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Educational status of the blind mentally retarded in the United States.

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Boston University

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Thesis

The Educational Status of the Blind Mentally Retarded in the United States.

Submitted by
( B.Sc. Massachusetts Agricultural College 1916 )

In partial fulfillment of requirements for the degree of Master of Education.

1933.

First Reader: Donald D. Durrell, Assistant Professor of Education
Second Reader: Herbert Blair, Professor of Education.
The Educational Status of the Blind Mentally Retarded in the United States.

I. Definition and previous research.

II. Historical treatment.

The opening of the schools for the feeble-minded in this country.

Provision made for the blind mentally retarded in this country.

The situation for this class in other countries.

III. Causes of blindness among the mentally retarded with a comparison of cases among the normal blind.

Former cause of blindness.

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IV. Frequency of admission of blind mentally retarded and recent increases.

V. Survey of opinion of educators as to care of this group.

Schools for the blind.

Schools for the feeble-minded.

VI. Comparison of curricula for the blind mentally retarded.

VII. Critical evaluation and suggestions for future study. Outline of course of study with suggestions for procedure.
Acknowledgments.

A study of the blind mentally retarded is made difficult by the fact that the schools for the blind, which should be our source of information, are widely distributed. It is impossible to visit these institutions in order to get information at first hand, therefore, I have had to depend upon that loathsome method of sending out a questionnaire. It is unfortunate that many of our schools are not prepared or equipped to give information to investigators. Since this is the case, I am exceedingly grateful to those who, with such care and at the expenditure of many hours, have been good enough to send me the information desired and without which this study could not have been made.


I also appreciate the cooperation which I received from the following schools for the feeble-minded: The Alabama Home, Colorado State Home and Training School for Mental Defectives, Mansfield State Training School and Hospital, Conn., Delaware Colony for Feeble-minded, Florida Farm Colony, Lincoln State School and Colony, Illinois, Iowa Institution for Feeble-minded Children, Hospital for Epileptics and School for Feeble-minded, Iowa, Feeble-minded Institute, Kentucky, State Colony and Training School, Louisiana, Pownal State School, Maine; the three Massachusetts Schools, Belchertown State School, Walter E. Fernald State School, and Wrentham State School, Minnesota School for Feeble-minded and Colony for Epileptics, Nebraska Institution for Feeble-minded, two New Jersey schools, State Institution for Feeble-minded and State Colony for Feeble-minded Males, three New York schools,
The Educational Status of the Blind Mentally Retarded in the United States.

Chapter 1.
Definition and previous research.

Any blind child with an I.Q. of 90 or below will, as far as this paper is concerned, be classified as retarded. Since a normal seeing child has an I.Q. of 90 - 110, one can easily understand how a child deprived of one of his most important senses has an added serious handicap when he has an I.Q. of 90 or less.

It seemed most practical to divide this group into four parts: Those with an I.Q. of 90 - 81, or dull normal; of 80 - 71, or definitely backward; of 70 - 60, or borderline; and those below 60, or feeble-minded.

The problem which these children present to schools for the blind is indeed serious. In the years 1910, 1914 and 1916, this problem appeared to interest the educators of the blind, also in 1926 and 1928 they made further study, but the amazing part of it all is that we are practically in the same position as to the care and education of this group as we were in 1910.
Chapter 11.

Historical treatment.

The first school for the blind in this country was opened in 1832 by Dr. Samuel Gridley Howe. He was a man of dynamic force and character who was interested in those of the human race who for some reason or other were oppressed or handicapped. Dr. Howe had not been in the work for the blind many years before people began to say that he would next try to educate the idiots. Sure enough, in 1845 he opened a school for them, at first teaching them with the blind, but the blind soon objected to being classed with the idiots and a division was necessary.¹

We all know how the schools for the feeble-minded have grown. When Dr. Howe opened what is now the Walter E. Fernald School at Waverly, he planned for an enrollment of 300. He firmly believed that this would amply care for all of the Massachusetts cases. Now that school has a waiting list of practically 1200. Is it any wonder that these schools do not want to admit any educable, blind mentally retarded child?

In those early years the schools for the blind had all they could do to educate the normal blind and to convince the public that such people were educable. Naturally, as time went on they probably had the mentally incompetent blind, but little heed or thought was given to the blind feeble-minded. Certain schools in this country had a department for the feeble-minded. Such was the case in Illinois, Minnesota and Montana, Ohio in 1856 had a public asylum for the blind and lunatics. Fortunately for the former this combination no longer exists, although there are schools for the blind that are still painfully near schools for the feeble-minded.

For years now schools for the blind have been harassed by this perplexing problem. In 1908, Dr. Allen stated that \( \frac{1}{6} \) of all the blind children were feeble-minded and that they were practically unprovided for.\(^1\) J.J. Dow put the number from 10 - 20\% of the blind youth.\(^2\) Pintner says that there is a large percentage of feeble-mindedness among the blind. The following table is of interest for it compares

-----------------------------------------------

670 blind children tested by the Irwin-Binet test and 1000 unselected seeing children tested by Terman test.

<table>
<thead>
<tr>
<th></th>
<th>Blind</th>
<th>Sighted</th>
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<tr>
<td>Genius</td>
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<td>.5</td>
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<td>Very Superior</td>
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<tr>
<td>Superior</td>
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<td>9.</td>
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<td>Average</td>
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<td>76.</td>
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<td>Dull</td>
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<td>Border line</td>
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<td>2.</td>
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<tr>
<td>Feeble-minded</td>
<td>.5</td>
<td>.3</td>
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</table>

It is interesting to read what educators of the blind and feeble-minded have said in the past as to the care and education of this group.

Dr. Fernald said: "Such pupils need, above all things to be kept happy, to be suitably entertained, to be given resources of their own, to be taught orderly, cleanly habits and most of all, to be taught some simple, useful occupation which they may be able to follow later in life. I have found that the average blind feeble-minded person is especially liable to bad personal habits. Practical industrial occupations and habits of industry are the best remedies for these habits." ²

H.H. Johnson tells us to teach these backward children along with others, "patiently, lovingly and faithfully." ³ Also in 1910 W.B.Wait said these


children should be in a separate institution.' In 1914 at a meeting attended by two superintendents of institutions for the feeble-minded, a superintendent of one of the largest and best schools for the blind, a principal of a school for the feeble-minded and a psychologist, it was definitely agreed that these children belonged in a school for the feeble-minded; that they should be scattered among the seeing feeble-minded who would care for them and that a special teacher should be employed. 2

We are told that the greater handicap is that of feeble-mindedness, therefore the child should be educated in a school for the feeble-minded. No state, however, makes any provision for them. If they are admitted, which is seldom the case, they should be placed according to their mentality and should have a special teacher. Robert Irwin has said that it is not fair to put the subnormal with the normal. 3

In 1916 a committee was appointed by the Governor of Pennsylvania to survey the activities


of the blind in that state and to report. This committee was made up of two superintendents of schools for the blind, a superintendent of a working home for the blind, and efficient field officer, and a dean of a leading industrial training school. In 1917 this committee recommended that the feeble-minded blind be placed in schools for the feeble-minded seeing; that groups of ten be placed in separate cottages, if possible; and that a special teacher trained in methods of teaching blind students be employed; and that such a school should receive $100 extra per capita for the work.

