnifico³ concluded social skills even more than vocational skills cannot be taught in the regular classroom because of differences in needs. He stated that the mentally handicapped and normal children should be separated during childhood and adolescence in order that they may live together peaceably during adulthood.

¹Ibid., p. 23.

²Magnifico, L. X., "The Retarded Need Special Classes," American School Board Journal, August, 1958, p. 33.

³Ibid., p. 33.

The need for special education can be viewed in a clearer perspective when the characteristics of the mentally handicapped are considered. He has difficulty with symbols and abstract materials. He has trouble with verbal and numerical symbols and his need for concrete materials is much greater than the need of the normal child. There is also a greater need for repetition and a much slower pace.¹

Americans believe in education for all children. The program of special education for exceptional children is based on the right of children to have an educational program adjusted to meet their individual needs, interests, abilities, and limitations.

Graham and Engel feel the educational responsibility is a governmental function. They point out:

It is the legal responsibility of the state and the local district to furnish this program. This is the American and democratic way of solving a problem.²

However the education of mentally retarded children is accomplished, it is sound planning to provide remedial and preventive programs for exceptional children in their formative years, and it is sound economy to spend rather

¹Garrison, Karl C., The Psychology of Exceptional Children, Ronald Press Co., New York, 1950, p. 131.

²Graham and Engel, op. cit., p. 23.

small sums for these early training programs rather than much larger sums for pensions and custodial care in later years for those who cannot make appropriate adjustment to normal social situations.¹

Current Trends in Education for the Mentally Retarded

The current trends in special education for the mentally retarded appear to be increasing enrollment, increasing state recognition of the problems and cost, and curriculum modification.

Increasing enrollment. In 1948 there were 719 cities in the United States with populations of 2,500 or better that had established one or more classes for children of low I.Q. These classes enrolled 87,142 pupils according to Heck.² In 1952 the special class enrollment in elementary and secondary public schools had grown to 113,465 according to Cruickshank.³

Heck⁴ surveyed 20 cities of 100,000 population or

¹Ibid., p. 23.

²Heck, Arch O., The Education of Exceptional Children, McGraw-Hill Book Co., Inc., New York, 1953, p. 346.

³Cruickshank, op. cit., p. 37.

⁴Heck, op. cit., p. 336.

more in 1945 as to what these cities conceived as trends in special education. One of the trends mentioned in all 20 cities was that they were gradually establishing special centers for children of low I.Q. consisting of four or more classes in a regular school.

The impact of this 1945 interest trend in special educational facilities shown by the cities reached the state level by 1949 with almost one-half of the states providing assistance to the mentally retarded by that time.

Increasing state recognition of the problem and cost. According to Cruickshank¹ by 1949 comprehensive legislation had been passed in 22 states that referred to both physically and mentally handicapped children and provided state aid for programs for both.

By 1956 the number of states having such legislation had grown to 44.²

Not only were the educable retarded children of prime concern but by 1956 emphasis had been given by state legislation to enhance the status of trainable children.

In 1956 a total of 21 states and the District of Columbia had passed specific legislation relating directly to community training of the trainable mentally deficient.

¹Cruickshank, op. cit., p. 30.

²Ibid., p. 30.

Of this total, seven states had enacted mandatory legislation while the remaining had permissive legislation. The majority of this legislation had been passed since 1952 according to Capobianco.¹

Of the states having no specific legislation relating to community training for mentally deficient children, five had included provision for public school classes utilizing existing legislation. The regulations established for admission to the classes were approximately the same as those proposed in the states where specific legislation had been passed.²

Most state departments of education under the existing legislation of the state relating to special education for the mentally handicapped have established criteria for eligibility on class attendance. Capobianco listed criteria generally used by state departments as:

1. an intelligence test administered by a qualified psychological examiner
2. independence of locomotion and the absence of severe motor and/or emotional handicaps
3. the assurance that the candidate is of no danger to himself or his peers

¹Capobianco, Rudolph J., "The Training of Mentally Deficient Children" in Education of Exceptional Children and Youth, Prentice-Hall, Inc., Englewood Cliffs, N. J., 1958, p. 240.

