SURVEY OF HANDICAPPED CHILDREN IN NEVADA

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PREFACE

During the 1951 Session of the Nevada Legislature, the Senate adopted Senate Resolution No. 15 which memorialized the Legislative Counsel Bureau to study the need of a program for handicapped children in Nevada, with the view of providing better facilities for the education and care of such children.

At the present time, the only state program in the field of education for handicapped children is the program for the education of the deaf, dumb, and blind administered by the State Department of Education. This program is educating only fourteen children in out-of-state institutions. Three school districts in Nevada are conducting home-bound programs whereby a limited amount of instruction is provided by teachers regularly visiting handicapped children confined to their own homes. The Variety Club in Las Vegas has constructed and is operating a school for handicapped children.

For some years, the State Department of Health has been administering the crippled childrens' services program, and which now includes care of rheumatic fever patients. A limited number of children are being cared for at the Nevada State Hospital. Thus a start has been made in the field of care of handicapped children.

A number of groups in the state are providing care for handicapped children, including the Nevada Society for Crippled Children, Inc., the Eagle Valley Ranch, the Shrine Hospital, the Catholic Welfare Bureau, and others.

The study begins with a general discourse describing the various types of handicaps, then describes the programs of the various western states, discusses in detail what is being done in the State of Nevada, and, lastly, devotes a chapter to recommendations that would further the education and care of handicapped children.

This study was undertaken by Mrs. Dorothy DeWhitt, Speech Therapist, Reno School District No. 10, at the request of the Nevada Legislative Counsel Bureau, and it will be a thesis for a master's degree in education. The study was compiled under the direction of Harold N. Brown, Ed. M., Professor of Education, University of Nevada. Extensive training and experience has made Mrs. DeWhitt well qualified for the task.

Mrs. DeWhitt and the Legislative Counsel Bureau gratefully acknowledge the valuable assistance of Mrs. Dorothy G. Hays, Executive Secretary, Nevada Society for Crippled Children, Inc.; Mr. Glenn Duncan, Superintendent of Public Instruction, State Department of Education; Mr. Earl Wooster, Superintendent, Reno School District No. 10; Mr. Roger Corbett, Assistant Superintendent, Reno School District No. 10; Mr. Neil P. Scott, Attendance and Guidance, Reno School District No. 10; D. J. Hurley, M. D., State Health Officer, and staff of the State Department of Health; David D. Carr, M. D., Clark County Health Department; Wesley W. Hall, M. D., Secretary-Treasurer, Nevada State Medical Association; Edith P. Sappington, Regional Medical Director, Children's Bureau, Federal Security Agency; Mrs. Marion Bowen, Director, Vocational Rehabilitation, State Department of Education; Mr. Walter Bates, President, Variety Club of Las Vegas; Mrs. Catharine Rueckl, American Association of University Women; and the many practicing physicians, practitioners of osteopathy, practitioners of chiropractic, superintendents, principals, and teachers of all the Nevada schools who returned the questionnaires needed for the survey.

Mrs. DeWhitt's study is hereby submitted for consideration and study by the Legislature and the people of the State of Nevada. Copies of the study may be obtained free of charge from the Nevada Legislative Counsel Bureau, Carson City, Nevada.

J. E. Springmeyer
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SURVEY OF HANDICAPPED CHILDREN IN NEVADA

CHAPTER I

THE HANDICAPPED CHILD

Special education for physically and mentally handicapped children is an accepted part of the American public school system. As of 1948, forty-one states had enacted laws authorizing or requiring local school systems to provide special educational services for one or more types of children whose physical, mental, or emotional characteristics deviated seriously from the normal. Included in the laws of thirty-four states were provisions for financial assistance on the part of the state to help local school districts meet the extra cost of making special educational services available; and there were persons on the staffs of state educational departments designated as responsible for the guidance and supervision of the state-wide program of special education.[1]

All states in the United States have at the present time some provision for location, diagnosis, and, in some cases, treatment of various handicaps in children. Such programs are supported usually by federal and state funds on a matching basis, with county assistance or administration in certain instances.

A chapter of the National Society for Crippled Children exists in every state and territory of the United States. Care is provided as extensively as there are funds available. Diagnostic clinics, some medical treatment, physio-therapy, occupational therapy, recreation camps, and swimming classes are a part of the program for permanently handicapped children.

Under the provision of the Social Security Act, every state now has a public program of services for crippled children assisted by federal grants-in-aid administered by the Children's Bureau. In February, 1948, the names and diagnoses of 442,137 crippled children had been reported to the Crippled Children's Division of the Children's Bureau. At present this register does not include all the children in need of service, for many are not known either to this or to any other official agency.[2] The cerebral palsied group alone, according to recent estimates, includes approximately 176,000 children under the age of twenty-one years.[3]

The State Crippled Children's Agency carries the main responsibility of the program. What every agency tries to do, within the funds available, is to locate crippled children, see that their condition is diagnosed, and then see that each child receives the care he needs to bring him up to par or to reduce his handicap as much as possible.

There has been, and still is, much confusion or misunderstanding as to who are physically and mentally handicapped. However, one point on which all writers of information regarding the handicapped and all educational codes providing for education of the handicapped seem to agree is that a handicapped child is one who, because of his infirmity, is not capable of getting enough from the ordinary school to enable him to meet satisfactorily the demands of living. It is also recognized that many of the handicapped have a potential contribution to make to the world in which they live and that it is a primary function of special education to help these handicapped to realize such potentialities.

To understand the problems of special education of the handicapped child, it is necessary to understand the types of limitations imposed upon the child as a result of his physical or mental deviation from the normal. Again, we find disagreement among authorities as to classification and definition of the various types. An accepted classification groups all handicaps into six major types:

1. Vision
2. Hearing
3. Speech
4. Orthopedic
5. Mental
6. Neurological

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[1] Statistics of Special Schools and Classes for Exceptional Children, Federal Security Agency, Office of Education, (1947-1948), p.1.

[2] Crippled Children in School, Federal Security Agency, Office of Education, Bulletin No. 5, (1948), p.3.

[3] Winthrop Phelps, The Farthest Corner, Chicago, Ill., The National Society for Crippled Children and Adults, Inc., (1947), p.8.

Each of these major classifications includes numerous conditions and degrees of handicaps.[4] However, for purposes of this study, cardiac, tuberculous and other systemic conditions in the field of internal medicine have been included with orthopedic conditions due to the similarity of educational requirements.

A further problem which must be understood in studying the handicapped child is that of the physical care imposed by the infirmity. Each child presents a different problem, educationally, since his schooling must be adjusted to the physical treatment which he must undergo to reduce the degree of his infirmity.

Vision Handicaps

The handicaps of vision requiring special educational treatment are those of the partially-seeing, requiring sight-saving books and materials, and of the blind, requiring education in Braille.

Partially-seeing or partially-sighted

The partially-seeing child is one whose vision has been impaired by congenital deformity or weakness, illness, or accident. This group includes those with:

1. Visual acuity of 20/70 to 20/200 in the better eye after correction. This group sees at a distance of 20 feet what should have been seen from a distance of 70 to 200 feet in the better eye after having been fitted with glasses.
2. Serious defects such as progressive myopia or nearsightedness, hyperopia or farsightedness, astigmatism or distorted vision, and lack of fusion or lack of coordination of the two eyes together to produce correct vision.
3. Diseases of the eye or diseases of the body which effect vision, as for example, glaucoma.
4. Any unclassified visual defect which impairs school progress.
5. An eye weakness or maladjustment as a result of treatment, operation, or convalescence. In this group are found those suffering from weakened eyes as a result of such deseases as measles, or from post-operative weaknesses.[5]

The partially sighted child needs little extra in the way of physical care or education. His text books and materials must be of extra large print to prevent undue strain upon the weakened eyes; but no extra physical care need be provided except in those cases where the eye condition exists with some orthopedic, mental, or neurological handicap.

Blind

A blind person is one who has visual acuity of 20/200 or less after maximum correction as been accomplished. He is also to be considered blind if he has "channel vision" to a degree that the peripheral field is contracted so that the widest diameter subtends an angle no greater than twenty degrees.[6] This individual must learn and live by senses other than vision. For education he needs to be placed either in resident schools for the blind or in special day classes. The blind child requires nothing more than any other healthy child as far as physical care is concerned.

Hearing Handicaps

Hearing handicaps fall into three degrees: defective, hard-of-hearing, and deaf.

Defective hearing

A person with defective hearing is one who has slight hearing impairment. This defect may be such that on some days he hears better than on others, or he may hear some sounds better than others. He is often mistaken for a child who has limited learning capacity, or who is careless, indifferent or impolite.

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[4] Harry J. Baker, Introduction to Exceptional Children, pp. 12-13.

[5] Ibid., pp. 41-42.

[6] Ibid., pp. 56.

Thus, his failure to respond is excused with little or no effort being made to determine its cause.[7]

This child needs physical examination to determine the cause of the impairment and proper treatment or correction. Once correction has been effected, the child can usually become a part of the regular classroom group.

Hard-of-hearing

A hard-of-hearing person is one who reacts with understanding to the spoken language provided the source is brought within his hearing range through a loud voice, amplification, or some mechanical device. This group generally includes those with a hearing loss of from 35 to 50 per cent or more.[8]

The child within this group needs treatment to reduce the condition to its lowest degree of handicap. Hearing aids may be necessary, and proper use of a hearing aid may enable the child to rejoin the regular school group. He may need not only medical treatment, but also the manipulative treatment of osteopathy or chiropractic, or a combination of such treatments. No special physical care is needed unless this infirmity is coupled with orthopedic, mental, or neurological conditions.

Deaf

The New Jersey Department of Education has given the following definition of the deaf child: "For education purposes a child is considered deaf if he has not acquired language because of inability to hear."[9] The deaf child is usually recognized prior to reaching school age. He should be enrolled in a residential school or a day school with classes for the deaf; he poses no special problem as to physical care.

Speech Handicaps

Speech difficulties are of multitudinous kinds and degrees arising from so many physical, mental, and emotional sources with such a variety of effects upon the individual that a simple, concise definition is difficult to formulate. Pintner, Eisenson, and Stanton[10] offer the following definition: "Speech may be considered defective when it is not easily audible and intelligible to the listener. Speech is defective if it is vocally or visibly unpleasant or labored in production. Finally, speech is defective if it is inappropriate to the individual in regard to his mental and chronological age, sex, and physical development." Educators consider a child as having a speech defect when his speech pattern deviates from accepted usage to the extent that undue attention is centered upon him.

Speech defects and disorders may be divided into two main classifications: (1) nervous difficulties and (2) articulation defects. Included in the first classification are such manifestations as stuttering or stammering, hesitation in the speech, or the appearance of unintelligible sounds due to cluttering. The majority of speech specialists seem to agree that, for the most part, the articulatory defects are functional and are manifested by omission of consonants, lisping, and substitution of certain incorrect sounds for the correct ones. They are usually caused by incorrect position of the speech organs, such as tongue placement. However, physical defects may cause articulatory difficulties when the sounds are affected by nasal obstruction, tooth malformations, cleft palate, and the like.[11]

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[7] Harry J. Baker, Introduction to Exceptional Children, p. 81.

[8] Ibid., pp. 80

[9] The Classroom Teacher Can Help the Handicapped Child, Department of Education, State of New Jersey, School Bulletin No. 12 (1947), p. 19.

[10] R. Pintner, J. Eisenson, M. Stanton, The Psychology of the Physically Handicapped, p. 320.

[11] The Education of Physically Handicapped Children, California State Department of Education, Bulletin Vol. X, No. 12 (December 1941), p. 76.

Included in the nervous disorders are stuttering and stammering, which are terms commonly used in this country to describe spasms of speech.[12] There are two varieties of true stammering: audible and silent. Audible stammering is easily recognized by intermittent blocking, repetition of sounds, syllables, and word phrases, random body movements, facial contortions, and visible body tensions. In silent stammering there is little or no outward manifestation, although there is a complete muscular and psychic inhibition. The latter type of disorder is rarely recognized by either parents or teacher. Children so handicapped are therefore greatly misunderstood and often thought to be either stupid or stubborn because they are unable to make a sound.

Dr. Josephine Jackson, psychiatrist and author, describes a stammerer as "cornered." This authority states that the stammerer is beset from within by a grip that will not loosen and from without by the darting menace of humiliation, ridicule, and defeat. Then comes the fear, the sensation of being caught in a trap, of not being able to depend on his speech machine to serve his needs. Instantly a state of tension is set up; and in that tension of muscle and mind lies the whole sad secret of his speech difficulty. Speech cannot slip smoothly along over muscles that go into a vise-like contraction under the stimulus of fear.[13]

Oral-inactivity or lalling

Lalling is a type of speech defect evidenced by an unintelligible, slovenly mumbling of sounds. It may be due to an inactivity of the back part of the tongue and of the throat, or to the inactivity of the tip of the tongue or lips.[14] During this type of speech, the tongue is rarely lifted from the floor of the mouth, a condition attributed to certain forms of paralysis, to a neurotic tendency, to poor speech environment, to some illness occuring before the speech habit is acquired, and occasionally to mental deficiency.

Lisping

Any deviation from a normal production of the sibilant sounds (s, z, zh, ch, j) is considered a lisp. For correction purposes lisps are divided into four types: (1) The frontal lisp is lingual protrusion. The tongue protrudes between the teeth causing substitution of the "th" sound for any of the sibilant sounds. (2) The lateral lisp is one in which the sound escapes over the sides of the tongue. (3) The nasal lisp is the misdirection of the breath through the nose. (4) The occluded lisp is the substitution of "t" or "d" for the "s" or "z" sound.

Aphasis

Aphasia is a defect or loss of the power of expression by speech, writing, or signs, or of comprehension of spoken or written language, which is due to injury or disease of the brain centers.[15] Symptoms are: (1) Complete or partial inability to speak but ability to comprehend meaning; (2) Inability to comprehend meaning of words although the individual may be able to repeat the words; (3) Speech appearing as a jargon of words which take on meaning when carefully analyzed; and (4) Lack of grammatical form.

Voice Disorders

This condition is the failure of the speaker to produce normal speech tones because of structural or functional causes. Observable symptoms are: husky, weak, nasal, shrill, aspirate (breathy), monotonous, etc; quality of voice.

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[12] The education of Physically Handicapped Children, California State Department of Education, Bulletin Vol. X, No. 12 (December 1941), p. 77.

[13] Ibid., pp. 78-79.

[14] Ibid., p. 82.

[15] W. A. Newman Dorland, The American Illustrated Medical Dictionary, 20th Edition, p. 129.

Baby talk or infantile speech

This is the substitution of one normal speech sound for another caused by slight interruption in the growth process, undeveloped emotional life, or poor speech environment. It is a pattern of speech retained after babyhood, -- a prolongation of the normal babbling of the baby stage. The older the child becomes the more handicapped he is by this condition.

Cleft lip and palate

A cleft palate is an opening in the roof of the mouth, causing a distorted and nasalized speech. The cleft is due to embryological maldevelopment. After plastic surgery, speech reeducation is mandatory to train the child to direct the breath through the mouth and to train him in the sounds of consonants and vowels. His voice will sound entirely different and seem to him that another person is speaking.

The cleft lip or harelip is a congenitally divided upper lip on one or both sides. This defect usually, but not always, accompanies the cleft palate. After surgical closure the child must be trained to use the lips for speech purposes.

Cerebral palsy speech

Cerebral palsy speech is due to a brain injury from trauma, certain diseases with high fevers, cranial wounds, etc. The injury may occur before, during, or after birth.[16] This speech condition is found in connection with the orthopedic handicap of cerebral palsy. In the more severe cases, the child may need to be taught to make his first intelligible sounds and his first words. The physical care of these children will be discussed under the orthopedic handicap.

Foreign accent

Foreign accent is the result of the influence of a language other than English. It is characterized by substitutions and omissions accompanied by faulty phrasing, by misplaced emphasis on many words, and by changes in rhythm, melody, and accent. It is found in children who have learned a foreign tongue prior to the learning of English.

The physical care of the speech defective children presents a problem only when coupled with an orthopedic, mental, or neurological handicap. The vast majority of speech cases can continue in the regular classroom if under a sympathetic teacher and under speech therapy administered by a specialist in special speech classes. However, the underlying causes of physical, mental, and emotional inefficiency and abnormalities must be determined and proper treatment instituted to reduce their crippling effect. All speech cases need an environment, both in school and at home, conducive to happy, harmonious living and relaxation.

Some of the physical causes of speech disorders which must be treated when found present are: (1) Adenoids or other nasal obstructions causing loss of resonance. For example, the child says "bood" for "mood". (2) Teeth, overshot uppers or undershot lowers, causing misplaced consonants. (3) Partial paralysis of the tongue and tongue-tie, in which latter case the frenulum extends to the tip of the tongue preventing the tongue contact with the upper gum ridge. (4) Extremely enlarged tonsils causing a "thick" voice or other throat defect. (5) Total deafness or hard-of-hearing causing muteness or an unusual speech pattern and a peculiar voice pattern. (6) A sluggish soft palate causing a nasal "twang" or an abnormally short palate resulting in nasal tone. The nasal "twang" is particularly noticeable after some tonsillectomies. (7) Mental retardation characterized by little or no comprehensible speech.[17]

Most people consider speech natural to the child. However, child psychologists state that learning to talk is a tremendous task, that our vocal organs serve purposes other than speech, that language is a super-imposed function which civilization has thrust upon us, and that the language function is easily disturbed. In the United States there are six times as many stutterers as the total of blind, deaf, crippled and mental defectives.[18]

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[16] C. Van Riper, Speech Correction, Principles and Methods, p. 404.

[17] The Education of Physically Handicapped Children, California State Department of Education, Bulletin Vol. X, No. 12 (December 1941), p. 81.

[18] Dorothy Mulgrave, Speech for the Classroom Teacher, (1946)

The importance of treating speech defects can only be fully appreciated when the evil effects produced by these disorders are fully understood. Many children are considered mentally retarded, backward, and even feeble minded because of a speech defect. Inferiority complexes, shut-in personalities, shyness, timidity, criminality, and other anti-social characteristics are some of the results of the disturbances of speech. The speech handicap is one of the cruelest of handicaps, warping the personality of the child.

Orthopedic Handicaps

A good definition of the orthopedic handicap was proposed by the committee on special classes at the White House Conference, which stated: "The crippled child, in the orthopedic sense, is a child that has a defect which causes a deformity or an interference with normal function of the bones, muscles, or joints. His condition may be congenital or it may be due to disease or accident. It may be aggravated by disease, by neglect, or by ignorance."[19]

Included in this classification are the familiar cases of paralysis, tuberculosis, cerebral palsy, bone and joint diseases, deformities of both congenital and traumatic origin, and the cardiopathic or heart cases. The crippling effects may be very mild, or may require institutional or hospital treatment for long periods. These cases require much physical care; and the educational program must be fitted to the need of each case, providing in some cases only a few hours per week at the bedside and in others providing specially equipped classrooms with highly trained teachers and therapists in full time attendance under the direction of doctors.

Special schools, special classes, or home-bound instruction through the public school system are means by which the vast majority of these children can be educated. The cost of hospital and professional health care for such children is so burdensome that few parents can afford private schooling or tutoring. Many parents cannot meet the tremendous costs involved in the physical care and are being assisted through the National and State Societies for Crippled Children, the National Infantile Paralysis Foundation, the Nevada Crippled Children's Services, the Nevada Rheumatic Fever Program, and other programs, in providing minimum physical care.

Infantile paralysis or poliomyelitis

Infantile paralysis is an acute infectious disease caused by a filtrable virus. It occurs chiefly in children, occasionally in young adults, and produces paralysis of the extremities or of the trunk muscles.[20] The crippling effects range from a degree almost imperceptible to the untrained observer to complete helplessness. Poliomyelitis has increased in frequency during the past years, but better methods of treatment have helped to reduce the crippling effect. However, everyone is familiar with the sight of an infantile paralysis victim struggling along with one or both legs in heavy braces and often on crutches.

The education of these children must be integrated with their physical care. Education must await the period of convalescence. While the child is still confined to bed in hospital and home, the home-bound teacher teaches at his bedside. As the child regains strength and health, he may again attend school provided the crippling effects are not too great a handicap for attendance in regular schools and classes. However, the child with severe crippling effects cannot climb the stairs to most of the school entrances; his limited strength may require rest periods during which the child can lie down instead of the usual recess with its playground activity. Therefore, he is denied school attendance with its advantages of classroom instruction and social development. In a larger city, this unfortunate child may have the educational home-bound program available for his instruction at home, but the child living in a rural area receives little, if any, instruction since the regular educational program fails to reach him.

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[19] White House Conference, Special Education: The Handicapped and the Gifted, pp. 23-34.

[20] Burgess Gordon, Hughes' Practice of Medicine, 16th Edition, p. 572.

Many of the larger school districts of the nation are providing either special schools or special classrooms for these children. Ramps lead to school entrances; classrooms are equipped with desks fitted to the child to make his time at the desk physically comfortable; and a quiet room equipped with cots and blankets is provided for rest periods. These facilities not only are needed by the infantile paralysis victim, but are necessary for all the orthopedically handicapped.