In 1928 those interested in this matter again met in conference, for apparently nothing had as yet occurred to help solve the problem. At this conference Dr. Watkins, Superintendent of the Polk State School, wrote the following in a letter: "Probably the reason we do not see more of the educable feeble-minded blind is due to the fact that we have not heretofore provided suitable instruction. Far be it from me to suggest that such a class be established at Polk, as I do not wish to steal anyone else's ideas or deprive either Dr. Fuller or Dr. Wolfe of this work, but in case it is looked upon with favor and suitable provisions

1. What is to be done with the Feeble-minded Blind? Chapple, B.P. A.A.I.B. 1920 pp. 31 - 34.
are given me in my next budget, I would have no objection to establishing such a class, and to receiving by transfer from the other two schools their educable blind. This, however, is a matter that should be gone into rather thoroughly. For practicality and economy, instructing the blind feeble-minded of the state should be in one definite place. There should be a definite teacher. They should be in a definite cottage in one of the three schools for the feeble-minded. They require the same routine and patient care and training that other defectives require."

It is interesting to note that in 1933 this offer still stands, but for some unknown cause it has not been carried out. Meanwhile, we apparently mark time and wonder what to do about it.

As far as I know there is only one school in this country for the educable blind, mentally deficient child. That is the Royer – Greaves School for the Blind, at King of Prussia, Pennsylvania. Many people are acquainted with the work which Mrs. Greaves is doing with the backward blind pupils. Naturally this is a small school but it certainly should show our state legislatures a way to provide some special place for the blind child who is further handicapped with a mental deficiency which makes him an unhappy burden.

to society.

We find that the situation is somewhat better on the other side of the ocean. There the educators have done something about it. Stormont House, London was opened in 1904. England believes that these unfortunate pupils need individual attention and should be cared for in a special school. Sir Francis Campbell believed that they should be subjected to simple, objective teaching, with plenty of handwork, games, and out of doors sports. Others felt that those who could be educated should attend schools for the blind until they were sixteen and should be taught with the others, perhaps a few separately.

Austria, Germany, Hungary, Irish Free State, and Scotland allow the blind feeble-minded to be received in schools for the blind. In Belgium and the Netherlands "the uneducable are placed in institutions for the abnormal." This is also true for Austria and Scotland.

In Czechoslovakia "feeble-minded girls up to eighteen years of age are cared for by the Provincial Institute for the Feebleminded, at Oparany. For the adult blind feeble-minded there exists no special institutes as yet."

Denmark "maintains a home for mentally defectives

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near Bristol where it has set aside special accommodations for forty mentally defective blind girls over sixteen years of age."

Sweden "has erected a school combined with a workshop and asylum for blind persons who are also physically and mentally defective."

In Switzerland "an institution for the blind of feeble mind was founded near Lausanne, originally for French speaking blind. It was subsequently moved to Chailly, also near Lausanne, and reorganized so as to deal with all Swiss blind in this class."

Canada provides for her blind feeble-minded in their own homes, if this is possible, or in schools for mental defectives. The home teacher is able to care for some of them while there are also some schools with special facilities to meet the needs arising from blindness.

One might conclude that the foreign countries have gone ahead of the United States in their attempts to provide care and education for the blind mentally retarded.
Chapter 111.

Causes of blindness among the mentally retarded with a comparison of cases among the normal blind.

Formerly the great cause of blindness among children was opthalmia neonatorum or "baby sore eyes". This was easily the cause of twenty percent of the children being in schools for the blind. This disease, caused by the germ entering the infant's eyes at birth, was superficial. It was not deep rooted, therefore many children blinded by this cause were not handicapped in other ways. Many of the boys and girls were bright, wide awake youngsters who have since grown up and have gone out into the world where they have been a credit to themselves and to the blind. There were, however, mentally slow pupils among this group.

This appalling state of affairs caused concern among those who were interested in the blind. For years it had been known that silver nitrate drops in the eyes of an infant at birth would prevent this dreaded infection, yet the medical profession were reluctant to use them for fear of insinuating that the parents were not clean. Fortunately for all concerned, Dr. Lucien Howe, of New York State, and others were

able to force through the New England Legislatures the Silver Nitrate Laws. This law was passed in Massachusetts in 1905 with the result that in 1930 only .52% of the pupils entering Perkins Institution came as a result of ophthalmia neonatorum. In the past twenty-two years, ophthalmia neonatorum has decreased 88% in the United States. In the 1930 report of the Perkins Institution, Dr. Allen calls attention to the fact that in 1920 one-fifth of all our pupils were blind from "baby sore eyes", whereas now only one forty-eighth of our number can trace their blindness to that cause.

What then is the cause of blindness among our pupils at the present time? We are finding that more and more the causes are congenital, often deep rooted, and carrying other difficulties. This is most serious, for the tendency seems to some of us to point to the fact that the mentality of the majority entering the institutions at the present time does not compare as favorably with that of those formerly entering.

Figure 1. shows the percent of increase of congenital defects and decrease of ophthalmia neonatorum


PERCENT OF INCREASE OF CONGENITAL DEFECTS AND DECREASES OF OPHTHALMIA NEONATORUM IN THE UPPER SCHOOL OF PARKINS INSTITUTION. ACCORDING TO KEELER. FIG. 1.
in the upper school of Perkins Institution. I imagine other schools could show the same thing. Further study might be made concerning this point. This graph is a copy of a study recently made by Dr. Keeler of the Howe Research Laboratory.

Dr. Keeler has said that "about thirty-three percent of the Perkins Institution enrollment suffer from optic atrophy and congenital cataract which usually behave in heredity as Mendelian dominants. Blindness from these two preponderant causes could be nearly eliminated in a single generation, if individuals suffering from them could be restrained from reproduction."

Figure 2. gives the causes of blindness in Institution A. among those pupils with an I.Q. of 91 or over. Figure 3. gives the causes of blindness in Institution A. among those pupils with an I.Q. of 90 or less. These two charts cover the periods from 1916 to 1933. There were three hundred fifty of the second group so an equal sampling was taken for the first group so that the two might later be compared.

