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## ABSTRACT

Special education programs and services available to handicapped children in Denmark are described in the areas of speech deficits, visually handicapped, aurally handicapped, slow learners, mentally handicapped, retarded readers, behavior problems, and hospitalized and homebound. Also discussed are concerns of student transition and adjustment, selection and termination criteria, vocational training, continuation schools, preventive measures, the role of the school psychologist, economic and administrative problems and structure, intercommunity cooperation, and financial concerns. Information on the enrollment and categories for special education classes in Denmark from 1961-68 is presented, and the organizational structure of special education is diagramed. (RD)

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SPECIAL EDUCATION FOR HANDICAPPED CHILDREN  
IN THE MUNICIPAL SCHOOLS IN DENMARK

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## Children who Require Special Education.

According to the public school laws, a community is required to provide all children of school age with an adequate education. Children who cannot profitably participate in the usual school work must receive special education. Children in this category may include those with speech or hearing defects, weak vision, difficulties in reading, spelling or arithmetic, low intelligence, emotional disturbances, social maladjustment, cerebral palsy and those who are immature school beginners.

In deciding whether or not a child should receive special education the starting point must be whether or not it is possible to overcome the child's handicaps within the framework of the regular education. As far as possible, each child's case should be considered individually and the needed special help or guidance should be given, possibly through the use of special educational tools or devices, within the regular class curriculum.

While in this way everything possible is done to limit the need for special education, it must also be emphasized that any child in need of this kind of special attention must get the required help and that help must be given as soon as the need is demonstrated.

Apart from these common principles, however, it is not possible to give specific rules as to when special education is justified. Instead, a decision must be made in each individual case, when all the information needed for the evaluation of the child's educational possibilities has been collected.

The decision must not only take into consideration factors concerning the child itself, but also conditions in the class in question - the general intelligence level and standard of work - and conditions in the home. This information is provided in connection with the psychological testing.

In deciding whether special education or welfare work is required, it must be kept in mind that the legislation

regarding the deaf and hard of hearing (1950), the blind and weak-sighted (1956) and the mentally deficient (1959) contains special provisions with respect to compulsory education.

Children who are deaf or blind must be taught in State institutions. It is of vital importance that the authorities charged with enforcing these laws make certain that the institutions are informed about these children.

Hard of hearing, weak-sighted and mentally deficient children fall under the compulsory school attendance laws. When they are unable to benefit from the education in the public schools, including special education in the local schools they must be educated in State schools.

In general, then, it may be said that all children are subject to the compulsory education laws, and only if it is impossible to offer a child a satisfactory education in the local public schools he should be taught in State institutions.

Special education in the public schools ought to be organized in such a way that, unless the children need a change of environment or combination of teaching and special medical care, they should remain in the public schools.

#### The Form and Contents of Special Education.

The educational aims of the public schools also apply to those children who cannot participate with profit in the regular school work. The special education that is arranged for the pupils aims at reaching the goals of the school as a whole as in any particular subjects. In some cases, of course, these goals must be modified in accordance with the situation. It must be realized, for instance, that the backward child will not be able to achieve the same scholastic goals as other children.

The scope of special education is defined by the need of the individual child. There are two general types of special education, one which replaces the normal instruction completely or partially, and one which supplements it.

It may be said that special education completely replaces the normal education when a child is transferred to a special class. This may be necessary either because the child's

entire education must be arranged as special education, or because conditions point to the desirability of transferring him to the sheltered milieu of a special class. It is characteristic of these special classes that the number of pupils is considerably smaller than in standard classes. In classes for speech-hearing and motor handicapped children not more than 8, classes for mentally retarded 10 - 14 and for retarded readers up to 16 provided that the class is divided in some Danish lessons. This is partially a result of the fact that special education is arranged, to a large degree, according to the needs of the individual child. These special classes may be located in the regular public schools, or centralized in special schools.

Special education partially replaces the ordinary education when the child has special instruction in only a few subjects. In such cases the child usually goes to a specialist teacher in another room when his class has instruction in the subject in question.

Special education is supplementary to ordinary education when the child receives special tuition in a subject at the same time as he follows the ordinary school work in that subject. In such cases it is desirable that the child's school day is not appreciably lengthened. Instead, the special tuition should replace part of the child's ordinary lessons.

Special education can be given individually or in groups. In special education, children are generally grouped according to their type of handicap, in classes for backward children, classes for hard of hearing, etc. However, until now, in the country schools special education groups included, for instance, retarded readers and backward children. Such groupings should be used only when unavoidable. The aim is to have all children receiving special education grouped according to their main difficulties.

This aim should continually be kept in mind in arranging special classes. Classes for backward children, for instance, should contain only backward children and not those of normal intelligence, but with difficulties in another field. In dealing with children with speech defects, hearing difficulties or **serious reading problems, it is often difficult to gather children enough to establish homogeneous groupings, especially if one**

wishes to avoid having children of all ages in the same class.

In such a situation, where the difficulties are to some degree related, it would be proper to divide the class into groups of more or less the same age and maturity rather than to group them according to the kind of difficulty. Therefore in each instance during the planning for special education, the question of whether it would be profitable to organize ordinary classes for children with speech difficulties, hearing difficulties and reading difficulties must be weighed.

Some of the children will not fit properly into one special group, as their difficulties in school will arise from more than one source. Among children with lower intelligence there will be some with weak vision or hearing, or children with reading difficulties. Children with poor hearing may often have speech difficulties, etc. When special education classes are arranged for each of the above-named groups, one is faced with the question to which category of special education children, who might belong to several groups, should be referred.

It is difficult to lay down general rules in this matter. Ordinarily, one can only say that if the child is so greatly handicapped in one direction that he should be moved to a special class, while in other respects there is only need for supplementary help, he should be placed in the required special class, where he should also receive the supplementary help.

In cases where supplementary teaching in more than one area is called for, an attempt should naturally be made to set up teaching in those areas.

If the child has such serious difficulties in more than one area, that moving him to a special class is called for, the decision must be based on consideration of where he can best be taught. The fact that the child has difficulties in several areas may call for transfer to a special class even though the difficulties viewed individually are not sufficient to argue for it. These principles must, however, be followed with discretion. In each case it will always be necessary to consider carefully which is the proper solution.

As stated, the scope and form of special education are dependent upon the individual child's needs. It is not expected, however, that every single school system will be able to set up

all forms of special education for the aforementioned categories. In any case, the choice from among the various forms of special education will be a local responsibility but it must be kept in mind that each child, no matter where he lives, has a right to special education in the form which effectively offers him help. In this respect collaboration between several communities will often be necessary.

#### Transition from School to Everyday Life.

The question of the role of the school in the change from school life to everyday life has received much attention during the last years. The employment counselling act of 1953 made it incumbent upon the public employment service to provide job counselling. According to the public school law of 1958, education in the seventh school year should be given with respect to the children's future and their further training. In the eight, ninth and tenth school years education is to continue along these same lines, but with special attention to preparing the student's transfer to trade schools or business schools.

With respect both to the Ministry's directives and the local conditions, it is possible to effect a grouping which will take into consideration the students' future employment within the various branches of trade, without the instruction actually becoming vocational training.

The students whose difficulties require that they receive special education will often be faced with greater problems than other young people. This means that the role which the school plays in the preparation for the change from school life to daily life, with regard to the children who have received special education, must be more comprehensive. It is important that, within the framework of special education, these children do not only learn about the world of work but that they also grow familiar with difficulties they are apt to encounter as a result of their handicaps. They should also be informed about the possibilities for them to receive special support. In a similar manner, job counselling for these young people will present special problems.

As conditions in this area are so different for the various groups of young people, we must here be satisfied with some general remarks. Later in this report each group of children who receive special education will be treated more completely. It is a question whether the role of the school in connection with these children's entrance into the world of work should extend further than usual. It would appear that especially in the case of lower ability children the school should offer special help and support in the first years after graduation.

In connection with the question of these young people's transition to daily life, it is natural to take into consideration the extent to which they can benefit from teaching in the already existing evening schools and continuation schools and, possibly, in on-the-job training. In this respect it may be noted that the law governing evening and continuation schools provides a possibility. Whereas there is normally required an average attendance of more students per hour, in the case of "handicapped students, for whom teaching alone or in smaller classes is required", only two students per hour is required for special education to be established.

With respect to the question of training within the field of vocational training, provisions for setting aside the regulations when it concerns persons who, because of bodily or mental weaknesses, are limited in their abilities. Further, trade schools and business schools may set up special classes for retarded readers.

### Children with Speech Difficulties.

One of the objectives of Danish lessons is to improve and cultivate the children's speech. This is achieved by speech exercises, among other methods, and these should be used during the entire period of school attendance. In this way the teacher seeks to combat bad articulation, lessen speech difficulties and improper voice control, etc. At the same time, however, there will be a proportion of the students with speech difficulties who cannot be reached or helped through the ordinary classroom procedures. For these children special speech training must be arranged.

Speech difficulties may concern language, voice, or articulation. Among the conditions which affect the language function, i.e., recognition, understanding, arrangement, formulation and production of language, are aphasia, deaf-muteness and constitutional speech impediments and improper sound formation. Sound formation problems can be organic or functional.

As soon as the teacher concludes that the child's speech difficulties are such that they cannot be helped by the ordinary class exercises, he should request the school psychologist to examine the child. With respect to the examination of children with speech difficulties, special speech and hearing consultants are connected to the school psychologist's office. A qualified speech teacher makes a speech examination of the child, and in certain instances the child should also be examined by the school psychologist to determine to what degree his difficulties are of psychological origin. In instances where there is a possibility that the child should enter the state speech institute, or if there is a doubt as to the kind of speech difficulty or its treatment, the child should be referred to the institute for examination.

The education of children with speech difficulties is planned on the principle, that only the children who must be treated in the speech institute are taken care of by the child welfare services.

The school provides education for all the rest of the

children - those who can profit from education in its special speech classes. The group which is under the authority of the welfare agency comprise children with very serious speech difficulties, deaf-mutes, and those with hare-lip or cleft palate, who must be operated on or supplied with aids. Also included in this group are children who must be examined by the institute for possible treatment, children who need to be removed from their surroundings, children with behavior problems, and finally, those children who live so far from a speech teacher that they cannot be taken care of locally. This group is now very insignificant.

Cases of hare-lip and cleft palate are reported at birth. Hare-lip is normally operated for at the age of about two months, and cleft palate at about two years. Cases of deaf-mute children are also usually reported before they arrive at school age. Of school age children referred to the State institute there will be some for whom a change of environment is a necessary part of their treatment and others who will require the services of the specialists attached to the institute.