Cerebral palsy

Cerebral palsy is a neuromuscular disfunction due to damage to the brain before, during, or after birth. The afflicted child moves the affected muscles with great difficulty in very awkward movements. The degree of handicap varies greatly, and until recently only those with comparatively mild defects were seen in public or on the streets, moving with awkward disassociated motions, often holding tightly to a companion to avoid falling.

There are several types of cerebral palsy, but they are generally known in three groups: spastics, athetoids, and others. Approximately 80 - 85 % of cerebral palsied children are spastic or athetoid.[21] The spastic comprises about one half of all afflicted. This type has certain muscles which contract whenever put under tension, thus causing stiffness and hyperactivity. The desired motion of a spastic muscle is often blocked by what is termed a "stretch reflex." The spastic muscle becomes irritated by the motion of its opposite muscle, becoming tense and immovable.

The basic principle underlying all spastic treatment is muscle re-education. The imbalance must be corrected by strengthening weak muscles, protecting weak muscles, and cutting down the power of the strong muscles through exercise.

The athetoid group is the second largest. This group has normal muscles, but they make involuntary, purposeless movements. The athetoid patient lacks ability to direct his extremities, lips, tongue, or trunk in the motion which he desires, and is likewise unable to control unwanted movements. This patient usually has some part of his body making unwanted, uncontrolled movements. He has been termed "a prisoner within a framework of constant, unwanted motion."[22]

The basis of all athetoid treatment is conscious relaxation. Best results are always obtained in tremor athetoids by treating proximally, then distally. Work should begin with heavy, large activities and be brought down to small, light, fine activities. He must be taught to coordinate hand skill with the limited range of sight and thus eliminate the excessive neck motions.

Others

The remaining cases may have any one of a number of neurological traits. They may be afflicted with tremors, incoordination, stiffness of muscle, clumsiness, or loss of equilibrium. Various names such as ataxia, tremors, or rigidity are used to describe these other types. Although any one patient may have a combination of many of these types of disability, he generally suffers wholly or predominantly from only one of them.

Ataxia is the most common form of the other types. This form of cerebral palsy is due to lesions in the cerebellum. There are disturbances of equilibrium, coordination, and tonus regulation. Sensation may be affected so that fine differences of heat, cold, and touch cannot be discerned. The child may have defects of vision and ataxia in the speech mechanism but not have hearing defects. The reflexes may be normal and muscle tonus may be diminished. Balance and postural sense are often affected in much the same way as those of an intoxicated person. The principle of treatment for the ataxic is the substitution of conscious balance for automatic balance, through the use of visual levels and epicritic sensation. The child must learn to relate himself to things around him. He must learn that when his head is off balance the sides of the room and the furniture, are out of line much as a picture that is taken by a camera which is not held straight. Nystagmus may deprive him of this visual intake. If so, he should be treated by weight

[21] W. M. Phelps, "The Differential Characteristics of Spasticity and Athetosis in Relation to Therapeutic Measures," New York State Medical Journal, Vol. 41, pp. 827-831.

[22] Help at Last For Cerebral Palsy, Public Affairs Committee, Inc., Public Affairs Pamphlet, No. 158, p. 6.

distribution. He must be taught to be conscious of the added weight on one foot when standing off balance, and that an arm held out to one side weighs more than an arm flexed on the chest. Typing may be taught by the touch system; but the child must use blank keys or be blindfolded so as not be become dizzy or sick while learning.

Can these children really be educated? Dr. J. Thomas McIntire has concluded that two-thirds of all cerebral palsied children have intelligence falling within the normal range; and after years of research on large numbers of cerebral palsied children, he suggests the following percentages:

Superior intelligence	4.0 %
High average	6.0 %
Average	25.0 %
Low average	7.6 %
Dull normal	11.0 %
Borderline	5.8 %
Feebleminded	27.6 %

There is no known relationship between the level of intelligence and the degree of physical handicap.[23] Many children showing a great deal of mental involvement show the mildest of physical handicaps. On the other hand, the athetoids may have so little physical control that they are unable to hold up their heads, speak intelligibly, or avoid drooling, and yet may possess normal or even superior intelligence.

Cerebral palsied children face the most difficult problem of education. In most cases, hands, speech mechanisms, and extremities are involved. Hearing and visual defects are also common. The unpredictability of muscular control and inability to sit securely in an ordinary school desk produce a feeling of insecurity, which may be aggravated by emotional tension or self-consciousness to a degree that the child loses completely the coordination which would otherwise be within his ability. Each case requires a different method of education to meet the child's difficulty in comprehension and muscular control caused by damage to a particular brain area.

The cerebral palsied handicap presents one of the most difficult problems of education. Children with this handicap need to be taught the very simplest of tasks, such as eating and dressing. To such individuals the lacing of a shoe is an accomplishment in muscular education. To properly educate the cerebral palsied children special facilities and specially trained personnel are mandatory.

Special schools or classrooms require ramps with special handrails leading to school entrances, chairs specially built to meet the individual requirement of each child, special tables which hold the child in a standing position, cots on which the children may sleep during rest period, along with special facilities to make the use of books and other educational materials possible. In addition to educational training, these children need the physiotherapist for the muscular training in relaxation, the occupational therapist for muscular education, and the speech therapist for speech education. The training activities of the staff must be coordinated with the professional health care under the direction of the family doctor.

In recent years many states have instituted extensive educational programs for cerebral palsied children. With the institution of the program by the state, and through the aid of public spirited individuals, service clubs, and fraternal organizations, equipment and special classrooms staffed by competent personnel have been provided in many communities for their education which might otherwise be denied.

Osteomyelitis

Osteomyelitis is an acute inflammation of the bone. It usually involves the structure of the bone so that deformity or defect occurs. Sometimes there is complete destruction of portions of the bone developing as a result of a bone injury in which there has been no particular pain or evidence of damage until an acute state is reached and considerable damage has resulted.

The educational problem presented in these cases may require home-bound instruction during the time of confinement. As physical improvement progresses, the child may need no more physical care than the victim of infantile paralysis; in milder forms restricted physical activity within the regular classroom program may suffice.

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[23] J. Thomas McIntire, Education of the Cerebral Palsied, Journal of Educational [illegible], XL (April 1947) p.563.

Bone and joint tuberculosis

This disease destroys the tissues of the bones and joints and may affect any portion of the skeletal structure. The "hunchback" often occurs when the spine is affected. When a hip is involved, one short leg with a definite limp usually results. If joints are the focal point, they become deformed and often enlarged. The disease progresses slowly, often remaining unnoticed by parents until reaching an advanced state.

The educational program must be coordinated with the child's physical ability. No special physical care is needed beyond that of other types of orthopedically handicapped.

Congenital

The congenital handicaps are those arising from maldevelopment of the fetus, and they exist at birth. Clubfoot is the most common and may be fairly successfully treated in infancy. Harelip, cleft palate, hydrocephalus and dislocation of the hip joint are all fairly common congenital deformities. The congenitally handicapped need special facilities for education only to the extent of making school attendance possible. The facilities provided for other orthopedic handicapped will also be adequate for this group.

Disability because of accidents

There is no limit to the types of handicaps found within this group. The increasing rise in automobile accidents has created an increasing number of crippled children. Accidents in the home have always been a large factor in crippling children. These children may have lost portions of their bodies, have lost partial use of portions of their bodies, have arms or legs crushed and twisted out of normal shape, or have disfiguring scars.

The degree of physical disability would necessarily determine whether the child could attend school in a regular classroom. Many would be readily accepted in the regular classes, but those with considerable disfiguration and handicap may not be accepted. Such children need to be in a special class with other orthopedically handicapped.

Cardiac disorders or heart conditions

This group is included in the orthopedic handicaps, as most heart conditions have caused some damage to the heart structure. The problems of transportation to school and reduced physical activity are much the same as those of orthopedic cripples.

The principal heart ailment among children is rheumatic fever. This condition, during the fever stage, requires that the child be kept in bed. After the fever has abated, the child may resume some physical activity, the degree to be determined by damage incurred in the heart muscle and valves. Such handicapped children must be kept under strict supervision of a competent doctor.

The educational program at the bedside and in the special classrooms for the handicapped must be coordinated with the amount of activity allowed by the doctor. Exhaustion can lead to relapse with very serious consequences.

Miscellaneous defects

In this classification there have been included the crippling orthopedic conditions not otherwise classified. Among these are osteomalacia, a bone disease which produces a softening of the bone to the extent that it bends under weight or stress,[24] and all of the many disorders of child growth, including bone, muscle, gland, and vital organ development.

Each individual case requires special consideration as an educational problem. The regular classroom and the special provisions for other orthopedic handicapped should be sufficient for any case within this group.

Mental

There are many faulty conceptions about intelligence. Except in a few extreme cases, the degree of intelligence cannot be estimated from general appearance of an individual's facial characteristics. Some handsome individuals are found among the inmates of an institution for the custodial feebleminded, whereas some very inadequate and insignificant-looking individuals are observed among scientific men. Irregularities

[24] Dorland, W. A. Newman, The American Illustrated Medical Dictionary, 20th Edition, p. 1043.

of features such as unusual shape of the nose, shape of the lower jaw, and spacing of the eyes are not safe criteria for the judgment of intelligence. Size of the head is not an index of intelligence.

Types of mannerisms and behavior are not reliable indicators of intelligence. Ability to do one or two simple tasks over and over is of little value in estimating intelligence. Speed of movement is not very helpful, although accuracy has some significance.

The seat of intelligence is in the brain and central nervous system, rather than in the external symptoms which have been mentioned above. Intelligence is based on the neurological system. There are great individual differences in the intricacies of neural connections, and in the readiness in which impulses may travel from one nerve to another. The basis of neural impulses seems to be electrical energy, although the source of such energy is still the crucial mystery of life.

Definitions have been formulated to describe intelligence from a practical point of view. Most definitions emphasize the ability to adapt to life situations, which would include not only school learning, but practical adjustment to neighborhood and to social customs. Thorndike, an eminent psychologist, proposed three areas of intelligence. The first is the abstract, or the ability to understand and manage ideas and symbols such as word, number, scientific principles, and similar factors; the second is mechanical intelligence, or the ability to learn, understand, and manage things and mechanisms; and the third is social intelligence, or the ability to manage people and to act wisely in human relations.[25]

Differences between individuals in intelligence may be expressed in at least three ways according to Thorndike: level, area, and speed. The level of intelligence may be expressed by the term "difficulty". At any given age there are a few individuals whose mental level is above or below the average for that age and who can perform acts with greater or lesser degrees of difficulty. This is important; because if an individual does not develop into the higher levels, he is eventually considered mentally retarded, unable to progress in school, or incapable of grasping the necessary concepts for successful adjustment in adulthood.[26]

The area of intellect at any particular level is the second factor taken into consideration by Thorndike. In some individuals the mental development appears to be poorly balanced, with great possibilities in a few difficult things, but with little experience and insight into much simpler things. Group mental tests tend to sample "area" in intelligence much more than individual tests which aim to determine "level".

Quickness of mental activity is the third factor in intelligence. Some individuals may be able to accomplish tasks at high level of difficulty but be deliberate and slow in making decisions, while others may be able to make decisions in situations where speed is required. Steadiness of rate is often more important than spurts of speed. Most of the intelligence tests, both individual and group, make provision for the slow worker.

Mental retardation may be hereditary or acquired. Among the acquired causes are injury at birth, encephalitis, convulsions, and accident.[27]

There is some disagreement as to the line drawn between the groups of mentally retarded children. Some writers and some school authorities include all mentally retarded children under the term "slow-learning", regardless of the degree of retardation. Others differentiate between "slow-learning" as referring to boys and girls who are of dull-normal intelligence and "subnormal" or "mentally deficient" as referring to those who are seriously defective in intellectual development but not necessarily feeble-minded. Individual differences among school children have been studied by scientific methods for many years. Begun in 1905 with the development of mental tests by Binet, the investigations made have established numerous facts. One of the most important of these concerns the frequency with which various degrees of intelligence, as measured by mental tests, occur among school children. Most children are about normal (average) in respect to intelligence, for

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[25] E. L. Thorndike, The Measurement of Intelligence, Teachers College, Columbia University, New York, (1927) pp. 1-36.

[26] Ibid.

[27] William S. Sadler, Modern Psychiatry, p. 496.

in a statistical sense the word "normal" means "what the majority can do." A few fall so low on the continuous scale of ability that they seem quite incapable of learning. Just above these are the much more numerous ones who are somewhat less retarded, and who in turn merge by imperceptible degree into the normal group.[28]

Slow-learners

According to Harry J. Baker, in his book, "Introduction to Exceptional Children," the slow-learning children form a group midway between normal average children and the mentally subnormal. They include from 20 to 25 % of the school population. Intelligence tests show these children to range in Intelligence Quotients from 75 to 89 on the intelligence scale.

These children cannot progress educationally at the same rate as the normal child. Many become discouraged and drop out of school as early as possible. They need specialized curriculums which will give them a measure of success in the classroom, and a feeling of belonging to the group. They especially need prevocational training at the adolescent level. A child may be intellectually retarded, even to a rather serious extent, and still have enough social competence to get along in the world fairly well if given an opportunity. The curriculum of the public schools is based primarily upon the abilities of the great number of intellectually average children.[29]

"All men are created free and equal" before the law, but it has long been an established fact of biology and psychology that from a physical and a mental point of view there is great inequality among them.[30] The adjustment of the school curriculum to include and provide adequate training and equal opportunities for these slow learners is necessary in our democracy in order to overcome these inherent inequalities.

The White House Conference on Child Health and Protection reported that at least two percent of the children in the elementary grades are mentally retarded to such a degree that special educational services are necessary if they are to make the most of their possibilities.[31] Other studies estimate that from three to five percent of the children need a program adjusted to their mental retardation. These children make up the greatest number of pupils who are retained from year to year in the regular classes. Most of them are normal children in many other respects. They are handicapped mentally. Each one is entitled to progress at a rate commensurate with his rate of mental growth. The desire for successful achievement is as alive in them as in their classmates. They yearn for the approval of teacher and fellow pupils.

"The most expensive child on the school roll is the 'repeater.' If he repeats a grade once, it has cost the district more to get him through that grade. Too often schools have adopted a policy of having these children repeat a grade and then giving them an automatic promotion. Still worse, these children often sit neglected at the side of the room and visitors are told 'they just can't learn.' .... It has been too often proved that they can learn if the program is adjusted to their abilities, disabilities, and possibilities. To expect the educable mentally handicapped child to duplicate the achievement of the mentally normal child is as fantastic as to expect the crippled child to duplicate the feats of athletes on the track."[32]

The mentally retarded

This is the mentally subnormal group which, because of the intellectual retardation, is unable to be adequately educated in the public schools without provision of special educational facilities and services. It includes children with Intelligence Quotients from 50 to 70. Most cities in the United States have at least one special class for the mentally retarded, even though no classes for other types may have been established.

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[28] Curriculum Adjustment for the Mentally Retarded, Federal Security Agency, Office of Education; Bulletin (1950) No. 2; p. 4.

[29] Ibid. p. 5.

[30] Ibid. p. 4.

[31] White House Conference on Child Health and Protection, Special Education: The Handicapped and the Gifted, Report of the committee on Special Classes, Charles Scott Berry, Chairman. New York: The Century Company, (1931) p. 439.

[32] The Educable Mentally Handicapped, The Illinois Plan for Special Education of Exceptional Children, Circular Series B, No. 12, Revised (1950), p. 6.

The American term, first used by Goddard, for individuals in this group is "moron".

In our discussion of physical handicaps our references to intelligence show that a small percentage range down into the level of the mentally retarded. Routine medical inspection for physical and sensory defects among the mentally retarded shows an average of at least two other defects per pupil. Although many of these additional defects center around tonsils, adenoids, and teeth, there is also a wide distribution of all the other kinds of defects. Usually these additional defects add to the education retardation.

Mental characteristics of these individuals show many features unique to the mentally retarded. Certain qualitative psychological ways in which they are backward are as follows: (1) they show a tendency to stereotype answers by repeating the same response to different questions; (2) they lack powers of self-criticism; (3) their powers of association are limited; (4) they are unable to keep unusual instructions in mind, but return to traditional methods; (5) they fail to detect errors and absurdities in statements and in commonplace situations; (6) they have concrete abilities rather than abstract; (7) they have limited powers of reasoning, visualization, and similar mental traits.

The pupils in this group can deal with things, persons, and abstract symbols, but in vastly different degrees of complexity. Educational methods and treatment must be given in keeping with the needs of the individual case. It is a wise investment of time and money to center education on the activities which will be of greatest use to each individual. Mentally retarded children are not equally competent in all directions. Most of them can learn to work with symbols or abstract ideas. A great many different kinds of useful work can in fact be mastered by them. Education should take into account that mentally retarded pupils can and do work more successfully with objects and materials than they can with the tools of literature (words, numbers); and that in the realm of symbols they can, as a group, learn about as much as their "mental age" may indicate, in terms of what average children of that age accomplish.[33]

In a regular school curriculum for normal children, retarded children are frequently subjected to tasks which they cannot possibly understand or perform; and frequently they are permitted to go from grade to grade without achieving anything of satisfaction to themselves or to their teachers. To escape the sense of inadequacy and blameworthiness they may become truants or engage in mischief. Studies of undesirable behavior among pupils show that there is a tendency for disciplinary problems to be concentrated among retarded children, who are not given the special educational help needed.

"A former public school superintendent in Massachusetts (George L. Wallace) expressed this as it applies to the mentally retarded. He said: 'If society does not keep mentally deficient children busy in a constructive way during the whole of their school lives, they in a destructive way will (might) keep society busy during their adult life.' The same thinking might be applied to the socially maladjusted or the physically handicapped. The figures are staggering when we study the tremendous burden society is forced to bear when it fails to provide through the schools the type of special instruction which will make the children happy, self-controlled, self-supporting citizens to the limit of their capacities."[34]

The known facts about child development and the instruments of child study give educators the opportunity of freeing backward children from problems arising from expecting them to perform tasks beyond their ability. Failure and wasted effort can be avoided. Proper guidance in special schools and special classes finally will make many of them contributive citizens to the community.

Some will be able to achieve only partial self-support. With others, the wages they earn may be adequate and sometimes even higher than those of people with greater intellectual capacity. In any case, the school has a responsibility to help every individual make the most of himself. The school should pave the way for whatever occupational activity he proves himself fitted.

It is hoped that the State of Nevada will encourage school administrators and supervisors to study the entire program with a view of adding special services needed for handicapped children in the state. This is a problem that should be met at the preschool level as well as in elementary and secondary schools.

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[33] Curriculum Adjustments for the Mentally Retarded, Federal Security Agency, Office of Education; Bulletin (1950) No. 2, p. 8.

[34] The Educable Mentally Handicapped, The Illinois Plan For Special Education of Exceptional Children; Circular Series B, No. 12, (Revised 1950) p. 5.

A state that disregards this problem is disregarding a constitutional privilege and duty. An administrator who claims to have no obligation to the handicapped child is sidestepping a moral mandate. The teacher who subscribes to the principle of individual differences will find only enlarged challenge in the greater deviations that characterize this group.

Feeble-minded

In this group called the feeble-minded is included all mental defectives with an I. Q. below 50, such as morons, imbeciles, and idiots. A loose use of the term "feeble-minded" in America has come to apply to all three types, causing much confusion in terminology. As to educational possibilities, morons are generally suitable candidates for special class training in special schools.

The second lowest class of feeble-mindedness is the imbecile. Their intelligence quotients range from 30 to 50 and their adult mental age from three or four years to eight or nine years. Some of the more stable ones with the higher I. Q.'s make fair progress in special classes, whereas the lower levels profit very little from formal schooling and more properly belong in custodial schools or institutions for permanent care. Their language expression is restricted to short phrases, while the morons make use of simple, complete sentences.

Idiots represent the lowest level of feeble-mindedness; their education is ineffective in schools of any kind. These individuals need the protection of a custodial institution. Idiots are limited chiefly to single words or to unintelligible mumblings. Parents are more attached to them than to any other types on account of the prolonged babyhood. It is not until the children reach the middle ages of childhood that parents slowly become willing to consider institutional placement. These children in the home become a source of great embarrassment to the normal brothers and sisters whose friends are not too charitable about associating with them. Feeble-minded children should be placed in institutions at an early age before they cause the mother's health to break down from the unusual and necessary care, and before the home atmosphere deteriorates.

Neurological

Epilepsy

Epilepsy is a chronic functional disease characterized by fits or attacks in which there is loss of consciousness, or a succession of convulsions. The fit lasts from five to twenty minutes, and the attacks vary greatly in frequency.[35] Epilepsy is divided into two types based upon the severity of the attack and whether it is accompanied by only momentary lapses of attention.

