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The education of crippled children

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Thesis

THE EDUCATION OF CRIPPLED CHILDREN

Submitted by

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The problem of the crippled child is not a new one, but society's recognition of the problem and realization of the importance of education in its solution is an entirely modern trend. It is necessary to compare with the present day practices only a few of the plentiful illustrations of earlier attitudes toward the cripple to realize the truth of this statement.

In the introduction to his "Bibliography of the Care and Education of Crippled Children" published in 1913, Douglas McMurtrie stated that there was a deplorable scarcity of literature regarding provision for cripples. (1) Today, though there is much more literature on the subject of the care of the crippled child, surprisingly little of it deals with his education. Because of this fact and the recent rapid growth of educational opportunities for crippled children the attempt is herein made to present a brief history of the movement and its present general tendencies, giving a few typical illustrations, rather than presuming to cover the entire field.

Since the terms "physically defective" and "crippled" have been often used synonymously it is necessary to limit the term "crippled" as here used to designate the orthopedic cripple "whose physical handicaps or deformity consist of some defect of the mechanisms which control the motions of the framework of our bodies, the nerves, the muscles, the bones and joints."(2)

(1) McMurtrie Bibliography of the Care and Education of Crippled Children Intro. P. XII

(2) Osgood Progress in the Treatment of the Crippled Child P. 1
The following definition, given by the Educational Committee of Birmingham, England in 1911, describes the cripple as "a person whose movements are so far restricted by accident or disease as to affect his capacity for self-support." (3) The problem of training this "cripple" to fit into his environment, and to become economically independent, is not a simple one.

Facing the Problem

Importance of the Problem

To the Community. The problem of the care and education of the crippled child is vital to society. This may not at once appear evident. As our educational system developed, more learning resulted in a realization of the economic value of education from the standpoint of society. A century ago the question of whether or not a citizen should be taxed to pay for the education of his neighbor's children was still debatable. Today secondary as well as elementary education has, for the most part, become free and accessible to all. Tax payers came to realize that in a democracy "one's economic well-being depended not only upon his own energy, intelligence, and vocational skill, but also upon the general prosperity of his community; that one's political safety depended as much upon the wisdom of his neighbor's vote as upon his own; that one's avocational and cultural satisfactions were conditioned not alone by one's own tastes and capacities, but by the nature of the society in which he must live and move and have his being." (1) If this is true of the able-bodied child how much more is it true of the crippled child who, unable to obtain an education grows up ignorant, unhappy and possibly a burden to society.

(3) Reeves Care and Education of Crippled Children P. 6
(1) Smith Educational Sociology P. 252
For the normal healthy child education is desirable; for the cripple it is necessary, that is unless he is to be a constant charge on the community. From a purely economic standpoint then, society cannot afford to neglect the problem of training the crippled child to fit into his environment and to become economically independent. McMurtie asserted that, judging from the mercenary standard alone, it would pay the state to educate the cripple even at five times the actual cost.

To the Crippled Child Himself

The problem is more vital to the crippled child himself than to society. Those who are not convinced by the economic aspect must surely be moved by an appeal in behalf of the child.

Primitive people cast crippled children out to perish; and more civilized peoples often killed outright, for rationalistic or superstitious reasons, those congenitally deformed. (1) "The early Romans had the right to destroy a deformed child provided the child were shown to five neighbors and their assent secured. In the Twelve Tables the decemvirs extended the authority of the father so that he, individually, could destroy or remove crippled children immediately after birth." (2) Among the Romans also many crippled children were exposed to die on deserts in the woods or on the banks of the Tiber, and those who were saved "became the slaves of those who took them up and succored them and they were intentionally crippled to a greater extent if their deformities when they grew older were not conspicuous enough to render them successful in begging alms for their master's profit." (3).

(1) Sullivan and Snortum Disabled Persons, Their Education and Rehabilitation
(2)-(3) McMurtie Notes on Early History of Care for Cripples

P. 4

P. 32
"Martin Luther shared the belief current at his time, in the theory of changelings. At the birth of an undesirable child it was believed that some diabolical mother had stolen away the right child and substituted her own offspring instead. Thus the child was known as a changeling. Cripples, rachities and cretins were regarded as changelings. The idea was that if such children were maltreated sufficiently their mothers would come again to get them and leave the rightful children in their stead. It is easy to conceive the attitude which such a concept would engender. Luther also regarded malformed children as mere masses of flesh and considered that killing them was a work well pleasing to God." (4)

Besides the rationalistic and superstitious beliefs already mentioned there was also the attitude that the cripple was necessarily feeble minded. Teutonic mythology associated bodily defect with low mental and moral tone. Shakespeare, in "Henry the Eighth", shows a trace of this same attitude toward the cripple when he makes Richard say:

"Then since the Heavens have shaped my body so let Hell make crook'd my mind to answer it."

Today after much study in the field of intelligence testing we have come to the conclusion that crippled children vary in their degrees of intelligence as do physically normal children. In both cases it is wasteful to attempt to give a dull child the education that is suitable for a child of higher intelligence. It is further clear "that children with unimpaired intellects, but disabled only in the activity of their limbs, may be capable of the best development, providing a fitting opportunity is offered them." (5).

(4) Ibid P. 36
Mrs. Humphrey Ward asserted in 1900, from her experience in early English schools for crippled children, "we think that the experience of the new schools has shown, that a large majority of the seriously crippled children are, as a rule, far too intelligent and sensible to be taught with the mentally deficient. The only future chance of these children in life lies in the development of brain and hand power that most of them possess. ———Their brain power, instead of being dragged down by association, ought to be stimulated and increased in every possible way so as to supplement their bodily deficiency. Their hope and the hope of the community with regard to them lies in their intelligence." (6)

This realization that the crippled child is not necessarily mentally inferior to the able-bodied child is comparatively modern and is of great importance in the history of the movement for his education. The following quotation from the annual report of the Massachusetts Hospital School for the year 1920 illustrates this change in public attitude toward the cripple and its significance to educational systems interested in his welfare. "It was thought (at the time the school was founded) that the physical condition of cripples would prevent substantial mental efforts. It seemed, therefore, prudent to avoid any extensive outlay for school accommodations, paying special attention to the needs for the development of the physical condition of the children. Experience of the last ten years has shown that the pupils of the school, partly owing to the well-planned system of short time and intensive study in small classes which has been arranged, compare surprisingly well in their school work with the physically unhandicapped. It seems therefore desirable that more attention should be paid to the necessity for the best possible school equipment as an aid to the mental development of a surprisingly promising class of pupils, and certainly a class which for its success

(6) Ward Invalid Children's Schools P. 8
in the community must rely on mental intelligence and self-reliant, well-trained character more than physical ability." (7)

It is easy to see that the long-cherished attitude of society toward the cripple can have but one effect on the cripple himself and that to foster an inferiority complex resulting in discouragement and failure. The growing tendency is to prevent the crippled child from feeling this sense of defeat because of his physical handicap and to foster the realization that he can make for himself a useful place in the world. The story of the following case, taken from one of many to be found in the annuals of our hospital schools would have read very differently in Roman or even medieval times. "When a very small child infantile paralysis left one boy almost completely paralyzed below his waist. He received no treatment for a number of years and the deformities which occurred were most distressing. Bedridden on admission he is now able to walk with mechanical aid and is actively managing a boot and shoe repairing shop, of which he is proprietor, employing additional labor." (8)

Both for its own good and for the sake of the crippled child society must be educated to give him a chance to prove his ability.