Out of one hundred seventy four pupils at Overbrook in 1915, forty-five were designated as "Pupils of lesser mentality, probably capable of graduating." Sixty-eight were above normal, twenty-seven presented special problems, twenty-four had low
CAUSES OF BLINDNESS IN INST. A. AMONG PUPILS WITH I.Q. OF 91 OR OVER. Fig. 2.

Accident
Albinism
Buphthalmus
Chorioretinitis
Cong. Amblyopia
Cong. Cataract
Cong. Defects
Cong. Syphilis
Glaucoma
Interstitial Keratitis
Meningitis
Myopia
Microphthalmus
Nystagmus
Opthalmia Neonatorum
Optic Atrophy
Retrobulbar neuritis
Unknown

Two cases each of: Anophthalmus, Aniridia, Diphtheria, Keratitis, Measles, Neuro-Retinitis Panophthalmus, Purulent Conjunctivitis, Rheumatic Iritis, Ulcerative Keratitis.

Numerals represent the number of cases.
CAUSES OF BLINDNESS IN INST. A. AMONG PUPILS WITH I.Q. OF 90 OR LESS.

Only causes where two or more cases are given are listed here.

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</table>
mentality, needing special instruction and ten of inferior ability who should be discharged.

When the State School of Ohio first tested its pupils in 1915, nine percent were found to be feeble-minded and twenty-seven percent subnormal. 2

Mental testing in schools for the blind is rather a new idea. It was a problem at first to know how to adapt tests for seeing children for those without sight. There is still plenty of opportunity for this work to grow, for of the schools of the blind that sent data, only six give scientific tests. Some are about to begin such a program while others frankly admit they are not interested. The tests used are the modifications of the Simon-Binet revision in practically all the schools for the blind that do testing. Many of these schools have also given more than the one test to the pupils which is most encouraging. It is hoped that more schools for the blind will give at least one Hayes Revision of the Simon-Binet test.


In order that sufficient material might be gathered concerning the education of the blind mentally retarded, the following questionnaire was sent to forty-three schools for the blind. The same questions, with the exception that the first read: How many blind pupils were enrolled in 1920, 1925 and 1930, were mailed to sixty-seven schools for the feeble-minded. Twenty-four schools for the blind answered, while thirty-six schools for the feeble-minded replied.
Questionnaire on the Blind Backward.

How many pupils were enrolled in 1920, 1925, 1931.

Of this number how many had I.Qs of 90-80  79-70  69-60  Below 60

Please state what scale you used.

Please indicate whether it was the first, second or third test.

If you cannot classify as to I.Qs., how many did you term as:

| dull-normal | definitely backward |
| border line | feeble-minded |

Please list sex, color, I.Q. and cause of blindness of the above groups and number test.
Example: Girl white 75 optic atrophy 3

Are these below normal children taught in a class by themselves, or are they mixed in with the others?

What subjects are they taught?

Please give me information regarding any special class room work which they do, special methods used, etc.

Do you have a special teacher for this class? If so is she trained for this particular type of work?

Do you have an observation or admittance cottage?

Do you believe these pupils belong in a school for the blind, or in one for the feeble-minded, or in a separate institution? Why?

What suggestions have you for the solution of this educational problem?
In studying the returns from the schools for the blind, I found that only seven had done mental testing. Eight had classified their students as below average or dull normal, definitely backward, border line and feeble-minded. One institution said that it was not allowable to take in feeble-minded and eight were unable to supply data due to the fact that no records were available. Certainly all the schools for the blind should be vitally interested in this problem, yet nineteen institutions failed to make any reply at all. It is most encouraging to learn that the schools that are testing have given as many as three testings on certain individuals. California will have completed by June a third survey of its entire school. One rather startling fact that came to light is that there are nearly forty percent more boys mentally retarded than girls in those schools for the blind that listed the sex in each case.

The definite knowledge of the I.Q. plus the keeping of scientific data on the cause of blindness will make it possible to attempt to make comparisons of causes with mentality. It is difficult in this study to positively know whether or not the causes of blindness, as reported, are primary or secondary. This may lead to inaccuracies that at the present time are unavoidable, but at least the results obtained are
based on the belief that the causes given are primary. Figure 4. shows some of the important causes of blindness of the present enrollment as given in schools for the feeble-minded and schools for the blind, exclusive of Institutions A and B.

The question of whether or not the cause of blindness has anything to do with the mentality of the child needs far more study and compilation of material than was offered by the meagre returns that I received.

Whether or not Keeler and Carris agree as to what are hereditary causes of blindness, Figures 5 and 6 show that a child who has cataract or optic atrophy is more liable to be mentally retarded than mentally normal. If one studies Figure 7 for Institution B., however, he discovers that just the opposite is true for congenital cataract. Further study on whether or not there is any relationship between causes and mentality might prove interesting and valuable. We also learn that these are the greatest causes of blindness in this country, as was shown by figure 4.

Figure 8 shows some of the important non-hereditary causes of blindness in Institution A., according to

SOME OF THE IMPORTANT CAUSES OF BLINDNESS IN ALL INSTITUTION AMONG
PUPILS WITH AN I.Q. OF 90 OR LESS. INST. A & B NOT INCLUDED. FIG. 4.

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<td>Ophthalmia</td>
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<td>Neonatorum</td>
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<td>Optic atrophy</td>
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<td>Myopia</td>
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<tr>
<td>Retinitis pig.</td>
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Keeler's classification. Ophthalmia neonatorum is by far the leader with accident an important second. We find this is true also in Institution B. Both of these two causes may be prevented, as proved by the progress made in the elimination of ophthalmia neonatorum.

We have always had these mentally retarded children in our schools as the following figures vividly picture. Figure 9 is rather startling in that it shows the large number of mental defectives attending Institution A. The average number of these pupils is 108 to 109 annually. Is it any wonder that the institutions for the blind are concerned with the problem of this particular group? This picture distinctly shows that we have always had these backward children. Perhaps we have been so unscientific that we have not realized the seriousness of the situation, or if we have, we may have held up our hands and only wondered what to do about it. Apparently this group stays about the same as far as numbers are concerned, although since 1929 there has been a tendency to increase.