Both types carry with them considerable personality disturbances. The victims are misunderstood, socially ostracized, and frustrated, and they resort to various types of antisocial behavior as outlets for their emotions.[36] With excessive mental strain, they labor to control and to prevent, if possible, the occurrence of the attacks which have lead to their social isolation. Their behavior problem is similar to that of other exceptional children when their defects are not corrected, or when no special educational provisions are made for them. They are capable of great improvement and socially acceptable behavior when proper physical, psychiatric, and educational treatment is provided.

The ability of this group to learn is somewhat lower than the other handicapped, with the exception of the mentally retarded and feeble-minded. The White Special School in Detroit for epileptics for the three-year period from 1937-1940 found the I. Q.'s among the greatest number fell between 70 and 89. Epilepsy has a resultant effect upon the brain, but only a small number of cases show marked deterioration leading to a lowering of the I. Q.

Epileptic children tend to have slow, strong, and rather exact motor performance. They tend to have the vowel sounds in their speech run along an even tone, which is contrasted with the rising and falling voices in normal people.

[35] W. A. Newman Dorland, The American Illustrated Medical Dictionary, 20th Edition, p. 511

[36] Ibid. p. 304.

Operation of the White Special School in Detroit was the first and chief educational attempt to provide special education for epileptics. With the removal of tensions resulting from associating with their own kind and having their convulsions taken as a matter of course, the epileptics began to experience comparatively infrequent seizures. The average length of enrollment is one year, after which most of them are returned to their regular classrooms. This school has proved the worth of special educational facilities for the epileptic.

Nerve diseases affecting the mentality and causing psyshoses or behavior disorders

Psychoses are characterisitc chiefly of adults and adolescents. Few Children actually suffer from psychoses. Among the psychoses which may affect children are epidemic encephalitis, infectious diseases, traumatic or injury psychoses, psychoses with epilepsy, psychopathic personality, mental deficiency, and primary behavior disorders. Adolescents may be affected by any of the above conditions, and in addition, by alcoholic psychoses and psychoses from drugs, such as marihuana, as well as by schizophrenia.

Schizophrenia was formerly called dementia praecox. It is one of the most mysterious and complex forms of personality retreat. Like all other forms of psychic involvement, schizophrenia represents the effort of the human personality to effect an emergency adaptation to the overload of life. According to William S. Sadler, an outstanding psychiatrist, this condition occurs between the eighteenth and thirty-fifth year, with very few exceptions.[37] Therefore, few cases will be found in the public school system.

Children and adolescents suffering from psychoses need psychiatric treatment. Few of the conditions will prevent attendance in regular classes. However, children in active psychotic conditions of in advanced stages of prepsychotic conditions need a specialized school program removed from the usual competition with normal children. Children with behavior disorders need a program of mental hygiene. The educational program needs to be closely integrated with the psychiatric treatment.

Encephalitis

Epidemic encephalitis, or encephalitis lethargica, is more commonly known as sleeping sickness. It is an inflammation of the brain, the distinctive features of which are increasing languor, apathy, and drowsiness. There is progressive muscular weakness and various cranial nerve palsies.[38] A form of this disease was prevalent in the San Joaquin and Sacramento Valleys of California during the summer of 1952.

Approximately one-fourth of the cases terminate in death, another one-fourth make a complete recovery, but the remaining one-half are left with varying degrees of residual effects. It is with the one-half that education is confronted with teaching and behavior problems. This group displays varying degrees of listlessness, emotional instability, spells of crying, restlessness, defiance, lying, cheating, stealing, disorderliness, disobedience, and irritability.[39] Their intellectual capacity compares favorably with that of any other group. However, various authorities have found that in severe cases there is a decrease in the average intelligence quotient of 1.4 points per year.[40]

Children afflicted with encephalitis need a quiet and and noncompetitive environment for many months or even for years until they have made all the neurological recovery of which they are capable. The regular classroom provides the exact opposite of their need. Competition and discipline for unsocial and disturbing behavior aggravate their condition and eventually create emotional problems which persist long after the neurological effects have disappeared. Many of these children are driven to such acts of violence that they are committed to various types of correctional schools or penal institutions without the real cause of their

[37] William S. Sadler, Modern Psychology, p. 438.

[38] W. A. Newman Dorland, The American Illustrated Medical Dictionary, 20th Edition, p. 495.

[39] R. L. Jenkins and L. Ackerson, The Behavior of Encephalitic Children, American Journal of Orthopsychiatry, (1934), 4, pp. 499-503.

[40] A. W. Brown, R. L. Jenkins, and L. E. Cisler, Influence of Lethargic Encephalitis on Intelligence of Children as Determined by Objective Tests, American Journal of Diseases of Children, (1940), 59, pp. 23-254.

antisocial behavior being discovered. It has been proved that behavior has improved under the more ideal conditions of a special school.[41]

Enuresis

Enuresis is the involuntary discharge of urine.[42] Nocturnal enuresis is commonly called bed-wetting. Most people dismiss the problem as one which will soon be outgrown, but the condition is found among all ages.

Strong emotional factors accompany enuresis. It is considered a disgraceful habit. In many cases the cause is psychological or emotional. Enuresis occurs most frequently after excitement, vigorous excercise, and emotional disturbance. There seems to be no relationship between the condition and intelligence, except that mentally superior children more often analyze the reasons for it and are better able to control the emotional factors.

The condition is far more prevalent than is supposed. Few statistics are available relative to the frequency of the condition, and they are very inconclusive. Estimates have been made that one percent or more of the general population is affected.

The enuretic child needs a controlled regimen. He must be in a quiet mental atmosphere, without scolding, nagging, worry, and confusion. His diet must include few liquids in the late afternoon and evening, his daily program must be without overwork and strain, his rest periods throughout the day must be frequent, and his regimen must be coupled with competent medical and manipulative treatment.

Congenital syphilis

Congenital syphilis is syphilis existing at birth, whether drived from the male reproductive element or due to infection from the mother.[43]

Accurate information on the percentage of children afflicted with congenital syphilis is lacking. Most children referred for medical care are sent for some other reason and the syphilitic condition is positively identified at the examination.

Syphilis attacks the child in many ways with certain conditions becoming progressively worse. The most common affliction is that of the eyes, known as interstitial karatitis. It begins in one eye between the ages of five and fifteen years and soon affects the other; it progresses until the child needs sight-saving classes. Some deafness is caused by congenital syphilis. Sores or lesions of the skin may occur. Bone destruction may occur with the bridge of the nose often being destroyed, resulting in a sinking of the bridge known as "saddle nose".

Central nervous system impairments and involvements are one of the common characteristics, with the eighth cranial nerve most commonly affected. This nerve is essential in hearing and control of equilibrium. Usually these neurological deteriorations are not discovered until there has been extensive and irreparable damage to the nerve tissues. Some cases manifest epileptiform seizures which are mistaken for epilepsy. In a more advanced state, juvenile paresis may develop, causing loss of memory, deterioration of intelligency, and other psychological disabilities.

The education of these children is dependent upon the manifest conditions. In a latent stage with no danger of infection or disability, the child may be located in the regular classroom. Thos with handicaps of vision, hearing, mentality or other types can benefit most from special classes dealing with children of the particular disability.

Chorea

Chorea is only one of the nervous-motor disorders which can affect the human body. Most people are familiar with the facial tic, which is a muscle spasm of short duration causing some portion of the face to twitch. Ataxia is another type of motor disorder in which there is lack of muscular coordination.

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[41] E. D. Bond and K. E. Appel, The treatment of behavior Disorders Following Encephalitis, The Commonwealth Fund, New York, (1931), p. 163.

[42] W. A. Newman Dorland, The American Illustrated Medical Dictionary, 20th Edition, p. 507.

[43] Ibid. p. 1452.

Chorea is defined as a convulsive nervous disease, with the involuntary and irregular jerking movement; it is attended with irritability and depression, and with mental impairment. More girls are affected than boys. This condition is more commonly known as St. Vitus' dance.[44]

The child becomes restless and uneasy in school and has difficulty in performing satisfactory work. He seems uninterested in school and often becomes a discipline problem. When corrective discipline measures are undertaken, they are not effective because the condition is aggravated.

This child needs periods of rest, better sleep, and proper nutrition under the guidance of a physician. The regular classroom tensions and drives are contrary to the basic needs of the child's physical welfare.

Miscellaneous behavior disorders

Overt malbehavior disturbs and upsets the classroom, the teacher, and the parent. Behavior problems are very numerous. The occasional acts of misbehavior can be easily dealt with as they occur; but the habitual misbehaving of a child becomes a serious problem which can be corrected only by determination of a correction of the underlying cause, which may be physical, mental or emotional.

Intensive case study and treatment are needed to relate behavior disorders to the specific causes. When these causes are corrected, such as defective vision, tensions are relieved, attitudes toward school improve, and the unacceptable behavior disappears. It cannot be definitely stated that the physical correction is the direct cause of improvement, but it is an indirect cause which leads to improvement of the behavior problem.

Summary

The six most common types of handicaps among school children are those of vision, hearing, speech, orthopedic, mental, and neurological. From brief descriptions of the various types it is evident that the needs of handicapped children vary according to the physical and mental ability of each individual case.

Basic provisions for the care and physical treatment must be set up to serve all types and should be available on an equal basis for all according to the need of the individual.

Care, physical treatment, and education for the handicapped child must go hand in hand. Each specific handicap or exceptional condition requires not only special care but also an adjustment or special service in the educational program. These adjustments vary from one or more specific services, such as speech therapy, within a normal school environment, to part or full time special class instruction, or bedside teaching. Education of handicapped children is necessary so that they may become productive, self-sustaining, socially adjusted members of our society.

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[44] W. A. Newman Dorland, The American Illustrated Medical Dictionary, p. 326.

CHAPTER II

WHAT OTHER WESTERN STATES ARE DOING

Introduction

The first institution for handicapped children in the United States, a residential school, was the American School for the Deaf, which was privately organized in Hartford, Connecticut, in 1817.[1] However, it was not until the year 1899 that the first public school class for handicapped children was opened as a project of the Chicago Board of Education. Even as late as 1914, except in the four larger cities of New York, Chicago, Cleveland, and Detroit, there were almost no educational provisions for crippled children in this country.[2]

Special education for speech defectives began in 1910 in Detroit. Many eastern cities soon followed the pattern. San Francisco led the West Coast in 1916, and in 1926 the State of California appropriated thirty thousand dollars for the advancement of speech correction work within the California schools. By 1930, sixteen states had enacted laws authorizing the reimbursement of the excess cost of the education of exceptional children to local school districts conducting approved programs.[3]

Among the western states the first provisions enacted for special education within the states' school laws were for the education of the deaf and blind. Only recently have the states included within their programs special provisions for other types of handicaps. Within the past few years such states as Arizona and New Mexico, with problems of area and population similar to that of Nevada, have instituted educational programs for all types of handicaps.

Comparison of the school codes of the other western states shows certain significant features which are common to all. First, the laws make provisions for the handicapped by defining who are handicapped and the purpose and extent of the program; second, the laws provide for state consultative and supervisory service; and third, the laws provide for the setting aside of appropriations of state funds to help the school districts maintain local classes and services for exceptional children. Both urban and rural school districts are included in the provisions.

Further comparison of the codes finds many differences. On one hand is the well-defined program as set forth by the California code which provides a pattern of administration and finance for an educational program for all types of exceptional children, both those who are handicapped and those who are outstanding in their ability. On the other hand are the limited programs in those states with huge areas, low population widely distributed except for a few cities, and comparatively smaller tax revenues. These programs are adapted to meet the states' particular needs and do not begin to compare in scope with those of the more thickly populated and wealthier states.

The State of California has appropriated huge sums of money for special education and for paying for professional health care where needed. More sparsely populated states have adapted their programs to include the physically handicapped programs of other services, such as the Society for Crippled Children, and to accept assistance through donations of special materials and equipment from service clubs and other philanthropic organizations.

Evaluation of each state's program for physically handicapped children must be determined by both services, special education and special health care. All of the western states have some services in each field. Comparison of the health services reveals the same wide range of differences and the same common elements based upon the states' population and area.

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[1] The Education of Exceptional Children, National Society for the Study of Education, Forty-ninth Yearbook, Part II, p. 8.

[2] Crippled Children in School, Office of Education, Federal Security Agency, Bulletin 1948, No. 5, p. III.

[3] Lecture Notes of Mrs. Amy G. Miller, Supervisor of Speech Improvement, Chowchilla, California, dated January 28, 1944.

Special Educational Programs

Arizona

The program of special education for the physically handicapped children of the State of Arizona is of special interest in that its problems are similar to those of the State of Nevada. The population of Arizona is spread thinly over a wide area with only twenty-five percent of its total population concentrated in two cities, Phoenix and Tucson;[4] Nevada's population distribution, with only the two large cities of Reno and Las Vegas, is analogous.

Until 1951, Arizona provided special education for only the deaf, the blind, and the speech defectives who were so totally handicapped that they could not utilize the regular classroom. The Arizona program consisted of the operation of a resident school, known as the Arizona School for the Deaf and Blind. Originally this school was a department of the University of Arizona. However, in 1929 the state legislature made the school a separate corporate institution and enacted the basic rules and regulations governing its operation.[5]

The legislature specified the qualifications of the superintendent of the school and the board of directors, and the entrance requirements for those who would be resident students of the institution. That law makes school attendance mandatory for all children eligible between the ages of six and eighteen, who are of suitable capacity and of good moral character and who are not otherwise being educated satisfactorily. Persons from eighteen to twenty-one years of age may attend the school. The statute further provides that those children whose parents or guardians are unable to pay costs of transportation and clothing for attendance at the school shall be furnished such needs so that poverty may not deprive them of availing themselves this educational service.

The support of the school comes partially from the setting aside of a land grant of 100,000 acres from which all the revenues and proceeds of sales or other dispositions are forever reserved for the use and benefit of the Arizona State School for the Deaf and Blind.

In 1951 the state legislature passed an act providing for a home-bound teaching program. This provides means of educating common or high school students who are unable to attend regular classes because of illness, disease, accident, or physical handicap for a period of not less than one school year. Through this program Arizona is now bringing education to a greater portion of her handicapped children.

The cities of Phoenix and Tucson have employed speech pathologists or therapists as regular instructional personnel.* The Phoenix school system has established sight-saving classes for the partially sighted and a class for the cerebral palsied children. Smaller schools depend upon the classroom teacher. In the rules and regulations adopted by the Arizona board of education to carry out this program, provision has been made that wherever practical the handicapped child may listen to class instruction and recitation through school-to-home telephone service conducted in cooperation with the [illegible] Telephone System.

To establish the home-bound program, the Arizona Legislature made an appropriation not to exceed $100.00 per child per year for each home-bound student taught by a school district, which is in addition to the regular apportionments and appropriations based upon school attendance. The handicapped child attending special classes or receiving special instruction for a specified number of hours per week is considered in regular school attendance, and the school district receives the regular school apportionment for such attendance.

In addition to the work in the regular classrooms, in the special classrooms, and in the home-bound program, Arizona has instituted a program of teacher in-service training. Classes and workshops have been conducted at various locations for the classroom teacher so that she might become familiar with ways and means of handling handicapped children in those districts where special services are not available. This program has drawn teacher attendance from as far as 150 miles away. Summer school courses have been established at both the University of Arizona and Arizona State College. These schools have set up speech and hearing clinics which enroll children from all over the state. Not only do these clinics aid the children, but they serve as laboratories for the teachers. There teachers observe the work of therapists and are instructed in plans and procedures for classroom follow up.[6]

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[1] Lydia H. Newton, The Child Who is Different, NEA Journal, (September, 1952) p.356.

[2] School Laws of Arizona, [illegible], pp. 136-139.

* Questionnaire returned by the Arizona State Department of Education, dated August 4.

[3] Lydia H. Newton, The Child Who is Different, NEA Journal (September, 1952), p. [illegible].

Another important phase of the Arizona program involves parent education. Both the university and the state college hold training courses for parents of exceptional children. These courses include discussions, demonstrations, and films showing parents methods, ways, and means of handling particular types of handicapped children.[7]

The Arizona program for handicapped children other than the deaf and blind has only recently been initiated, but, with the aid of service clubs and the Arizona Society for Crippled Children and the cooperation of state health and educational agencies, has already proved its worth.

California

The California program for the handicapped is the most complete of any of the western states. The school system is by far the largest, and funds provided for this purpose are greater proportionately than those of other states. Special education for the exceptional child has been a part of the California school system for may years.

Each school district must maintain special educational programs or must provide them through contract with another school district or through the county superintendent of schools of the county in which the school is located. The provisions of the California code make it mandatory that either the individual school board or the county superintendent of schools provides the necessary special educational facilities for every child within the school district or county. The law specifically provides that children may be instructed in special schools, special classes, hospitals, sanitoriums, preventoriums, or the home, through cooperative arrangements with the Bureau of Vocational Rehabilitation of the California State Department of Education, or by any other means approved by the State Department of Education.

The school code also provides that certain children will be transported to school. Those whose physical handicaps prevent their walking to school or those who live in excess of one mile from the school, or those who are transferred to the jurisdiction of another district maintaining the special facilities needed to educate the children, shall have transportation provided. If special physical care is needed by the handicapped during school attendance, the law stipulates that such care shall be provided.

The California school system is organized by counties, and each has a county superintendent of schools. It is his responsibility under the law to provide education for physically handicapped minors who otherwise would be denied proper educational advantages, through any of the following means: (a) In emergency elementary schools; (b) By the employment of emergency teachers to provide special instruction in the regular schools of the districts of the county; (c) By the maintenance of special classes of the secondary grades; (d) By the employment of home instructors to give individual instruction in the home or at institutions; (e) By cooperation with the Bureau of Vocational Rehabilitation of the State Department of Education in the provision of individual instruction and coordination services; or, (f) By contract with the county superintendent of schools of another county, or with the governing board of any school district in another county.

Under these provisions of law every school district and every county superintendent of schools is charged with the responsibility for providing special education for all handicapped children who can profit from it. This education is to include programs for all physically defective minors under the age of twenty-one years any may serve children of preschool age above the age of three years when the classes or schools are prepared to admit them.

The State of California maintains a resident school for the blind, known as The California School for the Blind. Any blind person of suitable age and capacity is entitled to free education in this institution. If a parent or guardian is unable, or refuses, to provide clothing, transportation to and from school, dental work, eye care, or hospitalization while the child is in school, such expenses shall be met by the state, followed by the necessary legal action to collect either from the parents or guardian or from the county of residence. Vocational education is stressed in this school so that the individual may become self-sustaining upon graduation.

The California School for the Blind and the State Department of Education have established a kindergarten service for the care and teaching of children under school age. In addition, the school has a visiting teacher who visits blind children of pre-school age, and, with the consent of the parents, instructs the parents in the early training of the children so that they may make an early adjustment to their physical, mental, and social environment.

[7] Lydia H. Newton, The Child Who Is Different, NEA Journal (September, 1952), p. 356-357.

California conducts a resident school for the deaf, known as the California School for the Deaf. The provisions of law governing the operation of and the requirements for admittance to this school are similar to those for the operation and admittance to the school for the blind. One additional provision made for the deaf is for advance education. The state department of education is authorized to pay from funds made available for such purpose expenses of graduates of The California School for the Deaf, who attend Gallaudet College in Washington, D. C.

The state maintains two schools for cerebral palsied children. These resident schools, one located in Redwood City, and the other at Altadena, had sixty-eight cerebral palsied children in attendance in April, 1951.[8]

The cerebral palsy program requires that these schools contract with publicly and privately maintained health centers for the establishment and maintenance of diagnostic centers. Any child whose condition is diagnosed as cerebral palsy and who is recommended for special education by a diagnostic center is entitled to free education and domiciliary care. The purpose of these schools is to train the children through physiotherapy, occupational therapy, speech therapy, and classroom instruction to a degree of achievement that will enable them to attend the special schools or classes conducted by their own school districts or counties.

By far the largest number of handicapped children are being reached through the public county or district schools rather than through the state schools. Deaf and blind children are receiving education through special classes provided by the larger public school systems. Speech therapy is a standard part of the program throughout the entire State. In the school year 1950-1951, 56,513 children in California benefitted through speech correction services. The speech program has been an integral part of the special education services of many school districts since first introduced in San Francisco in 1931.

By February, 1952, the cerebral palsy program in the public schools had reached a total of thirty-nine special schools or classes, which care for approximately 1,200 pupils.[9] Less than fifty percent of the estimated 2,500 cerebral palsied children in the state were provided for in February, 1952.

The effectiveness of the California system can be judged from a report issued in April, 1951, by the State Department of Education reporting that of a minimum estimate of 276,723 children needing a special education program, 96,276 were receiving that education in the public school system with 278 children in the state schools. Another 59,504 were enrolled in the public schools but were not receiving the special education needed.[10] Thus an estimated 140,215 children were still not being reached through any program. California, with its comprehensive program, at the date of the survey, was not reaching fifty percent of the children deprived of schooling because of handicaps.