Recognition of the Problem

That the problem of the crippled child is today recognized in America and its importance realized is evidenced by the fact that the professional groups in the fields of social service, public health and education are interested; lay organizations are promoting the cause; and many states are assuming more responsibility.

(7) Annual Report Mass. Hospital School P. 7
(8) Ibid 1917 P. 8
Professional Groups Interested.

The two professional groups about which the movement for the care and education of crippled children must revolve are the medical and educational groups.

We cannot doubt the interest which the medical profession is bringing to this problem when we read in the conclusion to Dr. Robert Osgood's article "Progress in the Treatment of the Crippled Child" the following summary of the recent advance in the prevention of the diseases largely responsible for crippled conditions.

"Let us in conclusion, briefly, and in a very general way, record the actual progress which medicine and surgery have made in the diseases that bulk large in creating the cripple.

1. Rickets is now curable and quickly curable by sunlight and light therapy and the unknown vitamins of cod liver oil. It is entirely preventable and ought soon to vanish.

2. Tuberculosis is largely preventable and amenable, — probably curable in early and some late cases by fresh air, heliotherapy, light therapy, and good food. When once established, if its inroads are not too extensive, and even after it has existed many years, it may be arrested and cured by rest and by surgical procedures which deprive the affected joint of motion. Rarely it may be removed en masse.

3. Our progress in infantile paralysis, which is responsible for crippling more than any other disease, is not so great, for we do not yet know intimately either its specific cause or its usual mode of transmission. We do know, after weary years of patient research, in which this country, and especially the Rockefeller Foundation, has played an important part, that it is caused by an ultra microscopic germ and that it is apparently sometimes transmitted by human contact and by milk. We also know how to
discover it, how to diagnose it in its earliest stages often before the paralysis has occurred, and that probably half the cases infected by this germ never develop any paralysis. We also know far better how to treat it in its acute and convalescent and chronic stages. We know how to prevent unnecessary deformity and we have learned many mechanical and surgical methods of bettering the disturbances of function which result from a severe attack. No page of surgery is brighter than this, but we must find its cause, and search is being made diligently and must be still more diligently made.

4. We have a clearer conception of the methods which bring about the healing of inflammation of bone, osteomyelitis, and an early attack upon the focus of the disease and an aiding of Nature’s defense mechanisms rather than an obstruction of them, especially in growing children, saves these limbs and heals them. We rarely amputate and we expect to cure with perfect function.

5. The causes of chronic arthritis are being discovered. It is an important cause of crippling in children and most important in adults. We have justifiable hope in restoring an early case to normal function and of arresting the more advanced cases.

6. If we teach right living and the people will heed our teaching, Mark Jansen’s ‘feebleness of growth and congenital crippling’ may disappear. We are, therefore, not faint, yet we must strongly pursue.

In the words of that progressive pioneer, Dame Agnes Hunt, ‘a great society should be formed whose aim should be to remove the bread from the mouths of orthopaedic surgeons and nurses by stopping at its fount the supply of cripples, and the people who will most whole-heartedly join this society are those same surgeons and nurses.’ (1)

(1) Osgood Progress in the Treatment of the Crippled Child P. 11-12
That the educators of the day are awake to the problem of the crippled child is evidenced perhaps most forcibly by the fact that the World Federation of Education Associations has scheduled a section on the physically handicapped for their meeting in Geneva in August 1929, and has extended an invitation to the International Society for Crippled Children to cooperate in this program.

Lay Organizations Promoting the Cause

Inestimable good has been accomplished, especially in educating the public to its responsibility. Rotary, Kiwanis, Lions, and Women's Clubs as well as fraternal organizations like the Masons and Elks have done much in this respect. "They are bringing this concealed problem out into public view. In doing this, they are gradually moving the legislative and administrative agencies of the various commonwealths into action—they are humanizing political machinery." (2)

State Responsibility

Typical of the increased responsibility being assumed by states is the recent recommendation of Governor Allen of Massachusetts for a state-wide census of crippled children to ascertain those who are not receiving proper care and education. (3)

(2) Allen "The Problem of the Crippled Child" P. 3

(3) News Item Boston Herald Feb. 7, 1929
History of the Movement

for the Education of Crippled Children

Today society is conscious of the problem of the crippled child and aware that education must play a large part in its solution. How is society facing the problem of educating the crippled child? Before attempting an answer to this question it will be well to trace the history of the movement for the care and education of crippled children and make clear the present trends.

General Development

In England in 1601, during the reign of Queen Elizabeth, the first law providing for any care of cripples was passed. Cripples were included among those offered asylum care by the first Poor Relief Act. (1)

It was in the eighteenth century that the outlook for the cripple became more hopeful, but even then the progress was extremely slow. "Some of the monasteries which had not been utilized since the time of the Reformation were thrown open and converted into orphan asylums, mad houses, or penitentiaries. In the establishment of the various institutions the cripple was frequently considered. The actuating motive in many cases however was utilitarian in character. One object was that all cripples might be confined so that they should not annoy the community by their deformed appearances." (2)

(1) Abt The Care, Cure and Education of the Crippled Child P. 9

(2) McMurtrie Notes on the Early History of Care for Cripples P. 36-7
In 1632, two hundred and thirty years after the passing of the English law, John Hopimak opened the first institution in the world exclusively for crippled children, The Royal Bavarian School and Home for Crippled Children. The movement now began to spread from Germany to America, France, England, Switzerland and Denmark.

The period from 1691 to 1900 was characterized by a rapid growth in the movement for the cripple, and a rise of public responsibility for the work. The first state hospital for "indigent crippled and deformed" was established in Minnesota in 1897. This hospital was later named the Gillette Hospital for Dr. Arthur J. Gillette who was largely responsible for its establishment. Massachusetts, New York, Indiana, Wisconsin, Nebraska, Iowa, and North Carolina soon established hospitals of a similar type as the idea of public responsibility spread.