The division between the role of the schools and that of the welfare agency should not be interpreted to mean that some children are taught by the schools and others by the welfare agency. As a rule, a child who has been under the care of the welfare agency will, as he improves, be able to return to his home and continue in his school, though usually requiring special education in the school. It is highly desirable, therefore, to have a close collaboration between schools and the welfare agency concerning the individual child's treatment. The transfer from education in one area to education in the other should take place as quickly and flexibly as possible, in accordance with the progress which takes place in the child's speech problems.

#### Form and Contents of Education.

The education of children with speech difficulties will usually take place in connection with ordinary education, and, as far as possible during ordinary school hours. The handicapped should preferably receive education either individually or,

as conditions determine, as members of a small class. The decision concerning how many weekly lessons the child should have - and their duration - must be made in each particular case. The decision should be based as far as possible on the most effective treatment for the child, but the practical aspects must also be taken into consideration. Thus, while it would be desirable for a child to receive speech instruction every day, in the country where one speech teacher must serve many schools, speech instruction could scarcely take place more often than every other day.

In the cases where a child receives speech instruction at the same time as he attends regular classes, it is desirable that the speech teacher and the regular classroom teacher discuss the child's education.

In certain instances it will be desirable to transfer the child to a special class for students with speech difficulties. In a case where, for example, the child's speech is so deficient that he does not profit from the ordinary class situation, transfer to a special class is desirable. Such children have need for a form of education which takes into consideration their retarded linguistic development and aims at building up their vocabulary, comprehension, etc. Also children who, perhaps because of their speech difficulties could only be comfortable in the protective atmosphere of the special class, may be transferred.

The number of children needing education in all subjects in a special speech class is relatively limited (about 1<sup>0</sup>/100 of all school children) and only in the largest school districts will there be grounds for the establishment of such classes. It is desirable, however, that speech classes are set up not only when the individual school system has a sufficient number of children, but also where there are enough children within a reasonable distance from a centrally located place. A class could thus be set up so that, with the collaboration of the various communities concerned, children from a relatively wide area could be served.

In this way every child who cannot satisfactorily follow the ordinary course of study, but who, on the other hand, does not need treatment at the institute, may attend a speech class.

The education in the speech class must naturally include the treatment of the speech difficulty concerned. This speech instruction can, to a certain degree, be given as class instruction, but the main emphasis should be on individual help, or at least as group instruction by which means the child's speech difficulties can be treated most effectively.

Along with the actual speech correction, the instruction must be aimed at increasing the child's vocabulary and improving his conceptual ability to such a stage that he can get along in an ordinary class. At the same time his psychological position must be improved so that it is defensible to send him back to his regular class. The instruction must, therefore, be aimed at improving vocabulary, conceptualization and linguistic readiness. This may be done through education in special classes and through special preparation in the ordinary subjects. The education should be so planned as to take into consideration the limited language ability of the students, and should take place to a great extent in the form of individual or group instruction. The number of students in a class should not be more than ten. Even though every effort is made to clear up the child's speech difficulties before he leaves the speech class, it will be necessary in a number of cases to give him speech instruction along with his ordinary school work when he returns to his usual class.

#### The Termination of Education.

For children who have been transferred to a special speech class, transfer back to the normal class should occur only when it is evident that further attendance in the special class is unnecessary. It must be kept in mind at this point that changing from the leisured, small special class to the ordinary class can cause hardships to the child if he isn't ready. Before the child returns to his class, his speech difficulties should be so much improved that they will not affect his school work. At the same time, the child can return even though he needs further speech training, if this can be given as a supplement to the regular lessons.

Before the decision is made to stop speech instruction

it must be determined that the child's speech is in order. Views of opinion from his Danish teacher and possibly his home should indicate that the recovery is evident not only during speech training, but in spontaneous speech.

In certain instances it may be wise to suspend speech instruction for a period of time to check progress.

#### Transition from School to Everyday Life.

In most cases it will be possible to overcome the child's speech difficulties during the course of his education. In cases where it is impossible to achieve this before the child's graduation, and where the speech difficulty is such that it might influence the child's choice of a job or occupation, the school psychologist should call the vocational counsellors's attention to the difficulties.

In such instances continued speech instruction for the child should be insured. In the school law governing evening schools and continuation schools, provision is made for the setting up classes for as few as four members in the case of students for whom instruction in smaller classes is advisable.

However, where there are speech difficulties the student should be referred to the speech institute.

### Visually Handicapped Children.

Visually handicapped children may be divided into two groups - blind and partially sighted children.

Blind pupils are to be understood as either totally blind or such whose vision is so poor that they must be instructed through Braille as Braille readers.

Partially sighted pupils are such whose vision is so poor that special pedagogical measures of some kind or other are necessary, but who, nevertheless, sees well enough to be instructed visually as "ink print readers".

An important factor in sorting out visually handicapped pupils is the determination of visual acuity through the use of the "Snellen table". On the basis of experiences made in this and in other countries it may in general be stated that special pedagogical measures seldom are necessary if the pupil has  $6/18$  of normal visual power or more and no serious visual complications are present, while most pupils with less than  $4/60$  of normal visual power are Braille readers. The group of partially sighted pupils will thus in the main be those with visual power between  $4/60$  and  $6/18$  of the normal.

The visual acuity must be measured on the eye with best sight or binocular after that the pupil has received the best possible medical care and the best possible correction of spectacles.

These borderlines must be considered merely as guide lines. Other factors than visional power may be of importance. A marked limitation of the visual field may, f. inst. be seriously invalidating. For pupils with visual power around  $4/60$  special considerations may be necessary. Quite a number of pupils with less than  $4/60$  of visual power, who previously had to read Braille, may now take good use of low vision aids and be able to read ordinary print. Certain Braille readers manage fairly well on their own in traffic, while a number of partially sighted feel it very difficult to manage in traffic. It is decisive in organizing satisfactory instruction for partially sighted pupils thoroughly to be acquainted with the situation of the pupil, and

this is possible only through knowledge of the medical, psychological and pedagogical findings and examinations and through daily association with the pupil.

Important causes of blindness and weakness of sight among young people in this country are:

Refraction anomalies, Glaucomas, Cataracts, Atrofia nervi optici, Degeneratio retinae, inherent Albinismus (failure of pigmentation) Nystagmus, Corneal trauma (injury), Chorioidedid and Iritis.

According to the "Folkeskole" Act of 1958 and the Ministry of Education Circular of 1961 concerning the education of the partially sighted the Public Primary and Lower Secondary School (Folkeskolen) is obliged to organize special education for partially sighted pupils, who are unable to benefit from ordinary instruction.

Blind and partially sighted pupils who cannot participate with benefit in the ordinary instruction - or in special instruction for handicapped as organized by the public school system - are liable to compulsory school attendance in State boarding schools for blind and partially sighted pupils according to Government provisions of 1956 concerning the blind and the partially sighted.

In Denmark there are two such State schools: "Refnæsskolen" for children and young people that, in addition to an ordinary type of school, has special classes for dull children, kindergarten, materials laboratory etc. and the "State Institute for the Blind and The Partially Sighted" (Statens Institut for Blinde og Svagsynede) in Copenhagen, that has a youth school for pupils being referred from the "Refnæsskole", from the public school or from revalidation departments with a view to attend vocational courses or being placed in suitable occupations. The school is also for newly blinded persons.

During the last few years a considerable number of blind pupils have been admitted to ordinary schools to participate in ordinary education. The legal basis for this development is the Government provisions previously mentioned providing for exemptions from compulsory school attendance if satisfactory instruction might be otherwise arranged. In spite of the fact that it must be admitted that we are not yet in a position to offer blind pupils in the "Folkeskole" the support they are

entitled to, we have, in the main succeeded in creating satisfactory conditions for such pupils through cooperation between the school, the home of the pupil and the "Refsnæsskolen" through the initiative of the superintendent of special education.

#### The Scope of Special Education.

Recording of partially sighted school pupils has not yet been fully organized. If about 1 p.m. of all school children were visually handicapped the number of such school children in Denmark should presumably be about 6-700. 130 are registered as blind, and about 400 school pupils are registered as partially sighted. Of blind pupils 40 are attending ordinary school of some type or other, and the rest are pupils in State schools, where also about 50 partially sighted pupils are taught. Of the rest who are instructed within the public school system, about 70 are in special classes.

Recording of blind and partially sighted pupils usually take place at pre-school age, because it is the duty of school medical officers and health nurses and such personnel to report such children to the welfare services for the blind, which will cause regular home-guidance to be carried out.

Towards the time the child must begin school he will be tested at the "Refsnæsskole", and in cooperation with parents and the local school authorities it will be decided to which school the child should be transferred.

Slight visual handicaps are often not discovered until the child begins school. All school children are examined by the school medical officer once a year, and this examination also covers vision, and children having reduced visual power will be referred to an eye specialist, who will prescribe treatment and optical aids. The pupils, whose sight in spite of treatment and optical aids is still so poor that pedagogical difficulties are likely, will then be reported to the school psychologist's office. The advisory officer for special education will then in cooperation with the school medical officer, the superintendent for special education or the "Refsnæsskole" arrange for the most suitable education for the pupil in question.

In the case of visually handicapped children such arrangements may be:

- 1) special attention to the school environment (seating of the pupil in the class, special light facilities, shading for direct light if sensitive to light, specially designed table, special material etc.)
- 2) special education or supplementary lessons in groups or individual lessons,
- 3) education in special classes if possible.

Special classes for visually handicapped pupils within the public school system have been organized in Copenhagen (1922), in Århus (1954) in Herning (1962) and in Esbjerg (1965).

Blind public school pupils are preferably placed in ordinary classes and are provided with equipment and material enabling them to carry out their school work (typewriter), (Braille writer, tape recorder, arithmetic aids, relief maps for geography, books in Braille or on tape etc.).

These pupils are, to the extent it is possible, taking part in the ordinary school work, and exemptions are given only to the extent that their handicap makes it necessary, f.inst. in examinations in geometry and in certain parts of physics and biology examinations, exemptions from the counting of marks in orderliness in written work, in needlework, sloyd, gymnastic exercises, and they are allowed prolonged time for written papers.

#### Qualifications for teachers of handicapped pupils.

Teachers of visually handicapped pupils in ordinary classes are not required to have special qualifications, but they are aided in their teaching by the previously mentioned advisory officers for special education, who will advise them with regard to methods of teaching, procuring materials etc. Every year they will be asked to participate in short courses dealing with the problems of blind- and visually handicapped pupils. Such courses are arranged through cooperation between the Association of Danish Primary and Lower Secondary School Teachers, the office of the Superintendent of Special Education

and the "Refsnæsskole". This school also invites teachers of visually handicapped pupils to the "Refsnæsskole" for shorter or longer stays for study purposes.