Figure 10 gives us some idea of the number of retarded children who are annually entering one of our institutions for the blind, the average number being 16.2 for the years covered. The reason for
HEREDITARY CAUSES OF BLINDNESS IN INST. A ACCORDING TO CARRIS. FIG. 5.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albinism</td>
<td>10</td>
</tr>
<tr>
<td>Anophthalmus</td>
<td>20</td>
</tr>
<tr>
<td>Buphthalmus</td>
<td>30</td>
</tr>
<tr>
<td>Cataract</td>
<td>40</td>
</tr>
<tr>
<td>Deg. of cornea</td>
<td>50</td>
</tr>
<tr>
<td>Glaucoma</td>
<td>60</td>
</tr>
<tr>
<td>Nystagmus</td>
<td></td>
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<tr>
<td>Optic atrophy</td>
<td></td>
</tr>
<tr>
<td>Retinitis pig.</td>
<td></td>
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</tbody>
</table>

I.Q. of 90 or below
I.Q. of 91 or above
HEREDITARY CAUSES OF BLINDNESS IN INST. A. ACCORDING TO KEBLER. FIG. 6

number of cases

<table>
<thead>
<tr>
<th>Condition</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chorio retinitis</td>
<td></td>
</tr>
<tr>
<td>Cong. cataract</td>
<td></td>
</tr>
<tr>
<td>Infant Galucoma</td>
<td></td>
</tr>
<tr>
<td>Optic atrophy</td>
<td></td>
</tr>
<tr>
<td>Prog. Kyopia</td>
<td></td>
</tr>
<tr>
<td>Retinitis pig.</td>
<td></td>
</tr>
</tbody>
</table>

I.Q. of 90 or below

I.Q. of 91 or above
SOME OF THE NON-HEREDITARY CAUSES OF BLINDNESS IN INST. A.  1930

ACCORDING TO DR. MEELER.

FIG. 3.

<table>
<thead>
<tr>
<th>Cause</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accident</td>
<td>10</td>
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<tr>
<td>Interstitial Keratitis</td>
<td></td>
</tr>
<tr>
<td>Ophthalmia Neonatorum</td>
<td></td>
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<tr>
<td>Phlycten Keratitis</td>
<td></td>
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<tr>
<td>Trachoma</td>
<td></td>
</tr>
</tbody>
</table>

I.Q. of 90 or below

I.Q. of 91 or above
NUMBER OF PUPILS IN INST. A FROM 1916 - 1933 WITH AN I.Q. OF 90 OR LESS.

years 1916 - 1933

FIG. 9.
the very large increase in the year 1930 is most interesting. At that time it was felt that part of that school might be closed for lack of pupils. The home visitor went out into the surrounding country and brought in children who had not been given the opportunity to attend an institution for the blind. The result is apparent. Since then that institution has been more selective. It does show, however, that there may be a number of blind children of questionable mentality who are not now being cared for by institutions.

Figure 11 gives us the same picture but in percentage.

Figure 12 points out that 126 pupils with I.Qs. of 70 or less have attended Institution A. sometime since 1916. It also indicates that 211 have come to that institution with an I.Q. between 71 and 91. This latter group certainly should be taken care of by our schools for the blind, but the former group is questionable. It is this group with an I.Q. of 70 and below that few institutions desire to take.

The length of time that the backward pupil remains in a school varies greatly according to the individual and also to conditions. Certainly Figure 13 shows that Institution A. has tried to give this group a fair trial. It is interesting to note that some seventeen stayed less than a year;
PUPILS ENTERING INST. A. YEARLY WITH AN I.Q. OF 90 OR LESS.  

FIG. 10.

years 1916 - 1933

FIG. 12.

DISTRIBUTION OF PUPILS IN JUNIOR HIGH SCHOOL OF 90 OR LESS.

Below 60 60 - 70 71 - 80 81 - 90

Number of Cases
forty-four remained one year; forty-three were discharged at the end of two years; fifty-two were allowed to remain three years; thirty-three left at the end of four years and from then on the number of mentally deficient students who remain to be eliminated decreases. It is rather startling to find that some remained sixteen years, while one stayed seventeen years, one eighteen and another twenty years. What an expense to the state and school! One may well ask: What constitutes a fair trial for these children? How long should they be allowed to remain? What shall we teach them?
NUMBER OF YEARS PUPILS WITH AN I.Q. OF 90 OR LESS HAVE REMAINED IN INST. A. FIG. 13.
In the replies to the questionnaire sent to the schools for the feeble-minded, I found that twenty-six of them received blind children. Ten answered that they either had no blind or would not take them. These schools also used a number of tests; those listed were: Simon-Binet, Kuhlmann, Terman, Goddard, and the Hayes-Binet. Only nine of the schools gave the causes for blindness. The three important causes again were: congenital cataract, optic atrophy and ophthalmia neonatorum. As far as sex is concerned the number seems to be about the same.

Figure 14 shows that the schools for the feeble-minded are perfectly willing to take those cases of blind children who are unquestionably feeble-minded. In fact most of the cases were the idiot or imbecile type. It does, however, indicate that there is a tendency to take other cases that may need institutional care. If the schools for the blind could get these pupils with an I.Q. of 70 or less into institutions for the feeble-minded, the problem would be far lessened for such schools.

Since the schools for the feeble-minded have practically only the blind imbeciles or idiots, they cannot do anything in the line of educating them. This they all admit. One superintendent made the

Number of cases

<table>
<thead>
<tr>
<th>IQ</th>
<th>Below 60</th>
<th>60 - 70</th>
<th>71 - 80</th>
<th>81 - 90</th>
<th>Over 90</th>
</tr>
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<tbody>
<tr>
<td>8</td>
<td>14</td>
<td>32</td>
<td>40</td>
<td>48</td>
<td>56</td>
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<td>64</td>
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<td>272</td>
<td>272</td>
<td>280</td>
<td>288</td>
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</table>
statement that a blind child with an I.Q. of 60 - 70 was far too bright to be in a school for the feeble-minded. Yet we find hundreds of seeing children with such I.Qs. in these institutions. It is admitted by most writers that feeble-mindedness is inherited and that sense of sight aids in the development of the brain, especially in early life-training.

Mr. Herd says: "Every blind person may be said to suffer in a sense from a mental defect in that his brain cannot develop normally like that of a sighted person." \(^2\)

If all the above is true, does it not make the situation far more serious? A seeing person with low mentality can dig ditches and do many odd jobs that require little reasoning power, but a blind individual cannot do them for the simple reason that he has no sight. The fact that he is blind plus the mental handicap makes him a more necessary institutional case than if he had sight.

If this group is increasing or even if it is as large as Figure 15. indicates, something must be done about it. Figure 15 shows the range of I.Q. in those pupils entering Institution A. in September,

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THE I.Q.S. OF PUPILS ENTERING INST. A SEPT. 1932. FIG. 15

I.Q.

Below 60

60-70

71-80

81-90

91-100

101-110

111-120

Number of cases

8

6

4

2

0

Below 60

60-70

71-80

81-90

91-100

101-110

111-120
1932. It is rather odd that there are twelve cases below an I.Q. of 91 and twelve above. It is also illuminating in picturing the group between 71 and 80. There, is a problem that should challenge any wide awake teacher!
Chapter IV.

The opinion of educators.

What then is the opinion of educators of the blind as to the care of this group?