The period from 1900 to 1912 saw the entrance of private activity into the field; but though work was much stimulated there was little if any cooperation between individuals and agencies interested. The end of this period found many forces working for the cripple but in a disconnected and therefore ineffective manner. McMurtrie, writing in 1913, noted the absence of interchange of experience in the work and was impressed with the scarcity of material on the education and care of crippled children. In order to discover institutions for crippled children outside of New York it was necessary to make a careful search through public documents both in this country and in foreign countries. After locating about a dozen institutions in different parts of the world it was necessary to carry on personal correspondence with them to secure further data.

(3) Abt, The Care, Cure and Education of the Crippled Child, P. 9

(4) Sullivan and Snortum, Disabled Persons, Their Education and Rehabilitation, P. 63
In 1912 a new period in this development began, that of more scientific study and cooperation. From these two advanced tendencies came a third, an important step in the improved status of the crippled child, state legislation. In 1912 the Russell Sage Foundation began a survey which lasted two years and was the first scientific study of methods and standards. The findings were published in 1914 in "Care and Education of Crippled Children" by Edith Reeves, the first non-medical work in this country to be devoted entirely to the problem of the crippled. (5)

The private and newer public institutions had been growing up entirely independent, in some cases ignorant, of each other's existence. The importance of uniting scattered individual effort and securing cooperation between groups now became evident as a result of the more scientific study of the problem. This study alone did much to promote the cause but two other forces were at work which share the responsibility for the growth of the movement at this time. They were the hospital system of the Mystic Shrine of the Order of Masons and the International Society for Crippled Children established by the Rotarians.

The work of the former organization will be sketched very briefly since its main interest is the medical and surgical care of the crippled child. The work of the Masons was inaugurated by W. Freeland Kendrick of Philadelphia, who in 1919 was Imperial Potentate of the Order of the Mystic Shrine. Although the plan of one immense hospital for crippled children was at first contemplated it was finally decided to build several in different parts of the country. In 1925 there were seven Shrine hospitals in operation and two more were being built. These institutions, though in

(5) Sullivan and Snortum P. 12

Disabled Persons, Their Education and Rehabilitation
important centres, were widely scattered over the country. Local temples of the order also took up the work for crippled children, and the Masonic order may be considered one of the chief factors contributing to the acceleration and growth of the movement in recent years. (6)

The International Society for Crippled Children has been much interested in the educational side of the problem. It has done much to arouse public interest, increase cooperation and secure legislation in behalf of the cripple. The society was formed to correlate the state societies being founded by the Rotary Clubs, the first of which had been established in Elyria, Ohio, in 1919 largely through the efforts of Edgar F. Allen, now the President of the International Society. Through the joint efforts of A. S. Fitzgerald and Edgar F. Allen, the Ontario Society for Crippled Children was formed in 1922. Although progress in Canada has been slow during the past six years it has, nevertheless, been steady. Ontario already provides special education for crippled children and will do more as the movement progresses. (7)

Rotary Clubs in many states have taken up the work in our own country and interest has spread rapidly. At the seventh annual convention of the International Society, held in Memphis, Tennessee in February 1928, twenty-four states and provinces were represented. "The subject of the education of cripples was discussed from the standpoint of the degree to which physical work should be carried on in special classes in public schools; the part which the school can and should take in the employment of its pupils through vocational guidance and cooperative social service;"

(6) Sullivan and Snortum Disabiled Persons, Their Education and Rehabilitation P. 65-6

(7) Martin The Work of the Ontario Society for Crippled Children P. 83-4
the part the state can play through a coordinated program, including the
interest of all public and private agencies touching the problems of the
physically handicapped." (8)

Since the 1926 convention new state societies have been formed
and it seems probable that there will be a larger representation at the
eighth annual meeting of the International Society which is to be held in
Minneapolis in March 1929.

A significant notice appeared in the News Bulletin of the Inter-
national Society for July 1926. "Daddy Allen has just returned from the
Convention of Rotary International still more thoroughly convinced that the
movement in behalf of crippled children is destined to reach all parts of
the civilized world. Plans were laid, after the special assembly on crippled
children, to organize in the immediate future state and provincial societies
for crippled children in Nova Scotia, British Columbia, Washington, Oregon,
Montana, Idaho, Texas, and the province of Nueva Leon, Mexico. European
delegates expressed a great desire to cooperate in the meeting for crippled
children in Geneva. This will be a great stimulus to the further development
of this world-wide movement." (9)

Much state legislation has been the result of this new attitude
toward the cripple and the cooperation in his behalf. In 1907 Massachusetts
established a state hospital school. Ohio and New York have formulated
decentralized state programs for the education of the crippled child. Between
1916 and 1921 legislative provision for teachers of special classes was made
in New Jersey, Wyoming, Missouri, Pennsylvania, and Minnesota. (10)

(8) The Memphis Conference P. 121
(9) News Bulletin Vol. IV No. 7

For Release in Rotary Bulletins July 1928

(10) Howett Legislating for Crippled Children P. 44
Harry Howett, the Secretary of The International Society sums up the present legal status of education for crippled children as follows:

"It seems that the principle of educating the crippled child in special classes was accepted in this country in 1921. Five states either amended their present laws or passed new ones that year. The problem was seen to be both a state and local responsibility which had to be supported financially to a great extent out of state funds and stimulated and supervised by state authority.

"New laws and amendments have been passed since 1921 which really include no new features except in Oregon where the law provides for hourly teachers' and a special local crippled children's institution fund." (11) History of the Movement for the Education of Crippled Children in Europe

Having a picture of the general development of the care and education of crippled children, its rapid recent growth and some of the agencies which fostered it let us now look at the strictly educational phase of the work as it has evolved in Europe and in America.

Not only was the movement for the care of crippled children late in starting but for a surprisingly long time the importance of the education of the cripple was overlooked.

The first educational institution for the care of the cripple was founded in 1852 by Johan Nepomuk in Munich, "The Royal Bavarian School and Home for Crippled Children." The movement thus begun spread rapidly throughout Germany, France, England, Switzerland, and Italy. Denmark also followed Germany's example with a model school, clinic and home founded for men, women and children. Its aim was to render pupils wholly or partially self-supporting.