²Ibid., p. 240.

4. the presence of communication abilities which will enable the candidate to express his needs and understand simple directions.¹

Inasmuch as the state departments listed I.Q. as the first criterion, it would appear they were accepting the definition of the child who can profit from public school instruction as the trainable child as that given by Wallin:

So far as instruction is concerned children with mentalities of about three years and Binet I.Q.'s of 35 or 40 can be handled by the public schools provided they are stable and have acquired control of their bodily functions and have no obnoxious habits.²

This concept was different from the early state legislation which provided for only the educable child. It would appear that the I.Q. limits set by Goodenough fit the educable child:

Most public schools confine the enrollment of special classes to children of moron and borderline intelligence, that is, to those whose IQ's fall roughly between 50 and 80.³

Supplementing the continuing trend of state legislation and interest in the mentally retarded, there is a

¹Ibid., p. 241.

²Wallin, J. E. Wallace, Education of Mentally Handicapped Children, Harper and Bros., New York, 1955, p. 72.

³Goodenough, Florence L., Exceptional Children, Appleton-Century-Crofts, Inc., New York, 1956, p. 246.

continuing tendency to organize the educational program to suit the needs and conditions confronting the pupils rather than compelling them to conform to some rigid system designed and controlled by standards.

More and more curriculum is undergoing modification to suit these needs. This type of program has been called a unit of experience and has been defined by Martens as:

An actual experience in living related to the child's immediate interests and environment, which in turn related to his total experience makes for richer and more vital living. There are three basic attributes which give to the well-developed unit of experience its value. In the first place, the experience or activity should be real and not make-believe. In the second place, the experience should provide for cooperative living. In the third place, the results, whether tangible or not, should be emotionally, physically, and mentally satisfying to the child.¹

It appeared from the literature that units of experience were the same as the persistent life situations used by Williams² and described as those which everyone must meet and try to solve according to his ability. While the traditional school subjects are included, they are coordinated with the broad objectives of education for successful living

¹Martens, Elise H., Curriculum Adjustments for the Mentally Retarded, U. S. Office of Health, Education, and Welfare, U.S. Government Printing Office, Washington, D. C., 1950, p. 20.

²Williams, op. cit., p. 13.

in a democracy. Williams¹ indicated that this does not mean neglect of reading and arithmetic as they are tools of learning. Geography, social studies, and science are ways of learning about the world in which we live according to him.

Special classes for retarded children should offer carefully tailored programs designed to deal with developing assets and reducing the liabilities of the retarded child. According to Hutt and Gibby,² special classes should not be remedial in nature since the retarded child does not need and cannot profit from the traditional remedial approach.

The curricula must have both breadth and depth to meet the needs of the pupil according to Wallin who said:

The curricula in the special classes not only must be as varied and comprehensive as those in the regular grades, but must also include various specialities to meet the needs of the different types of deviates enrolled at any time.³

Even though the need for special education is recognized, the latest available statistics for special classes indicated not more than one-fourth of the retarded children needing special education help were receiving it. Shortage

¹Ibid., p. 13.

²Hutt, Max L., and Gibby, Robert Gwyn, The Mentally Retarded Child, Allyn and Bacon, Inc., Boston, 1958, p. 271.

³Wallin, op. cit., p. 280.

of adequately trained teachers, difficulties of bringing children to special classes, lack of knowledge regarding their needs, and the added expense involved may have influenced the use of special education facilities.¹ The presence of mentally retarded children in the regular classroom is perhaps more common than anyone knows.

The history of special education for the mentally retarded has been in existence for some time. The trend of the present century is the awakening of interest in special education for the retarded in public schools.