The group of doubly handicapped children such as we are dealing with may be divided into two; those with an I.Q. of less than 70 who may to some degree be educable, and those with an I.Q. of 70 - 90. From now on I shall consider the first group as feeble-minded and the second as retarded.

Where then do the blind feeble-minded belong? Certainly they do not belong in schools for the blind for the following reasons:

1. It is absolutely unfair to the normal blind child to be forced to associate in his school life with the feeble-minded. When we attended school, we did not have to associate with that type of child. Why then should the normal blind have to do so?

2. There are hundreds of visitors to the institutions for the blind every year, anxious to see what the blind do, how they live, how they work, etc. We consider that the education of the public to a sane idea of the blind is most necessary and desirable. We want them to know what the normal blind child is capable of doing. While we are in the midst of trying to impress the visitor, along comes one of the
"unfortunates" and our education of the visitor blows up, for he leaves not with a picture of the normal blind but with an impression of that less gifted child who will never be self-supporting but will always be a burden to society. This is most unfair to the normal blind who justly deserve the opportunity to earn a living.

3. The blind feeble-minded belong to an entirely different class. Their inability to comprehend all that the normal children do makes it difficult to house the two groups together.

4. The blind feeble-minded vitiate the environment in which they live. Socially, this class is quite apart. They often do not enjoy the games that others play. Many moral problems arise which unfortunately seem to oling to these subnormals thereby making some of them a real menace to others.

5. It is an economic loss to train them with the normal blind. If the normal child is to be thus handicapped by keeping him with the slower child while the latter tries to keep up, we find a group remaining in the institutions much longer than should be expected. Certainly the mentally alert should not be held back, neither should the subnormal be ground through the same mill. Special teachers, rooms and houses should be provided, all of which cost money.
6. The blind feeble-minded are unhappy and often depressed when placed with the normal blind.

In reply to my question: where do the backward blind belong? the educators of the blind have the following to say on the matter:

"These blind feeble-minded should be taught in a separate institution."

"The lower grades of mentality certainly do not belong in this school and we do not keep them very long. My opinion is that a separate school would fit our cases better than the Feeble-minded Institution."

"Any blind feeble-minded should be in a school for the feeble-minded."

"A segregated group under the jurisdiction of schools for the blind might help."

"Many students with an I.Q. between 70 and 90 do fair to average work. They do not learn as readily but some of them work hard and have an achievement quotient equal to or even higher than others with an I.Q. of 90. I believe that these students should be in a school for the blind. Others with a lower I.Q. on the border line or definitely feeble-minded would belong in a school for the feeble-minded. I believe a special department for this group of low I.Qs. would be beneficial."

"I believe the trainable cases could be
handled in the same institution along with the blind children but special teachers should be provided and separate classes maintained."

"I am of the opinion that in all cases it would be better if these backward children could be educated in a school by themselves, and then avoid the depressing influence of such groups upon the classes of normal children."

"I think it would make for efficiency if we could have more of our retarded children taught in special classes and by special methods and on a basis of a more restricted and simplified course of study."

I might go on quoting from letters, but there would be little difference. Many of those in the field of the feeble-minded have said practically the same thing. Dr. Goddard, former head at the Vineland Training School and now of Ohio State University, said that the blind feeble-minded belonged in institutions for the feeble-minded. This was the same point of view held by Fernald and Rogers fifteen to twenty-five years ago. Dr. Kuhlman, Director of the Division of Research in Minnesota, declares that the blind defective cannot become self-supporting and that their training is easier in schools for defectives rather than for the blind. Dr. Green, superintendent of the Walter E. Fernald State School reports that the policy of that school
is not to accept blind persons unless they are idiots or imbeciles. He believes a separate institution would offer the best solution. Dr. Murdock believes they should first go to schools for the blind, then be sent home, and finally, if necessary be sent to schools for the feeble-minded. Dr. Johnstone, Director of the Training School at Vineland, says that a blind child with an I.Q. below 30 should be in an institution for the feeble-minded, otherwise in schools for the blind.

In answer to the present questionnaire, men in the field of the feeble-minded have said the following:

"If after receiving training in a school for the blind, the children with I.Qs. between 50 and 75 cannot be cared for satisfactorily in their homes, or where no family can be found to give the child care and supervision, they can be cared for satisfactorily in our institution."

"It is probable that they get along better in schools for the feeble-minded than they do in schools for the blind. If there were sufficient number of such cases to warrant it, a separate institution for them might well be given consideration."

"It is our belief that blind children of moron or higher intelligence should, unless epileptic or otherwise unsuitable, be taught in a school for the blind where they might benefit from the skilled
instruction. Many of these will eventually become inmates of schools for the feeble-minded."

"All blind children with an I.Q. less than 80 belong in schools for the feeble-minded."

"It is my opinion that the feeble-minded blind belong in a school for feeble-minded and that special provision for them, by reason of their blindness, should be made. This opinion is based on the fact that these children operate under the reasoning power and judgement and other characteristics of the feeble-minded. They cannot be raised from this level and are probably as well understood as they ever will be. I doubt if a separate institution could be obtained for such."

"Unless a school for the blind wishes to become a residential home for the feeble-minded, it must confine itself rather strictly to educational endeavor."

"A special teacher should be provided, having been trained primarily in instructional processes for the blind and also having had, at least, some experience as a teacher in a school for the feeble-minded. For the dull-normal and border line, one could hope for a definite betterment. For the definitely backward and feeble-minded, most likely but little could be accomplished."
There are apparently three perfectly sound reasons why blind feeble-minded children should not be in schools for the feeble-minded.

1. There is great difficulty in grading the blind feeble-minded child into the proper class with the seeing.

2. Sometimes the blind pupils are abused by the seeing feeble-minded.

3. There is no adequate provision for the blind.

To the question: Are these below normal children taught in a class by themselves or are they mixed in with others: practically all the answers were that they were taught in with others. Painfully few schools, in fact only five, stated that they were taught separately or that they were taught by a special teacher who had been trained for the work. Not a single school had any information regarding special class room work, or methods used, etc. Only one school reported that it had an admittance cottage.

To be sure the schools are hampered by lack of funds and are thereby unable to attempt what they might like to accomplish, but I believe they are also held back through lack of willingness actually to get down to the problem and do something about it, other than talk.
Those schools which answered the question as to subjects which the pupils were taught practically said that they were given the same things as the others plus more handwork. At Philadelphia, Dr. Burritt had a day class of these defectives which met in the city. This year it was necessary to bring this group to Overbrook, but no one is pleased with the arrangement. Mrs. Sumners, the special teacher in charge, told me that the children are given individual attention and work according to their ability. These pupils have some arithmetic, history, geography of the city, English, spelling, reading and writing braille if they can master it, hand work which suits the age and disposition of the boys, current events and all the information which they can gather over the radio and bring to class. A rhythmic orchestra furnishes them enjoyment, helps them in concentration, and is an emotional outlet for them. The project method is generally used for it gives better correlation of subject matter.