Training, properly so called, for teachers of visually handicapped pupils is being planned, and the Association of Danish Primary and Lower Secondary School Teachers has already arranged one longer course for teachers of visually handicapped pupils. On the long view this training will be organized through cooperation between the Nordic countries. Such really comprehensive training will be organized mainly for teachers whose principal work is the teaching of visually handicapped in special classes or in institutions (boarding schools and special classes), or such who are to be engaged in the duties of advisory officers for special education. For teachers instructing an odd visually handicapped pupil in an ordinary class complete special training will not ordinarily be required, but such teachers will still be in need of shorter courses.

#### Transition from School to Adult Life.

Towards the termination of school vocational guidance should be arranged. The visually handicapped pupil will as far as possible participate in vocational guidance and the advisory officer for special education will supplement the basic guidance through his special knowledge. The case of the pupils will be reported to the local centre for revalidation with a view to special support for vocational training and placement. If the revalidation centre is unable to solve the problems of the pupil he may receive support from the State Institute for the Blind and Visually Handicapped in Copenhagen, where he may be admitted for training.

New occupational opportunities for blind persons are continually discovered. The traditional trade for the blind, brush making, basket making and weaving have receded into the background. Many blind persons are now being trained as switch board operators, industrial workers and some as punched card operators. A few have even been trained as EDB programmers. Until now few blind people have pursued studies at university level (Law, Theology, Psychology, Linguistics) or studies leading to quali-

fications as teachers or social workers etc.

### Children with Hearing Handicaps.

To ascertain loss of hearing in children is important in more than one respect. Most often loss of hearing is the result of disease, and it is of great importance to discover such diseases and bring them under treatment as early as possible.

The yearly examination by the school doctor includes hearing tests, administered through the use of the tone audiometer. This method has the advantage of being more objective than the whisper test. As the test consists of variations in both tone force and frequency, it is possible to obtain more complete data on any hearing losses which are discovered. The audiometer test is also less dependent on the acoustical conditions of the room used, though, of course, its effectiveness will be increased through the use of an insulated room in a quiet part of the school building.

The school doctor's goal is not to determine the extent of a possible hearing loss, but only whether or not a loss exists.

Even though the children's hearing is examined by the school doctor, it is still incumbent upon the teacher to be alert for, and report to the doctor, any evidence of a child's difficulty in hearing.

When the school doctor discovers a case of hearing loss in a child, he refers the child to a specialist, so that treatment, if necessary, can take place. The school doctor should again test the child's hearing after a period of about a month. In cases where there is continued hearing loss, with no information that treatment in progress is expected to restore hearing to the proper level, the doctor must inform the school so that the question of special education can be taken up.

After that a report is submitted to the school psychologist on the child's difficulties and his academic standing. The school doctor places at the psychologist's disposal the results of the examination by the specialist, and possibly testing results from the hearing center. If the child has not been exa-

mined at the hearing center, the school psychologist should instigate such an examination. The assembled material on the child then goes to the speech and hearing consultant attached to the school psychologist's office, who must himself examine the child. Upon this is based the final decision as to what special education measures need to be taken.

Areas where the Child with a Hearing Loss Needs Help.

The help which is offered to children whose hearing is impaired is aimed at a) increasing the possibilities for the child to achieve contact with others in spite of his hearing handicap, and b) remedying the effects which defective hearing often has on the child's language, conduct and academic standing.

a) Improvement in the possibilities for contact can be achieved primarily by a more effective use of the child's reduced hearing ability. This can be obtained partly by means of hearing aids and partly by auditory training. Also, the child can be helped to compensate in the widest degree for the missing hearing ability through the sense of sight, by training in lip-reading.

Hearing aids. During the last few years a great advance has taken place through the use of electric-acoustic hearing aids. This means on one hand that a high degree of amplification can be achieved with slight distortion, and on the other that the apparatus is so light and inconspicuous that it can be worn with very little discomfort.

In accordance with the law on rehabilitation, hearing aids are provided free for the hard of hearing. They are supplied after the hearing center has undertaken an examination of the nature and extent of the hearing loss, so that the proper apparatus can be prescribed. All children who have received hearing aids are summoned for a yearly check up at the State hearing center.

Occasionally it will prove difficult for a child to acustom himself to the use of the hearing aid. As it is also important for the child's school work that he uses the hearing aid, it is natural that the school should have an interest in helping him to adjust himself to it. It would also be practical for the school to help in the maintenance of the apparatus by

furnishing batteries, wires, etc.

Auditory training is tuition aiming <sup>at</sup> increasing awareness of aural impressions in the hard-of-hearing child and helping him to interpret them correctly. Auditory training will be especially meaningful when the child has got a hearing aid and has thus come into a new situation with respect to sound impressions.

Lip reading has heretofore been the most important aid in helping the hard of hearing to achieve verbal contact with others. Through instruction in lip reading, the hard of hearing learn to grasp what is said by watching the speaker's lips. Even though hearing aids are now common, it is necessary to teach lip reading. This is because hearing aids seldom or never restore completely normal hearing, and lip reading will therefore be a necessary supplement. The child should be taught lip reading even though he is outfitted with a hearing aid.

b) As the natural acquisition of language occurs through the ear, a hearing loss will often affect the child's linguistic development. The degree to which this occurs is dependent partly upon when in the child's life the hearing impairment occurs, and partly upon how long time it takes before the child is helped in the previously mentioned ways. The child's speech will be characterized by limited vocabulary, faulty articulation and voice production out of the ordinary.

These conditions must be counteracted by specially planned instruction which aims at increasing the child's vocabulary and correcting the aforementioned speech problems. If the child's speech is seriously affected by his hearing handicap there are good grounds to move him from his regular class to a class for the hard of hearing.

The child's smaller vocabulary will also affect his "inner speech" and limit his ability to interpret and retain his experiences. Further, the hearing loss limits his contacts with the world around him and tends to rob him of those experiences which are natural for the ordinary child. Added to this is the possibility that those with whom the child comes into contact may react in an unfavorable manner toward him, blaming his slowness to respond or lack of attention or willfulness.

All these conditions mean that the hard of hearing child

is apt to be burdened with psychological problems which can be the basis of behavior problems. They may take the form of noisiness, willfulness and impatience, or depression, introversion, etc. However, when the child has achieved better possibilities for contact through the use of a hearing aid, instruction, etc., these difficulties will often diminish or disappear. It is important that the child's parents, teachers and playmates understand the situation and react in an understanding manner.

The child's difficulty in hearing his teachers and classmates will prevent him from getting the full benefit from the education in school. The hard of hearing child's standing in his class will therefore be lower than his abilities would suggest. When a child is found to have a hearing loss it will be necessary to decide whether the child will be able to carry on in his regular class with the help of supplementary instruction in Danish and other subjects, with special emphasis on the learning of new words and concepts.

The decision concerning what kind of special education the school should offer the individual hard of hearing child must be based on the results of the examinations by the specialist and the hearing center. These examinations provide information about the extent of hearing loss both with and without hearing aid, the cause of the hearing loss and the possibilities for improvement or worsening of the condition. Also included in the report on the child are the results of the psychologist's investigations pertaining to the child's abilities, class standing, behaviour, linguistic development, adjustment to school and home, and a report on his general health. The decision as to whether and to what extent the child should be given special education (lip reading, auditory training, language comprehension and speech correction) is made from his collected information. This material will also be used to reach a decision whether the child should attend a regular class with supplementary speech training or should be transferred to a special class for the hard of hearing.

One of the principles of special education is that it should not interfere with the child's ordinary school work more than necessary. This is also the case here. It can also be claimed that remaining with his usual classmates will have a

beneficial effect upon the child's language. On the other hand, the child should be transferred to a special class if he is unable to follow the ordinary class work, or where regular class work plus supplementary instruction does not give satisfactory results.

#### Form and Content of Special Education.

Special education for children with hearing handicaps includes both special instruction for the hard of hearing - such as auditory training, lip reading, language comprehension and remedial speech training - and special arrangements for the teaching in the ordinary subjects. The two can be carried out either in the special classes for the hard of hearing or in the regular classes with supplementary instruction.

Instruction in hearing training, lip reading, speech correction, and language comprehension must be suited to the individual child's needs. It will often be desirable to rehabilitate the child as quickly as possible through intensive training, but in general, because this places such a heavy burden on the child, it would be wise to limit the instruction to a few hours a week. Short speech correction lessons, however, could be given daily.

Generally speaking, classes should not be larger than five pupils. Lip reading classes, however, could be larger, while speech correction should be individual. The children's aptitudes for lip reading, plus their need for hearing training and speech correction naturally vary greatly. Therefore it is impossible to say how long the special instruction should continue.

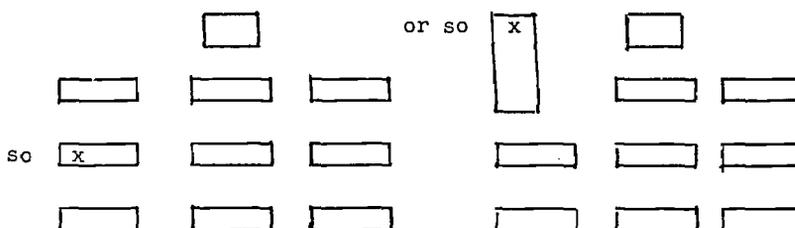
When the child's training is finished, it is a good idea to keep him under observation and continue instruction if necessary. Ordinarily, short yearly refresher courses are sufficient.

The instruction must be given by a specially trained teacher. Since each community cannot be expected to have a specially trained teacher, it will be necessary for communities to cooperate in the appointment of a teacher who can be available for several communities. As an aid in instruction, the teacher should have a tape recorder, an articulation mirror a:

possibly a "language master" an amplifier and an audiometer at his disposal.

Supplementary Instruction.

When the hard of hearing child is placed in an ordinary class, a special effort must be made to place him in the best possible way in the classroom. He should be in the best possible position not only to hear, but also to enable him to read the teacher's lips and those of some of his classmates.



In many cases it will also be necessary to give the child special help in adapting himself to the new words and concepts which appear in the education. This can be accomplished by supplementary instruction, which will also serve to support him in the Danish lessons.

To the extent that the hard of hearing child is regarded as a retarded reader, he should have special lessons in reading. Otherwise, however, the supplementary instruction as such may be given by the school's regular teachers, preferably the child's Danish teacher, following the recommendations of the special hearing teacher. The supplementary lessons should be fairly limited, as a rule to only a few hours a week.

Children, whose aptitudes and interests fit them for the examination classes, should have an opportunity for added supplementary lessons, possibly in a foreign language, if they need them.