To finance this program of education the State of California has provided that every handicapped child receiving the specified minimum hours of instruction, four hours per day for classroom and one hour per day for individual instructions, shall be included in the average daily attendance record of the school district or the county, and that the average daily apportionment of $120.00 per year be paid to the school district or county for such education. In addition thereto, each district or county maintaining approved special educational programs may be reimbursed up to $400.00 per year for each child in average daily attendance, except for the mentally retarded children. The excess cost for the latter is a maximum of $200.00 per year.

The State of California requires that all teachers working with handicapped children must be properly trained. Excellent training courses for teachers have been conducted for years in a number of the state colleges and universities. Such teachers must be properly certified by the State Department of Education to teach their

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[8] Report of Special Services Rendered to Exceptional Children in California Public Schools, California State Department of Education, Division of Instruction, Bureau of Special Education, Survey - April, 1951.

[9] Special Education Newsletter, California State Department of Education, Volume 1, Number 2, (February, 1952) p. 5.

[10] Report of Special Services Rendered to Exceptional Children in California Public Schools, California State Department of Education, Division of Instruction, Bureau of Special Education, Survey - April, 1951.

particular specialty, with certification being made only upon completion of specified training in the field of specialty, i.e., speech, blindness, deafness, cerebral palsy, etc.

The California Program of special education for the physically and mentally handicapped has been well defined in the school code. Administrators of the program have established schools and classes as the need has arisen and the school funds have permitted. Much remains to be done to provide for the estimated fifty percent of the handicapped not now receiving the benefits of the program.

Colorado

Little information is available relative to the Colorado program of special education for the handicapped child, other than that found within the provisions of the school code. Statistical information as to the extent of the program is unavailable.

The State of Colorado operates a school for the deaf and blind at Colorado Springs. This resident school admits both blind and deaf children over the age of six and under the age of twenty-one years who are of sound mind. Applicants above the age of twenty-one years may be admitted at the option of the institution's board. Attendance in this school is compulsory for all deaf and blind children between the ages of six and eighteen years, inclusive, except for those children who are receiving competent and qualified instruction by private tutor or in private schools.

This school is specifically exempted from being classified as either a reformatory or a charitable institution. However, provision is made within the law that in all cases where children sent to the institution are too poor to furnish themselves with sufficient clothing and to pay expenses of transportation to and from the school, the judge of the county court of the county in which the child resides shall issue an order, which shall be certified by the clerk of the court, to the superintendent of the institution, who shall then provide the necessary clothing and transportation at the expense of the county of the child's residence. The school is reimbursed semi-annually from the county treasury upon presentation of the proper claim.

Children who are residents of other states or territories may be admitted to the institution upon payment of an agreed sum in advance, provided that no resident of another state or territory shall be admitted or retained to the exclusion of a resident of the State of Colorado.

The 1949 Legislature amended the school laws to include all types of handicapped children in the education program. Education is provided for all handicapped children between the ages of three and twenty-one years for whom the regular public school facilities are inadequate or unavailable. The services shall include teaching services for the crippled, partially seeing, deaf or hard-of-hearing, deficient in speech, cardiopathic, tubercular, cerebral palsied, or otherwise physically or mentally handicapped, together with the cost of transporting such handicapped children to and from school.

The parents or guardians of any child or children qualifying for this type of education may enroll the child or children in any school of any district in the State of Colorado. However, application must be made by the parent or guardian to the county superintendent of schools, and, upon proper filing of such application, the Commissioner of Education may cause the child to be enrolled in any school in any district with the approval of the board of education of the school in which the child shall be enrolled. Children may be transferred from one school district to another on request and upon the approval of the Commissioner of Education, and with a portion of the payment of enrollment and its cost to be apportioned to the other school district. For any such child transferred from the district of residence to another district of attendance where facilities for teaching the handicapped are available, the Commissioner of Education may pay an enrollment fee not to exceed $300.00 per year to the school district in which the child is to receive education, and he may pay an additional sum not in excess of $500.00 per year for the care and maintenance of each child during the period of education. The latter provision applies only in cases in which the parents or guardians do not maintain a residence within the school district where the child is enrolled.

For those children who are hospitalized or home-bound, instructional services shall be applied for through the county superintendent of schools of the county in which the child who is to receive such instruction resides. Upon determination of the need of such instruction, the Commissioner of Education shall authorize the employment by the school board of such district of a teacher to give instruction to the child. All such teachers must be certified by the Commissioner of Education.

Those school districts with special programs for the education of physically handicapped and mentally retarded children are eligible for reimbursement for certain portions of the cost of instruction and other services

which exceed the cost of ordinary classes maintained in the district. Such reimbursement shall be $100.00 per child in average daily attendance per year. Provided the excess cost does not exceed $150.00 per child, the actual excess cost will then be the actual amount of the reimbursement. Special transportation costs over and above the normal transportation facilities available in the district may be reimbursed at a rate not to exceed seven cents per mile.

The Commissioner of Education may recommend the grouping of pupils with common handicaps and determine the regulation of minimum and maximum class enrollments for purposes of reimbursement. No handicapped child is required to be enrolled in special classes provided the parents or guardians certify to the satisfaction of the Commissioner of Education that the child is receiving adequate educational advantages.

Determination of the eligibility of applicants for special classes rests primarily with the board of education of the district supplying such facilities. In cases where the ability of the applicant is determined to be borderline or questionable by current standards of testing, such child shall be enrolled for a trial period of three months, at which time the child's ability to fully utilize the special classes can be determined.

The State Department of Public Health, under the terms of this law, shall provide general medical consultation for the administration of the program, and it is the duty of the Commissioner of Education to refer such cases as need medical consultation to that department.

With the assistance of the State Department of Education, several school districts have set up programs for the special education of the physically handicapped. State personnel has made examinations of the children and has given instruction to the teachers who will be teaching these children. The responsibility for carrying out this program rests with the local district. Information as to the number of school districts availing themselves of this program and the efficiency of their programs is not available.

Idaho

The Idaho school laws provide only for a state school for the education of the deaf and blind. This institution shall examine all applicants for admission to the school to determine whether they are educable. Students between the ages of six and twenty-one years who cannot be educated in the public schools are accepted for enrollment.

In the school year 1952-1953 several school districts are reported to be taking advantage of a small amount of state aid available for education of the physically and mentally handicapped children not eligible for enrollment in the school for the deaf and blind. This program is being started during the current school year; therefore statistics are unavailable as to the number of children included or the classifications of their handicaps. In addition to the aid from the department of education, some school districts are receiving assistance from the department of public health speech therapists in the speech correction program.

Montana

The State of Montana has a limited program of special education for physically and mentally handicapped children. A bill introduced in the legislative assembly in 1951 providing for a comprehensive program to cover all phases of education for the handicapped children failed of passage. The opinion has been expressed that this failure was probably due to the fact that the provisions of the bill were too elaborate for the needs of the state.

A state-operated school is maintained for the deaf and blind whose sight or hearing is so defective that they cannot be successfully taught in the public schools. The purpose of the establishment and maintenance of this residential school for children and adolescents is clearly set forth within the law; and various vocational subjects, such as, carpentering, printing, painting, baking, and sewing, are set forth as mandatory courses of instruction, so that the students may become independent and self-sustaining citizens.

Montana's school system provides sight-saving or large print texts for the partially-sighted children. These texts are distributed within the regular public school classes. The state operates a school for the mentally defective at Boulder. Through private subscription, there are now three centers in Montana where schools are conducted for those handicapped by cerebral palsy. No information is available as to the effectiveness of the operation of these centers nor the number of children served.

In 1949, the Legislature enacted a law providing that an individual school district may hold elections for additional assessments of one mill on each assessed dollar of valuation in the district in order to provide

funds for special education of physically handicapped children. This law placed upon the individual school district the extra financial burden of educating handicapped children between the ages of five and sixteen years. Services which may be furnished are home tutoring, transportation to and from any adequate school within the state, and special facilities within the district as may be needed. Such an election must be held prior to the first day of July and in accordance with the laws governing elections for special assessments.

New Mexico

The New Mexico program for special education is authorized in two short paragraphs:

"Additional teachers for crippled children in addition to all other budgetary requirements of the State of New Mexico fixing the number of teachers for budgetary purposes, there may be allowed in each administrative unit an additional teacher for each five to fifteen crippled children regularly enrolled in such administrative unit and an additional teacher may be allowed in such administrative unit for each additional fifteen crippled children or major fraction thereof."

"A crippled child is hereby defined as a child who by reason of a physical disability is unable to attend regular classes."

Although no specific authorization has been included in the school code, the State of New Mexico operates a school for the deaf and blind which had an average daily attendance of onehundred elementary and twenty-nine secondary deaf students and one hundred and two elementary and twenty-eight blind students in the 1951-1952 school year.

A cerebral palsy educational program is being conducted under the direction of the New Mexico Society for Crippled Children. There is no regular cerebral palsy program within the public school system. Likewise, there is no regular speech therapy program. However, a speech program is being operated in cooperation with the New Mexico Society for Crippled Children and the speech department of the University of New Mexico. No figures are available as to the number of children served. Under the cerebral palsy program only ten children between the ages of two and six years are receiving benefits.

New Mexico's census of all school children for the school year 1951-1952 reports a total school enrollment of 177,035 children. Of these, 3,356 were reported as handicapped. Table No. 1 sets forth detailed information relative to these handicaps. The percentage of handicapped is only 1.95 percent, which is far below estimates of other states. Likewise this percentage is below the percentage for the State of Nevada. This information is compiled from reports forwarded by the clerks of the school boards to the New Mexico Department of Education. It is evident that the clerks are not furnished the names of all children within the district needing special education.

Table No. I

STATE OF NEW MEXICO
SCHOOL CENSUS ENUMERATION
1951-1952 School Year

	Number of Handicapped			Percentage
	Rural Schools	City Schools	Total	to Total Enrollment
Hearing Difficulty	88	292	380	.22
Speech Difficulty	113	244	357	.20
Vision Difficulty	298	979	1277	.72
Mental Retardation	127	385	512	.29
Physically handicapped	249	581	830	.47
Total	875	2481	3356	1.95

Oregon

The program for special education of the handicapped in the State of Oregon is well defined in the school law. However, little information is available statistically to measure the effectiveness of operation of the program.

The Oregon law defines handicapped children as those with the intellectual capacity and the mental health to benefit from instruction, who for their education require instruction in their homes, special classes, or special facilities and materials in regular classes, because they are crippled, blind, partially sighted, deaf, hard-of-hearing, speech defective, cardiopathic, tuberculous, or otherwise handicapped; who have maintained a physical incapacity continuous over a period of at least two months, or who have a handicap that has been determined permanent in nature; or who are maladjusted or have extreme learning problems exclusive of mental retardation.

The board of directors of any school district which has one or more handicapped children, with approval from the superintendent of public instruction, shall establish and organize suitable special classes of instruction in regular schools or in the home and may provide special schools or home instruction as a part of the school system for such handicapped children as are entitled to attend school. School districts may also establish, with approval, a clinical class or classes for children who are maladjusted or have extreme learning difficulties, in cooperation with the state child guidance clinic. This provision of law applies to children between the ages of six and twenty years inclusive, in grades one to eight inclusive, and it may include grades nine to twelve inclusive. Special classes may be established whenever there are eight or more children with any one of the five general types of handicaps; (1) deaf or hard-of-hearing, (2) blind or partially sighted, (3) speech defectives (4) crippled, cardiopathic, or otherwise physically handicapped, (5) clinical.

In the case of the hard-of-hearing and speech defective children, if it is more economical to do so, the superintendent of public instruction may set up facilities on a county-wide plan or provide itinerate lip-reading or speech teachers. In the event that there are not enough handicapped children of any one type in the school district to warrant the establishment of a special class, such children may be transferred to a school in another district where such special classes have been establisheded. These transfers may be made by mutual agreement of authorities involved, with the school district transferring the children paying for each child an amount equal to the cost per child in the special classes in the schools of the school district to which such children are transferred.

The Oregon school law provides that, when a child has been determined to be handicapped and has been recommended and approved by school authorities for admittance to a special class, it is the duty of the parents or guardian to enroll such child for instruction in the special class in the grades from one through eight, and they may enroll the child in grades nine to twelve. The maximum number of pupils per teacher is determined by the local school authorities in accordance with the rules and regulations of the state board of education.

A school district does not have to keep a handicapped child in regular instructional classes when the child cannot sufficiently profit from the work of the regular classroom; nor is the school board required to keep such a handicapped child in a special class for instruction of handicapped when it is determined that the child can no longer benefit therefrom or needs more specialized opportunity elsewhere in the state.

The state superintendent of public instruction in cooperation with hospital authorities is authorized to establish classes and appoint teachers in the state tuberculosis hospitals, Doernbecher, and the Shrine Hospital for Crippled Children, and shall assume the responsibility for the supervision of instruction, the provision of instructional supplies and the payment of teachers' salaries. Such responsibility may be delegated to the school district in which the hospital or institution is located or to an adjacent school district. Whenever a school district assumes this authority, it is to be reimbursed for the cost of the program.

Home teachers may be employed by the boards of school directors or by city boards of education of any district on a ratio not exceeding one home teacher for every five hundred units of average daily attendance in the common schools of the district, as shown by the report for the preceding year. The home teachers work in the homes of the pupils, instructing children and adults in matters relating to school attendance and preparation therefor; also in sanitation, in the English language, in household duties such as purchase, preparation and use of food and of clothing, and in the fundamental principles of the American system of government, the rights and duties of citizenship. Such teachers are regular kindergarten, primary, elementary, or secondary certificate holders in the schools of Oregon. The salaries of home teachers are paid from the city or district special school funds.

Any school district which provides special educational facilities and meets the standards as set forth in the school code and the rules and regulations of the state department of education, is reimbursed on an excess cost basis for the extra per capita cost of such instruction. Application must be made to the superintendent of public instruction for reimbursement to the extent of the entire cost of educating the handicapped children over and above the per capita cost of instruction for the other children of such districts in equivalent grades of school. Reimbursements do not exceed one and one-half times the regular per capita cost. Should insufficient funds be available with which to reimburse the districts to the full extent of the maximum, the amount of reimbursement is on a pro-rata schedule based upon the ratio that the total amount of funds available bears to the total amount of funds that would be required to make such maximum reimbursement.

The State of Oregon operates resident schools at Salem which are free training schools for blind and deaf persons. However, the length of time of enrollment is limited to ten years, except in special cases where the time may be extended from year to year by the school boards. The boards hold discretionary powers of admittance and retention in attendance enabling them to deny admittance or continued attendance for cause.

Every year the clerk of each school district must send his county superintendent a report with the number of children in his district between the ages six and fourteen years, together with their names, addresses, ages, and parents' or guardians' name. In turn the county superintendent must report to the superintendents of the schools for the deaf and blind.

Traveling expenses and clothing of indigent deaf and blind pupils must be born by the county of which the children are residents and are paid by the county court upon presentation of proper, itemized claims duly certified by the county superintendent of schools or the superintendents of the state schools.

Blind students in attendance at a university, college, conservatory of music, or normal, professional, or vocational schools within the State of Oregon may receive, upon approval, a sum not to exceed $500.00 per year for the payment of the services of readers and for subsistence. Payments are to be made directly to the students and no student shall receive such assistance for a aggregate period of more than five years.

Assistance in higher education may be given in an amount not to exceed $400.00 per year for each deaf student in the State of Oregon who has matriculated as a student of higher education in a school approved by the state board of control and the department of education. This state aid is provided only to deaf students who are regularly enrolled and attending the approved institution. No deaf student receives aid who has not been a resident of the State of Oregon for three years prior to the date of application for aid.

Oregon has also provided a small sum to provide special training for teachers of blind children being educated in the public schools. Such funds may be paid upon approval of the state board of education and superintendent of public instruction.

No information has been received from Oregon relative to the number of children in state and public schools, the numbers of the various types of handicaps, or the number of special schools or classes being conducted in the state. The school code does provide for a good program of special education for the physically handicapped.

Utah

The Utah program of special education for the physically handicapped places the responsibility for the establishment and maintenance of special classes or school upon the individual school districts. However, it is the responsibility of the state superintendent of public instruction to make the necessary plans for the establishing and maintaining of such special educational programs as may be needed.

The school code provides that special classes in any district will have a minimum of ten children in attendance. Should a district not have sufficient children for the establishment of a special class, it is the responsibility of that district to secure the necessary educational facilities through another school district. These special classes are maintained from the funds of the school district or jointly with a neighboring district proportionately from the funds of each. The state provides for some reimbursement to the school districts maintaining such programs.

All children between the ages of six and eighteen years who, because of exceptional physical conditions are not being properly educated and trained are examined by a doctor or public school psychologist. A report is then made to the state superintendent of public instruction concerning the fitness of such children for special education. Also, it is the duty of the clerk of each board of education, of school enumerators, and of attendance workers, to secure and report to the superintendent of public instruction the name of each child

who may need special education.

The State of Utah maintains a school for the deaf and blind. This school is a separate entity with full corporate powers of a state institution and is governed by a board of trustees. All blind and deaf under twenty-one years of age who are of sound body and mind are accepted as students and instruction is provided in mechanical trades and arts to the end that such students may become self-supporting and useful citizens. Residents of the state are entitled to the benefits of the school free of expense. Pupils from other states may be received into the school on such terms as the board of trustees may prescribe. In the school year 1949-1950, the per capita cost for each child in this institution was $1,135.00 with 113 deaf and 35 blind children in average daily attendance.

Education of other types of physically and mentally handicapped children is a comparatively recent program in the State of Utah, and little information is available. A speech therapy program has been started in Salt Lake City and Ogden schools. Classes in speech correction are regularly conducted at the University of Utah and the Utah State Agricultural College. No statistics on other handicaps are available.

Washington

The State of Washington has a comprehensive program for the education of all exceptional children, which includes both those who are physically or mentally handicapped and those with exceptionally high capacities. Few statistics are available from the state at present because of the conditions of change taking place within the program.

The State of Washington has found that establishing schools solely for children with medical diagnoses of handicaps does not provide the necessary educational facilities for the particular child. It has been found throughout the state that the child's admission to special services should be based strictly upon the child's need rather than on a medical diagnosis. Accordingly, children of many different types of handicaps are placed in the regular classrooms, provided they can benefit to the fullest from the regular classroom program. Washington has thrown aside the nationally recommended standards and at present is working on the simple theory that children should be admitted to special educational services according to need.[11]

The state operates a resident school for the blind, a resident school for the deaf, and a cerebral palsy center. The state school for the blind is located at Vancouver and furnishes free education to all blind residents of the state between the ages of six and twenty-one years who are free from contagious or loathsome diseases. The same provisions apply for admission to the school for the deaf, also located at Vancouver. Both of these schools may admit non-resident children provided payment is made in advance on an annual or quarterly basis in an amount equal to the cost of maintaining and educating such non-residents.

It is the duty of parents or guardians to send eligible deaf and blind students to the state schools, and it is the responsibility of the county superintendent of schools to enforce their attendance. However, if he is convinced that the child is receiving satisfactory education at home or in some suitable institution, he may excuse his attendance at the state school, but it is his responsibility to see that the educational training shall be continued.

If the parents of indigent children cannot pay the travel expense to and from the state schools during vacation periods, the state board may pay the costs of keeping the children at the state schools instead of paying their expenses to and from their homes.

Washington has included a penalty section within the school code for the failure of any parent, guardian, school superintendent or county commissioner to comply with these provisions of law relative to attendance in the deaf and blind schools. Any of the above persons who fail to comply without good cause are guilty of a misdemeanor and, upon the complaint of any officer or citizen and upon conviction, may be fined a sum of not less than $50.00 nor more than $200.00 at the discretion of the court.

The state cerebral palsy center, located on the grounds of the Firlands Sanatorium in Seattle, is operated jointly by the Washington State Department of Health and the state superintendent of public instruction. The center has facilities for the extension of educational and medical diagnosis beyond the limits of those available in local communities or in the cerebral palsy field clinics. It is a service center to the local health and educational agencies, furthering the development of the cerebral palsied program within the state.

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[11]Personal letter from Ross E. Hamilton, Director of Education for Handicapped Children, Washington State Department of Public Instruction, dated August 7, 1952.

In addition to the prime function of diagnosis, the purpose of the center is to orient and train both medical and educational professional personnel and all personnel ancillary who are associated with these professions. It is also a research center investigating and evaluating the practices and procedures in the program of diagnosis. Experimental research projects conducted in the center are subject to the joint approval of the state superintendent of public instruction and the director of the state department of health, and the organization of these projects must be consistent with the policy jointly approved by both the state superintendent of public instruction and the director of the state health department. Admission to the center is made upon application approved by the superintendent of the center. The superintendent of the center is responsible for the development and execution of the policies and procedures concerning the admission of children to the school, the planning of programs, the evaluation of child progress, recording, discharge of children from the school, and liaison with cooperating agencies.

In the speech department emphasis has been made toward the development of a program bringing about a total effort on the part of the regular classroom teachers as well as the speech and hearing specialists. Reports show that there is a heavy movement of children back to the regular classrooms and that the regular classroom teachers are carrying a greater degree of responsibility in connection with speech difficulties. The speech and hearing specialists are concentrating on prolonged cases requiring a great deal of individual attention or competencies peculiar to a few teachers.