(11) Ibid P. 44
Sweden now has schools open to crippled adults and children. Adults receive industrial training in the schools but the children are taught in their own homes by publicly supported teachers. For the Swedish gymnastic education curative and corrective exercises are substituted and given free of charge. (12)

The British schools for crippled children are an integral part of the school system. Instruction is said to be superior to that of any other country. (13) Mrs. Humphrey Ward's work on education, transportation, housing, and research is internationally known. In 1900 Mrs. Ward estimated that the crippled and invalid children in London of the type to benefit by special schools suited to their needs would not fall short of 2000. (14) In 1921 there were 2514 crippled children in 100 classes in 44 public schools, annexes, hospitals and convalescent homes in 5 boroughs in England. (15) Italy has many endowed institutions and has been considered a leader of the other nations in the education of crippled children. Turin, Bologna and Rome each have such an institution and Milan boasts one of particularly high standard.

History of the Movement for the Education of Crippled Children in America

Special attention to the education of handicapped children in

(12) Sullivan and Shortum Disabled Persons, Their Education and Rehabilitation P. 121

(13) Ibid P. 121

(14) Ward Invalid Children's Schools P. 4

(15) Wood and Rowell (Health Supervision and Medical Inspection of Schools) P. 367
America began through private agencies long before the public awoke to its responsibility. Private education of the deaf and blind was well established before the cripple was even considered. (16) The public school system was established in America in the third quarter of the nineteenth century after a struggle of over fifty years. Educational opportunity for the crippled child was as slow in making its appearance in the public school system as that institution had been in the educational system of the country.

Attention was first directed to the education of the cripple in this country by the work of Dr. James Knight and his daughter Cornelia in New York City in 1861. From this work later developed the "Hospital for the Ruptured and Crippled." (17) The Industrial School for Crippled and Deformed Children was founded in Boston in 1894 by Dr. Bradford and Dr. Thorndike. This was the first institution whose object was purely educational. (18) In 1915 there were no less than thirty private or semi-public and five public institutions. The latter were located in four states, Minnesota, having two, and Massachusetts, Nebraska and New York each one. In addition to these institutions there was one in New York City maintained under the Department of Public Charities. (19)

Public facilities for the education of this special class of physically handicapped have advanced rapidly during the past decade. Many cities now aim quite generally to provide facilities for crippled children

(16) Sullivan and Shorlum

Disability Persons, Their Education and Rehabilitation

(17) McDonald Adjustment of School Organization P. 58 to Population Groups

(18) McCurtrie The Care of Crippled Children P. 4 in the United States

(19) McDonald Adjustment of School Organization P. 59 to Population Groups
through their public schools, and state legislation cares for the education of many more. In 1926 the principal cities which maintained such facilities for educating crippled children were New York, Philadelphia, Chicago, Detroit, Cleveland, Baltimore, Kansas City, Minneapolis and Oklahoma City. (20) The Spaulding School in Chicago was the first to make special provision for high school training of crippled children. (21) The day is not far distant when in practice as well as in theory no school system will be complete if it lacks provision for the education of the deaf, the blind, and the crippled of whom we have 200,000 in our hospitals and public schools. (22)

"It has been estimated that there were in 1924, 6225 pupils in over 200 special classes for crippled children. In the decade ending then the increase in the number of teachers of crippled children was over 150 per cent. The number of teachers in Ohio and New York in 1914, was respectively 6 and 67, which increased in this ten year period to 72 and 170. Ohio has special classes in 26 different cities. Numbers are increasing much more rapidly during the present decade in all parts of the United States. Ohio, Michigan, New York, Pennsylvania, California, Wisconsin and a few other states have special state supervisors or directors of corrective education to stimulate and standardize the work of special education." (23)

(20) Sullivan and Snortum
Disabled Persons, Their Education and Rehabilitation
P. 128

(21) Chief of the Children Bureau U.S. Dept. Labor
Sixteenth Annual Report
P. 4

(22) Folder No. 7 U.S. Dept. of Labor
P. 7-8

(23) Howett Legislating for Crippled Children
P. 46
Two phases of this education receiving rather marked attention at present are the problem of the rural cripple, and the recently developed University Hospital School. In 1914 the state institutions in Massachusetts, New York, Minnesota, and Nebraska were cited as the only ones which were meeting adequately the problem of crippled children in rural communities. At the rural school supervisory conference of the Southern states, called by the United States Bureau of Education at New Orleans in December 1928, Mr. Terry C. Foster, Supervisor of Civilian Rehabilitation, Alabama State Department of Education was asked to speak on the education of crippled children in rural communities. At the Memphis Convention last year The Education Committee of the International Society for Crippled Children gave special attention to the education of the rural cripple and experts in the field were invited to this year's convention at Minneapolis. (25)

An example of the University Hospital School is that established at Ann Arbor, Michigan five years ago by the Kings Daughters of Ann Arbor. The school started with an enrollment of 500, but this year will number over 1600. (26)

"Four hundred children confined in the University Hospital are undergoing corrective treatment for malformations, either congenital in origin, or acquired through accident or disease, many of whom are there as the result of the activities of the Michigan Society for Crippled Children." (27)

(24) Reeves Care and Education of Crippled Children Preface P. III in the United States
(25) Ibid May 1929 - Vol. IV No. 5
(26) Notley The University Hospital School P. 39
(27) The Michigan Alumnus December 15, 1928 P. 222
"Every part of Michigan is represented—large cities, small towns, rural districts and parochial schools. More than 150 from the Upper Peninsula have received instruction according to their stay in the hospital. Many of these children have returned three, five, and even seven times during those years, thus showing their dependence on the hospital school for instruction. Over 200 from Wayne County, the majority of whom were from Detroit, have been pupils in this school. All grades are taught from the kindergarten to the twelfth grade with the same objective for all—keeping up with the home school and receiving promotion." (28)

The first commencement exercises were held at the University hospital when three pupils received diplomas. "The exercises were held in the surgical amphitheatre of the South Department. Two of the graduates, Joseph Babala and John Gauthier, received theirs on Bradford frames. .........Miss Bagnall only recently 'graduated' to a wheel chair. She too has been on a Bradford frame. None of the three had ever seen each other before the graduating exercises brought them together." (29)

In addition to the institutions with which we are already familiar there seems to be a place, in the work of educating the crippled child, which can be filled only by this new Hospital School plan of the University

Present Trend of the Movement

For the Education of Crippled Children

During the gradual development of educational opportunities for crippled children two facts have been become increasingly evident to those interested in the movement. Any system of education which is set up

(28) Notley The University Hospital School P. 39
(29) The Michigan Alumnus March 9, 1929 P. 425
for this special class must first recognize the importance of beginning the education of the crippled child at an early age, and next consider whether the crippled condition is temporary or permanent.