Further information of the emphasis of special education is given in the next chapter.

¹Williams, op. cit., p. 18.

CHAPTER III
SURVEY OF SOME SPECIAL EDUCATION CONTEMPORARY PROGRAMS
FOR EDUCABLE MENTALLY RETARDED CHILDREN

A desire for further knowledge of special education and special education classes prompted the initiation of this study in order that local problems in special education for the educable mentally retarded could be compared with current activities in the surrounding area. This required an examination of certain selected special education school programs in the immediate area.

The study was initiated by contact with State Department administrative heads of special education in the five state area of Idaho, Montana, South Dakota, Utah, and Wyoming. Through their interest and cooperation listings of elementary special education classes and teachers for the educable mentally retarded under their jurisdiction were obtained.

Construction and Administration of the Questionnaire

Questionnaires were constructed so that both factual information and attitudes toward methods of instruction were revealed. These were then sent to all 60 schools containing

one or more special education classes for mentally retarded children in this five state western mountain area.

Of the total questionnaires administered, 60, the 41 returned resulted in a 68 per cent return as shown by the data in Table 1.

TABLE 1. NUMBER AND PER CENT OF RETURNED QUESTIONNAIRES BY STATE

State	Questionnaires		
	Number sent	Number returned	Per cent of return
Idaho	4	3	75
Montana	21	11	52
South Dakota	4	4	100
Utah	25	18	72
Wyoming	6	5	83
Total	60	41	68

The mean of the five states' percentages of return was 75 per cent, which, it was believed, furnished sufficient information for the purpose of this study.

The questionnaire was constructed with multiple

questions used to explore each area of interest: (1) enrollment, (2) method of classification, (3) curriculum composition, (4) available advanced classrooms, and (5) post-school community adjustment.

It was evident that of the five states surveyed, three had programs of special education for educable mentally retarded children which were numerically small. These three states with the smaller number of questionnaires attained the highest percentage of return.

The 11 returned questionnaires of Montana yielded a 52 per cent return, while four returned questionnaires resulted in an 100 per cent return for South Dakota.

The survey consisted of five major areas: (1) enrollment and physical plant location, (2) classification for special education placement, (3) curriculum planning and composition, (4) advanced facilities and planned articulation, and (5) community adjustment and integration. The results are presented in the following sections.

Enrollment and Physical Plant Location

It was felt that enrollment figures were meaningless unless compared with the total elementary school enrollment in each community and in each state in order that the percentage of enrollment being served could be ascertained.

As has been pointed out earlier, three per cent of the population would be included in those with intelligence quotients under 70 using Terman's 1937 revision of the Binet scale.¹

Programs within states varied and showed little consistency in relation to the percentage of students served. Idaho's special education program for retarded children reported a small number of mentally retarded children actually served in relation to the total number of pupils in school as shown by the data in Table 2.

TABLE 2. ENROLLMENT IN TOTAL SCHOOL PROGRAM AND IN SPECIAL EDUCATION CLASSES IN IDAHO

Surveyed school number	Total system pupils	Special education enrollment		
		Expected number of pupils	Total pupils	Maximum allowable pupils per room
1	605	18	5	10
2	11,708	351	26	10
3			16	7

¹Heck, Arch O., The Education of Exceptional Children, McGraw-Hill Book Co., Inc., New York, 1953, p. 349.

It was noted that the largest school reporting was serving a fewer number of mentally retarded pupils percentage wise than the smaller school even though numerically they had five times as many pupils enrolled in their special education classes. No school even remotely approached the three per cent level. The maximum allowable number of pupils reported in special classes were ten and seven. Two schools indicated they would accept ten pupils per room, while one school specified seven.

A similar pattern was demonstrated by the information available for the state of Montana, the larger communities were furnishing fewer classrooms for the mentally retarded than the smaller communities as shown by the figures in Table 3.