Miss Dustin believed that the duller child should be separated from others for three reasons:

1. For the sake of the teacher.
2. For the child's own good.
3. For the simple reason that he loses interest.

She believed that this child should have plenty of
games in the gymnasium and the open air. It would seem wisest that he should have sufficient manual training for his needs, a course in gardening, care of animals, practical arithmetic, attractive reading and nature study.

Mrs. Greaves points out that these children need individual attention. At her school they are taught "housework, handwork, and the running of a store and a refreshment stand, and obedience."  

Mr. Spurgeon writes in an article that he believes we should try to make these doubly handicapped children useful citizens. They have a right to be given suitable work which will create in them a feeling of contentment and satisfaction in knowing that here is a piece of work well done. There is no end of odd jobs around the class room which these pupils can do and would like to do, thereby keeping themselves occupied and busy. We should try to teach them things which may help coordination of brain and hand.  


particular article was one of the most encouraging which I have read for it indicated that we are on the way to doing something.
Chapter V.

Course of study.

I offer the following tentative course of study which may be followed by our blind feeble-minded. Not every pupil in this class can profit by studying all of these subjects, but at least there are in among this list fields of endeavor which may be understood by some. This course of study will include: nature study (which can well bring in a good sound course in sex education), poultry raising, every type of handwork available (with the hope that there will be some which can be mastered), practical arithmetic, English, interesting history and geography, general science that is on their level, hygiene, speech correction if necessary, physical corrective work where needed, plenty of exercise and the reading and writing of braille, if it is found practical for the particular individual.
General Science.

Apparently general science is a subject that is not taught to the backward pupils in our schools. It is something that has been left for the eighth grade or first year of High School, yet what a wealth of material there is in it that can be acquired by the group in which we are interested.

Since I have taught this subject to a very much retarded group, I can make numerous suggestions which may be helpful. I found of all the science books which I studied, that "The Science of Common Things" by Tower and Lunt could be adapted most easily to this group. There are five things which should be kept in mind.

1. It is necessary to begin with something with which the pupils are acquainted.

2. One wants to remember that these students not only assimilate slowly but that repetition is exceedingly necessary.

3. It is an excellent idea to do at least one experiment every week and more if possible. The boys should take an active part in these experiments. They will be most enthusiastic over them and it will help bring home more quickly to them the points which the teacher is trying to establish.

4. The teacher must be practical.
5. One must not expect these students to write a report of what has happened. Some of them can; most of them are able to remember the outstanding facts and some just are unable to do either but at least they receive pleasure out of having done something. After all, pleasure is one thing which we are after.

We began with the study of air. Each pupil told what he knew about it; then a number of questions were asked which awakened their realization that there was much about air which they did not know. After being told of many experiments which they could all do in class, they proved the truth of some of these things.

Does air occupy space? For this experiment the teacher wants to bring in paper bags for each pupil and allow him to blow them up. He realizes something has entered the bag. Let him hold the mouth of the bag near his face and slowly press the bag. He will feel it resist pressure and as he opens the bag ever so slightly he will feel the air escape. Queer but true, they will like to do this several times and at the end of the period they will have a glorious time breaking the bags. Someone has said, "Why let them do this?" My answer is: "They get a kick out of it and at the same time it drives home a scientific fact."

Does air have weight? Let each boy have a toy balloon. Place the empty balloon on the end of an arm
balance and a dish of sand on the other end allowing them to balance. Next blow up the balloon and try to balance with the same amount of sand. The result is evident to the slowest pupil. Give the boys the balloons at the end of the period.

What happens if we use up all the good air in a room? What is meant by ventilation? By all means do the experiment which is given on page 14 and 15 of "The Science of Common Things." This helps drive home to the pupil why he should sleep with his windows open; why air is needed for life; and why he should ventilate his room properly.

By this time the boy wants to know about oxygen. Prepare several jars of it. Be sure that the boys help set up the apparatus and examine the potassium chlorate and manganese dioxide. Let each one have a turn at heating the mixture. Do all the standard oxygen experiments.

In the study of air and in fact in all of this work the teacher will often become sidetracked. Personally, I think this should not be a source of worry, for what one is trying to do is to interest the individual and if this method does lead one into unintended realis which are valuable, so much the better.

Next we studied the weather. We followed weather reports and the movements of storms across the country. We studied climate, humidity, causes of rain, snow, etc.
It is easy to show how cold air will hold less moisture than warm air. This led to questions about the thermometer and barometer. This year each boy made his own barometer which to his joy worked. The mercury in the thermometers proved interesting to them. This gave us an opportunity to learn why it is used and what else might be substituted.

The study of water contains a wealth of material. How is it made? What causes it to evaporate? Why does it freeze? How is ice made? Where do we get our water supply? How is it purified? One boy lived on a farm and said that he pumped water from a well. This led us to the study of a simple pump. Meters were brought into the class, taken apart and put together. We visited a commercial ice plant and even manufactured our own. The visit to a pumping station was also deemed necessary.

The study of fire and heat completed the year. Where do we obtain the materials used for fuel? What are the causes of fire? How may we prevent fires? We showed how dust could cause an explosion. In order to do this we made a miniature grain elevator, filled it with dust, caused a flame to enter which blew the whole thing up. Were the boys tickled? Ask any of them. We next made our own fire extinguisher. Just to see whether or not it was good, we made a little fire and
tried it out. All the heating systems may be studied for models may be made which are tangible to the class.

This year this group are doing things about which they did not study last year. There should be a practical value to those things which they are taught. I believe that there is a great deal of ordinary house plumbing which they can be taught which will be valuable to them. It would be of advantage to these children to know where the water is shut off in their house and how it is done, how do you drain your heating system, how do you change washers on the faucets, how can you keep the door bells in repair, and how do you put in fuses?
Geography.

In this course we should try to teach those geographical facts concerning this country which are not only valuable but will stir interest. We can give these pupils some idea of location, some meaning of topography, some knowledge of what is raised in different sections of our own country. This would appear to be within the grasp of our most dull pupils. Let the radio be a medium of instruction. There is not a pupil who does not thoroughly enjoy listening to it. Most of the dull boys whom we have at Perkins could easily be interested in locating the different stations to which they listen. The wealth of material which the recent presidential inauguration presented is a good example of possibilities along this line. Not only did we have a national but an inter-national hook up. Governors came from every state; some arrived by auto, others by train, and others by air. Plenty of place-geography in all that.

This retarded group could be made interested in topography by such questions as: How ere mountains made? How are deltas formed? What is erosion? Where are sand dunes?