Classes for the Hard of Hearing.

The aim of education in a class for hard of hearing children is to give each child the chance to cover the same

material as in the ordinary classes, and at the same time to aid his rehabilitation by special instruction in such areas as lip reading and speech correction. The lessons in the special classes for children who are hard of hearing are planned with the children's problem in mind, and are to a large degree individualized. This requires the size of classes to be small. The number should be limited to five to ten pupils, depending on how great their hearing loss is and how many class levels are in a class.

Outside Copenhagen the special classes would be housed in a school with ordinary classes. As a rule the hard of hearing children take part in some of the classes with the other children, for example in the manual arts. This association can have a beneficial effect on the handicapped child's linguistic development. It is also desirable that the other children learn to be considerate of their handicapped classmates. In this respect the teacher must discourage both maliciousness and the formation of cliques.

Since it will be possible to form special classes for the hard of hearing only in the largest communities there must be collaboration among communities if the schools are to fulfill their obligations to these children. In order that every child who cannot profitably follow the lessons in the ordinary classes can be admitted to a special class for the handicapped, neighbouring communities will have to set up special classes to serve several communities.

#### Camp School.

It is not surprising that a hearing loss in some cases can bring psychical or environmental difficulties in spite of the above mentioned arrangements.

In such cases we are able to send the children to a two-weeks camp school. They can attend classes of leap reading, auditory training if needed, but the most important thing is that the comradeship with others, who have similar problems can be of great help, especially for these children who cannot accept their handicap.

The teachers of the camp school (one for each 5 or 6 pupils) besides to help the children with their difficulties have to observe the child so that he can give a report to the

home school with a proposal for arrangements in future.

Limits of Special Welfare Work.

The regulations governing special welfare work for the deaf and hard of hearing are found in the "Deaf Law". This field of special welfare services is divided into welfare service for the deaf and welfare service for the hard of hearing. The institutions working within each of these fields are:

The State Boarding Schools for the Deaf  
The State Schools for Very Hard of Hearing Children  
The State Continuation School for Children from the  
Schools for the Deaf.

Besides these schools there is the State Examination and Guidance Clinic for Deaf and Hard of Hearing Children.

A consequence of the "Deaf Law" has been the establishment of hearing centres in Copenhagen, Odense and Århus.

The decision whether the child should be enrolled in one of the welfare service schools or remain in the public school will not be final, it may be changed as the child's progress warrants. When a child is transferred from a welfare service school it will be natural for the welfare service to keep informed of the child's development and to offer advice about the proper treatment.

Transition from School to Everyday Life.

When school days are over, many of the hard of hearing children will be faced with serious difficulties. The degree to which this occurs and the areas in which these difficulties occur are dependent upon the extent of hearing loss and the success the school has had in restoring the child's possibilities for contact. These difficulties can be combatted by continued instruction, assistance in connection with the choice of occupation, employment assistance and other advisory help.

The hard of hearing children who drop out of public school have the same need for continued education as others, and should have equal opportunity to receive it. For some of them it will be possible to follow education in the ordinary

classes in the continuation schools, evening schools, folk high schools, etc. For others a specially planned course will be necessary.

The law on youth schools and continuation schools provides that classes of two pupils may be set up in cases where teaching in smaller groups is desirable. This provision makes it possible to set up special classes for the hard of hearing. Among the hard of hearing children who drop out of school there will be some who are greatly limited in their abilities on the job and in their capacity for further training. These children are the ones who might be considered on the borderline of need for special welfare service. The children who are educated under the "Deaf Law" are required to go to school for nine years. After that period they may continue one or two years in continuation school, where the emphasis in education is on vocational orientation and preparation.

These hard of hearing children need a further strengthening of their school subjects and continued instruction in lip reading. Furthermore, they often lack maturity and self-confidence, which it is especially desirable that they should overcome if they are to be successful in spite of their handicaps.

Some of these children may be placed in ordinary continuation schools, but in some schools it is desirable that they have a chance for supplementary hearing training in small groups. Experience shows that some of these children have handicaps of such a character that they can only get the necessary support if they have specially prepared material in surroundings favorable to their handicaps. The aim of the education should be a general education, but it should be organized with their special needs in mind. Emphasis may be placed on vocational prerequisites and social studies. If required, special instruction in lip reading, speech correction, etc., may be given.

The choice of vocation for the hard of hearing will often be dependent on their handicap. In the first place, the ailment which is the cause of the hearing loss will require special consideration. For certain ailments of the ear it is important to avoid occupations which involve cold, dampness, or drafts. In other cases it is important to avoid noise. Furthermore, the hard of hearing must avoid occupations where their limited pos-

sibility for contact would be important. This is especially true where there are chances for misunderstanding which might have serious results, such as nursing, but also where there is contact with other people to such an extent that their handicap will constantly be thrown into relief.

Since vocational counselling of the hard of hearing can present problems which require specialized knowledge, it is appropriate that, in addition to ordinary vocational counselling, special employment and counselling office, to which these young people may be referred, are available.

To give the best help possible to the hard of hearing pupils it is planned to appoint a counsellor especially for these pupils in connection with the centres for special education of the severely handicapped children.

His duties will be to help and advise the hard of hearing children especially regarding their choice of occupation. He also must be able to give advice regarding assistance arrangements where pedagogical and economic problems are present.

The counsellor must be a specially trained teacher for the hard of hearing, and he must have his job in the special classes for the hard of hearing children.

The speech and hearing adviser has to discuss the problems of the hard of hearing pupils with the adviser from the Ministry of Social Affairs, the above mentioned counsellor. The child with speech and hearing difficulties has to be examined at least once a year so that no chances for the best help possible must be lost.

#### Slow Learners.

Special education in the public schools for slow learners includes all those whose abilities are so limited that they cannot follow the regular course of study. Children who are behind because of illness, long absences, behaviour problems, or auditory or speech handicaps, should not be referred to classes for slow learners. The same holds true for children with special reading problems.

Through tests undertaken by the school psychologist, it

is endeavoured to determine the child's abilities. Both the results of the tests and the psychologist's observations of the child during the testing should be in the form of a description of the child. It is not especially practical to report the results of the tests as an intelligence quotient.

It is impossible to set a definite limit according to which children are retarded in abilities. In each case, however, it is possible to evaluate whether the child's abilities are such that he can satisfactorily follow the normal course of study.

There is a group of children who are so low in ability that they cannot profit even from the education which is organized within the schools or classes for slow learners. Where the school system has not set up special classes for these children they are referred to special schools for mentally retarded children according to provisions made for the welfare of the mentally deficient. As in other cases, it is impossible to say that all children above a certain level of intelligence can be helped by education in the special classes and all those under can not. The question to be answered is whether or not the individual child can profit from attendance in one school or the other.

#### Selection of Children for Special Education.

The responsibility for recommending examination of a child with a view to special education rests with the class teacher. As the teacher usually needs some time to observe the child before he can decide whether an examination is necessary, and as some children develop rapidly after they have begun school, it is only toward the end of the first school year that the question normally comes up. In the case of an obviously retarded child, refer should take place as soon as possible. In general, provisions should be made for children who do not profit from the ordinary class work as soon as possible. When they are daily faced with work which they cannot do their self-confidence suffers. At the same time their attitude toward school work becomes uncertain and contrary. On the whole, the time is wasted for the child.

Before the class teacher recommends refer of a child he

should discuss the problems of the child with other teachers. At the same time he can refer to group intelligence tests and achievement tests. It is essential that he discusses the child's problems with the parents before he takes any steps toward transfer.

#### The Form of Special Education.

As slow learners will usually have difficulty in all subjects, it will probably be necessary to enroll them in classes where they can have special education in all subjects. Every retarded child should be able to attend one of these classes. Communities that do not have enough mentally retarded students to start a special class for them must make arrangements with another community so that such children can be admitted to a special class. In this kind of cooperative undertaking an attempt should be made to arrange for education in classes that are set up for each class level. This is especially important for the eight and ninth forms. Where conditions demand, centralization can be limited to these two years.

The number of pupils in classes with only one class level must not exceed fourteen. In Danish and arithmetic, where education is individualized, it will be practical to divide these classes into two sections. In classes where there is more than one class level the number of pupils must not exceed ten. Where there are children with especially great difficulties, individual or group supplementary instruction should be provided. Children in the classes for the mentally retarded who are hard of hearing or who have speech problems should have the special instruction which their handicaps require.

In rural districts education for retarded children has until now mainly been in the form of supplementary group teaching, as described previously. Though rural children have received valuable help in this way, it cannot be said that the method is satisfactory for the severely retarded. The solution of the problem of education for these especially handicapped children lies in cooperation between communities.

In certain cases it will be possible to achieve satisfactory education for the retarded child without moving him to a special class. The psychological examination then will indi-

cate that the slow learners can profit satisfactorily from school work without being transferred to a special class. In such cases, special considerations must be observed in the ordinary class teaching. Not only should loss be expected from the child's achievement, but care must be taken that he receives instruction adapted to his abilities. In very small classes such instruction can be carried out with the help of special materials. This is true where there are not more than ten pupils per class. In other cases it will be necessary to supplement the child's lessons with auxiliary group teaching several hours a week. It is desirable that groups of four pupils receive four to six supplementary hours of instruction a week. Where possible the special education should take place within the child's normal school hours. Where it is not possible, the remedial instruction should as far as possible be at the beginning of the child's school day.

Where remedial instruction is given in Danish or arithmetic it is important that the teacher works in close collaboration with the child's regular teacher in those subjects.

It is also possible to set up special education in such a way that the child has all of his Danish and arithmetic in a special class and his other subjects in the ordinary classes. Thus, the child attends his regular classes for all subjects except Danish and arithmetic, for which he goes to a special class. In such cases the school will have a teacher available in a special classroom to which the children go. A class of this kind should at the same time have no more than ten pupils. This solution requires that the school is of a certain minimum size. Collaboration between the child's special teacher and other teachers is still important. Transferring the child partially or wholly back to his regular Danish or arithmetic class may be desirable.

#### Content of Special Education for the Slow Learners.

Because of the limited abilities of slow learners, the education plan cannot be based on the syllabus which applies to the ordinary classes. Therefore a draft syllabus for the school for the slow learners has been worked out. Each community can base its own syllabus on this. The syllabus must only be regard-

ed as a guide, since in each class the education must be adapted to the needs and abilities of the pupils. It must constantly be remembered that the pupil must have assignments which he can carry out. In Danish and arithmetic the wide use of individual education will enable the teacher to adapt the assignments to the individual pupil's ability, background and speed.