It was evident that one of the largest school systems was serving fewer pupils in special education than many of the smaller districts. The normal three per cent incidence amounted to 300 special education pupils while only 15 special education students were actually reported in special classes for the mentally retarded in the one reported room. Two questionnaires indicated 30 pupils, of a three per cent incidence level of 39, were in special classes. These classes appeared to have been closest to attaining the predicted three per cent level.

TABLE 3. ENROLLMENT IN TOTAL SCHOOL PROGRAM AND IN SPECIAL EDUCATION CLASSES IN MONTANA

Surveyed school number	Total system pupils	Special education enrollment		
		Expected number of pupils	Total pupils	Maximum allowable pupils per room
1	1,305	39	30	15
2	1,257	39	30	15
3	7,726	231	30	15
4	1,652	51	14	15
5	1,000	30	21	12
6	1,000	30	21	12
7	10,000	300	15	15
8	1,754	54	14	15
9			21	12
10	1,000	30	14	15
11	1,200	36	8	15

Reported allowable maximum classroom load varied between 12 and 15 pupils. Three schools reported a maximum of 12 pupils, while the remainder allowed 15.

South Dakota's small enrollment in special education classes for the mentally retarded, as shown by the data in Table 4, further indicated need for expanded classrooms.

Although only three returned questionnaires were indicated for the state of South Dakota, in reality, questionnaire number 4 was returned with no items completed. This

situation existed in that the facility contacted was not primarily a school for the mentally retarded, but rather a crippled childrens school which had been recommended for the survey by the South Dakota State Department of Education.

TABLE 4. ENROLLMENT IN TOTAL SCHOOL PROGRAM AND IN SPECIAL EDUCATION CLASSES IN SOUTH DAKOTA

Surveyed school number	Total system pupils	Special education enrollment		
		Expected number of pupils	Total pupils	Maximum allowable pupils per room
1			75	16
2	6,888	207	65	15
3	9,000	270	35	15

Reported allowable maximum classroom load varied between 16 and 15 pupils. As was the pattern in some of the other surveyed states, the smaller system was caring for more retarded children both numerically and percentage wise than was the larger school system.

Of the surveyed states, Utah had more special education classes and teachers than any other state surveyed.

This was readily explainable when the total population of this state was considered in comparison to the other more sparsely populated states included in the study. This was apparent when the reported total system pupils, 213,176, were considered as shown by the figures in Table 5.

TABLE 5. ENROLLMENT IN TOTAL SCHOOL PROGRAM AND IN SPECIAL EDUCATION CLASSES IN UTAH

Surveyed school number	Total system pupils	Special education enrollment		
		Expected number of pupils	Total pupils	Maximum allowable pupils per room
1	10,884	327	36	15
2				15
3	2,500	75	14	15
4	12,550	378	75	15
5				10
6	7,185	216	52	15
7	11,000	330	51	15
8	8,205	246	22	12
9				15
10	600	18	11	15
11	39,000	1,170	264	15
12	3,200	96	25	15
13	24,481	735	200	15
14				12
15	5,800	174	42	15
16	2,106	63	7	15
17	6,941	207	36	15
18	2,746	81	20	12

Large centers of population in Utah reported more special education activity and interest than the largest centers in some of the less populated states. In Utah the smaller populated areas did not exceed the large centers in the number of special education pupils served.

Total number of special education pupils allowable per room varied. Figures of 10, 12, and 15 were reported for total allowable classroom enrollments. The larger centers of population consistently reported maximum teacher loads of 15 pupils. The most pupils reported as served, numerically speaking, were 264, while seven pupils, the smallest reported, were in one classroom where there could have been a maximum allowable load of 15.

All states were deficient both numerically and per cent wise in terms of the number of students cared for. Wyoming continued to follow this trend of a small special education program for the mentally retarded as pointed out by the data in Table 6.

Wyoming was serving more pupils percentage wise, if not numerically, than any other state surveyed. The school closest to its three per cent incidence level of 63 pupils was providing special instruction for 45 children.