In the Ohio system a recent development is the early enrollment of crippled children in special classes often as early as the age of five or six. (1) At the Massachusetts Hospital School experience has shown that the education of crippled children should be begun at a very early period since it is necessarily protracted. It is also evident that training and character building begun at an early age usually fosters a great desire for activity and frees the children from the self-pitying condition which is often characteristic of the cripple. (2)

In the actual teaching of a class for crippled children many of the problems which arise are due to the fact that the group is composed of both the temporarily and the permanently crippled child. Since some of them are curable or partially so it will be the duty of the special class teacher to see that they follow as nearly as possible the curriculum of the regular schools so that at the end of the period of their treatment or convalescence they will be enabled to return to the regular public school class with little or no retardation. (3)

The majority of cases found in the special class are, however, permanently crippled, their disabilities being of such a character as to prevent complete restoration to normal activity. These children unless specially trained will become a burden on the community. The special

(1) Hadley Educating Crippled Children in Ohio P. 63
(2) Annual Report Mass. Hospital School 1921 P. 19
(3) Solenberger Public School Classes for Crippled Children P. 29
class for them must furnish special opportunities of education, which are suited to their condition, that they may become partially if not entirely self-supporting. (4)

Whether the school be public or private, day school or institution the teacher must take account of this fact of the temporary and the permanent cripple if the education is to meet the needs of the child.

Buildings and Equipment

Wallin describes the model school building as having "an assembly room, academic class-rooms, industrial class-rooms, a room for curative gymnastics, electric treatment and massage, a solarium for heliotherapy, a bathroom, rest rooms (with a few wicker or woven-cane couches, or sanitary or army cots, wicker rockers and folding chairs), an open air room (with the necessary cots and blankets), a kitchen, dining room, toilet-rooms, several exits, wide aisles, hand-rails along the walls, rubber or cork covering on the floors and stairs, and no thresholds." (5)

If possible the school rooms should be located on the ground floor. Although some schools, not being able to secure the necessary ground space for this ideal arrangement, have equipped two-story buildings with inclines. This is not such a good plan as there is danger of such accidents as run-away wheel chairs.

There are different contentions as to the type of furniture advisable. Adjustable or partially adjustable seats with lap boards for wheel chair cases is one suggestion which is widely followed. Movable tables and chairs have also been used in many instances. In the experience

(4) Annual Report

Mass. Hospital School 1908 P. 6

(5) Wallin The Education of Handicapped Children P. 116
of the writer the latter has seemed the more advisable plan and much more popular with the children. The use of invalid bedside tables has also proved satisfactory for wheel chair and bed cart cases. Whatever the type of furniture selected it is essential that it be either movable or adjustable to meet the needs of the crippled child.

In day schools two special provisions necessary are busses to carry the children to and from the school, and food served free or for a very small payment.

The ventilation of the class-room is of great importance. In some cases, such as bone tuberculosis when the length of convalescence is long, special provision must be made for out-of-door classes. (6) A number of the schools for crippled children are so arranged as to allow classes to meet either in doors or on an adjoining porch. The Massachusetts Hospital School has an admirable system of ventilation not only in the new school building erected a year ago but also in the cottages where the children live. This monitor system has also been adopted in some regular public schools.

Enrollment

Children unable to attend school, because of the physical handicaps which place them in the classification of the "crippled", should be admitted to special classes. Since much individual attention is required and many special problems arise in such classes the enrollment must be small. Some institutional schools meet this requirement as well as that for shorter hours in the classroom for crippled children by a platoon system. Larger day schools solve this problem by ability grouping.

(6) McDonald Adjustment of School Organization to Population Groups
Wallin gives as the ideal enrollment in such cases, twenty to thirty in the normal group, eighteen to twenty-two in the dull or backward group and thirteen to sixteen in the mentally defective group. (7)

"It is evident that crippled children should be given the opportunity to associate with, and labor among the children with whom they must live and cooperate in later life." (8) For this reason, when orthopedic disabilities have been overcome, when physical or therapeutic treatment is no longer beneficial or required, and when the educational training received is not of a special form not given equally well in other types of classes, the children should be transferred to the regular grade classes and transportation provided.

Curriculum

Whatever the organization of the curriculum and daily program, it should be such as to allow for flexibility in grading and individual promotion. A child who has been in hospitals a large part of his life and is far below the comrades of his chronological age in his school work should be allowed to progress as rapidly as is possible and should be promoted by subject. At the Massachusetts Hospital School it is possible to make promotions from group to group at any time during the year when a pupil shows ability to do the work of the class next above. (9)

The curriculum may be considered under four general divisions.

The academic course should follow as closely as possible that of the regular public schools. The course in physical education will of necessity be vastly different from that of the regular school for normal healthy children. It must include in physical care and rehabilitation "orthopedic treatment, curative or corrective gymnastics, massage, electrical and heat

(7) Wallin The Education of Handicapped Children P. 114-5
(8) Ibid 115
(9) Annual Report Mass. Hospital School 1912 P. 16
treatment and heliotherapy." (10) The mental and semi-vocational course must be suited to the individual and have as an ultimate aim some occupation which has proved itself adaptable to the disabilities of the individual or one which he has demonstrated is most likely to prove successful in his own case. The following is Wallin's list of miscellaneous activities (some of which will be mentioned in more detail later under Social training) opening exercises, entertainments, recreational activities, and rest periods. All these should be so conducted as to build up the morale of the crippled child, develop self-respect, self-reliance and habits of self-help; as well as a determination to conquer hampering physical conditions and an ambition to achieve success in life. (11)

In order to insure the flexibility necessary in this orthopedic class the program must be carefully planned with attention to a shorter school day, frequent rest periods for rest relaxation and treatment, and each pupil's physical condition. Wood and Rowell include as another factor to be considered in planning the program, "the grading of classes with not less than two grades to a class and frequently with all grades." (12) This factor is, however, variable according to the type and size of the school in question.

Social and Cultural Training

The crippled child has been described as the two parts of a circle, the center at home where everything revolves about him and the circumference at school where he is pushed out of active games and becomes an onlooker.

(10) Wallin The Education of Handicapped Children P. 117
(11) Ibid P. 117
(12) Wood and Rowell Health Supervision and Medical Inspection of Schools P. 367
One of the greatest reasons for special school or class socialization of the child. He must learn that there is no reason for him to be the center or the circumference, that he must become a part of the mass. (13) It is largely through proper play activities that his socialization can be affected. The special class or school must allow for this development both in the class room and through extra curricular activities.