It is desirable that the girls become as thoroughly grounded in home making (housework and needlework) as is possible, to prepare them for their future role as housewives. The fact that a corresponding increase in hours is not necessary for the boy's workshop courses is the difference between the girl's and boy's class load.

Where special education is given in small groups, the subjects covered are usually Danish and arithmetic. These are not only the central subject in school, but they are those which give the slow learners most trouble. In group work one can also give support to the other subjects. The education should be planned according to the suggested syllabus, but with modifications which the smaller number of group hours demand, and the fact that the child at the same time is participating in the regular classes in these subjects.

In the sixth and seventh forms children who receive special group help may take part in foreign language education (in the first foreign language) with their regular class if they receive special help in it. The children who cannot profit from foreign language education even with such help should be excused from it. However, it should be possible to give them a short course in English (or German) as part of their group work.

#### Conclusion of Special Education.

As a general rule, most dull children must have special help throughout their school years. However, in some cases these retarded children make a great enough advance to be returned to their regular class after having received instruction which takes into consideration their handicaps and which enables them to be successful. In other cases it turns out that even the special help does not give the desired results and other measures must be taken - either transfer to other special help or possibly they must be referred to the welfare agency. The children's

progress should be checked periodically by means of standardized tests, and decisions concerning transfer or changes on the kind of help given should be based upon the results of these tests.

When the special help has been in the form of supplementary remedial group education, the decision to stop should take into consideration not only the child's work, but his standing in relation to the rest of his class and its level of work. As a rule, remedial help should not be terminated if the child will not be able to carry on in ordinary classes without it.

If the child has been in a special class, and transfer back to a regular class is considered, it is even more important to be sure that return to the special class will not be necessary. The level of the work of the receiving class must also be taken into consideration. It will often be advantageous to transfer the child to a class whose work norm is a step under the normal for the age group.

#### Transition from School to the Outside World.

Many problems occur when slow learners leave school and try to find a place in the world of work. There are many reasons for this.

Dull children are only prepared for the transition to a limited extent. Their abilities are in some way like those of children two to four years younger and their mental development, sphere of interest, and vocabulary and store of concepts correspond to some extent to that age. Their ability to master a new situation and to solve new problems independently is limited.

In spite of the special classes, the scholastic skills of dull children will usually be poorer than those of their age group. The very fact of their having been in a special group, with its special problems of milieu, means that the transition from school life will be especially harsh for these children. In their classes allowances had been made for their handicaps, they were not confronted with problems they could not solve, and, generally, the requirements were moderate.

Added to this is the fact that dull children often come from homes which cannot offer the support which others receive from their homes and where there is little understanding of the problems attending dullness. In many cases, where the social

level of the home is low, this lack of understanding leads to the child being taken out of school as early as possible and set to work. Thus one sees children who are very well equipped mentally remaining in school till they are eighteen or nineteen, while the poorest equipped - the remedial class' pupils - often leave school as soon as they possibly can.

The mentally retarded child's difficulties appear right from the time he leaves school, beginning with the choice of a job. Because of his limitations he is less able to obtain the necessary information on possibilities for jobs and is not equipped to evaluate his chances for success in different kinds of work, and usually receives only a limited amount of help in these respects from his home.

Many kinds of work are not available to the dull person because they require too great intellectual capacity. The mentally retarded will usually be referred to the more manual kinds of work. This can be a real hardship when the person is physically unable to do heavy manual labour.

The dull person's relative inability to adjust to new situations and to solve the problems which confront him must also be taken into consideration.

It is difficult to point out certain occupations as best suited to dull persons, since individual aptitudes and interests are widely varied among them. It can be said with certainty, however, that the important thing is that they choose work which they can master. If the dull person is defeated not only in school but also in his work, the damage to his self-confidence can lead to even more difficulties in his adjustment to everyday life.

Adjustment to life on the job will be difficult for the mentally retarded. He is confronted with new situations in which he can seldom directly use the knowledge and work habits he has acquired in school. His immaturity makes it difficult to deal successfully with his fellow workers. If he is also unable to do the work satisfactorily the results may be that his behaviour becomes unstable and aggressive.

As a rule, the greatest difficulty for the child is learning the job, because of his limited ability to understand and interpret explanations. Explanations must be given piece -

meal and the young worker must be given time to catch up. An understanding work leader who has been informed of the young person's difficulties can train him so that he can accomplish a normal day's work. Many organizations, however, allow normally a limited time for on-the-job training of unskilled workers, with the result that many of the dull boys and girls are dismissed without having had a fair chance. There are some possibilities of exception.

An increasing number of occupations in industry require a greater or lesser degree of training. If such training is mainly theoretical, or if it requires too great intellectual effort, the result is apt to be that there will be still fewer occupations open for mentally retarded people. It is necessary that employment counselling and vocational courses in school take into consideration these pupils' special limitations and needs and that they arrange for a counsellor to support the dull in the difficult years of adolescence.

Through the years the teachers in the auxiliary schools have had discouraging experiences concerning the young people's existence after they have left school. While in school the instruction was especially adapted for them, once on the job these children, whose development is often only equivalent to that of ten, twelve year olds, are faced with problems which they can not master. In many cases the result is unemployment or unstable employment, poverty, and bad living conditions, all of which can lead to criminality and prostitution. It is not seldom that the welfare agencies must concern themselves with these mentally retarded young people. The help and counselling offered to the dull must be built upon confidence and trust in the school on the part of the young people. Otherwise there is a risk that the help might not reach them until it is too late. Help must also be offered by people who are accustomed to dealing with the dull, and who can understand their problems and ways of thinking, and can express themselves so that the dull can understand them. This can be accomplished if the counsellors are attached to the school psychologists' office in each rural and urban school system. Or, where special education for the dull is given in a school for the mentally retarded, the counsellors should be attached to the school leaders' office. In cases,

where it is practicable an urban and a rural school system may arrange to set up a common counsellor's office.

It is assumed that ordinarily it will be teachers who are specially acquainted with education of the dull who are appointed to these posts. It is a prerequisite for the success of this work that the counsellors have knowledge and understanding of the mentally retarded and their problems.

The counsellor's work begins while the child is still in school. Through discussion with the teachers he seeks to inform himself about all the retarded pupils. When they are taught in a school for the mentally retarded it will be natural that vocational orientation is taken over by him and, in any case, he should occasionally give lessons to the older classes. In other cases it will be practical to have him occasionally present one or more lectures concerning vocational information, organized especially for the retarded students. Furthermore, as an authority on the transition from school to life outside, he should also act as adviser in the organization of the vocational and trade courses in the school. It will be natural for him to take over a part of the school leader's meetings with parents concerning the children's futures.

The counsellor should be available for the retarded students throughout their entire school life. However, he should make special effort to get to know each child in the higher classes, the child's strong and weak points, his ability to take care of himself, his reaction to difficulties, his work speed and its quality, and the support he can expect from his home. At the beginning of the final school year he should discuss the child's possibilities and desires with parents, teachers, the head of the school, and the school doctor. He should try to prevent the child's being taken out of school too early.

In connection with the retarded child's vocational placement, the counsellor should take over his vocational counselling. In many cases, however, the counsellor will refer the child to the institution which can offer him the necessary help. It is not expected that the counsellor takes the place of the existing institutions. The counsellor can decide about those whose abilities and home conditions are such that help will be limited to vocational counselling and the services of the public

employment office. Experience shows, however, that in these cases it is wise for the counsellor to follow up each case later in the year, because it often happens that the young person in question does not return to the employment office after unsuccessfully seeking one job.

Most mentally retarded children have a pronounced difficulty in one or more areas. Even though both the reports of school and the results of a psychotechnical test indicate that training in a trade is possible, other conditions may require that the counsellor consults the apprentices' boarding home and the welfare authorities regarding a possible increase in the subsidy to the home. It may also be desirable to arrange with the continuation schools and evening schools for supplementary education. In the case of unskilled workers, the counsellor may often, through his knowledge of the young person or the results of the psychotechnical tests, find the kind of work in a factory which the young person has the ability to cope with.

It will seldom be sufficient just to secure a job in a factory for the young person. The counsellor must try to place him in the kind of job he can master in a factory. He should also talk with the work leader to try to provide the young person with a reasonable incentive for learning.

If possible the counsellor should obtain an agreement to the effect that the young person will not be fired without previous notice to the counsellor. This may prevent dismissal and in cases where it does not prevent dismissal the counsellor may try to avoid repetition of the situations which led to the dismissal. In many cases he can have the dismissal postponed until a new job has been found.

There is a group among the mentally retarded who cannot be placed to earn ordinary wages. In such cases, the counsellor may seek employment for him where there are no wage contracts. or he may negotiate with the trade union to allow a lower wage than that of the contract. The counsellor should take part in finding employment for his group, as he is in a better position than parents to investigate conditions at the place of employment, and he can explain the situation to the employer and possibly the trade union.

The counselling is not by any means another form of wel-

fare work, but rather an addition to the work of special education. It is a tool placed at the disposal of the mentally retarded youth, since they often have no possibility of gaining support from their homes. In many instances the parents fight hard themselves to get by. Therefore, the counsellor's work must to a great extent be aimed at the family, for whom he must be an adviser in all matters, not only occupational and economic ones. He must also act as a support for the parents, who may have difficulties with the retarded child because of his often long period of puberty. With the parents' consent the counsellor may also act as the young person's intermediary to public officials, including military and recruiting authorities. The counsellor should also keep in contact with any other public official from whom the parents receive help or supervision.

The counsellor should also be able to help the young person in obtaining work clothes, shoes, bedding, etc., together with travel money.

Even though the counselling service is set up with the mentally retarded in mind and is based on their special problems, it is logical that help is also offered to others who face similar problems in the transition from school. Help should be offered to children with serious reading problems, visual or auditory handicaps and those with physical disabilities, as well as those with behaviour problems.

#### Vocational Training for the Mentally Retarded.

Experience both here and abroad has shown that in order to establish the necessary connection between special education and daily life, there is a need for practical training in the school. In the suggested syllabus for the schools for the educationally retarded it is suggested that in the ninth grade practical work should replace the ordinary woodwork classes for the boys and the housework and needlework for the girls, together with language, science and free electives for both groups, subjects which are common to the syllabuses in the regular public schools. The practical work should include actual on-the-job experience. Training in the home making should build on the preceding courses, but it is aimed more at preparing the girls

for house keeping on their own.

It should be noted that the practical work should not be aimed at training for a particular job, nor should it be conceived of as actual training of non-skilled workers. The work should be arranged entirely with the aim of making the pupils' transition easier, whether it is to skilled or unskilled work, by acquainting them with the demands that will be made on them on the labour market. The work should, therefore, be organized in the same manner as an ordinary job. The concept is, further, to teach them certain basic habits, such as carefulness and exactness, and to increase manual dexterity and eye-hand coordination. They must also learn about and use the different tools which are most commonly used. Not least important is that they learn how to behave on the job with respect to their fellow workers.