TABLE 6. ENROLLMENT IN TOTAL SCHOOL PROGRAM AND IN SPECIAL EDUCATION CLASSES IN WYOMING

Surveyed school number	Total system pupils	Special education enrollment		
		Expected number of pupils	Total pupils	Maximum allowable pupils per room
1	7,800	234	120	15
2	6,584	198	70	15
3	2,100	63	45	15
4	1,183	35	14	15
5	2,216	66	15	15

The data furnished by the five states were not conclusive and indicated no consistent trends within the states, with the exception that all programs were lacking in scope as far as percentage of expected pupils receiving service.

Wyoming's special education program was caring for approximately twice as many pupils as any of the other states in terms of percentages of total pupil population as shown by Table 7.

Wyoming was serving 1.32 per cent of its total elementary enrollment and was followed by Montana, serving 0.70 per cent of its total enrollment. It was seen that Montana's

effort was slightly more than one-half of the percentage program of Wyoming. Trailing Montana in state effort at educating retarded respectively were South Dakota, Utah, and Idaho. The latter was an appalling 0.25 per cent.

TABLE 7. ENROLLMENT IN TOTAL SCHOOL PROGRAMS AND IN SPECIAL EDUCATION CLASSES IN IDAHO, MONTANA, SOUTH DAKOTA, UTAH, AND WYOMING.

State	Enrollment			
	Total system	Special education		
		Pupils	Per cent	Expected number of pupils
Idaho	12,313	31	0.25	369
Montana	27,894	197	0.70	840
South Dakota	15,888	100	0.62	477
Utah	137,198	855	0.61	4,116
Wyoming	19,883	264	1.32	596
Total	213,176	1,447		6,398

Numerically, Utah had the largest reported program followed by Wyoming, Montana, South Dakota, and Idaho. These figures were, however, undoubtedly subject to error

as Montana's low per cent of returns eliminated many special programs in that state. Undoubtedly, numerically Montana was furnishing special education to more pupils than Wyoming.

The figures on total state special education enrollment for mentally retarded pupils compared with the expected number of pupils as shown by the data in Table 7 left little doubt but that special education programs for the mentally retarded in the area surveyed were failing to meet the needs of the educable mentally retarded. The majority of states were not only not meeting the three per cent incidence level, but were not even approaching one per cent of the total students enrolled.

This lack of special educational facilities may have been due to the scarcity of special education teachers and other personnel. More teachers have expressed interest in special education since some schools have grouped two or more special education rooms together.

The number of special education rooms surveyed in the five states and the number of communities that preferred more than one special education room to a building are indicated by the figures in Table 8.

Many communities could not combine their special education room with others in that only one such room existed within the community. Many of the larger centers of

population indicated more than one special education room to a school where there was population available to support this type of administrative organization.

TABLE 8. NUMBER OF SPECIAL EDUCATION ROOMS FOR EDUCABLE MENTALLY RETARDED IN THE STATES OF IDAHO, MONTANA, SOUTH DAKOTA, UTAH, AND WYOMING

State	Number of special education rooms	Communities with more than one special education room	
		In the community	In a building
Idaho	7	2	2
Montana	17	6	3
South Dakota	13	3	0
Utah	75	16	6
Wyoming	18	3	2
Total	130	30	13

Lack of special education facilities may have been due to lack of special education personnel but also might have been attributed to lack of interest, poor identification of pupils, and lack of knowledge of special class organization. The area of special class organization for the retarded was the second section explored by the questionnaire.

Methods of Classification for Special Education Class Placement and Organization

Little continuity seemed to exist either within the states or between states in special class organization. The extremes of the range reported by different schools within the states were used to construct Table 9.