The children of the poorer districts in the city have well equipped play grounds but there is no organization or foundation as yet that reaches out to the vast army of crippled children shut in at home unable to go out on the public school play grounds. These children are shut off from play. They cannot go out to enjoy clubs and concerts. Gertrude Hubbard is taking "play grounds of music" to the crippled children and shut-ins of Philadelphia. She conducts clubs at a number of institutions for crippled children. Not only do the children often develop a true ear and an appreciation for music; but doctors are beginning to realize that there is also a real therapeutic value in this music play. Miss Hubbard relates the story of a boy who, as a result of infantile paralysis, could move his right fore arm only a few inches and whose shoulder was deformed. In spite of this seemingly insurmountable handicap he learned to play the violin by lifting his shoulder, and became a leader and inspiration in his school orchestra. (14)

In one of the smaller schools an evening reading club was a great joy to the older boys and girls who developed a taste for better literature in a surprisingly short time.

Dramatics seem to hold a particular fascination for the crippled child. A dramatic club of seven boys in one of the progressive schools

(13) McKay Recreation of the Crippled Child P. 133
(14) Hubbard Musical Playgrounds P. 201-2
gave a full evening entertainment, and even wrote one of the sketches presented themselves. At the Massachusetts Hospital School one of the social events of the year is the eighth grade play.

Some of the other activities which have proved their worth at the Massachusetts Hospital School are the band, glee clubs, Camp Fire and Scout organizations and a Junior Red Cross. It seems impossible that athletics should be helpful to the crippled child, but there are many kinds of apparatus for supporting paralyzed limbs and making locomotion possible. An excellent base ball team, of cripples, "the equal and at times the superior of the competing teams of normal boys" proved an opportunity to develop intelligence and self-reliance. (15)

James E. West, Chief Scout Executive wrote recently an article on "Scout Training for Crippled Boys" which illustrates how such organizations as the Camp Fire and the Boy Scouts can be adapted to the needs of the crippled child and yet foster a true spirit of endeavor.

"Boy Scouts are such active, out-of-doors fellows that it may come as a surprise to some people to learn that there are many Scouts who are physically handicapped, Scouts who must use crutches to get to a troop meeting, and can never hope to grow into sturdy manhood." (16)

The Achievement Scout has been created to give these crippled boys an opportunity, in this popular organization. The Achievement Scout must pass those of the requirements for Second Class and First Class Ranks, which are within his physical capacity. For those which he cannot pass he devises substitute tests which he passes. (17)

(15) Annual Report 1912 P. 8
Mass. Hospital School 1914 P. 10
(16) West Scout Training for Crippled Boys P. 91
All these school and extra curricular activities train the cripple to meet an important and often most difficult problem by educating him for a worthy use of his leisure time.

**Industrial and Vocational Training**

More emphasis has recently been placed on the industrial training with the aim of making the cripple at least partially self-supporting. Cripples by the very nature of their deformities are debarred from many avenues of work but there are other occupations in which they can compete successfully with or even excel the able-bodied. "Among the trades adapted to persons with limited strength there have been selected the making of reed articles, engraving, the jewelers trade, mechanical drawing, cobbling, typewriting, printing, cooking, sewing, embroidery and dressmaking. Gardening and other outdoor work are found to be especially suitable and beneficial for those needing continued life in the open." (18)

In the case of large institutions there is often opportunity for more specialized vocational training than is usual in the regular schools and here it is possible to allow the crippled child to try out his ability in certain lines of work as an apprentice to some employee in the institution. More and more emphasis is being placed on avoidance of economic waste by educational guidance and vocational training. This phase of education is very important in the case of the crippled child who can scarce afford to spend time preparing himself for a trade only to find, after preparation, that he is not likely to succeed in it. One responsibility of the schools is to guide and encourage these children, and in this the teacher must realize the importance of wise guidance.

This problem is being met in Ohio by a cooperation of the agencies

(18) McDonald  Adjustment of School Organization  P. 62

to Population Groups
at work. "Under the Ohio law there is a separate state administrative division for training crippled children for their vocations. It is called the division of industrial rehabilitation and vocational education. This division accepts youths who are sixteen years of age and through the seventh grade, for vocational training. Only a limited amount of work having prevocational value is done in the special classes." .......

"Teachers have been urged to study their pupils with a view to finding those tendencies which might indicate the best types of prevocational training for handicapped children. They are also requested to cooperate with the Civilian Rehabilitation Department and make such recommendations to this department as have been determined through study of the child." (19)

"Is it worth while? This question is answered by Robert Bishop in the Cleveland, Ohio, Rotary Reminder of March 26, (1926).

'With intense interest I have been watching the development of some of the crippled girls and boys who have come to our attention during the past five years. We are now obtaining practical results. In the past year ten boys and girls have been referred to the State Rehabilitation Service for vocational training. Out of these, three girls and one boy have entered business college, two boys are being trained in dental mechanics, one as a watch repairer, and one girl is in college preparing to be a teacher. Two of the girls in business college are quite badly crippled and when we first knew them, they seldom, if ever, went away from home. We have obtained very good results from corrective treatment, and now they are coming daily into the city from the country to school. The boy who was trained as a watch repairer, has finished his course and is now employed. He is not only caring for himself, but is helping to support his widowed

(19) Hadley Educating Crippled Children P. 27
mother and three sisters.'

'These children have proved that our work is worth while.'" (20)

Qualifications of Teachers

The teachers of crippled children should, perhaps first of all, possess "sympathy, tact, genuine interest and a special understanding of a technical nature." (21) If no other qualities than these were demanded we should at least avoid a repetition of the incident which so deeply wounded Rustis when as a young man he overheard the remark of an instructor in the school he was entering, "Who dragged that wreck in. This isn't a hospital."