The program of the State of Washington seems to deviate considerably from the usual programs of other states. Emphasis apparently is placed upon keeping the child in the regular classroom whenever the child can utilize the regular classroom instruction to the fullest. This program requires all classroom teachers to be trained in the basic principals of education for handicapped children so that they may carry on the work of the specialists.

Wyoming

The program of special education for the physically and mentally handicapped in the State of Wyoming has developed slowly, probably partially because of the state's small population and large area.

The state board of education bears the responsibility of providing the education and training and, when necessary, the support and maintenance of children, residents of the state, afflicted with stuttering, stammering, defects of the organs of speech, arrested physical development, or other physical defects, or defective in mental development, and consequently unfitted for attendance in the public schools, whose instruction, treatment, and care are not adequately provided for in the public schools or other institutions of the State. Under provision of law the state board of education may provide for such children under the age of twenty-one years by placing them in schools or institutions within or without the state, as they deem expedient, or by creating special classes for them in the local school of any city or rural district.

The state pays all the necessary expenses: investigation of the children's needs, clothing, subsistence, transportation, and keeping and maintaining them in the institutions. When the state board is satisfied that the parents or guardians of handicapped children are financially able to bear such expense in whole or in part, it requires that the parents or guardians do so. The state board assumes the care of handicapped children only when the board of education of the school district in which the children reside approves the action.

Until the opening of a state school for the deaf and blind, the state board of education must provide for the education of such children by placing them in schools in adjoining states which will best serve the educational need of the children. The law also provides for the hiring of a field agent whose duties are to establish personal contact with each deaf, mute, and blind person of the state, both adult and juvenile. So far as possible he must provide for their instruction in reading and in various useful duties and trades and arrange for the purchase of such books, tools, and other equipment necessary for the instruction of such individuals. The field agent assists the deaf, mute, and blind to help themselves to become useful citizens of the community.

The State of Wyoming has no special schools for the physically or mentally handicapped. All children requiring resident school instruction must be sent out of the state for such instruction. For those children with lesser degrees of handicap the state gives some financial aid to school districts providing special educational facilities, but not until the district has expended at least $10.00 monthly per pupil requiring such special educational facilities.

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*See appendix

The state does not have an accurate census of the handicapped children within the state. The State Department of Health, Welfare, and Education and the Wyoming Society for Crippled Children and Adults are formulating plans to coordinate their activities and pool their information to the end that an accurate census may be developed. Through this census the actual needs and requirements of special educational facilities for the State of Wyoming may be more definitely determined.

Summary

A review of the provisions for special education for the handicapped in the other Western States reveals the differences and the similarities of the programs. All of the programs have as their purpose the education of the child to the extent that he may take his place as a useful citizen of the community. All of the programs place the state in a general supervisory position with state aid being furnished those school districts which provide programs meeting the minimum requirements of instruction as determined by the state department of education. All of the programs require the cooperation of the various state departments and bureaus which work with handicapped children. Differences are primarily in the extent of types of handicaps included and the extent of the state aid furnished, although all state aid is furnished upon an excess cost basis.

Regardless of the similarities or differences in the various programs, each is set up to operate to meet the particular problem of the state. Each state still has to make much greater effort to bring the program to a level where all the handicapped children within the state who are educable are receiving an education.

Special Health Programs

Special health programs in the other Western States are as varied as the special educational programs in their provisions for assistance to the handicapped children. A detailed study of the program of each individual state reveals differences based upon the state's problems of area, population, and tax revenue. However, all programs are based upon the requirements of the Crippled Children's Bureau and the Federal Security Agency, so that they may receive matching federal funds. Operational details of the programs of all the Western States are unavailable.

California

The California Crippled Children Services Program is based upon State legislation enacted in 1927, which directed the State Department of Public Health to establish and administer a program of services for physically handicapped children, under the age of twenty-one years, whose parents are wholly or partially unable to furnish such services.

Eligibility for benefits under the program are based upon the medical requirements of the handicapped and the economic ability of the parents or guardians to meet the medical costs. The medical requirements are established by the recommendations of a participating physician; the recommendations must be for treatment which will arrest or correct the handicapping condition. Determination of economic eligibility rests with the local agency, not with the State Department of Public Health. In general the determination is made by considering the following factors: (1) Length of care recommended by the physician, (2) Estimated cost of recommended care, (3) Family income, (4) Size of family in relation to income, and (5) Family resources and family obligations. Where it is found that the family needs no financial assistance in following the physician's recommendations, the family is referred to private care. Where costs are high and of long duration, the family's ability to reimburse the program for a part of the services is assessed. Families who are able to pay for care usually do not make application for assistance until they have exhausted their resources. Most families making application represent the marginal and relief income levels who cannot finance any part of the care.[12]

The services provided under the program are those directly related to the medical care which the child requires and include: (a) Diagnosis, with all the necessary diagnostic aids requested by the physician in charge of the child's care, (b) Hospital care and the necessary medical supervision, (c) Surgical care, (d) Physical therapy

[12]Personal letter from Edith P. Sappington, Regional Medical Director, Children's Bureau, Federal Security Agency, San Francisco, California, to the Nevada Legislative Counsel, dated November 17, 1952.

and occupational therapy upon medical recommendation and under medical supervision, and (e) Necessary appliances as recommended by the physician. Transportation and maintenance are not financed by the program unless the transportation required is by ambulance and the maintenance is for long-term or convalescent care.[13]

Several other direct services are furnished under this program: (a) Nursing consultation is provided through the Division of Public Health Nursing, State Department of Public Health; (b) Social service consultation is provided through the Social Service Section, State Department of Public Health; (c) Direct public health nursing is provided by local health departments; (d) Direct social case work service is provided by local health departments or local welfare departments depending upon the local agency having administrative responsibility for the Crippled Children's program; (e) Physical therapy and occupational therapy are available in local areas, particularly to children with cerebral palsy, through state and local physical therapists and is also purchased as part of hospital care and out-patient treatment; (f) Orthodontia is available to children receiving care for cleft lip and palate and others with malformations of teeth; (g) Convalescent care is purchased from institutions meeting standards set up by the Crippled Children's Services; and (h) Vocational rehabilitation is available through referral to the Vocational Rehabilitation Division, State Department of Education.[14]

The California program is financed by funds received from three sources: (a) The county 1/10 mill appropriation established by law as a minimum for this purpose, (b) Funds from the budget of the State Department of Public Health, appropriated for this division and including special appropriations made available for such programs as Cerebral Palsy and Rheumatic Fever; and (c) Federal funds made available through the Social Security Act on a matching basis. Funds from the latter source constitute a relatively small portion of the total funds available in California.[15]

In California local administration of the program falls within three plans. The larger counties have set up approved independent programs under which state funds augment the local budget and state personnel are available for advisory and consultatory services. Other counties which have neither staff nor facilities available locally may choose to conduct a program in direct cooperation with the State Department of Public Health. In these counties the local agencies retain responsibility for case finding, for determination of economic eligibility, referral to the program and follow-up. The Department makes necessary assignments to the nearest available facilities, issues authorizations, checks and pays bills through a revolving fund, provides a central statistical service, and provides advisory and consultatory services. The counties of the third group have programs which do not meet the standards set up by the Department of Public Health. As of November, 1952, only one small county was in this group.[16]

Every effort has been made in the program to utilize all sources of service equitably, despite certain geographic difficulties and budgetary limitations. Physicians, hospitals, and members of official and voluntary agencies attempt to work together in the program to provide adequate and continuous services to handicapped children.

Oregon

The State of Oregon has a centralized state-wide program of health services for crippled children administered by the Crippled Children's Division, University of Oregon Medical School. The executive faculty of the medical school acts in an advisory capacity, representing fifteen different medical specialties, to the general and technical advisory committee charged with responsibility for the program. This committee is composed of representatives of medical, dental, health, welfare, education, nursing, hospital, social work, clinic, and other interested groups.[17]

The laws of the State of Oregon do not contain a definition of a crippled child. For administration of the program, the following definition is used: "A crippled child is one, under twenty-one years of age, who by reasons of congenital or acquired defects of development, disease or injury of the musculo-skeletal system, is, or may reasonably be expected to become, deficient in the use of body or limbs. In addition, the term crippling

[13]Personal letter from Edith P. Sappington, Regional Medical Director, Children's Bureau, Federal Security Agency, San Francisco, California, to the Nevada Legislative Counsel.

[14]Ibid.

[15]Ibid.

[16]Ibid.

[17]Ibid.

shall include certain conditions amenable to plastic surgery, namely, cleft lip, cleft palate, and certain other deformities of the face which, although not functionally handicapping, may lead to psychological disturbances." Under this definition crippling conditions caused by congenital deformities, traumatic deformities, static deformities, inflammatary conditions, neuro-muscular disorders, nutritional, circulatory and growth disturbances, and tumor and related diseases of bones and associated structures are accepted for care.[18]

Services provided are: (1) Diagnostic clinics are held on regular schedule. Except in Portland, where a clinic is conducted by the Crippled Children's Division, local health departments are responsible for organization and management of itinerant clinics in accordance with the pattern established and set forth in the Crippled Children's Division manual. The state staff which attends itinerant clinics includes an orthopedic surgeon, physical therapist, medical secretary, medical social consultant, and/or an orthopedic nursing consultant. (2) Diagnosis and treatment are sometimes given in offices of private physicians when need arises during the interim between regular clinic sessions. (3) Hospitalization is in private hospitals meeting standards established by the Crippled Children's Division. (4) Foster home care is provided while the child is in the treatment center for out-patient study or undergoing treatment in cooperation with state and local public welfare units, and is paid for by the state. (5) Transportation is provided to and from treatment center for the patient and one or both parents. Transportation is also provided to and from the doctor's office, foster home, or other place of treatment or examination while the patient is in the treatment center. (6) Subsistence is provided for the patient who is not in a foster home and for parents while at the treatment center with the patient. The cost is borne by local welfare departments, depending on the financial need of the family. (7) Rehabilitation training is purchased from the Portland Rehabilitation Center, which offers physical therapy and occupational therapy. Vocational rehabilitation is available by referral to the Division of Vocational Rehabilitation. (8) Physical therapy consultation is given by three physical therapists on the state staff to therapists on the state and local staffs; direct service to patients and parents is given in the clinics. (9) Orthopedic nursing consultation is furnished by two orthopedic consultant nurses on the state staff. (10) Public health nursing is available from local health department staffs and from the Visiting Nurses Association in Portland. (11) Medical social service consultations are given to state and local staffs; direct service is given to patients and families by three medical social consultants on the state staff. (12) The new speech therapy program offers consultation and direct service to children with organic speech problems. A speech pathologist is employed on the state staff and two speech therapists are hired by the State Department of Education. (13) Orthodontic services are being established in cooperation with the University of Oregon Dental School in connection with the plastic surgery services. (14) Appliances are furnished as recommended by physicians.

State funds to finance this program are appropriated by the State Legislature on the basis of a budget submitted by the Crippled Children's Division. Federal funds augment the state budget.

During the calendar year ended December 31, 1951, the State of Oregon provided physicians' services for 3,483 individual children. Other services were rendered in accordance with cooperative agreements with the Division of Vocational Rehabilitation, Board of Public Welfare, Board of Public Health, Board of Higher Education, Shriner's Hospital, National Foundation for Infantile Paralysis, and the Portland Visiting Nurses Association.

Washington

The centralized state-wide program of health care for the handicapped children of the State of Washington is administered by the Division of Maternal and Child Health and Crippled Children, State Department of Health.[19]

The laws of the State do not give a legal definition of a crippled child, but by policy of the Crippled Children's Services, services are limited to those children whose crippling condition has been caused by congenital defect, birth injury, or deformity, by burn or trauma, by disturbance of innervation from such diseases as infantile paralysis, by disorders of metabolism, growth, or nutrition, by neoplasm, by infection, or

[18] Personal letter from Edith P. Sappington, Regional Medical Director, Children's Bureau, Federal Security Agency, San Francisoco, California, to the Nevada Legislative Counsel, dated November 17, 1952

[19] Ibid.

by other conditions either acquired or of uncertain etiology.

Services provided are: (1) Diagnostic clinics are regularly held, which provide some follow-up. Organization and management of itinerant clinics are the responsibility of local health departments with assistance of the clinic team provided by the Crippled Children's Services and local volunteer workers. The clinic team consists of an orthopedic surgeon, medical secretary, orthopedic nurse-physical therapy consultant, nutrition consultant, and a medical social work consultant. (2) Diagnosis and treatment are sometimes given in offices of private physicians on basis of need arising during the interim between regular clinics. (3) Hospital care is provided in hospitals meeting the standards established by the administrative division. (4) No transportation other than emergency ambulance service is provided by the State. Transportation is handled privately or may be arranged by the local health department through a local resource. (5) Physical therapy consultation is provided to state and local staff, and direct service to patients and parents in clinics by one consultant on the state staff. Purchase of physical therpay service for hospitalized patients is included in the per diem expense. Out-patient physical therapy is purchased on a fee-for-service basis. (6) The Division of Nursing cooperates with the Crippled Children's Services by providing consultant nursing services to the staff and nursing personnel from local health departments. Follow-up nursing service to children receiving care is provided by public health nursing services in local health departments. (7) Medical social work consultation is provided to state and local staff, and direct case work service to patients and families by four medical social consultants on the state staff of the administering division. (8) A program of speech therapy is being developed by a consultant on the Staff of the Division of Maternal and Child Health and Crippled Children. Service to individual patients is arranged through other agencies or privately on a fee-for-service basis. (9) A state-wide program of hearing conservation is conducted with provision for referral for otological services. (10) Consultation in nutritional problems is provided to state and local staffs and to patients and parents in clinics by a consultant on the State staff. (11) Orthodontic service is provided when recommended for those children who have had surgery for cleft lip and palate.

Cooperative agreements have been worked out between the Division of Maternal and Child Health and Crippled Children, and the Shriners Hospitals, Children's Orthopedic Hospital, National Foundation for Infantile Paralysis, Cerebral Palsy Association of Washington, Washington Society for Crippled Children and Adults, State Department of Public Instruction, State Department of Social Security, and local health departments.

In the calendar year ended December 31, 1951, a total of 1,924 individual children received physicians' services and the treatment required in their particular cases.

Summary

Presentation of the detail programs of the other Western States would repeat the presentations of the above three states. All of the states have patterned their programs upon the requirements of the Children's Bureau, Federal Security Agency, so that they might participate in matching federal funds. The scope and effectiveness of the programs are based upon available funds to determine who are crippled, to diagnose the condition, and to provide the necessary treatment.

Summary

A study of the programs of special educational and health care programs of other Western States reveals that all of the states have some program. Some of the programs have been in effect for a number of years and the programs are well defined in their operation. Other states have recently undertaken the responsibility of providing needed services for their handicapped children. Reports from all of the states indicate that the administering officials realize that much remains to be done to provide a program which will reach all eligible children.

CHAPTER III

WHAT NEVADA IS DOING

Introduction and History

Nevada is doing less than any of the other western states in providing for the education of physically and mentally handicapped children. All the other western states except Wyoming provide as a minimum program a state-operated school for the deaf and blind, but Nevada sends her deaf and blind to other states for their education. Wyoming sends her deaf, blind, and severe speech cases to out-of-state schools but is providing some state assistance within the state for other types of handicaps.

The Constitution of the State of Nevada lays the ground work for a program of education for the handicapped.[1] Within the article dealing with public institutions provision is made for such other benevolent institutions as the public good may require which shall be fostered and supported by the state subject to such regulations as may be prescribed by law. Within this section, it appears that the writers of the Constitution intended by inclusion of exact wording that we should have institutions for the blind, deaf, and dumb or mute.

However, it was not until March 2, 1869, that the first law providing for education of the physically handicapped in this state was passed. The law, providing for education of the deaf, dumb, and blind, stood upon the statute books until 1907 without amendment. It was amended to its present form in 1943. That amended statute is the only one upon the statute books of the State of Nevada providing for special education of physically or mentally handicapped minors. Despite the lack of specific provision within the school laws of the state for any financial and supervisory assistance from the state through the Department of Education, efforts have been made by various groups, privately and within the larger school districts, to provide some type of special education for children now deprived of adequate educational services.

Education of the Deaf and Dumb and the Blind

The Nevada law providing for education of the deaf, dumb, and blind authorizes the Superintendent of Public Instruction to make arrangements with the directors of any institution for the admission, support, education, and care of the deaf, dumb, and blind of this state. He is authorized to make any contracts or agreements for the carrying out of the provisions of the act.

Application must be made to the board of county commissioners by the person legally responsible for the child to the effect that the child is disqualified from being taught by the ordinary process of instruction or education. The board must first satisfy itself of the truth of the affidavit and then apply to the Superintendent of Public Instruction for arrangements for the child's education.

Section 4 of the act limits the benefits to those children whose parent, relative, guardian, or nearest friend is unable to pay for their support, education, and instruction in such a school. In these cases the county of residence must transport the persons to the school. Thereafter the state will pay the cost and expenses of maintenance at the institution.

The state-sponsored program for the deaf, dumb, and blind is at present furnishing education facilities for thirteen children. These children have been sent to institutions in neighboring states for their education, there being no provision nor facility within the State of Nevada for the education of these children.

This program does not include facilities within the state for the education of the partially-sighted or hard-of-hearing child. The partially-sighted child needs sight saving materials, books printed with extra large type, and charts with printing larger than is ordinarily used in the classroom. The hard-of-hearing child, although not deaf enough to be educated under that program, needs to have the teacher's voice brought within his hearing range by amplification or by some mechanical means.

Table No. II sets forth the appropriations and expenditures under this program during the past four fiscal years. The last two fiscal years show a great increase in expenditure, all of which has been used to pay tuition of children sent to schools in other states. No funds have been expended by the State Department of Education from these appropriations for administration of the program.

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[1] Constitution of the State of Nevada, Issued by Department of Education, (1952) art. XIII; sec. 1, p.30

Table No. II

STATE OF NEVADA
DEPARTMENT OF EDUCATION
EDUCATION OF DEAF, DUMB, AND BLIND
STATEMENT OF SOURCES AND APPLICATION OF FUNDS

	Fiscal Year Ended			
	June 30, 1949	June 30, 1950	June 30, 1951	June 30, 1952
Appropriation	$	$15,600.00	$11,000.00	$26,600.00
Transfers of balances between years	16,369.93	(10,682.52)	10,682.52	(8,621.33)
Total available	$16,369.93	$ 4,917.48	$21,682.52	$17,978.67
Expended:				
Tuition	6,214.00	4,857.00	19,114.00	17,951.17
Travel	69.65	60.48	-------	27.50
Total expended	$ 6,283.65	$ 4,917.48	$19,114.00	$17,978.67
Amount unused to general fund	$10,086.28	$ ------	$ 2,568.52	$ ------

Other State Health and Education Programs for Handicapped Children

A comprehensive study of the State of Nevada's program for the education of the handicapped requires clusion of the health services furnished these unfortunate children and the vocational rehabilitation program. l ucation for handicapped persons cannot be studied independently of their requirements for special health f ilities; nor can their education be confined solely to the usual formal education of the twelve grades. The o ect of special education for these children is to make them self-sustaining individuals to the extent of their p sical and mental ability, thus making them productive members of society.

The Crippled Children's Services Program is administered by the Division of Preventive Medical Services of he State Department of Health. The Rheumatic Fever Program for the fiscal years ending on June 30, 1950, an June 30, 1951, was also administered by this division. These programs operated on a state appropriation wi federal funds on a matching basis.

For administrative purposes these programs define a handicapped child as a person under twenty-one years of e who, by reason of some remedial deformity or defect, whether congenital or the result of accident, inj , or disease, is or may become totally or partially incapacitated. Children handicapped by the following con tions, or children suffering from diseases which, if not treated, are likely to lead to such handicaps, are ceptable for care under this program:

. Orthopedic -- club foot, poliomyelitic paralysis, cerebral palsy, etc.

In need of plastic reconstruction -- cleft palate and lip, contracture or disfigurement because of burns, etc.

3. In need of orthodontic reconstruction -- dental-facial deformities accompanying cleft palate.
4. Eye conditions requiring surgery -- cataract, strabismus or cross-eye, etc.
5. Ear conditions leading to loss of hearing -- chronic otitis media, chronic blockage of Eustachian tubes, congenital deafness, etc.
6. Other disabling or disfiguring deformities -- extrophy of the bladder, severe hemangioma, etc.
7. Congenital hearing conditions in which surgical treatment is indicated.
8. Rheumatic fever or any condition which may cause rheumatic heart disease.

During the fiscal years ending on June 30, 1950, and June 30, 1951, the Rheumatic Fever Program was conducted under an appropriation by the 1949 Legislature for that specific purpose. A small federal allotment was also available on a matching basis. Since July 1, 1951, this program has been conducted as a part of the Crippled Children's Services Program.