TABLE 9. PUPIL CLASSIFICATION FOR SPECIAL EDUCATION CLASS ORGANIZATION IN THE STATES OF IDAHO, MONTANA, SOUTH DAKOTA, UTAH, AND WYOMING

State	Age		Intelligence quotient		Grade	
	Range	Difference in years	Range	Difference in points	Range	Difference in grades
Idaho	7-20	13	25-96	71	K-6	6
Montana	6-17	11	40-84	44	K-5	5
South Dakota	6-15	9	43-91	48	K-3	3
Utah	6-14	8	44-85	41	K-6	6
Wyoming	6-16	10	50-82	32	K-5	5

It was evident that children of six years of age were acceptable in special classes in all states except in Idaho which specified seven years as the lower limit. These limits

varied between schools as different schools in the same state reported different limits. Most state elementary programs terminated at age 12, 13, and 14. The variation in ages of children accepted for special class instruction differed by a differential of eight years in Wyoming to 13 years in Idaho. These children were not necessarily in the same classes. However, there was no assurance that they could not have been.

Data concerning ranges of I.Q. scores and grades taught, as shown in Table 9, were formulated in the same manner as were the extremes of age used. These were the extremes of scores in the states involved.

The wide range of intelligence quotient with the bottom score initiated at a level lower than 50 would have seemed to point to the inclusion of trainable mentally retarded children in many states programs. These low figures were examined closely in that the questionnaire had been constructed to cover only an area applicable to educable retarded children. The I.Q. scores at the high end of the ranges of many states far exceeded the limits normally attributed to educable retarded children and this again fostered the belief that children other than educable children had been accepted in many state programs. Many authorities have theorized that children with an I.Q. below 50 cannot be

considered educable and some have even set limits of 65. Most have felt educable children fell within the limits of I.Q. extending from 50 to 75 or 80.

Types of grade organization reported extended from a readiness program or kindergarten through third grade in one state, to kindergarten through grade six in others. Although some of the pupils may never have been able to attain the higher level grade, it was felt material must be available to meet the needs of those children that could profit by fifth and sixth grade work. Where more than one class was available, the usual procedure has been to segregate or group by size, age, and ability. Consequently additional classes allowed for more uniformity of curriculum and learning programs.

Curriculum Planning and Composition

Special education for retarded children has advocated learning programs which have been based on units of study rather than the more formal type of academic presentation. Many felt that this did not mean neglect of tool subjects but rather the integration of tool subject learning into meaningful life situations. Indications that all schools were still teaching some tool subjects as such is shown by

the figures in Table 10.

TABLE 10. TEACHING PRACTICES AND SPECIFIC CURRICULUM CONTENT IN SPECIAL EDUCATION CLASSES IN IDAHO, MONTANA, SOUTH DAKOTA, UTAH, AND WYOMING

State	Curriculum guide used		Taught tool subjects as such		Subjects taught as separate subject matter							
					Arithmetic		English		Social studies		Reading	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Idaho	2	1	3		2		2		2		1	
Montana	5	6	11		8		7	1	5	3	7	1
South Dakota	3		3		3		2		2		2	
Utah	10	8	18		14		11		12		12	
Wyoming	3	2	5		5		3	1	5		4	
Total	23	17	40		32		25	2	26	3	16	1

Many schools indicated a strong trend toward the teaching of academic subjects in their special classes even though the method of presentation, speed of learning, and amount of repetition varied from the amount expected in a regular classroom. Other schools leaned heavily upon units

of instruction but admittedly were using a more academic or formal presentation of some tool subjects. Arithmetic was more often taught as an individual subject than either English, social studies, or reading as shown by the figures in Table 10.

Twenty-three schools in all states were employing curriculum guides in their classroom planning. This figure (23) indicated that more than one-half of the schools were using curriculum guides. Returned questionnaires indicated many different guides from many different sources and suggested some confusion in determining the difference between curriculum guides and state courses of study. The amount of use of curriculum guides in any school was not ascertainable as the value of such an instrument lay with the personal preference of the teacher in applying the guide in actual practice.