The ideal teacher for crippled children should have the following qualifications necessary for the teacher of any special class. "(a) Preliminary fundamental training equivalent to a two years professional course in a standard normal school or college; (b) basic technical training including courses in clinical psychology and psychopathology on sub-normal and abnormal children and in clinical examination of exceptional children including physical anthropometric and psychological tests and the working up of case histories through field investigations; (c) specific technical preparation for training the particular type of defective which they expect to teach." (22)
For the teacher of crippled children this specific technical preparation should include--

"Specific technical courses on muscular and skeletal defects, orthopedic and gymnastic treatment and physical care of crippled children, industrial art courses suited to their needs, and observation of teaching and practice teaching under expert supervision. It is recommended that a specially qualified physiotherapy teacher be appointed for the physical training." (23)

In the small community there must be special care to select the right type of teacher, for she carries the burden practically alone and must be responsible for more than merely the academic work. "She must see that the child wears his braces, or goes back to the hospital at the appointed time, or consents to the necessary operation, or, perchance, if he has a cardiopathic condition, she must keep an ever watchful eye on him to see that he does not overexert himself. If he has a tubercular bone, he must be carefully guarded against bumps and bruises. The teacher is the one who should lead the thought of the people of the community, not only toward the proper education of the crippled children, but also toward the proper correction and placement. It seems almost unnecessary to add that in order to do all of this successfully, she should be a person of unusual ability, temperament, and personality." (24)

Four New England Schools
for Crippled Children

From the history of the educational movement in behalf of crippled

(23) Ibid P. 117-8
(24) Hadley Educating Crippled Children in Ohio P. 45
This page contains a block of text that is not legible due to the quality of the image. It appears to be a paragraph, but the content is not discernible. The text is fragmented and unreadable, preventing any meaningful transcription.
children it is evident that private care is being gradually supplanted by public responsibility. It is equally clear, from a survey of the field of progress that there is a place for both private and public agencies in the effort being made by society today to face the problem.

The same can be said of the two systems which have caused some disagreement among authorities as to their relative values—the residential and the non-residential systems. It is not necessary here to discuss the merits of the two systems—each has its vantage points; and, therefore, both are necessary if society is to face the problem squarely.

As there will always be a few children for whom home visiting will be necessary this also must be provided for in any adequate system for the education of crippled children; but it should be looked upon as a makeshift. (1)

The four types of schools for crippled children—private institutions, private day schools, public institutions (state supported), and public day schools (in the city systems)—must cooperate in the solution of this problem of education of crippled children. All of these types of special schools are to be found in New England—three of them in Massachusetts.

The two private schools The Industrial School for Crippled and Deformed Children and The New England Peabody Home for Crippled Children represent the non-residential and residential school respectively.

The Industrial School for Crippled and Deformed Children.

The Industrial School for Crippled and Deformed Children in Boston is a private day school and has already been mentioned as the first school of its kind in America. It was founded in 1893 and opened with eight pupils in two rooms of the St. Andrew Parish House. In 1921 a Junior High School

(1) Hatt Croley's Hygiene of School Life P. 138
course was added to the eight years training then given. Since 1926 the school has occupied enlarged quarters on St. Botolph Street. In 1927 the enrollment was 115, and the following statement tells something of the training offered.

"The school offers the regular eight grades of elementary work and an advanced course for older pupils of three years of High School grades, in which opportunity is offered for advanced work along vocational lines. Among the different lines of industrial work offered are paper weaving, clay modeling, wood-working, cobbling, sewing, linen embroidery, cooking, printing, telegraphy, linotype operating, stenography, typewriting and office practice."

"The enlargement of the building has made possible not only an extension of the Industrial Work but provides rooms which are more suitable for the equipment necessary to carry on this work."

"Other advantages have become possible by the enlargement of the building making for more efficient training, also an extension of the opportunities of the school to a much larger number of pupils.

"Two large play rooms provide opportunity for play activities throughout the year. Basket-ball teams have been organized and games played in which competition has been keen and healthful.

"The large assembly room with its stage, piano, victrola, and moving picture equipment provides facilities to entertain and instruct the pupils in the school gatherings as well as for special entertainments which are held from time to time.

"The addition of rooms to the medical department provides separate rest rooms for boys and girls, two rooms for special exercises and massage work, a room equipped with a lamp for violet ray treatment and a room with full dental equipment so that necessary attention may be
given the teeth.

"The medical and surgical treatment is a very important part of the work of the school. Frequent examinations are made by specialists who volunteer their services. The necessary apparatus is supplied, the school paying for it in full or in part, according to the needs of the family. Regular examinations of the eyes and teeth are made and everything possible is done for the physical welfare of each child.

"A substantial meal at noon, an open-air school room, and constant supervision by nurse and physical instructor under the direction of medical and surgical specialists are strong features of the work.

"The pupils show great physical improvement due to the care and treatment received at the school and are ambitious to go into the world to pursue some line of useful work which will make them self-supporting." (2)

The New England Peabody Home

The New England Peabody Home a private residential school for the care and education of crippled children was founded in 1894, largely through the efforts of Mrs. M. H. Peabody and Mrs. E. B. Kellogg. The school was located in Weston and then in Hyde Park before the purchase of the present building in Newton Center was made possible by a legacy of Mr. Charles Wright of Boston. The building is located on a hill-top and is well adapted to its present purpose with broad glassed-in porches, an open-air school and a modern operating room. Heliotherapy treatment was given here in 1913, this being one of the pioneer institutions to adopt it.

The tea room and gift shop on the estate help to support the home

(2) The Industrial School for Crippled and Deformed Children 1927
and a recent Benefit Skating Carnival at the Boston Arena was well attended. The school is free to indigent crippled children presenting applications signed by the family physician. (3)

There are six regular teachers on a salary basis, who are assisted by volunteers from Framingham Normal School, Normal Art School, The Newton Center Women's Club and various individuals who give their services from time to time. (4)

The curriculum on the school gives attention to prevocational education, instruction being given in basketry,loyd work, cooking, typewriting, and the institution is considered one of the best of its kind in the country. (5)

The Massachusetts Hospital School at Canton, Massachusetts and the Public Street School for Crippled Children in Providence, Rhode Island represent the two types of public school—the residential and the day school.

The Massachusetts Hospital School

The Massachusetts Hospital School is a public institution of the residential type. The school owes much of its success to the late Dr. Bradford who was instrumental in founding it and to Dr. John E. Fish who has been superintendent since its opening over twenty years ago. Its aim is to furnish home care and hospital care as well as educational training.

Besides the administration building, nurses home, three cottages and two dormitories for the children, there is a hospital, the Bradford Infirmary, an assembly hall, with well equipped stage and facilities for

(3) Abt The Care, Cure and Education of the Crippled Child P. 101-2

(4) The New England Peabody Home P. 36
motion pictures; and a new schoolhouse built on a ground-floor plan with the monitor system of ventilation previously referred to and a porch on which the class rooms open.

The enrollment of the school each year is about 300. In the twentieth annual report, for the year ending November 30, 1927 we find the following statement—

"Seven hundred and forty children have been under treatment during the year. The daily average number of crippled and deformed children enrolled for care and education was 204.60 and the daily average number of sick minor wards was 67. There were in the institution on December 1, 1926, 224 school and 81 hospital cases, or a total of 305 children." (6)

Children from families of limited means are admitted upon application of parents or guardians. When parents are unable to pay, the charges are referred to the county or city in which the family resides. A number of the admissions, however, are private or "pay" patients.