During the fiscal year ending on June 30, 1952, the State Department of Health held eighteen clinics for crippled children in various parts of the state, with 646 children examined and 1,348 days of hospital care and 572 days of foster home care provided. In addition and during the same period, 39 rheumatic fever clinics were held, with 205 children examined and 476 days of hospital care and 753 days of foster home care provided.

The costs of these programs are set forth in Tables No. III and No. IV. It is to be noted that the appropriation figures for the fiscal years ending on June 30, 1949, and June 30, 1950, are not those of the actual appropriations by the legislature, but are the actual amounts of the general appropriation of the Department of Health which were applied to these programs. In the latter two years specific appropriations were made for this purpose by the legislature.

Table No. III
STATE OF NEVADA
DEPARTMENT OF HEALTH
CRIPPLED CHILDREN'S SERVICES PROGRAM
STATEMENT OF SOURCES AND APPLICATION OF FUNDS

	Fiscal Year Ended			
	June 30, 1949	June 30, 1950	June 30, 1951	June 30, 1952
Appropriation	$ 9,217.42	$ 8,215.44	$ 7,645.77	$88,000.00
Federal Allotment	29,773.91	22,782.78	29,880.74	46,398.38
Private Contributions	----	2,043.27	----	----
Transfers of Balances between years - to 1953	----	----	----	(57,005.13)
Available	$38,991.23	$33,041.49	$37,526.51	$77,393.25
EXPENSES:				
Salaries	$ ----	$ ----	$15,417.00	$ 9,675.00
Professional Services	13,404.30	12,365.00		20,220.02
Hospital Care	22,705.65	16,232.75	19,372.99	40,658.87
Appliances	1,607.95	2,704.80	1,984.00	4,278.20
Traveling Expense	933.17	905.46	542.39	949.37
Other Expense	340.26	833.48	210.13	1,512.29
Equipment	----	----	----	99.50
Total Expenses	$38,991.33	$33,041.49	$37,526.51	$77,393.25

Table No. IV
STATE OF NEVADA
DEPARTMENT OF HEALTH
RHEUMATIC FEVER PROGRAM
STATEMENT OF SOURCES AND APPLICATION OF FUNDS

	Fiscal Year Ended	
	June 30, 1950	June 30, 1951
Appropriation	$25,000.00	
Federal Allotment	4,863.14	
Transfers of balances between years	(19,561.95)	$19,561.95
Available	$10,301.19	$19,561.95

Table No. IV (cont'd)

	Fiscal Year Ended June 30, 1950	Fiscal Year Ended June 30, 1951
Expenses:		
Salaries	$	$ 4,078.15
Travel expense		521.50
Professional services	2,561.51	
Hospital and convalescent care	7,410.88	4,695.39
Other expenses	328.80	113.85
Total expenses	$10,301.19	$ 9,408.89
Amount unused to general fund	$ ----	$10,153.06

The State Department of Health also has a Mental Health Program, which is designed to provide psychiatric and psychological clinical facilities for the detection and diagnosis of mental handicaps. Provision has been made for testing and counselling but not for "in-patient" treatment. However, the lack of funds has prevented the hiring of professional personnel to carry out the program.

Vocational rehabilitation services in the State of Nevada have been confined to adults because of lack of funds sufficient to work with minors. Funds have been provided on a federal matching basis.

Handicapped persons entitled to the services of this program must have reached the employable age of sixteen years, must have a disability which substantially interferes with employment, and must have a reasonable chance of becoming suitably employed. The services are available to both sexes with either physical or mental impairments. These services are available not only to those whose disabilities are readily seen, such as amputees, paralytics, spastics, and the blind, but also to those with the unseen handicaps caused by tuberculosis, emotional disabilities, arthritis, deafness, and heart diseases. Any condition resulting from accident, illness, or any other mishap which substantially prevents or interferes with the individual's earning a living in accordance with his best ability makes that individual eligible for vocational rehabilitation.

Briefly, any or all of the following services may be provided for any eligible handicapped person:

1. Medical examination in every case to determine the extent of disability, to discover possible hidden or secondary disabilities, to determine work capacity, and to help determine eligibility.
2. Individual counsel and guidance in every case to help the disabled person to select and attain the right job objective.
3. Medical, surgical, psychiatric, and hospital care, as needed, to remove or reduce the disability.
4. Artificial appliances such as limbs, hearing aids, trusses, braces, and the like to increase work ability.
5. Training for the right job in schools, colleges, or universities, on-the-job, by tutor, through correspondence courses, or by other approved means, to enable the individual to do the job well.
6. Necessary maintenance and transportation for the disabled person undergoing treatment or training.
7. Occupational tools, equipment, and licenses, as necessary, to give the disabled person a fair start.
8. Placement on the right job, one within the disabled person's physical or mental capacities and one for which he has been thoroughly prepared.
9. Follow-up after placement to make sure the disabled person and his employer are satisfied with each other.

Some of these services are furnished free of charge to all eligible persons. Other services are provided only when the person must have financial assistance to train and equip him to be self-sustaining.

Since these services are available to handicapped minors who have reached the age of sixteen years, it seems that the state has been neglecting this group of handicapped by its failure to provide funds for the program. Some of the other western states utilize this educational program and make mandatory the endeavor to place the trained individual through the state employment service.

Home-bound Programs

Several of the local school districts have endeavored to partially meet the demand for special education of handicapped children by inauguration of home-bound programs. These programs bring educational instruction to the child confined to home or hospital. Instructors teach the individual child, at his bedside, the same work which he would normally have if attending the regular classroom.

The children taught under this program are kept aligned with their chronological age in their school work if their physical health permits. Children who must miss weeks or months or even years of school as a result of some crippling accident or illness have an opportunity to keep up with their classes. When school can again be attended, these children find themselves on the same level of work as the other children of their ages.

Reno School District No. 10 established the home-bound program in 1947 with one teacher hired by contract and a second on an hourly basis. Today two teachers are on full time contract, conducting the program which includes both elementary and secondary grades.[2]

Estimated costs for the school year ending June 1950, reflect an estimated annual instructional cost of $334.00 per pupil or $4.78 per pupil hour of instruction. The total estimated cost was as follows:

State apportionment	$2,111.00
County apportionment	1,360.00
School district funds	3,753.00
	$7,224.00

Table No. V reflects comparatively the pupil attendance for the four school years ending in June 1949 to June 1952, inclusive.

Table No. V

STATE OF NEVADA
RENO SCHOOL DISTRICT NO. 10
HOME-BOUND PROGRAM
PUPIL ATTENDANCE

	School Year			
	1948-1949	1949-1950	1950-1951	1951-1952
Grades 1 to 8, Inclusive				
Total days of pupil attendance	3359	2250	2024	2355.5
Average daily attendance	18,558	12,711	11,307	13,233
Grades 9 to 12, Inclusive				
Total days of pupil attendance	510	737	383	520.5
Average daily attendance	2,817	4,163	2,139	2,924

Approximately five years ago the Sparks School District hired a teacher to start a home-bound program. For the present school year, the teacher is hired on an hourly basis to teach convalescent children who receive two hours of individual instruction per week. The number of children taught has varied in the five years from one to ten.[3]

The Hawthorne School District has initiated its home-bound program with the current school year. The instructor is hired on an hourly basis and has between twelve and fifteen pupils who are victims of rheumatic fever. No child with any other type of handicap has been included up to this time.[4]

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[2] Report from Mr. Roger Corbett, Assistant Superintendent of Schools, Reno School District No. 10 to Mr. Earl Wooster, Superintendent of Schools, Reno School District No. 10.

[3] Statement made to writer by Mrs. Edwin Whitehead, Sparks home-bound teacher.

[4] Statement made to writer by Mr. Floyd Smalley, Superintendent, Hawthorne School District.

Consolidated B School District in Fallon has maintained the home-bound program for three years. The home visiting teacher is paid on a fee per visit basis. There has been an average of six pupils per year.[5]

Variety School

The history of the Las Vegas Variety School is difficult to relate since no written record is available which gives the complete story of the founding and erection of this school. The story, pieced together from conversations with various people[6] who have been in contact with the project, and from newspaper articles, is substantially as follows:

Approximately three years ago parents of handicapped children in the City of Las Vegas met to find some means of providing their children with the needed special educational facilities. A publicity agent became interested in their problem and their efforts to solve it. He convinced the Variety Club of Las Vegas of their need, and the club started a fund raising campaign for a community service project.

The Variety Club sponsored several benefits and raffles and placed cans in various business establishments with signs asking people to give for the purpose of helping the handicapped children. Through these fund raising campaigns, enough money was collected to start the construction of a special school. A plot of approximately eight acres contiguous to existing school property was deeded by Clark County to the association formed to hold title to the property during the construction operation. Interest in the project was so intense that labor unions, various clubs and organizations, and individuals donated both money and labor. For example, one women's group is reported to have made a gift of an electronically controlled door which automatically opens as the child approaches, and stays open until he is safely through.

The completed building will be but one wing of the proposed plan, and will provide three classrooms, physiotherapy rooms, and one general purpose room. The architectural plans were provided by the National Society for Crippled Children. Future plans of the Variety Club include the completion of additional education facilities, and the construction of dormitories to provide for resident instruction for children from other cities in the southern part of the state. However, at present the number of children needing special facilities, and who are residents of Las Vegas, exceeds the capacity of the school.

The Variety Club plans called for the deeding of this property to the Las Vegas School District upon completion of present construction, but the School District cannot accept it even as a gift. The School District lacks sufficient funds to hire the necessary teachers to staff the school and to actually operate the plant. Also, the Attorney General has rendered an opinion that the District cannot operate the Variety School, since it is not a common school. Upon actual completion of the present construction, about Christmas, 1952, the association expects to operate the school for the balance of the 1952-1953 school year with funds raised by the Variety Club. Funds now available are insufficient to plan on operation beyond that time.

The Constitution of the State of Nevada prohibits the legislature from appropriating money for private purposes. The Variety School is at present a private school. Unless the legislature changes the existing school laws to allow the Las Vegas School District to accept this school as a gift, and provides some financial assistance to the district to maintain it, the project cannot be continued. The efforts of an entire community to provide special education facilities for its handicapped children will have failed because of the state's failure to assist.

At the present time, nine children are enrolled and awaiting the opening of school in January 1953. Many more need the instruction but the school's capacity will not meet the demand. The teaching staff has been selected and await completion of the construction.

Speech Correction

Two known attempts have been made by individual school districts, Reno and Las Vegas, to maintain speech correction programs. The Las Vegas program, carried on for one year with 400 pupils, was then abandoned, but the Reno program has been continued upon a very limited basis.

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[5] Statement made to writer by Mr. Albert Seeliger, Superintendent, Consolidated B School District, Fallon, Nevada.

[6] Mrs. Dorothy Hays, Executive Secretary, Nevada Crippled Children's Society.
Mr. J. E. Springmeyer, Nevada Legislative Counsel.
Mrs. Thelma Calhoun, Research Assistant, Legislative Counsel Bureau.
Mr. Walter Johnson, Superintendent of Schools, Las Vegas, Nevada.

The Reno School District hired a speech therapist on a half-day basis at the opening of the 1948-1949 school year and has maintained the program on that basis to the present time. The average number of pupils enrolled in speech classes each year for the first four years was 115. These were referred to the speech teacher by the classroom teachers. In September 1952, a survey was made by the speech therapist of all children in grades 1-4, inclusive.[7] Two thousand one hundred and six children were interviewed personally by the speech therapist. The actual number of children found to be defective in speech was 293 or 13.91% of those interviewed, which is almost 40% higher than the estimated national average of 10%. These cases ranged from slight to exceedingly severe speech difficulties. Some children will need only a few months of speech training to correct their defects, whereas many will need several years, according to the kind of disorder, the severity of the case, the persistence of the individual child, and the cooperation of the classroom teacher and parents with the speech correctionist. The latter is hindered by the lack of time and lack of working space in the over-crowded buildings.

An effective speech correction program should furnish each child a minimum of three one-half hour lessons per week with either individual or small group instruction. Under present conditions each child receives approximately twenty minutes per week.

Cerebral Palsy Class

A group of parents of cerebral palsied children met in Reno in August 1951, to discuss possibilities for educational facilities for their children. They met once each six weeks thereafter.[8]

In January 1952, with the consent of the Reno School Board, a class for cerebral palsied children was organized with five pupils enrolled.. One of the Reno home-bound teachers was the regular instructor. Speech correction was given by the Reno speech therapist and a volunteer student trained in speech work and doing graduate work at the University of Nevada. The mothers of the children assisted on a rotation schedule in the class and aided in physiotherapy suggested by the physio-therapist of the Nevada Society for Crippled Children. This class was discontinued after a six weeks period because of lack of proper facilities, transportation difficulties during the severe weather, and the hospitalization of some of the children for surgery.

What Nevada Should Be Doing

A resume of what Nevada is doing to assist the physically handicapped children in education and health care has little meaning unless evaluated in comparison to need. To determine the need for these services throughout the state, a survey has been made.

In December 1951, all medical doctors, osteopaths, and chiropractors practicing in the State, all school teachers of the public schools, and the Nevada Society for Crippled Children were requested to submit to the office of the Legislative Counsel Bureau the names, addresses, ages, handicapping conditions, and educational need of all defective children who had come to their attention. The teachers of all the schools but two small one-teacher schools responded throughout the state; however, the reporting by the doctors was very incomplete. A large number of medical doctors, osteopaths, and chiropractors either did not take time to report or failed to realize the importance of the survey and objected to revealing names of patients. All doctors were assured that the names would remain confidential and known only by members of the Legislative Counsel Bureau staff. Still doctors refused on a basis of ethics to report. Others refused because of time required to go through their case files.

Over 2,300 cards were submitted by June 30, 1952, with numerous duplications of names because the children had come to the attention of more than one person reporting. Upon elimination of all duplicates an actual reporting of 1,726 children had been made. The statistical compilation required groupings by counties, by actual count of children, by handicaps, by ages, by sex, by educational facilities needed, and by races.

It was determined that the officials of each county would desire information on the number, the ages, the handicaps, the sex, and the educational requirements of the handicapped children reported for their county. School officials were interested in determining the number of handicapped children of pre-school age, kindergarten

[7] Report of survey made by Mrs. Dorothy DeWhitt, Speech Therapist, Reno School District No. 10, to Mr. Earl Wooster, Superintendent of Schools, Reno School District No. 10, September 1952.

[8] Interview with Mrs. Arthur Wilson, president of the parents' group.

age, and elementary through high school age, together with the types of handicaps and the type of educational facilities and instruction needed to care for these children. The Division of Vocation Rehabilitation was interested in the same information for all those above the age of sixteen years as they would become eligible for assistance under that program. Health officials were interested in the number of children, sex, age, county of residence, and diagnosis. Thus almost unlimited combinations of statistical information were desired by the various interested groups. Tables Nos. VI to X inclusive are an attempt to set forth the information desired by all of these groups.

Table No. VI

STATE OF NEVADA
SURVEY OF HANDICAPPED CHILDREN
NUMBER OF HANDICAPPED CHILDREN BY COUNTY, SEX, AND RACE
June 1952

	Number of Children Reported	Per Cent of Total Reported
By County		
Churchill	97	5.620
Clark	318	18.424
Douglas	24	1.378
Elko	106	6.141
Esmeralda	4	.232
Eureka	4	.232
Humboldt	67	3.882
Lander	18	1.043
Lincoln	65	3.766
Lyon	25	1.448
Mineral	111	6.431
Nye	26	1.506
Ormsby	41	2.375
Pershing	46	2.665
Storey	1	.058
Washoe	630	36.514
White Pine	143	8.285
Total	1,726	100.000
By Sex		
Male	1,059	61.356
Female	667	38.644
Total	1,726	100.000
By Race		
White	1,606	93.048
Indian	89	5.156
Negro	24	1.390
Other	7	.406
Total	1,726	100.000

Table No. VI shows the actual number of children reported as handicapped, by the county of residence, sex, and race. The survey reveals that the popular conception that most of the handicapped children are among the non-white children is completely erroneous, as over ninety-three percent are among the white race.

Handicapping conditions are more prevalent among boys by a ratio of approximately three boys to each two girls. The county totals reveal definite discrepancies in reporting. Washoe County reported almost twice the number of children reported by Clark County. The figures from both counties are far below the number to be expected in accordance with population, yet these two counties account for over fifty-four percent of the the total children reported. A study of the cases reported by the various counties indicates that persons in certain counties were either more diligent in their efforts to make a complete report, or were more cognizant of conditions which are handicapping.

Table No. VII

STATE OF NEVADA
SURVEY OF HANDICAPPED CHILDREN
NUMBER OF HANDICAPPED CHILDREN BY AGE
JUNE, 1952

By Age in Years	Number of Children Reported	Per Cent of Total Reported	Comparison with 1950 Census: Number of Children Reported	Report By Age Groups	1950 Census By Age Groups	Per Cent Reported of Census Totals
0 - 1	4	.232	4	4	3,305	.121
1 - 2	30	1.738	30			
2 - 3	36	2.086	36	66	7,139	.924
3 - 4	44	2.549	44	44	6,514	.675
4 - 5	43	2.491	43	43	2,834	1.517
5 - 6	75	4.345	75	75	2,915	2.573
6 - 7	97	5.620	97			
7 - 8	124	7.184	124			
8 - 9	144	8.343	144	365	7,774	4.695
9 - 10	163	9.444	163			
10 - 11	166	9.618	166			
11 - 12	150	8.691	150			
12 - 13	136	7.879	136	615	9,004	6.830
13 - 14	78	4.519	78	78	1,940	4.021
14 - 15	97	5.620	97	97	1,916	5.063
15 - 16	99	5.736	99			
16 - 17	96	5.562	96	195	3,669	5.315
17 - 18	78	4.519	78			
18 - 19	41	2.375	41	119	3,859	3.084
19 - 20	20	1.159	20			
20 - 21	5	.290	5	25	2,041	1.225
	1,726	100.000	1,726	1,726	52,910	3.262

An attempt has been made in Table No. VII to show the ages of the children reported in comparison with the 1950 census. A study of this compilation reveals the highest reporting of handicaps for the age group of nine to thirteen years. The school age groups show a higher percentage than the pre-school age groups or the groups above the legal mandatory school attendance age of sixteen years. This is probably a result of several factors. Pre-school age children often have conditions which are unobserved or not understood by parents, and thereby remain undetected unless discovered by a physician while he is examining for some other conditions. Many parents are not aware of the expected normal development of a child and are not conscious of abnormal development trends.

When the child is enrolled in school, the classroom teacher soon determines the obvious handicapping conditions. However, lack of training on the part of teachers in the field of abnormal children, and lack of proper testing of hearing, vision, and mentality permit many children to proceed undetected through their school life. These children would have become better students and eventually better members of the community had their handicaps been determined and provided for properly. Minors above the mandatory school attendance age of sixteen are often not known to the teachers who are reporting. By the time the child has reached this age many parents have become accustomed to the difference in him and no longer have him under regular medical care.

Tables Nos. VIII, IX, and X have been compiled on the basis of handicaps reported. One hundred and sixty children were reported with multiple handicaps, and since officials were interested in learning the numbers and kinds of handicaps to be dealt with, these tables have been compiled on this basis. The 160 children with multiple handicaps account for 354 of the total handicaps shown in the final figures. Of these children, 130 have handicaps in two fields, 26 have handicaps in three fields and four have handicaps in four fields.

In Table No. VIII the handicapping conditions have been tabulated by sex, race, and degree of educability of the reported children for each county, with the total of 1,920 handicapping conditions shown in the same manner for the entire state. Of the total handicaps reported, 745 have been reported as allowing the children to attend regular school, and 40 as rendering the children as non-educable and eligible for custodial care only. This leaves 1,135 handicaps, of which 1,093 demand special educational instruction, and of which 515 demand special school facilities. It is apparent that a number of children need both special educational instruction and special school facilities.

A compilation of the handicapping conditions by counties is set forth in Table No. IX. The grouping of handicaps has been made on the basis of their demands for similar educational needs, and not on the basis of medical diagnosis, which accounts for the orthopedic and systemic conditions being grouped together. Educationally, these children require similar reduced physical activity programs in school.

A study of Table No. IX reveals that the highest incidence of handicapping is in the mental grouping, with a total of 646 of the 1,920 handicaps reported, slightly more than one-third. Within this group are probably included children who appear to be mentally handicapped but have undetected vision, hearing, or systemic conditions which manifest themselves in a slow learning rate. Only adequate physical examination and mental testing will reveal how many of these children should have been reported in other classifications.

Slightly less than one-third of the total cases have been reported in the orthopedic and systemic grouping. Many of these children need reduced physical activity programs if in school, rest periods in place of playground activity at recess, special entrances to buildings, special equipment and classroom materials. Those children in hospitals or homes need home-bound instruction programs. However, the educational activities of this entire group must be very closely coordinated with the physicians' recommendations as to the amount of activity allowed.