Even though some elementary programs in special education for the mentally retarded terminated at 12, 13, or 14 years of age this in some cases meant continuation of the same type of program at a junior high level as examined in the next section.

Advanced Facilities and Planned Articulation

The type of school organization needed for a comprehensive program of special education for the mentally retarded would of necessity require special education rooms on an advanced level, junior high and possibly vocational training in high school. Transition from one level to another or from one class to another even at the elementary level requires curriculum adjustment and follow-up to insure that the pupil has not been subjected to pressures either academic or social with which he unable to cope.

Twelve of the special education classes and schools studied indicated they have developed transition plans which are coordinated with the curriculum. Some have indicated this type of planning in spite of the fact that they reported no special education classes at a junior high or high school level as shown by the figures of Table 11.

Utah reported more advanced classes for the retarded than any other state surveyed. In fact, Utah reported more junior high school rooms and more high school rooms than all other surveyed states combined.

Idaho reported no junior high or high school level special education rooms. This might have explained the number of older children reported in elementary classes for

retarded children.

TABLE 11. SCHOOL ORGANIZATION INDICATING CONTINUOUS SPECIAL EDUCATION PROGRAMS IN THE STATES OF IDAHO, MONTANA, SOUTH DAKOTA, UTAH, AND WYOMING

State	Schools with a transition plan with coordinated curriculum between classes		Advanced special education classes					
			Junior high school		High school		Other	
	Yes	No	Yes	No	Yes	No	Yes	No
Idaho	2	1		3		3		3
Montana	1	10	2	9		11	1	10
South Dakota	2	1	3		1	2	3	
Utah	4	14	15	3	10	8	4	14
Wyoming	3	2	3	2	1	4	2	3

Some states surveyed indicated other special classes such as facilities for the trainable retarded child. Again, Idaho was the only state which failed to indicate additional other special classes.

Much interest has been expressed in the past by teachers of special education concerning community integration

following termination from public school whether from elementary class levels or from the more advanced classes. This was another of the areas examined in the survey and it will be discussed in the next section.

Community Adjustment and Integration

Comprehensive data concerning the success of individuals in the community following their educational training was not available from the returned questionnaires of this study. Information concerning the belief of special education teachers as to student post-school experiences was sectioned into (1) areas of community integration and (2) factors involving removing the individual from the community as shown by the data in Table 12.

Many questionnaires were returned with this section of the questionnaire unanswered, while others indicated a belief that some of their pupils fell into more than one or perhaps almost all categories specified. It was reasonable to believe that unanswered items had some correlation with the "don't know" item.

Fourteen teachers in all states indicated a belief that the majority of their students remained in the community. However, the most prevalent response or lack of response was

the incompleted item of the questionnaire.

TABLE 12. POST-SCHOOL COMMUNITY INTEGRATION OF MENTALLY RETARDED CHILDREN IN THE STATES OF IDAHO, MONTANA, SOUTH DAKOTA, UTAH, AND WYOMING IN TERMS OF TEACHER OPINION

State	Teachers' opinions concerning mentally retarded pupils					
	Mentally handicapped pupils				Don't know	Item not answered
	Remained in community	Went to institution	Contact lost	Enrolled in out of area school		
Idaho	2					1
Montana	4	2	1	2	6	1
South Dakota						3
Utah	5			1	2	11
Wyoming	3	2	1		2	2

A minority of schools admitted some portion of their students were institutionalized and that they were unable to maintain contact with others following termination from school. To have assessed the value of special education it appeared that a more intensive follow-up would have been

necessary. This was impossible in many cases as many special education programs were relatively new, having been initiated within the last few years.

Of the five state area surveyed by the questionnaires few definite trends were evident either intra-state or inter-state. However, in examining the reported material it is evident:

(1) Actual enrollment in special education classes is below the normally expected number of retarded pupils, three per cent of the total enrollment.