In spite of the fact that the instruction should be mainly a versatile orientation, the work output should be up to normal job standards.

Since most teachers trained in the teacher training college are unable to handle shop instruction it will be possible to appoint trade teachers from outside the school who have had supplementary pedagogical training.

When the school work in the ninth grade is organized to include practical work, the morning hours may be used for ordinary school subjects, after which the class is taken over by the trade teacher until the end of the ordinary school day. As a substitute for the shop instruction it should also be possible periodically to make visits to factories, and to provide on-the-job experience, possibly in such a manner that the afternoon work takes place at an ordinary place of work for an extended period.

In addition, there should be a chance for the students in the last half of the eighth and ninth years to be accepted as provisional apprentices or ordinary workers. Reservations for return to school should, however, if it is desirable, be made. The ninth class practical training in the schools for the mentally retarded is intended not only for boys. For girls the emphasis should be on further training in the home making arts, but should also include vocational training which would

enable them to obtain work in factories. Such training should include such things as machine knitting, industrial sewing, book binding and chemical work.

#### Continuation Schools.

The pupils who did not take part in the practical trade classes in special schools should have an opportunity to go through such a training in another manner. Special continuation schools for mentally retarded students should be set up on a pattern similar to that of the eighth, ninth and tenth forms of special schools. The instruction in these schools should follow that of the ninth year in the special schools.

According to the school law, it is possible to set up continuation schools either as one year or multiple year vocational schools, which would make them of special interest in this respect. Education must aim at making the pupils competent in different branches of work, and education should be organized so that it can fit into the ordinary training of adult unskilled workers. Such a school can be set up with the emphasis on agriculture, home making, or other basic fields.

According to the school law, such schools must be open to everybody from fifteen to eighteen years of age. The young people who go through this training receive both an idea of their possibilities for future employment and a basic training which will enable them to enter the training program for adult workers without having to begin at the beginning.

Pupils who have begun a multi-year course before they are eighteen may have the upper age limit extended. The upper limit also may be waived in the case of mentally retarded pupils because of their slower development.

These continuation schools are as a rule organized for daytime education, but when conditions call for it they may be changed to evening schools or be open both during the daytime and at night. In this way it will be possible to combine this kind of vocational training with on-the-job training. The law provides for one half day free each week without loss of pay (the free half days may be accumulated) during which they may attend the day sessions of these schools. In the case of agricultural workers, this holds true only for the winter.

It is also possible to establish some of the continuation schools as boarding schools. These will be especially important to the students who have had special education in rural schools. The schools may be set up to receive both boarding and day students. It will also make it easier for the students to attend a school if boarding homes are set up in proximity to continuation schools.

The law also provides for contributions to the pupils' transportation to and from the school.

Communities with about 50,000 inhabitants - about 6,000 children of school age - will be able to establish continuation schools within their own community. In smaller communities cooperation between communities will be necessary. If cooperation between communities is not feasible, the responsibility to arrange for every retarded child to receive the vocational training which is the aim of this education rests upon the school directorate of an "Amt" (County). They may, in cooperation with the municipal authorities of the county, arrange for the education through the establishment of a continuation boarding school.

#### Work Techniques Continuation Schools.

The law on employment and training of young people contains regulations governing both work techniques continuation schools and youth schools for the young unemployed. Students in these schools will receive basic instruction in work techniques, and they will have an opportunity to take part in trade courses. The law further states that instruction in the work techniques schools shall be in accordance with the provisions of the law on vocational training of non-skilled workers. The work techniques schools and the youth schools accept young unemployed workers of eighteen years and up.

The law on employment and training of young people also provides for the establishment of courses at boarding schools or day and evening courses with a duration of 144 hours. The education shall aim at promoting specific skills in various fields of work. It must, therefore, conform to the instruction provided for in the law governing the training of non-skilled workers. These courses are for the unemployed under 25 years of age.

In view of the foregoing, it should be possible to set up

special education or special courses for young people who have attended the special schools for slow learners, including those who have completed the eighth, ninth and tenth classes and also continuation school, but who need for training or preparation for the special trade course they will take later.

In especially difficult cases it is possible to arrange for training in special workshops.

#### Vocational Counselling and Employment Service.

The theoretically based vocational orientation which is given in the public schools will have little meaning for the mentally retarded. For these students the main thing will be orientation on conditions in shops, stores, factories and other places of work together with information on trade unions, types of pay, relations between superiors and workers, how to seek a job, etc. During vocational orientation it must also be kept in mind that most of these students will find their future work as unskilled workers. It will also be an advantage for these students to get an idea of the possibilities that will be open to them considering their abilities and development and the local conditions.

This special kind of vocational orientation can usually take place in the schools, but it will often be desirable to call upon the counsellor to present information on vocations in a lecture arranged especially for the mentally retarded.

That part of occupational orientation which consists of visits to factories and on-the-job experience must be specially worked out for these students. The selection of the factory to be visited, or the location of the students on-the-job experience, should be done with great care and with the cooperation of the counsellor. Care must be taken that students are not sent into types of work for which they are not suited. Usually retarded students will work at various jobs, and they will need to remain for a longer period than the ordinary students. It is absolutely necessary that the employer has been informed about the students who are mentally retarded and about their need for special help to get started in their jobs. On-the-job experience should be postponed until the eighth, ninth or tenth school year because until then the students will not have obtained suffi-

cient maturity to profit from the experience. It is important that the students are not asked to make a decision concerning their choice of occupation too early.

Through their knowledge of the students and their homes, the teacher should, in collaboration with the counsellor, decide which of the students need individual vocational counselling. In many cases the counsellor may merely refer the pupil to the ordinary employment exchange. In more complicated cases, however, he must be prepared to use his special knowledge and personally counsel the pupils.

For the mentally retarded, apprenticeships and other training, must always be closely joined to individual vocational counselling. The counsellor should normally undertake the referral, in any case he should take part in it.

There are at least as many problems for the mentally retarded with regard to jobs coming under the apprenticeship laws. It is important that the pupils who are likely to have a reasonable chance to complete apprenticeship training are given a chance to try. At the same time it will be necessary to take advantage of the easement of laws (with respect to persons with physical or mental weaknesses which effect their work capacity) both with respect to length of apprenticeship and theoretical training. It will be an advantage to postpone the theoretical training for a year, when the students will be more mature. This will also give him a chance to take preparatory courses in evening school, also in theoretical subjects.

#### Retarded Readers.

It is important that retarded readers receive special education because of the fundamental importance of reading in school. It is expected that all children can read when they leave school. In other subjects inability to read at more or less the same speed as the other students will be a hindrance. Furthermore instruction in reading helps to build the child's vocabulary and to aid him in his use of language. The material that is read helps in the building of the child's character and

provides valuable experiences. Finally, in school the child will discover that he is expected to be able to read. If these expectations are not fulfilled it will have a bad effect on the child's relationship to the school.

The question of the reasons for reading problems has been discussed. There are many possible bases for reading difficulties, among them:

Irregularities in school attendance (absences or change of teachers or schools).

Ineffective teaching (teaching that is not interesting enough to motivate the children to work, or is so one-sided in method that it is ineffective).

Problems in the children (lack of strength, low energy level, poor concentration).

Low intelligence, immaturity.

Emotional and personality problems such as

anxiety, aggressiveness, lack of self-confidence and initiative and independence.

"Word blindness" or dyslexia (special reading and spelling difficulties closely connected with the reading and spelling progress in the individual).

It must be remembered that poor performance in reading can be the result of visual or auditory handicaps. Far-sightedness or a difference between visual ability of the eyes, and hearing covering only certain frequencies are defects that are not always discovered in the school doctor's examinations.

While the visual examination of the school medical officer generally covers distance examinations in connection with letter and figure tables, audial examinations through audiometrical appliances have been adopted.

It is naturally of the greatest importance in cases of reading difficulties caused by faulty education, that the cases are removed. Reading instruction at the very beginning in an attempt to prevent the occurrence of reading difficulties among students is important.

Children who have reading difficulties due to low intel-

ligence will usually come under special education for slow learners. Children whose reading performance level is below that of their intelligence level should receive special education for reading difficulties. The selection of children for these classes requires not only knowledge of the child's reading abilities but also his intelligence.

Decisions on referral are difficult since it is often impossible to point out the specific causes of reading difficulties so that the most appropriate education can be given. It is the difference between the child's reading performance level and his expected ability to read which determines the decision, but the borderline will be flexible between the students whose standing in reading is low, but not so low that special education is indicated. Thus, the borderline between reading difficulties which require special education and those which should be overcome within the framework of the ordinary class teaching will be arbitrary. Factors such as the child's class load and his work habits may influence the decision.

The decisive point, however, must always be whether the child's reading difficulties are severe enough to hinder his school work or otherwise have a bad influence on the child's relationship to the school.

Children with speech or hearing handicaps will often be poor readers. Special education for these children should, therefore, include specially arranged reading classes.

In connection with welfare service for speech handicapped, there is established instruction for reading retardation. It is emphasized, however, that treatment under the welfare statutes can only occur in cases of reading retardation which cannot be remedied through the public schools' special classes.

It is difficult to decide at which point a child's reading ability is so limited that special education is called for.

#### Special Education.

The first two school years should be considered as introductory years where the aim is both to expand the children's vocal grasp of language, and to introduce them to reading. The education should be planned with the greatest possible consider-

ation for the individual children's abilities and qualifications. It should be only toward the end of the second year or the beginning of the third year that a need for special education for retarded readers becomes apparent.

While the foregoing concerns difficulties in connection with beginner readers, it is also probable that the difficulties may show up later. The child may suddenly experience new difficulties in reading, or his progress in reading is too slow to keep pace with the requirements of his class. Special education is also needed in such cases.

#### The Form of Special Education.

Remedial reading education can be given either in special classes or in groups of up to four pupils several hours a week. The children in the small groups will at the same time follow the ordinary reading education in their Danish class.

During recent years another form of special instruction in reading, the so-called "reading clinics" has been established in several schools. This instruction is often given to one child at a time and is thus more individual than group instruction.

In the remedial reading class the number of pupils should not exceed sixteen. However, classes of more than ten pupils should be divided into two groups for Danish lessons and the groups taught separately for part of the time. In cases where the remedial class has pupils from more than one class level the division should take place in every Danish lesson, and perhaps also in arithmetics lessons.