In the class rooms the children are grouped according to age in eight divisions similar to the grade system. Classes range from the sub-primary classes to the eighth grade. The 7th and 8th grades are similar in nature to the Junior High School though not so called.

The treatment of the curriculum subjects is not rigidly formal. Drill periods are short and to the point. In many subjects individual work is permitted and the pupil goes on at his own rate of speed. Promotion by subject may take place at any time during the year.

The classes are small but the teacher has as many in small groups during the day as in the public school. The time of classes ranges from one hour a day in the lowest grades to two hours in the upper. "It has been found possible by intensive study directed to essentials to fit pupils

(6) Annual Report

Massachusetts Hospital School 1927
for vocational work or for further study in the High School." (7)

Many social and recreational activities, some of which have been previously referred to are under the supervision of the educational department.

"The school has gradually developed along lines which experience has found to be most practical to meet the educational needs of both temporary and permanent cripples. As a general rule, class-room work in the grades comparable to that of a public school is required of all, while vocational training is placed on an elective apprenticeship basis." (6)

"Girls are taught cooking, sewing, general housework, laundering and similar domestic arts as a routine course for all while a few selected cases are assigned to office work, the telephone desk, typewriting, etc." (9)

"Farming, gardening, the care of poultry, work in the dairy, an apprenticeship with the baker, engineer, carpenter, painter, store man, tailor, cobbler, chauffeur and other necessary employees afford educational opportunities of value to the older boys." (10)

The Public Street School

for Crippled Children

Probably the first public school system in New England to establish a special class for crippled children was that of Providence, Rhode Island. In 1925 when the class was started two teachers not only gave the instruction and prepared the noon meal for the children but did the marketing as well. Since that time a nurse has been added to the staff. It is her duty to oversee the rest hour; and, though she gives no treatments at the school she watches the physical condition of the children and sees that they receive

(7) Ibid 1919 P. 16-17
(8) Ibid 1922 P. 15
(9) Ibid 1921 P. 16
(10) Ibid 1921 P. 19
the proper medical attention.

Lunch is sent in under the splendid school lunch system which Providence supports for her public schools. A woman comes to help the nurse in preparing and serving the lunch and to clear up afterward.

The school program is conducted somewhat on the order of the rural school but the problem of instruction is more simplified than in the usual rural school since there are two teachers for the twenty-five children enrolled. One teacher has charge of the primary grades and one of the higher grades but all classes follow the same general program.

9:00 - 10:30 Academic Work
10:30 - 10:45 Recreation
10:45 - 11:20 Academic Work
11:20 - 11:30 Preparation for Lunch
11:30 - 12:00 Lunch
12:00 - 12:30 Rest and Recreation
12:30 - 1:10 Rest (for some) Academic Work (for others)
1:10 - 2:00 Hand work
2:00 Dismissal

Instruction in music and drawing is given by the special teachers who make rounds to the other public schools of the city.

Whenever the weather permits, the children go outside for their recreation.

Although the school is a public school supported by public funds, yearly sales have been held to dispose of articles made in the manual arts and sewing classes. The proceeds from such sales have gone into further equipment for the school.

No medical treatment or special exercises are given at the
Indeed, the conduct of industrialized and commercialized societies is the primary cause of the environmental problems we face. Without a fundamental change in our approach to resource use, we will continue to deplete our natural capital at an unsustainable rate.

The need for a radical shift in our economic and social systems cannot be overstated. It is not enough to merely adapt to the existing system, we must fundamentally transform it to one that is sustainable and equitable. This requires a comprehensive approach that addresses the social, economic, and environmental dimensions of our challenges.

In conclusion, the future of our planet is at stake, and we must act now to ensure a viable and just society for future generations. The time for action is now, and the stakes could not be higher.
school, but those for whom such treatment is beneficial are sent to the hospital in the school bus. Individuals may be sent when necessary but a regular trip with the nurse is made at stated times.

Although the Public Street School is small and cannot accommodate all the children needing this special care, it is doing a splendid work and Providence has set an example which all New England cities should follow in caring for the education of their crippled children.

The present trend is cooperation of the agencies working to care for and educate the crippled child, and with this cooperation has come a realization that one method is not sufficient to adequately meet the problem. There must be in each community supplementary use of the systems which conditions in the community render most effective.

After a period of increased interest, a period of private enterprise and scientific research followed by the rise of public responsibility we are now in the era of the education of the crippled child for rehabilitation. The opinion of "Daddy" Edgar F. Allen, President of the International Society for Crippled Children is becoming universal:

"After fourteen years of study and work for and among crippled children it is my opinion that the greatest service we can perform for them is education." (11)

How is society facing the problem of educating the crippled child? The answer is now clear. It is facing the problem in a critical attitude applying itself in a united scientific effort to make the education meet the needs of the individual child.

(11) Allen Education of Crippled Children P. 2
Solving the Problem

Hopeful Signs

Although the development of the movement for educating crippled children has been gradual, it has been none the less progressive. Today the problem is recognized by a larger number of persons than ever before. "The hopeful thing is that more has been done toward the solution of the problem, in the last ten or twenty years, than in all previous history. It is now looked upon as a soluble problem." (1)

The public is being educated to give the crippled child a chance to demonstrate the value of his services. Devastating handicaps which would have meant defeat in the past are now serving as a challenge to combat.

Future

Concerning the future of rehabilitation of the handicapped the following statement has been made:

"In the crippled children's work there is less of an element of doubt and more of hope of early fulfillment than in any other branch, vast though the required outlay of funds be. The country has never failed to respond to an appeal in the name of childhood. Powerful organizations have enlisted in the cause. The movement has all the zeal of a crusade. It is not intended to imply that the day of complete success is at hand but only that the forces that make for such success are more clearly visible. In great regions of the country the larger part of the program still waits to become an actuality. Every crippled child must have the opportunity of academic schooling. Every crippled

(1) Allen The Problem of the Cripple P. 7
child must have his proper measure of therapeutic care. Every crippled child must be given vocational preparation and raised to the best degree of economic self sufficiency of which he is capable."

"To bring this about will require a thorough survey in each state whose program is still deficient, a comprehensive crippled children's code to cover all the desirable public provisions, and co-ordinated private activities to supplement and to exercise watchfulness that the authorized public educational and therapeutic care be actually given. It will require additional legislation, additional appropriations, and additional private expenditures. But it is essential if the problem of the crippled child is to be solved." (2)

(2) Sullivan and Snortum

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The additional code is written in the history and can be read in the text.

The code is then compiled and input into the system for further analysis.

The output is then presented as the final result of the experiment.