On and on we might go, not only telling the pupils of nature's formations but illustrating them. For instance, anyone could have a water proof table with a large, irregular mass of earth, sand, clay and rocks mixed together placed on it. On the highest level he might
make a small lake and allow it slowly to overflow, studying the result as the stream travels down the slope and seeks a lower level until it finally reaches the ocean below. A miniature grand canyon may be the result, or a delta may be formed. The clever teacher will find some means of making this part of the subject vital to these children.

There are no end of good stories in braille which the students would like to read giving them interesting views of the customs, habits and life of people in foreign countries which they might study.

Then, too, the geography could be linked with the manual training course with interest aroused as to the source of the material used in the shop, how it is raised and how it is transported.

Miss Pratt, teacher of geography at the Perkins Institution, made the following suggestions:

1. Proceed from the known to the unknown.
2. Be rather brief and to the point, i.e. give what can be solved in fifty minutes or be so extremely interesting that, if not complete the pupil can scarcely wait for the next lesson.
3. At the end of the hour always have an assignment for the following day, if not something to prepare at least something that will arouse the children's curiosity so that they will look forward to it.
Illustrations:

A. We celebrate the fourth of July but people in Singapore do not. Would you like to know what and how they celebrate some of their holidays?

B. We think swimming is a healthful sport. Do you know that there are people who think it is wicked?

C. We have spring, summer, autumn and winter but I know places where they have only two seasons. Shall we find out where they are and why this is so?

A teacher must have her lessons exceedingly well prepared for this group for they ask an endless number of questions.

The project method would probably give the best opportunity for real work in this class. The teacher will find that the use of plasticine is a source of pleasure to these boys as well as an excellent means of motivation.
Reading.

Does it pay to attempt to teach these backward pupils to read? For these children there is probably only one reason for their reading and that should be that in later life they will so enjoy reading that many otherwise empty hours will be somewhat filled by this pastime. The next question to ask is: Do these pupils read when they have left school?

Miss Potts, of the Personnel and Research Department of the Perkins Institution, is beginning a most interesting study of this entire question. At least two or three years will be needed before the work is complete but it has all the earmarks of being of value to us. She has said, "The value of teaching braille reading to students with I.Qs. of 85 and below has been subject to much conjecture but little actual research." For her study she has taken only those pupils who had an I.Q. of 85 or less and had been out of Perkins a minimum of three years and whose records are complete in the library. A brief summary of her work to date follows.

Pupils with an I.Q. of 81 - 85. Only seven readers out of a total of twenty-six borrowed books. These readers took out one hundred and eight books in a ten year period. The average number of years since leaving Perkins was 4.6.
Pupils with an I.Q. of 76 - 80. Only six out of a total of twenty-three borrowed books. The average number of years for this group was four and the books read ninety-seven.

Pupils with an I.Q. of 71 - 75. Out of thirteen children, only seven were readers. Ninety-nine books had been taken out over an average of 4.3 years.

Pupils with an I.Q. of 66 - 70. There were seven readers out of a possible ten; average years out 6.3; books read, ninety-three.

Pupils with an I.Q. of 61 - 65. Here there were no readers out of a possible number of five.

Pupils with an I.Q. of 56 - 60. Two readers out of a possible four read seven books. The average length of time out was 4.5.

There were four pupils with I.Qs. less than 56 but none of them took out any books.

There was no way of checking whether or not any of these read magazines.

Miss Maxfeild states that the time of the high grade imbecile is precious and should be spent in trying to give him something of value. Reading can scarcely be classified as such for him. She is firmly convinced that there is little sense in teaching
the low grade moron braille."

I think that we might conclude that the reading and writing of braille greatly depends upon the individual child. If the student can learn it easily and likes it by all means give it to him, but if it means years of struggle, as it has in some cases, then it is time that the teacher and those others concerned forgot there ever was such a thing as braille.

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Arithmetic.

The aim in this subject should be the desire to give each pupil the ability to tell money accurately and to be able to make change. Many of the courses which the boy may take will give ample opportunity for practice in this line.

The industrial department can be the source of inspiration. Every boy wants to earn money and the practice which he may receive of buying his materials receiving pay, reckoning his profits, will be helpful and practical. He will also find use of certain measurements which he has to employ in every day shop practice.

Some of the boys who study poultry will have sufficient practice in handling money and keeping accounts.

Useful and practical arithmetic must be the only kind taught to this group.
History.

There is a wealth of historical material which will appeal to these children. This year the Howe Memorial Press put "A History Reader" by Wilson in braille so that there would be available for this backward group something which might interest them. The results have proven that these boys do enjoy the subject when it is written so that they can understand it and as if it were a story. "Following the Frontier" by Nida and parts of the "First Course in American History" by Hodgdon also proved valuable.

A sand table will be necessary in this course for there are several things which the pupils might make. An Indian village, or a pilgrim scene or village, Lincoln's cabin, are a few things which they might attempt to construct. Who is there that does not enjoy dramatization? There are many pilgrim stories which lend themselves to this kind of teaching, such as the first Thanksgiving, the story of Pocahontas, John Alden, etc. There are scenes from our struggles for independence; some of the stories of Daniel Boone; or the life of Buffalo Bill, and many others which would give these pupils a real feeling of coming close to the actual events of history.

If the class should study about Franklin, the
boys could make kites and learn to fly them. It ought to be a live course for them and I think it can be so if it is properly directed.

If it would be possible to get hold of models which would show the evolution of automobiles, airplanes, trains, or anything else this would be tangible and instructive to them all.

The following books are in braille. Most of this material will be of use to the pupils and some will only be additional reference material for a blind teacher for her history class.

Indian Stories.
Stories of the Red Children. Dorothy Brooks
Magic Feather and other Indian Tales.
Wigwam Stories. Mary C. Judd.
Indian Why Stories. Frank B. Lindermann
Legends of the Red Children. Mara L. Pratt
American Indian Legends. A.Tyler
Dorcas the Indian Boy. Snedden

Colonial Stories.
The Colonial Twins of Virginia. Lucy Perkins
Stories of the Colonial Children. Mara Pratt
Colonial Plays for the Schoolroom. Blanche Shoemaker
Colonial Stories Retold. Mara Pratt
Boys and Girls of the Colonial Days. Carolyn Bailey
Pilgrim Stories.
The Story of the Pilgrims. Roland G. Usher
Stories of the Pilgrims. Margaret B. Pumphrey

Christmas Stories.
The Seventh Christmas. Coningsby Dawson
A Christmas Carol. Charles Dickens
The Gifts Without the Giver. Priscilla Hovey
On Christmas Day in the Morning. Grace Richmond