In group instruction up to four pupils are taught three to five hours a week. The instruction should take place as much as possible within the usual school hours. The statutes governing maximum school time must be adhered to.

In each separate case it will be necessary to decide which lesson the child should skip for remedial instruction. He should miss only his regular Danish lesson if possible. It will be defensible to have him miss his arithmetics class, for example, only if he is so good at this subject that he can keep up in spite of missing lessons. One must be careful not to make inroads into interesting subjects such as shop, sewing and homemaking. Where group instruction will last some time,

it will be wise to rearrange some of the group lessons so that certain subjects are not disproportionately neglected.

The question of the extent to which remedial education should be offered in special classes or as supplementary group work has several aspects. It must be remembered that the remedial reading class maintains a special atmosphere which on one hand may be good for the slow reader, but on the other hand may present problems when the child must return to his ordinary class or proceed to conditions for adults.

It will be desirable to have all types of special education available. While the majority of the children may receive the required help in supplementary reading groups, a certain part of them will require transfer from the ordinary class to the protective milieu of the remedial reading classes. It is, therefore, desirable to set up enough remedial classes so that any child who needs it may be transferred. As such classes often cannot be set up in small rural schools it will be necessary for several communities to cooperate to provide free remedial reading classes made up of children from several communities.

Transfer to a remedial reading class should not occur before a prolonged attempt has been made to help the child through group instruction. Also, the pupil should not remain in the remedial reading class longer than is necessary.

Transfer back to the ordinary class could take place even though the child's reading ability is not quite up to the desired level, provided he can receive continued instruction in a group or individually.

In addition to the special class and group education, special education may be given individually.

Education in reading classes must have as its aim the improvement of the child's reading performance level and the earliest possible return of the pupil to his regular Danish class. To achieve this aim, reading education is intensified. This occurs naturally when there are fewer children in the class, so that the teacher has more time for each individual child, and the education can be oriented toward individual needs. It is also regarded as desirable, however, if the number of lessons of reading is increased. This obviously means that the time devoted to other subjects must be reduced, but not to

the extent that the child is unable to reach the same level as the pupils in the corresponding ordinary classes. This should be possible because of the smaller classes.

In especially difficult cases reading education in the special classes will have to be supplemented by a certain number of lessons of individual or group instruction weekly.

The program in all subjects should be set up so that the children's limited reading ability does not handicap them, or present them with problems they cannot solve. It must be remembered that the children's reading handicaps usually have a harmful effect on their work in their other subjects. One must therefore endeavour to bring their basic knowledge within the various subjects up to a certain standard.

Children in the retarded readers' special classes should take progress tests at the same time as the other students, but in the case of Danish, the tests should be especially adapted to their abilities. Special reading class pupils who expect to return to their regular classes should, however, take part in the ordinary tests.

For the retarded readers who are not transferred into special classes but receive supplementary group education, these tests will prove a problem. It is natural that these children should take the tests along with the other children, but in the administration and scoring of the tests special consideration of their reading difficulties must be taken. In so far as test results are reported to other schools, mention should be made regarding considerations taken.

Retarded readers with extremely severe handicaps must stay in the reading classes for the whole of the period they are attending school. So the largest school districts have to set up reading classes also for the eighth or ninth school year. Such classes may be connected to the 10 - 12 centres for the teaching of severely handicapped children.

Where an eighth grade reading class is set up, it should be possible to arrange supplementary instruction, for example in languages which will aid the pupils who are otherwise fitted to enter the higher secondary school.

The supplementary group instruction is aimed at helping the children to carry on their regular classes. An improvement

in spelling is not in itself an aim, except in those cases where special referral, because of severe spelling difficulties, is made, but spelling is included in the group curriculum.

The child takes part in some of the regular Danish lessons and in this respect a close collaboration between the regular and special teachers is necessary. The child should actively participate in the activities in these Danish lessons, and should be given just as much attention as the other pupils. At the same time there must not be too great a burden placed on his reading ability, or too great expectations attached to his progress. The child must also be shown special consideration in the other subjects where his reading problems will be a handicap.

The special reading groups must not acquire the character simply of "help with lessons". Both the material and the approach to it must be different from the regular class lessons. To the extent that reading books and a Danish writing system are used, it will scarcely be practical to use the same books as the regular class. It is necessary to make certain that the reading process is in order by elementary training in reading skills. To do this, the instructional material should lie close to the students' intellectual level. Independent reading and other activities which are suited to stimulation of interest in reading should be used as soon as possible. The supplementary material should always serve as a part of a logically planned reading programme and the teacher should check carefully to see that this is the case.

The education should be arranged for each child, taking into consideration his standing, special difficulties, and the psychological reports on his abilities and on the best methods of teaching him. The psychological report should contain this information plus suggestions about instructional materials. The first examinations must be followed at least once a year by follow-up tests which may give a basis for new discussions with the special teacher.

Although good spelling is not an aim in itself in the group for remedial reading help, an attempt is made to build up the store of natural word-pictures through transfer between oral and written training exercises. It may aid the learning process

to give the pupil home work in the form of small written exercises or free reading.

The teacher must be careful that the homework is such that the student can master it without help and, especially in the case of the youngest pupils, that the child does not feel overwhelmed by it. It should be remembered that the children will often have more homework in their other subjects to make up for the hours they have missed because of the remedial reading instruction.

The teacher should be in contact with the child's home to try to bring about a positive attitude toward the child's work. The teacher should especially advise against unrealistic expectations with regard to the child's progress.

#### Terminating Special Reading Education.

Special education should end as soon as the child's reading performance level is equal to the normal. On the other side the child must not be transferred from a special reading class to an ordinary class if there is a possibility that the change of milieu and the different education methods will cause the child any great difficulties. It will also be natural to see if the child's standing in spelling is more or less at a level with that of the ordinary student.

Group reading instruction should not stretch over more than one or two years. If there has been no real progress it will in some cases be proper to suspend special education for a while. A suspension of special education, however, should only occur after discussion between the special teacher and the class teacher. In some such cases it may pay to transfer the child - possibly after a pause - to another teacher, who might be better able to communicate with him. If this is done it must be made clear to both his class teacher and the home that the action implies no criticism of his class teacher, rather that it is a case of the proper contact not being made because of the nuances of personality (in human beings).

Before supplementary group instruction is terminated, the child's scholastic standing must be discussed with his regular Danish teacher.

In many cases it will be desirable to have the special teacher keep in loose touch with the child even after the end of the special education. He will thus be able to give the child support by loaning him free reading books, spelling lists and other adapted material. Such a loose attachment to a special group can also be established when the pupil has certain reading problems not serious enough to call for real special education. Even such a small amount of help may prevent a future need for intensive special education.

For the school year 1966/67 the public school had established 372 reading classes with 4738 pupils equal to 0,73 per cent of the total number of pupils. Of this 3417 were boys and 1321 girls.

There were 7691 reading groups with 26014 pupils (17901 boys and 8113 girls) equal to 4 per cent of the total number of pupils. 535 pupils equal to 0,08 per cent were taught in reading clinics.

#### Teaching Older Retarded Readers.

While most cases of reading difficulties are cleared up by the time the child leaves school, there will be a number of cases where pupils leave school with such limited reading ability that it is a handicap for them. In these cases the school must inform the employment counsellor about the child's special problems. The employment counsellor may consult the school psychologist.

There will also be cases where the reading ability is quite satisfactory when the child leaves school, but then grows worse.

It is therefore desirable that young people have an opportunity to attend Danish classes where the difficulties may be improved. These classes are provided for in the law governing the establishment of classes in the continuation schools of as few as two students when instruction in special groups is required. This provision may be used to provide retarded readers with special education in the continuation schools. Many evening schools and "Folk High Schools" have classes for retarded readers.

Slow readers who wish to attend trade schools or business schools will have difficulties both in the Danish and in other subjects in these schools. The law provides for the establishment of special classes for retarded readers in such cases.

Both within the Armed Forces Civil Education Service and the Prison Department instruction programmes for handicapped personnel have been established.

Rules are established for special consideration, when retarded readers want to have higher education. For instance it is possible for handicapped students to obtain exemptions at examinations. This is the case for instance when a reading retarded student has difficulties in foreign language or Danish at the Higher Secondary School Leaving Examination. When a student wishes to obtain admission to the studies in civil engineering at Denmark's Technical University only the marks in mathematics, physics, chemistry, geography and biology are considered. In this way it is possible also for highly gifted but retarded readers to compete for admission also to studies where admission is limited.

It is very important at all levels of education that opportunities are available for those with reading problems, children and adults, to receive especially adapted instructional help.

#### Children with Other Special Problems.

##### Education of Feeble-minded Children.

There is a group of children who are so retarded mentally that they cannot profit even from the instruction in the schools for slow learners. The law governing the welfare of the severely mentally retarded provides for a close collaboration between the schools for these feeble-minded people - schools set up under the welfare services - and the public schools. This will be especially important where local school authorities have undertaken the responsibility for the education of the feeble-minded.

It is also provided that communities may establish edu-

cation for feeble-minded children within the public schools. Where such education is established, however, special schools should be established separately from the public schools for the slow learners.

Schools for the mentally deficient will accept pupils whose deficiencies place them in the group of the imbecile (IQ below 50), but there is a strong tendency to divide schools for the mentally deficient into schools for the feeble-minded and training schools, and a strong development in this direction is taking place.

While schools for the feeble-minded may be successful in their endeavour to develop the ability to form language and concepts, and with the vital functions as the basis arrive at some elementary instruction in ordinary school subjects, the main weight in the programmes of the training schools must be laid on training of the senses, functional training (movements, eating, cleanliness) and primitive occupations.

It is surprising how developments during the years have pointed at pedagogical treatment and influences from environment as a means of improving the mental conditions of mentally deficient children.

Through the provisions of Act 5th June 1959 it was laid down that mentally deficient children, like others, were liable to compulsory education, and throughout the years a comprehensive building programme has been carried out. At present well over 3000 children are being instructed in 51 schools for the mentally deficient and well over 2000 in training schools under the authority of the Welfare Service for the Mentally Deficient. Compulsory education for the mentally deficient cover the period from 7 to 21 years.

Mentally deficient children living at home with their parents may be instructed in day-schools.

Opinions with regard to how these schools should be placed within the social sector but outside the public school system is varied, but even a close cooperation between the different types of school systems cannot conceal the fact that considerable disadvantages are experienced with regard to inspection, advisory activities, research, teacher training and staffing policy.

A historically biased type of administration can hardly prevent reforms in the future. Education for all children, who are educable in the traditional meaning of the word, must be the duty of the local school authorities.

Children with Behavior Problems.