(2) Special education classrooms for the mentally retarded are organized using different criteria and individual interpretation of the same criteria.

(3) Over one-half of the special education schools surveyed reported the use of a curriculum guide. All schools indicated emphasis on certain tool subjects.

(4) All states surveyed but one reported classes on a junior high school level or high school level.

This survey will be summarized in the following chapter.

CHAPTER IV

SUMMARY AND CONCLUSIONS

The purpose encompassed by this paper was the examination of contemporary elementary special education programs for educable mentally retarded children in states in the same general area as the state of Wyoming.

Questionnaires were administered to special education teachers in the five western states of Idaho, Montana, South Dakota, Utah, and Wyoming, with the returned questionnaires fluctuating from approximately 50 per cent to 100 per cent. A 68 per cent accumulative all state return was realized.

Summary

When comparing the enrollment of special education programs in the five states with each other and with the predicted three per cent of the population expected to need special education facilities it was found:

1. Idaho was serving fewer retarded pupils numerically and percentage wise than any other state. Less than one per cent (0.25%) of the elementary school population was being furnished special education facilities for the mentally handicapped.

2. Montana was serving less than one per cent (0.70%)

of the students in elementary school, and was not approach-^{ed} the three per cent level. The burden of the special education program was being carried by the middle-sized rather than the larger communities. The largest community had such a small program that it appeared to be of little value to so large a community.

3. South Dakota was furnishing special education classrooms for less than one per cent (0.62%) of the elementary school population. As in Montana, the larger community had fewer special education classrooms for the retarded than the smaller communities.

4. Utah reported more special classes numerically than all other states. There were more classrooms for special education for educable mentally retarded children available in the larger population centers. Even though Utah had a greater number of special classes, the percentage of pupils served was very small (0.61%) and was below all states but Idaho.

5. Wyoming's reported program, while not serving as many pupils numerically as Utah, indicated more pupils were cared for percentage wise (1.32%) than any other state. The state's program resembled that of Utah's in that more classrooms were available in the larger communities.

Reports of types of classroom organization in all

states reported I.Q., age, and grade level as factors used in placement of children in special classes for the mentally retarded. The data reported on these factors were treated in terms of range and the range of each state compared with the ranges of the other states, with the following summary of findings:

1. The smallest difference in I.Q. range (32), the number of points from the lowest to the highest I.Q., was reported by Wyoming.
2. The largest difference in the I.Q. range (71) was reported by Idaho.
3. The smallest number of years of age (eight years) between the youngest and oldest child accepted for special education was reported by Utah.
4. The largest difference in number of years of age (13 years) of children in special classes was reported by Idaho.
5. All states taught classes extending from kindergarten to third grade. In addition, two states reported a range of grades one to five and two states reported a range of grades one to six.

Inquiry was made concerning the existence of curriculum guides, subjects taught, and methods used. The results revealed the following concerning curriculum planning and

curriculum:

1. More than one-half (23) of the 41 surveyed classes employed some type of curriculum guide.

2. All schools reported emphasis on certain tool subjects as a part of the curriculum.

3. Two schools of the 41 surveyed expressed emphasis of tool subjects as a primary objective.

4. All schools indicated that arithmetic was taught as a separate subject.

The data showed advanced special education classes at junior high school and high school levels for mentally retarded pupils with coordinated curriculum planning as follows:

1. Classes at junior high school and high school levels were reported in all states with the exception of Idaho.

2. Plans for articulation between elementary schools and junior high and high school level classes which included coordinated curriculum planning were reported in approximately one-half of the communities with junior high and high school special education classrooms for the mentally retarded.

Conclusions

From the results of the survey it was concluded:

1. That special education programs of the five state area surveyed are not providing adequate services and classrooms for the mentally retarded.

2. In special class organization for the educable mentally retarded no specific pattern of organization was evident.

3. That curriculum emphasis directed toward tool subject mastery was excessive.

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