The total number of speech cases reveals a tremendous lack of reporting. In the school year 1950-1951 a speech survey for the City of Las Vegas is reported to have revealed over 400 children needing therapy, yet Clark County reported only 67 cases and a total of only 328 cases was reported for the entire state. A speech survey made in September 1952, in the Reno schools, including only grades one through four, revealed 293 children requiring therapy, and Washoe County reported only 124 cases as of June 1952.

The blind and deaf handicaps total 32, of which 10 are blind. In the current school year the state is providing education for only 13 blind and deaf children. If all the blind were also deaf, only 13 of 22 children would now be provided for by the state. No program is in effect to provide for the 108 partially-seeing, the 49 with defective hearing, and 21 hard-of-hearing cases, nor does an adequate program exist to assist the 127 neurologically handicapped, either in education or health.

Age groups in each county have been reported in Table No. X. Educators are primarily concerned with the age groups of five through eighteen years, the ages of school attendance. The groups of sixteen through twenty years are of particular interest to those administering the vocational rehabilitation program, as all within these ages may be eligible for training and assistance under that program.

A close study of the survey tabulations reveals the decided lack of correct reporting on the part of teachers and physicians. Only 3,262 per cent of the 1950 census total of minors in the state were reported as defective. Based upon school ages of six to eighteen years and upon the school enrollment figure for the state at the close of school in June 1952, only 4,612 per cent of the school age children were reported as handicapped. This percentage is far below national estimates, and is also far below the total percentage determined by the California survey of April 1951.

Table No. VIII
STATE OF NEVADA
SURVEY OF HANDICAPPED CHILDREN
NUMBER OF HANDICAPS BY COUNTY, SEX, RACE, AND EDUCABILITY
June 1952

By County	Sex		Race				Educability			
	Male	Female	White	Indian	Negro	Other	Can Attend Regular School	Needs Special Instruction	Needs Special Facilities	Non Educable
Churchill	77	41	113	5	---	---	75	37	18	2
Clark	229	125	334	3	15	2	141	197	114	9
Douglas	20	4	17	7	---	---	11	13	8	---
Elko	75	44	86	33	---	---	55	54	35	6
Esmeralda	4	---	3	1	---	---	2	3	1	---
Eureka	2	2	4	---	---	---	1	3	2	---
Humboldt	31	44	69	3	1	2	47	31	18	---
Lander	10	8	14	4	---	---	10	6	4	1
Lincoln	41	40	78	1	1	1	33	45	22	3
Lyon	14	15	29	---	---	---	8	19	8	1
Mineral	71	56	118	5	4	---	45	70	38	5
Nye	20	7	19	8	---	---	17	9	4	---
Ormsby	27	22	35	14	---	---	36	13	5	---
Pershing	34	16	47	3	---	---	17	33	27	---
Storey	1	---	1	---	---	---	1	---	---	---
Washoe	435	249	664	15	5	---	187	473	155	9
White Pine	93	63	149	5	---	2	59	87	56	4
Total	1,184	736	1,780	107	26	7	745	1,093	515	40

The Research and Statistical Division of the National Society for Crippled Children has reported to the Nevada Society for Crippled Children the following national and State of Nevada estimates for handicapped children under twenty-one years of age:

	Estimated Percentage in U. S.	Estimated Number in Nev.
Blind and seriously handicapped visually	.13	70
Deaf and seriously hard-of-hearing	1.50	800
Speech	6.99	3,730
Orthopedic	1.50	800
Slow-learning (I. Q. 75-89)	17.75	9,500
Mentally retarded (I. Q. 50-75)	2.00	1,100
Feeble-minded	.25	140
Total	30.12	16,140

Examination of these estimates reveals neurological and systemic handicapping conditions have not been included. The speech average is below the statistical figure of ten per cent as given by speech authorities. The estimate for the slow-learning group apparently includes many who would be able to make satisfactory progress in the regular class group. Those in the lower intelligence level of this grouping would probably require special instruction. However, comparison of this report with the Nevada survey definitely indicates that the survey has failed to reveal many handicapped children needing special educational instruction or facilities.

For further comparative evaluation of the results of the survey, a comparison with the California survey of April 1951, indicates a failure on the part of the Nevada survey to reveal the total of the children needing special assistance. The California survey reports the following percentages of handicapped children in the school population of that state:

Blind and partially-seeing	.25 per cent
Deaf and hard-of-hearing	1.05 per cent
Speech defective	5.00 per cent
Crippled	1.00 per cent
Epileptic	.20 per cent
Mentally retarded	2.00 per cent
Emotionally maladjusted	2.50 per cent
Lowered vitality	1.50 per cent
Total	13.50 per cent

Analysis of this report reveals that the speech percentage is only half of the statistical figure of ten per cent given out by speech authorities in the country. This might be accounted for in two ways -- either that it includes only those whose need is great, the most severe cases, or it is low because of the speech program which has operated for so many years in that state. Other groupings, except for blind, deaf, and mental groups, differ from those used in the Nevada survey, but comparison of types of handicaps and the over-all total again indicates that the Nevada survey has failed to reveal as many handicapped children as expected.

Table XI sets forth a comparison by counties of the total number of handicapping conditions actually reported as found in school age children of six to eighteen years and the total which might be expected to have been reported, basing the latter figures on the California estimate of 13 1/2 per cent of the children enrolled in each county at the close of school in June 1952. Thus each county probably has many children unreported who should have been included in the survey and who need special educational instruction and facilities.

A review of these tables reveals the following pertinent information relative to each county:

Table No. IX
STATE OF NEVADA
SURVEY OF HANDICAPPED CHILDREN
NUMBER OF HANDICAPS BY HANDICAP AND COUNTY

	Churchill	Clark	Douglas	Elko	Esmeralda	Eureka	Humboldt	Lander
Vision								
Partially seeing	3	18	2	6	---	---	12	2
Blind	---	4	---	1	---	---	---	---
Total vision	9	22	2	7	---	---	12	2
Hearing								
Defective hearing	9	11	---	3	---	---	6	---
Hard of hearing	---	5	1	4	---	---	2	---
Deaf	---	7	---	3	---	---	1	---
Total hearing	9	23	1	10	---	---	9	---
Speech								
Stuttering and stammering	2	12	1	4	---	---	2	---
Oral inactivity	1	5	---	1	---	---	---	---
Lisping	---	2	---	1	---	---	---	---
Articulation	1	6	1	---	---	---	---	---
Aphasia	1	---	---	---	---	---	---	---
Baby talk	---	1	---	1	---	---	---	1
Foreign accent	---	2	---	---	---	---	2	2
Cleft lip and palate	4	13	1	3	---	---	1	1
Cerebral palsy disorders	---	8	---	1	---	---	---	---
Misc. voice disorders	4	18	---	7	1	---	---	1
Total speech	13	67	3	18	1	---	5	5
Orthopedic and Systemic								
Poliomyelitis	6	19	1	15	---	---	1	---
Cerebral palsy	3	28	---	4	---	---	7	---
Osteomyelitis	---	1	---	---	---	---	---	---
Bone and joint diseases	3	7	1	---	---	---	2	---
Congenital	2	27	2	4	---	1	6	1
Club foot	---	12	---	5	---	---	2	---
Disability due to accidents	7	6	---	3	1	---	---	2
Cardiac	9	8	2	3	---	---	2	---
Tuberculosis	---	---	---	---	---	---	2	---
Rheumatic fever	2	3	---	2	---	---	---	1
Diabetes	---	---	---	---	---	---	1	---
Miscellaneous	2	15	---	10	---	---	8	1
Total orthopedic	34	126	6	46	1	1	31	5
Mental								
Slow learning	33	38	4	10	---	1	12	1
Mentally retarded	9	42	7	13	1	1	3	4
Feeble minded	1	19	---	7	---	1	1	1
Total mental	43	99	11	30	1	3	16	6
Neurological								
Epilepsy	2	5	1	1	1	---	2	---
Enuretic	5	1	---	3	---	---	---	---
Chorea	1	2	---	1	---	---	---	---
Misc. disorders	2	9	---	3	---	---	---	---
Total neurological	10	17	1	8	1	---	2	---
Total	118	354	24	119	4	4	75	18

Table No. IX (cont'd.)

Nye	Ormsby	Pershing	Storey	Washoe	White Pine	Total	Per Cent of Total Reported
1	8	2	1	25	11	108	5.625
---	1	---	---	3	---	10	.521
1	9	2	1	28	11	118	6.146
---	6	1	---	10	---	49	2.552
---	1	---	---	4	1	21	1.094
1	---	---	---	5	1	22	1.146
1	7	1	---	19	2	92	4.792
1	2	---	---	24	4	55	2.865
---	---	---	---	2	5	18	.937
---	---	---	---	5	2	11	.573
---	---	---	---	40	---	50	2.604
---	---	---	---	---	---	3	.156
---	---	1	---	8	3	19	.990
---	2	---	---	3	2	17	.885
---	---	---	---	17	7	58	3.021
1	---	1	---	7	2	23	1.198
1	1	2	---	18	6	74	3.854
4	5	5	---	124	31	328	17.083
---	2	7	---	28	13	99	5.156
1	1	---	---	46	12	123	6.406
---	---	---	---	4	2	7	.365
---	---	2	---	8	1	30	1.562
1	1	1	---	14	7	80	4.167
---	---	6	---	13	4	48	2.500
---	---	1	---	4	4	39	2.031
---	---	2	---	22	7	61	3.177
---	---	1	---	3	---	7	.365
---	---	2	---	9	1	36	1.875
---	---	---	---	---	1	4	.208
---	---	1	---	16	1	75	3.906
2	3	1	---	167	59	609	31.718
2	13	---	---	206	14	354	18.437
1	9	---	---	68	32	225	11.719
---	3	---	---	13	5	67	3.490
3	25	---	---	287	49	646	33.646
---	1	---	---	11	1	30	1.563
---	1	---	---	3	---	20	1.042
---	1	---	---	4	---	12	.625
---	---	---	---	41	3	65	3.385
---	2	---	---	59	4	127	6.615
1	27	3	1	684	158	1,920	100.000

Table No. X
STATE OF NEVADA
SURVEY OF HANDICAPPED CHILDREN
NUMBER OF HANDICAPS BY COUNTY AND AGE GROUPS
JUNE, 1952

County	Under 5 yrs.	5 yrs. only	6 yrs. through 16 yrs.	16 yrs. through 18 yrs.	19 and 20 yrs.	Total	Per Cent of total handicaps
Churchill	5	6	90	16	1	118	6.146
Clark	37	14	257	41	5	354	18.438
Douglas	3	---	17	4	---	24	1.250
Elko	10	8	82	16	3	119	6.198
Esmeralda	---	---	3	1	---	4	.208
Eureka	---	---	3	1	---	4	.208
Humboldt	13	5	55	2	---	75	3.906
Lander	1	---	16	1	---	18	.938
Lincoln	6	3	62	8	2	81	4.219
Lyon	2	---	17	8	2	29	1.510
Mineral	13	4	99	10	1	127	6.615
Nye	1	---	23	3	---	27	1.406
Ormsby	1	12	26	10	---	49	2.552
Pershing	4	3	36	7	---	50	2.604
Storey	---	---	1	---	---	1	.052
Washoe	40	15	550	72	7	684	35.625
White Pine	14	8	119	13	2	156	8.125
Total	150	78	1,456	213	23	1,920	100.000

Table No. XI
STATE OF NEVADA
SURVEY OF HANDICAPPED CHILDREN
COMPARISON OF HANDICAPPING CONDITIONS AS REPORTED AND AS ESTIMATED
JUNE, 1952

		REPORTED		
	Total School Enrollment June, 1952	Total Handicapping Conditions Reported Ages 6 to 18 Years	Percentage of Total School Enrollment	Estimated Number Which Should Have Been Reported
Churchill	1,345	106	7.881	181
Clark	13,459	298	.221	1,817
Douglas	411	21	5.109	55
Elko	2,503	98	3.915	338
Esmeralda	75	4	5.333	10
Eureka	182	4	2.198	24
Humboldt	828	57	6.884	112
Lander	337	17	5.045	45
Lincoln	1,071	70	6.536	145
Lyon	935	25	2.674	126
Mineral	1,877	109	5.807	254
Nye	679	26	3.829	92
Ormsby	1,023	36	3.519	136
Pershing	701	43	6.134	95
Storey	104	1	.962	14
Washoe	8,542	622	7.282	1,153
White Pine	2,553	132	5.170	345
Total	36,625	1,689	4.611	4,944

Churchill

A total of 97 children were reported as handicapped in Churchill county, representing 5.62 percent of the total children reported for the state. These 97 children, 77 male and 41 female, were afflicted with 118 handicaps. Only five handicaps were found among Indian children, the balance all being among the white race. Children with 75 handicapping conditions were found to be able to attend regular classes and school. Special instruction is needed for children with 37 conditions, and children with 18 conditions require special facilities. One cerebral palsied minor and one feeble-minded child have been reported as non-educable and eligible only for custodial care.

Table IX showing the breakdown by handicaps indicates that the county has a large group of mentally handicapped children, since 43 handicaps or 36.4 per cent of the total children reported for the county have been so classified. Some physical defects may be the primary cause of certain children manifesting a slowness of learning, but only adequate physical and mental testing would reveal the number erroneously included in the mental group.

On the basis of the school enrollment in June 1952, and the percentage of handicaps as revealed in the California survey, an estimated 181 handicaps should have been reported from Churchill County instead of the 118 actually reported. Thus it appears that a number of children were overlooked or unknown to those reporting.

Clark

The children reported by Clark County represented 18.424 per cent of the state total or 318 of the 1726 reported. Male children were affected in 229 cases and female in 125 cases of the total of 354 handicapping conditions. Three cerebral palsied children and six feeble-minded were reported as uneducable and eligible for custodial care only. Special instruction is needed for the children afflicted with 197 handicaps, and special facilities for 114. Of the total handicaps, 334 were found among white children.

The 22 vision defectives and 23 hearing defectives indicate that special classes for these children are probably a necessity within the county. The 99 mental defectives represent 27.9 per cent of the total handicaps reported for the county. The reporting of 67 speech handicaps reveals that many children with handicaps were not reported as the speech survey of 1951 in Las Vegas revealed over 400 children needing speech therapy. Over one-third of the cases reported had orthopedic or systemic handicaps, many of whom need special school or special classes.

An estimated 1,817 handicapping conditions should have been reported from Clark County. The discrepancy in figures indicates that the conditions reported covered only about one-fifth of the children afflicted.

Douglas

Douglas County reported 24 children with 24 handicapping conditions. In eleven cases the children can attend regular classrooms, but thirteen children need special instruction and eight of them need special facilities. Only four of the handicaps are found in girls. Seven Indian children were reported. Almost half of the handicaps were classified as mental, with seven of the eleven children in this group being mentally retarded. This again reveals the necessity for an adequate testing program to determine the cause of the retardation.

Only 24 handicapping conditions of an expected 55 cases were reported, thus indicating a reporting of less than 50 per cent of the estimated handicaps.

Elko

Elko County reported 106 handicapped children who were afflicted with 119 handicaps. Two cerebral palsy and four feeble-minded cases were classified as eligible for custodial care only. Children with 55 handicaps can attend regular classes, but 54 handicaps require special instruction and 35 require special facilities. Indian children accounted for 33 of the handicaps, which is the largest group of Indians reported in the state, and represented 27.8 per cent of the total cases in the county.

The seven cases of vision defects and ten of hearing defects indicate a probable need for a special class for each of these groups in the county. One-fourth of the cases reported were classified as mental defectives.

An estimated 338 handicapping conditions should have been reported instead of the 119 conditions actually reported. Again incomplete reporting is indicated.

Esmeralda

Esmeralda County reported four handicapped boys, of whom one was Indian. Children with three of the conditions require special instruction and one special facilities.

The four cases reported represent 40 per cent of the estimated cases which should have been reported. The survey indicates that the school districts of this county have an insufficient number of handicapped children to conduct special classes. Some home instruction might be effectively used. It appears that the regular teacher will have to assume the responsibility for instruction of these children.

Eureka

Two white boys and two white girls were reported as handicapped by Eureka County. These children had four handicapping conditions, of which one would allow satisfactory progress in the regular classroom. Three of the conditions necessitated special instruction and two special facilities. Three of the conditions have been classified in the mental group.

An estimated 24 handicapping conditions should have been reported from this county.

Humboldt

The County of Humboldt reported 67 handicapped children afflicted with 75 handicaps. Mental defectives account for sixteen of these handicaps, of whom one is feeble-minded but may be educable. Defects of vision and hearing account for twelve and nine handicaps respectively.

The 75 conditions reported represent 67.5 per cent of the expected reporting of 111 handicapping conditions based upon the June 1952, school enrollment.

Lander

Of the 18 handicapped children reported in Lander County, six or one-third were classed as mentally handicapped. One feeble-minded child was reported as non-educable. Five children were reported as speech defectives and five as orthopedically or systemically handicapped. Two children were classed as partially-seeing. Special instruction is needed in six cases, and special facilities in four cases. Of the eighteen handicaps reported, children with ten handicaps can be taught satisfactorily in regular classes.

An estimated 45 handicaps should have been reported instead of the eighteen actually reported. Again, there is definite evidence of either failure to report, a lack of understanding, or a lack of contact with handicapped children.

Lincoln

Lincoln County reported 62 handicapped children who are afflicted with 81 handicapping conditions. These conditions are found in 22 cases and girls in 40 cases. Three children have been reported as non-educable. Of the handicapping conditions, children with 33 handicaps can be successfully handled in regular classes, but children with 26 handicaps require special instruction and those with 22 require special facilities. Only three of the children are not of the white race.

The estimated number of cases which should have been reported from Lincoln County total 145. Less than 56 per cent of the expected number of cases were actually reported.

Mineral

Mineral County reported 111 children as handicapped by 127 conditions. In five cases Indian and in four cases Negro children were afflicted, the balance being white. Seventy-one handicaps were found among boys, 56 among girls. Of the total defects reported, 34 were classed as mental. Sixteen rheumatic fever cases were reported among the total of 32 orthopedic and systemic handicaps.

Among the seven vision and six hearing cases, one was totally blind and two totally deaf. Five cases were reported as non-educable. Regular class attendance is possible in 45 cases, but 70 cases require special instruction and 38 cases special facilities.

The number of cases reported is exactly 50 per cent of the estimated number of handicapping conditions within Mineral County.

Nye

Of the 26 handicapped children reported from Nye County, one was afflicted with two handicapping conditions, making a total of 27 handicaps reported. Twenty cases affected boys and seven affected girls. Indian children were afflicted in eight of the 26 handicaps. In seventeen cases the handicaps do not prevent attendance in the regular classroom. However, nine cases require special instruction, and four cases require special facilities. Slightly more than 50 per cent of the conditions reported were classed as orthopedic or systemic. Only five cases were reported as mentally defective.

The 27 conditions reported are slightly less than 30 per cent of the expected total of 92 cases.

Ormsby

Ormsby County reported 41 children as being afflicted by 49 handicapping conditions. White children were affected in 35 conditions, and Indian children in fourteen. No children were reported as non-educable, and 36 conditions would not prevent regular class attendance. Of the remaining 13 cases, all required special instruction with 5 cases requiring special facilities. Nine defects of vision were reported with one child being blind. Only three cases of mentally defective children were reported, which is unusually low compared to reports from other counties.

An estimated 138 handicapping conditions exist in the county of which the reported 49 represent only 35.5 per cent.

Pershing

Pershing County reported 50 handicapping conditions afflicting 46 children. Three of the conditions were found among Indian children. Thirty-four conditions were found among boys, whereas only sixteen were found among girls. One-half of the cases, or 25, were classed as mentally defective, of which three were classified as feeble-minded, but were not considered as non-educable pending adequate mental testing. Another sixteen conditions were orthopedic in classification. Regular classroom attendance can be continued by children afflicted with seventeen of the conditions. The children with the remaining 33 handicapping conditions require special instruction, and 27 require special facilities.

Slightly more than 50 per cent of the estimated 95 handicapping conditions existing in the county were reported.

Storey

Storey County reported one partially-seeing child. The boy is of school age. An estimated fourteen handicapping conditions should have been reported.

Washoe

Washoe County reported a total of 630 children, 36.514 per cent of the entire state total. These 630 children were afflicted with 684 handicapping conditions, of which 435 were affecting boys and 249 affecting girls. In fifteen cases the children were Indian, and in five cases, Negro. In only 187 cases were the handicapping conditions such that the child could attend regular classes. Nine children were reported non-educable. Of the remaining 488 conditions, 473 require that the children receive special instruction, and 155 special facilities. Of the total of 684 reported handicaps, 287 were classed as mentally defective of which 206 were slow-learning, 68 mentally retarded, and thirteen feeble-minded. Orthopedic conditions accounted for another 117 and systemic conditions for 50 cases. The highest ratio of speech cases was reported by this county reporting a total of 124 cases. A total of 59 neurological disorders was reported, which is several times higher than reported by any other county. Vision defects, including three cases of blindness, accounted for 28 conditions. Hearing defects, including five cases of deafness, accounted for 19 of the reported conditions.