Stories of Lincoln.
The Perfect Tribute. Mary Andrews
Lincoln and Slavery. A.E. Pillsbury
Uncle Joe's Lincoln. E.A. Steiner
Abraham Lincoln and the Union. N.W. Stephenson
He Knew Lincoln. Ida M. Tarbell
The Wanamaker Primer on Lincoln
The Toy Shop. M.S. Gerry

Hero Tales.
Hero Tales from American History. T. Roosevelt and H.C. Lodge
Daniel Boone, Wilderness Scout. S.E. White
Stories of Great Americans. Edward Eggleston
Stories of Great Men and Deeds.
Heroes of Every Day Life. Fanny Coe
Heroes of To-day. Mary R. Parkman
Flag Stories.
The Origin and Evolution of the United States Flag. Thurston and R. U. Ballard
The Flag. Homer Greene
Stories of Early American History.
Stories from Early American History. Wilbur F. Gordy
The Story of the Thirteen Colonies. Helene A. Grueber
The American Twins of the Revolution. Lucy Perkins
The Many Sided Franklin. Ford
Old Settler Stories. Mabel Fletcher
Additional Material.
The Young Travellers. Altsher
The Adventures of Buffalo Bill. W. F. Cody
Cowboys North and South. Will James
The Little Confererates. Thomas N. Page
Leading American Inventors. Iles
Ten Pivotal Figures of History. Ambrose W. Vernon
The Story of Our Country. R. and Willis West
Historic Adventures.
Stories of Later American History. W. F. Gordy
The Seven Ages of Washington. Owen Wister
Camping with President Roosevelt. J. Burroughs
Theodore Roosevelt's Letters to His Children. J. B. Bishop (ed)
The Boy's Life of Edison. W. H. Meadowcroft
Hallowe'en and Mystery Stories. Anna Tyler
Twenty-four Unusual Stories. Anna Tyler
A Sheaf of Christmas Carols ed. by E. E. Allen
Holidays in Story and Verse
English.

Certainly the only English which this group should be taught is that which will help them speak the English language more accurately and acceptably than they already do. There is absolutely no sense in trying to give these pupils formal grammar, for they will never learn what an noun or a verb is, and to be frank about it, who cares?

Time could be spent on learning short, worthwhile verses. Every possible means should be used to correlate the English with the other subjects. This could easily be a general informational period.

Since many of the pupils will not be proficient at reading braille, the teacher could spend considerable time in reading good stories to the pupils. She could then have them retell some of them with the idea that they would begin to try to tell some of their own.

I find that many of them lack imagination. Then, too, the teacher could try to teach these boys how to write interesting letters home.

Many of these pupils have fairly good rote memory. Some learn to spell with good results. I believe time should be spent in teaching them the common ordinary words which they will use.
Nature Study.

The course in nature study could and should be given prior to a course in gardening. The idea of this preliminary course is to give the pupil some knowledge of all of the wonders of nature that are at his very finger tips, many of which he can learn to appreciate.

Most children love pets; a blind child is no exception, so if it is possible in any way to make use of this drive one should do so. An aquarium will be of much value with its snails, turtles and goldfish. The boys can be held responsible for keeping the water pure and the creatures fed. They will then justly have a real pride in showing their possession to visitors.

I doubt if there is any school for the blind so located that it does not have flower gardens and flowers. It is through the avenue of flower study that much sex hygiene can be taught. The boys ask all manner of questions in their classes. Every question which deals with sex is of vital importance. The wise teacher will meet the problem squarely and will not try to dodge the issue. I believe it takes a wise teacher to give these backward children the proper knowledge of sex hygiene, for many of them find life full of problems, too often so difficult that they find themselves lost in conflict. Masturbation is a rather common practice. How to combat it with these subnormal children is a serious problem. It cannot be done by mass group
...
technique but must be an individual affair.

The question of marriage for most of this group seldom arises, nevertheless, they often want to know about their blindness and whether or not if they did marry their children would be blind. Such information should be carefully given out. Certainly there should be an attempt made to impress upon them the serious consequences which might result if they should reproduce.
Gardening and Poultry.

These two courses should be as practical as it is humanly possible to make them. Probably none of our very slow pupils could ever master the theory of either one of these subjects, yet if given the opportunity and training they might become useful hands on some farm.

For a number of years Perkins Institution and Overbrook have given a course in Poultry. There are always some mentally slow boys in this course and for those pupils more time is allowed in the hen yard. A few of these boys will, if they are properly supervised, make good poultry helpers.

This year for the first time Perkins is also offering a gardening course. The boys who have elected this course will stay here during the summer and run the farm. Now that spring is here they are already at work in the field. Two of the six boys staying over for this work are mentally retarded, yet one of them shows that he will make a good man for some farmer.
Conclusions.

This study of the blind mentally retarded tried to do two things.

1. It attempted to discover if there is any relationship between the causes of blindness and mentality.

2. It attempted to bring together the opinions of educators on what is being done and what should be done for this group.

The material was gathered from questionnaires which were sent to forty-three schools for the blind and sixty-seven institutions for the feeble-minded in the United States. A total of sixty replies was received.

The following data was obtained from these replies.

1. The number of blind mentally retarded pupils reported in these institutions was 1605.

2. The two most important non-hereditary causes of blindness are:
   A. Ophthalmia neonatorum
   B. Accident

The two most important hereditary causes of blindness are:

A. Congenital cataract
B. Optic atrophy

3. It is impossible to give the percent or numbers for these four important causes due to the fact that many institutions for the feeble-minded
did not list the cause of blindness.

From a comparison of 385 blind mentally retarded pupils with an equal number of blind normal children it was discovered that:

1. Congenital cataract was found among 17% of the blind mentally retarded and only 6% among the blind normal.

2. Optic atrophy was found among 16% of the blind mentally retarded and only 9% among the blind normal.

3. Accident was found in 5% of the cases of the blind mentally retarded and 8% of the cases of the normal.

4. Ophthalmia neonatorum was found in 16% of the cases of the normal and only 10% of the blind mentally retarded.

A survey of the opinions of the educators of these special schools brings out these interesting facts.

1. All are in agreement that the blind feeble-minded child should be in an institution for the feeble-minded.

2. There is very little agreement on what actually constitutes a blind feeble-minded child.

3. Many of the schools believe that the educable blind mentally retarded pupils should be educated in a separate institution which would only care for this particular group.
4. A number of the educators believe that the blind mentally retarded who are educable should be taught in schools for the blind.

5. Practically all of the institutions for the feeble-minded do nothing in the line of education for their blind inmates.

6. Most of the schools for the blind do not have special classes for this retarded group.

7. Only one institution reported as having an admittance cottage.

8. Practically all of the superintendents agree that a special teacher who has been trained in handling both the blind and the mentally retarded should be employed for this class. Very few, however, have such a teacher.

9. A need was felt by all to have some special curricula for this group.
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