Washoe County reported almost twice as many handicapping conditions as any other county, yet only [illegible] per cent of the estimated total of 1,153 existing conditions was reported.

White Pine

White Pine County reported a total of 143 children who were afflicted with 153 handicapping conditions. Handicaps affected 93 boys and 63 girls, of which 149 were of the white race and seven of the Indian. Forty-nine conditions were classified as mental defectives, including five cases reported as trainable-minded. Orthopedic and systemic conditions accounted for 59 of the reported conditions, of which 43 were orthopedic and 16 systemic. Eleven partially-seeing cases, one hard-of-hearing case and one blind case were reported. Only 31 speech defectives were included. Of the 156 conditions reported, four will attend regular classroom attendance. Of the remaining cases, 87 need special instruction, and 56 special facilities.

An estimated 345 handicapping conditions exist in White Pine County. The 156 conditions reported are only 45 per cent of the expected reporting.

State of Nevada

The same comparison made on a state-wide basis as has been made by each county, reveals that 1,726 children were reported to be afflicted by 1,920 handicapping conditions. As in [illegible] boys predominate by a ratio of 1,184 conditions to 736 conditions among girls. Contrary to [illegible] comparatively few conditions were found among non-white children, with 1,780 conditions found among whites and only 140 among Indians, Negroes, and others. Of the 1,920 handicapping conditions, children with [illegible], or 38.8 per cent, can be satisfactorily handled in regular classrooms. Forty cases or slightly over 2 per cent of the conditions make the children non-educable. Of the remaining conditions, 1,003, or 56.9 per cent of all cases require that the children receive special instruction and 515, or 26.8 per cent of all cases, special facilities, such as classrooms, building entrances, equipment or materials.

On the basis of the total school enrollment in June 1952, and the percentage of conditions as revealed by the California survey of April 1951, a total of 4,944 handicapping conditions should exist among the school children of the state. The total of 1,689 reported conditions in the school age groups is only 34.2 per cent of the estimated handicapping conditions which should be found among school age children of the state.

Summary

The comparison of the various programs on state and district levels with the actual need as revealed by the survey of June 1952, reveals the definite need for a state-wide program of education and health care. The present health programs need some expansion to provide more adequate testing facilities for detection of physically and mentally handicapped children, but the education program must be greatly expanded to meet the urgent need.

The thirteen blind and deaf children now being assisted by the state represent only .7 per cent of the total number of children reported as handicapped and 1.1 per cent of the total number of conditions requiring special instruction and/or facilities for adequate education.

The larger school districts have endeavored to meet the demands of parents and the needs of the children, but lack of funds has limited their programs to a very small number of children compared with those needing assistance. Small school districts have no program for those needing special instruction or facilities, although some teachers have extended every teaching aid available in an attempt to meet individual problems.

Although the survey does not reveal as many children as it should when compared to other surveys and estimates, it does prove the need for additional state aid to school districts and to the state health department that an adequate program may be established. The education and health care necessary to make handicapped children self-sustaining to the limit of their handicaps costs only one-tenth of the cost of the assistance necessary through welfare and institutional care.

CHAPTER IV

RECOMMENDATIONS

Introduction

A program of special education and health care for the State of Nevada must be based upon the needs of the state. The survey of handicapped children has definitely revealed an immediate need for meeting the problems of these children.

Nevada is peculiar in its distribution of population over an extensive area with only a few large centers of population. It is also peculiar in its school district form of school organization; most of the western states have a county school administration supervising the individual school districts of the county. These two special situations preclude the recommendation of programs which have been found successful in other states wherein special facilities or special teachers are furnished on a county-wide basis. However, certain definite recommendations are justified by the study of other state programs and the survey of the State of Nevada.

Special Education and Facilities

The 1959 Legislature of the State of Nevada should pass enabling legislation which will permit individual school districts to establish special educational programs and to provide special school or classroom facilities. Such programs should meet minimum standards established upon a state-wide basis. Appropriations should be made to meet the excess cost of the program to the school districts which satisfactorily establish and maintain such a program.

Required revision of the Nevada School Code

The Nevada school laws should be amended so as to provide for the education of handicapped children. It is recommended that a special chapter be added to the school code defining a handicapped child for educational purposes, empowering school boards to determine their districts' need and to establish programs, determining school or class entrance age limits, providing transportation in certain situations, empowering the state superintendent of public instruction and the state board of education to prescribe minimum standards for district programs, authorizing the state superintendent of public instruction to withhold excess cost apportionments from districts failing to meet minimum standards, and defining the hours of daily instruction and computation of average daily attendance. It is also recommended that the sections of the existing code providing for apportionment formulas for elementary and secondary schools be amended to provide specific apportionment formulas to cover the special educational program, and that the word contiguous be deleted wherever it appears in the school law relating to inter-district contracts.

The first section of the new chapter should define a handicapped minor eligible for special education benefits as one who, by reason of physical or mental impairment, cannot receive the full benefit of ordinary educational facilities. Handicapping conditions include inadequacies of vision, and hearing, or speech, and orthopedic, mental, neurological, cardiopathic, tuberculous, or other physical conditions which have or will produce physical disability. Suggested wording for this section is:

> Definitions. Subject to the provisions of this act, the governing board of any school district or county high school may make such special provisions as in its judgment may be necessary for the education of physically or mentally handicapped minors. "Physically or mentally handicapped minor" as used in this act means a physically or mentally defective or handicapped person under the age of twenty-one years who is in need of education. Any minor who by reason of physical or mental impairment cannot receive the full benefit of ordinary educational facilities shall be considered a physically or mentally handicapped individual for the purposes of this act. Minors with visual, hearing, speech, orthopedic, mental, neurological, cardiac, and tuberculous disorders or defects or other physical conditions which have or will produce physical disability shall be considered physically or mentally handicapped.

The second section should provide for the establishment of rules and regulations by the governing boards of schools for the operation of the program. These rules should be subject to the minimum standards established upon a state-wide basis. Under this section any governing board would be empowered to use as much or as little of the state-wide program as meet the particular need of the district or school, taking into consideration the number of children, types of handicaps, available classroom facilities and financing. A suggested wording for this section follows:

> Education of Handicapped Minors. The governing board of any school district or any county high school may establish uniform rules of eligibility for instruction under the special education program herein provided.

The third section of the act should make specific exemption of those children who are receiving adequate educational opportunity from private sources. Parents or guardians should be required to file an affidavit or statement setting forth the facts of the situation with the governing board of the school which the child would attend if not privately educated. Suggested wording follows:

> Exceptions by Means of Statements. No minor shall be required to take advantage of the special provisions for the education of physically or mentally handicapped minors, if the parent or guardian of the minor files a statement with the governing board of the school district or county high school showing that the minor is receiving adequate educational advantages.

Provision should be made in the fourth section for the transfer of handicapped children from one school district within a county to another district. This provision is necessary to allow eligible children to be domiciled and to attend school in districts other than the one of their legal residence. State aid under this program, the state average daily attendance apportionment, and the county apportionment would go directly to the district of attendance. The district apportionment from taxes received on the assessment rolls could be absorbed by the district of attendance, or an agreement for payment of tuition could be made under the provisions of the school law governing such payments of tuition. Suggested wording for this section is:

> Residence. Any school district furnishing education to physically or mentally handicapped minors shall furnish such education to any resident handicapped minor or child of the county in which said district is located.

The fifth section should establish the minimum age of admittance to the benefits of the program. The blind and deaf, and victims of cerebral palsy have responded best in programs in which special education is started at three years of age, and many states have begun educational programs for them at the age of three. This provision in the law would not make it mandatory that a school district include children of such age, but would allow those districts, which were able, to establish programs for younger children. The following wording for the section is suggested:

> Age of Admittance. Handicapped minors may be admitted at the age of three years to special schools or classes established for such minors, and their attendance shall be counted for apportionment purposes as if they were already six years of age.

The locations of instructional facilities should be set forth in section six of the new chapter. School boards should provide for instruction in homes, hospitals, and sanitoriums for children confined to such places, and should provide for special schools or classes in existing school buildings, in buildings erected particularly for this purpose, or in suitable rented quarters. The erection of school buildings specifically for this purpose must be governed by existing law relative to elections and bond issues. Suggested wording is:

> Location of Instructional Facilities: Physically or mentally handicapped minors may be instructed in special ungraded schools or special ungraded classes, in hospitals, sanitoriums, or preventoriums, or in the home through the employment of home instructors, by cooperative arrangement with the division of vocational rehabilitation of the state department of education. Governing boards of schools are hereby authorized to set apart any school building or buildings or any room or rooms in any school building or buildings for the establishment of special or ungraded schools or classes for the instruction of handicapped minors. Governing boards of schools are also authorized to purchase sites and erect buildings for such purposes, in the same manner as other school sites or school buildings may be purchased or erected, or governing boards of schools may rent reasonably suitable property at an economical rental for special or ungraded rooms without being so directed by vote of the district, or governing boards of schools may accept gifts or donations of sites and buildings for such purposes.

Some states have made mandatory the furnishing of transportation for all handicapped children who cannot walk to school and for those who must walk more than one mile to school. Such a provision in this state, with its problem of distances, could prove a financial barrier to successful administration of a program by a school district. A provision permitting the local district to make the decision as to the furnishing of transportation would not impose added financial burden; still it would permit districts to furnish transportation when advisable. A suggested wording for the seventh section of the proposed chapter is:

> Transportation. The governing board of any school district or county high school may provide for the transportation of pupils assigned to special schools or classes for physically or mentally handicapped pupils.

The eighth section of this chapter should provide for the establishment of minimum standards by the state department of education. Provision should be made authorizing the superintendent of public instruction to withhold apportionments of state funds for this purpose to any district which fails to comply with the minimum standards. Only through establishment of state-wide standards can a program of this type prove successful. The following is suggested wording:

> Standards. The State Department of Education shall prescribe minimum standards for special education of physically or mentally handicapped minors, and no apportionments of state funds shall be made by the superintendent of public instruction to any school district on account of the instruction of physically or mentally handicapped minors until the program of instruction maintained therein for such handicapped minors is approved by the State Department of Education as meeting the prescribed minimum standards.

A section should be included establishing the computation of attendance for the purpose of average daily apportionments under this program. In all programs of this type the number of hours of instruction have been reduced from the standard hours of regular classes. Much of the instruction is on an individual or small class basis, with a much greater amount of time being given proportionately to these children than those in regular classes. Furthermore, the reduced activity schedule of many of these children prohibits long hours of study. Most states have adopted four hours of special class instruction or one hour of individual instruction as being equivalent to one day of attendance. With the peculiar problems of Nevada relative to population distribution and distances to schools, it appears advisable to leave the determination of this standard to the State Board of Education. By so doing, inequities which might arise could be adjusted by that board. Suggested wording for the ninth section is:

> Computation of Attendance. The State Board of Education shall establish rules and regulations for the computation of average daily attendance of pupils enrolled under the provisions of this act.

A final section to this chapter should provide for annual attendance reports similar to those now filed for regular classes. Suggested wording for section ten is:

> Reports of Attendance. The attendance of all physically or mentally handicapped pupils instructed in accordance with the provisions of this act, including those instructed under cooperative arrangements with the division of vocational rehabilitation of the state department of education, shall be reported annually together with all other attendance on forms provided by the superintendent of public instruction.

Proper administration of a program of this type in the best interest of the children requires provision for the transfer of children from one district to another both within the county and from county to county. Section four of the proposed new chapter provides for the transfer of children from one district to another within the county, but does not provide for inter-county transfers. This problem can be satisfactorily met by striking the word "districts" where it appears in paragraph 13, Section 274, Chapter 31 of the Nevada School Code.[1] This paragraph would then allow agreements between any two school districts regardless of geographical location.

The apportionment formulas in Section 180 of "An act concerning public schools of the State of Nevada, prescribing and defining certain crimes and providing punishment therefore, and repealing certain acts and parts of acts relating thereto," approved March 15, 1947, as amended and being Section 4 of Chapter 113, Statutes of Nevada 1951, must be amended to provide an apportionment basis for this program for both elementary and secondary school levels. Section 2 should have a paragraph (c) added, which would provide for a recommended $100.00 apportionment for each physically or mentally handicapped child in average daily attendance. This paragraph might read:

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[1] State of Nevada, 1947 School Code as amended, 1951, p. 114.

In addition to the regular apportionment for each pupil in average daily attendance as provided herein, he shall apportion on a per capita basis from the state distributive school fund $100.00 for each physically or mentally handicapped minor pupil in average daily attendance, as shown by the last preceding annual school report.

Likewise Section 181.04 of the same act, being section 181.04 of Chapter 63, Statutes of Nevada 1947, should be amended by an addition of Section 3, which might read:

In addition to the regular apportionment for each high school teacher unit as provided herein, he shall apportion on a per capita basis $100.00 for each physically or mentally handicapped pupil in average daily attendance as shown by the attendance report for the last preceding school year.

These two additions to the apportionment formulas would adequately provide for all types of handicaps with the exception of speech. Speech correction presents a peculiar problem in that in most cases the child is in a regular classroom unless otherwise handicapped. The average speech handicapped child should continue to be in regular classrooms, but the proposed additions to the apportionment formulas do not provide for salaries of speech therapists.

Speech therapy is based upon a recommended twenty-five minutes of individual or class instruction, with classes no larger than six pupils of like condition and similar ages, three times weekly. Under present conditions in the only functioning speech program in the state, the child receives about twenty minutes of instruction weekly. Because of the special requirements for speech therapy, it appears that the State Board of Education might work out some means of determining an average daily attendance computation; or with assistance in providing for other fields of handicaps, local school districts may be able to absorb the cost of this phase of the special program.

Appropriation

The state superintendent of public instruction has included in his budget for the biennium 1953-1954 a request for $124,162.50 to cover the elementary and $17,737.50 to cover the secondary apportionments anticipated with passage of this program. These amounts appear to be very conservative when considered in relationship to the total number of known children revealed by the state survey. The request amounts to less than twenty-five per cent per year of the total of the apportionment for each unit of average daily attendance multiplied by the total number of handicapped children of school age revealed by the survey. Approval of the appropriation is definitely recommended.

In-service-training for teachers

Much of the effectiveness of this program will depend upon the regular classroom teacher. Small school districts with very few handicapped children cannot provide a program for all the different handicaps which may affect children of the district. Some districts may be able to contract with other districts for furnishing the needed instruction. Some districts may be able to hire jointly and on a proportionate financial basis a specially trained teacher or teachers to provide the needed instruction. However, in all cases in which the child continues to receive instruction under the regular classroom teacher, much of the success of the program depends upon the understanding of the condition and proper instructional methods.

It is recommended that the State Department of Education provide a program of in-service-training for teachers throughout the state in the basic requirements of each type of handicap and the instructional methods used to teach children with such handicaps. It is not intended that such a training program would prepare teachers for certification in the various fields of special education, but that the program would provide sufficient teacher knowledge that the work begun by specialists would be carried on in the regular classroom. An in-service-training program might be coordinated with a university extension program and the allowance of credits to meet the existing regulations of credential renewals.

University teacher training program

The need for specially trained teachers to fill the requirements of the proposed special education program places a responsibility upon the University of Nevada to properly train teachers. Cadet teachers should be required to take some basic courses in methods of teaching handicapped children, so that future teachers of the state will

have a working knowledge of the methods of teaching these children. Courses should be provided in summer sessions for those teachers now employed so that they may prepare themselves for this work, or may obtain more technical instruction than can be given in the in-service-training program. The program of teacher training must be set up to meet the particular needs of this state and not to attempt to provide specialists in every field of instruction for the handicapped.

Teacher certification

Those states with comprehensive programs in the field of education of handicapped children require all special teachers to be certified in the particular field of handicap in which they teach, i. e., blindness, deafness, speech abnormality, cerebral palsy, etc. Several states require that all regular classroom teachers produce evidence of a minimum number of hours of instruction in the general field of instruction for the handicapped to secure regular kindergarten, elementary, or secondary certificates. It is recommended that the State Department of Education review the regulations governing the certification of teachers and revise those regulations to provide the necessary adequately trained teachers for this special program.

Vocational rehabilitation program

At present a lack of funds limits the vocational rehabilitation program to adult cases. Since the program of special education is aimed at making handicapped children productive members of the community, it appears that the benefits of vocational rehabilitation should be extended to those minors needing job training. The provisions of the recommended new chapter to the education code provides for cooperation of public school officials and the Division of Vocational Rehabilitation. Such cooperation can only be effective provided the Division has additional funds to extend its services to minors. It is recommended that funds be made available for this purpose. Such funds should come from the appropriations for the division.

Nevada Employment Service

It is recommended that the Division of Vocational Rehabilitation and the Nevada Employment Service cooperate in the placing of adequately trained handicapped minors. Some states have written mandatory provisions for such cooperation into law, but it appears that the present cooperation between these agencies on an adult level can easily be extended to cover employable minors.

Mental testing program

The comparatively high percentage of mentally handicapped cases reported makes a mental testing program mandatory to determine the true causes underlying these cases. A program of testing by trained professional personnel is prohibitive at present; however much of the testing can be done on the local district level. All of the larger school districts can arrange means of roughly screening sight and hearing defectives. Many districts could find teachers who have had courses in tests and measurements with training in giving mental tests, and who could give standard intelligence tests. Thus a rough screening could be made.

For more detailed testing, children who appear to have defects as a result of the tests in the schools must be referred to professionally trained personnel. Children with low mental capacity as a result of the school test should be examined by psychologists or psychiatrists. Two possible methods of obtaining such mental testing present themselves; one, reactivation of the mental health program of the state department of health with sufficient funds to hire a psychologist or psychiatrist on either a full or part-time basis; second, examination by members of the staff of the psychology department of the University of Nevada or by senior psychology majors under direction of staff members. It is recommended that the school administrators work out an adequate program of testing in conjunction with the State Department of Health or the University of Nevada.

Summary

A program of this type and size will take several years to reach maximum effectiveness. Time will be needed to train special teachers and to train regular classroom teachers to supplement work of the specialists. A beginning should be made now to provide handicapped children with an education which will lead toward their eventually being self-sustaining members of the community within the limitations of their handicaps. Immediate establishment of this program can brighten the future of these children.

Special Health Programs

The program of special health services for handicapped children has been well started in the State of Nevada. The Crippled Children's Services, including the Rheumatic Fever Program, has been efficiently administered by the State Department of Health, and has provided much needed services to eligible children. However, an educational program for handicapped children requires additional services from the State Department of Health. These services are needed for better detection of handicapping conditions, better determination of the extent and degree of handicapping, and more extensive treatment of cases which will benefit therefrom. Close cooperation will be required between the State Department of Health, local health departments, and school administrators because all children seriously falling behind regular class progress should be examined physically and mentally to determine the cause. Such examination and corrective treatment should be furnished by the state or county should parents be unable to meet the expense.

Children's Clinics

The Crippled Children's Services, including the Rheumatic Fever Program, has conducted clinics throughout the state during the past years and has recommended and paid for health services as needed. However, the Mental Health Program has not been operating because of lack of funds. Under a program of special education for handicapped children, it is necessary to have available to school administrators an adequate working program for the detection and treatment of both physical and mental handicapping conditions.

It is recommended that in the future children's clinics be continued on schedule and that competent personnel for testing and counselling the mentally handicapped be included as regular members of the clinic team. The present regulations excluding "in-patient" treatment for the mentally and neurologically handicapped children should be amended to include such treatment when recommended by the clinic team.

Appropriations

Careful analysis of the proposed budget of the State Department of Health and the services which have been furnished in the past reveals that little additional money is needed to enable the Department to increase its services to meet the increased patient load.

The Crippled Children's Services has been furnishing adequate surgical treatment for children with slight defects, some physiotherapy and surgical treatment for children with orthopedic handicaps, and medical treatment and hospital or foster home care for children with systemic conditions. Under the proposed program, testing and surgical or medical treatment of children with hearing defects will be included together with surgical treatment for children with speech defects.

The proposed Crippled Children's Services' budget for the 1953-1955 biennium of $100,000 will provide all of the necessary services to children eligible for the benefits. It is strongly recommended that the State Department of Health be given this amount for its crippled children's program.

The State Department of Health has asked for $25,000 for reactivation of a Mental Health Program, which is included in its budget request for the Division of Preventive Medical Services. The amount appropriated will be matched by the federal government on a basis of fifty cents for each state dollar. A total of $37,500 would thus be available in the 1953-1955 biennium for the Mental Health Program for both adults and children. This appropriation would permit the State Department of Health to hire an adequately trained psychiatrist, or two clinical psychologists, or one clinical psychologist and one psychiatric social worker. With these trained persons testing and counseling, school supervisors could make arrangements for those children needing special attention who are now neglected because of inadequately trained personnel (in the local school districts).

When one considers the number of children who need mental testing and the amount of salaries which must be paid, one recognizes how conservative is the request for $37,500. It is recommended that the appropriation for this purpose be made.

Summary

The State Department of Health does not expect this program to meet the maximum demand for health facilities for all handicapped children; rather, it is concerned with a conservative beginning which will prove the worth of the proposed program.