The school law states that it is the aim of the schools to develop and advance children's talents and abilities, to strengthen their character and give them useful knowledge. In a Ministry of Education Notice it is emphasized in agreement with these aims that besides imparting information the schools must assist in upbringing and character building according to the following aims:

"The public schools should develop and strengthen the children's appreciation of ethical and Christian values, instill respect for human life and for the nation, love for the home and our people and our country, respect for uprightness in speech and behaviour, and strengthen their sense of duty. Through sound discipline teach them proper behaviour and develop their appreciation for order".

It will first and foremost be through its role in imparting information that the school will carry out its upbringing activities.

It is emphasized that in his encouragement of order in the school the teacher must rely on his personality and example to affect the children and must seek cooperation from the home in his upbringing work.

It is stipulated that if the methods of upbringing which the school has as its disposal are not sufficient and, if it is believed to be necessary with respect to the child himself, the school may refer the matter to the child welfare services.

The children to be discussed in this connection are those whose conduct is disturbing to the class and which cannot be tolerated in the interest of order and quiet. Through the years it has been unsatisfactory for the schools that they could do nothing for such children without going through the child welfare services. The school department has in many different ways tried to improve these children's adjustment to school life.

The establishment of school psychologists offices has provided better possibilities for such work.

Some children does not disturb the class but have such a passive or negative relation to the education that the children benefit little from it. It is scarceley satisfactory for a child to continue school attendance from which he does not profit.

Besides the children whose behaviour disturbs either their own school work or that of others, there is a group that has great difficulties in adapting itself to school life. These children follow the lessors satisfactorily but have difficulty in being accepted by their school mates, children who are strongly inhibited, anxious and nervous. Naturally, these conditions can also be bad for the child's participation in the class room, but even when this isn't the case it is unsatisfactory if the school does not seek to help these children conquer their contact problems.

In many cases children's behaviour problems are the result of difficulties with school work. Visual or auditory handicaps - as well as reading difficulty and low intelligence - can lead not only to pedagogic problems but also to behavioural problems. In these cases it will be sufficient to secure for the child special education suited to his difficulties. It must here be noted that children whose behaviour difficulties are of this nature should not be referred to a special class, even though there may be an advantage in doing so because of the smaller classes and of teachers who especially understand children with such problems.

On the other hand, it is possible to establish special classes for children with behavioural problems.

Since the work of the school psychologists began in the thirties, one of the most important tasks has been the examination of children with behaviour problems and the counselling of school and home with respect to their treatment. The thoroughness of these psychological examinations depends upon the degree of special training (clinical psychology or psychiatry) of the personnel attached to the school psychologist's office. This will also determine the extent to which actual therapy can be applied.

It is important that examinations, counselling and therapy are not attempted by the school in cases requiring a greater degree of special knowledge than is available. Such cases should be referred to the child psychiatric section of a hospital or a child guidance clinic. It is natural, however, that in cases where it is at all possible, the school should offer assistance.

Collaboration takes place with the counselling clinics approved in the welfare law.

In certain cases, a child, who has had quite a bad relationship both with his teachers and classmates, has a chance for a better adjustment if he is transferred to another school. If such a transfer is to be effective it must be well prepared for. Through meetings with the child and the home, the fact that the transfer is a form of help for the child must be made clear. One must be sure that the child is prepared to make the most of the opportunity which is being given him. One must, furthermore, choose with great care the class to which the child is to be transferred. One can usually find a teacher who is especially suited to such a task. The number of pupils in such a class should preferably be somewhat lower than the ordinary.

Only a comparatively small number of children is sent to observation classes. Much more use is made of observation camps. The child is sent to the camp after psychological and psychiatric examination, and the personnel at the camp works in close connection with the school psychologist who pays visits to the camp.

Though the chief goal with these camps is to reach a closer understanding of the child and his problems, it is quite usual that behaviour problems are influenced also. This is a natural result of the child's being placed in a new environment where the possibilities for conflict previously existing are absent. It is also natural that the camp teachers will exert a stabilizing influence upon him.

It is of importance that the school psychologist closely follows the child during his stay in the camp, through regular discussions. He should also keep in contact with the child's home and by talking with the family prepare for the child's return home.

The leadership of the work of such a camp should be given to a skillful teacher who has both interest and ability for work of this character, and who has supplemented his training with courses in psychology.

#### Sick and Invalid Children.

For the children under discussion here, the question is not merely what special considerations must be taken with respect to their education, but also how, on the whole, they are going to receive an education if they are not able to get to a school. This also holds true for children who are either in a hospital or must be kept home for long periods.

The term invalid children includes among others:

1. Children with congenital deformities, such as missing hand or arm.
2. Children with acquired deformities, resulting from amputation or crippling diseases.
3. Children with severe deformities of the back.
4. Children who must have supports and aids as a result of poliomyelitis.
5. Children with cerebral palsy.
6. Children with muscular atrophy.
7. Children suffering from rheumatoid arthritis.
8. Children suffering from hemophilia.

For some of these children going to school could actually put their lives in danger, but aside from those cases there are others whose condition in general argues for not sending them to school. However, if it is at all feasible they should, of course, be sent to school. This is unequivocally true when the child's health merely prevents him from walking to school. In such cases transportation must be provided. It is important that these children are not isolated but are able to come into contact with other children. In this respect the school has a meaningful task.

It goes without saying that every effort must be made that children with a markedly different appearance or other difficulties are not teased or tormented. It is precisely this

- to help the more normal children learn to be thoughtful and helpful - that is one of the school's many tasks. The teacher must make an effort to see that such children are accepted in the ordinary comradeship.

For some of the children who should not be placed in the regular classes, it will be desirable to set up separate education, either individual or in small groups. Form and content of such special education will depend upon the children's needs and problems.

In the case of cerebral palsied children, among others, the establishment of special classes is called for. In the classes for the cerebral palsied only children who are not able to follow the lessons in the ordinary classes are accepted. It is also possible to accept several other categories of invalided children. Children who are so low in intelligence level that they should be under the authority of the welfare services should not be enrolled. Children who are mentally retarded to the point where they would be placed in a class for retarded children if they were not suffering from cerebral palsy, should be placed in such a class if their motor functions are merely slightly influenced by the disease. In other cases they should be placed in a class for the cerebral palsied. Where it is possible, retarded children with cerebral palsy should be placed in special classes for other children like themselves.

In connection with the examination of children with cerebral palsy there are certain problems resulting in part from their motor restraints, and in part from the fact that these children often have serious speech handicaps or visual or auditory disturbances. What is more, they often lack perseverance and initiative. However, if the examination is made by a psychologist with special knowledge of these children's problems the test results will give valuable information relative to the child's proper placement. The testing should, furthermore, be based upon a close collaboration between the psychologist and a doctor with special knowledge of cerebral palsy.

An observation period will often be necessary before a decision is made concerning the child's educational placement.

To as great an extent as possible considering the children's limitations, the education in a class for the cerebral

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palsied should aim at providing an education that corresponds to the regular public school education. At the same time an effort is made to improve the motor functions by physical training. Experience has shown that improvement in mental development accompanies improvements in the physical condition of these children. It is important that each child's physical and mental development is seen as an entity. Therefore classroom education must be accompanied by specially prepared exercises. Children with speech problems should also be given speech training, and those who are hard of hearing must be given training in lip reading, hearing, etc.

The education must be laid out according to the needs and capabilities of the individual students. The size of the class should not exceed four to six, depending on the spread in the age and development of the children. The instruction should aim at the possible transfer of the children to ordinary classes, and in order to stimulate their contact with the common school milieu they should as far as possible have a few of their lessons in such classes.

The teachers for classes of cerebral palsied children should attend a one year course at the Danish College of Education. Besides this there must be a speech and hearing teacher available for the required number of lessons. The gymnastics instruction should be handled by a physiotherapist, and it will be an advantage if an occupational therapist is available to give these children help in woodwork and sewing. A practical assistant should also be at disposal to render aid to the children in their physical needs during the schoolday.

The classroom should be situated at the groundfloor, staircases and thresholds should be avoided, and the doorway should be wide enough for passage of children in wheelchairs. Special furniture and technical aids adapted to the need of the individual must be available, and as such things seldom are produced by the ordinary factories for school material the educational system has established its own workshop where they are made.

In addition to the classroom there should be rooms for speech training, physiotherapy and occupational training, and it is desirable, that facilities for swimming are available.

Classes for cerebral palsied children are established in adequately located towns, so-called "centre-towns". To these centres the children are given transportation facilities - without expenses to the parents - by bus, covering all distances.

The classes form part of the ordinary educational system in the centre-town, but the special expenditure which they involve is defrayed by the County Council and the State. While most cerebral palsied children were previously confined to boarding schools for cripples, many of them may now receive their education at these centres and thus stay in their homes during their childhood.

At the same time an increasing number of motor handicapped children becomes able to join normal classes, thanks to still better technical aids, and to-day it is an approved principle that no child must be transferred to a special school or a special class if he by means of technical aids might be enabled to attend school in an ordinary class.

#### Teaching in the Home, in Hospitals, etc.

The legal basis for the establishment of such teaching is found in the school laws where it is stated that the community must take the responsibility of offering adequate education to any handicapped child of or above school age when required by the parents.

It then follows, that every child has a right to be educated in the public schools, and if and when it is impossible for him to come to the school, arrangements are to be made to have him educated in some other way.

Children whose lives or health are put in jeopardy if they go to school, and those whose health prevents them from attending school, should receive instruction at home.

In each case the education must be suited to the individual child's abilities, health and needs. Before education begins a physician should submit his report and information to the teacher in question regarding the child's physical condition and the relationship between his health and his ability to receive education. As a rule, five to six lessons of education weekly are adequate for the first to fifth school years, and six to twelve lessons for the sixth to tenth years.

The curriculum should be based on the regular syllabus of the school, but it should be adapted to the child's abilities and state of health.

The education must include Danish and arithmetic, but also a complete orientation in other basic subjects. Free reading will be an excellent educational implement as reading improves. Suitable free reading material from school and central libraries and advice and discussion based on reading matter constitute an important part of home teaching.

It must be emphasized that one of the most important duties of the teacher is to help the child to fulfill his possibilities and to offer him an orientation with respect to the outside world, things which these highly isolated children especially need.

It must also be pointed out that sick children's rights to education past the compulsory age must not be curtailed, even though their state of health indicates that they will not be able to make use of their acquired aptitudes later on.

A great deal is required of a teacher of sick and invalid children, and in the case of older children it will be appropriate that more than one teacher is available so that they may receive a more varied instruction, and at the same time avoid a too great dependence upon one person.

Where the child's health permits, teaching should be supplemented with nature excursions, and it will also be desirable that he is taken to the school for its special ceremonies and arrangements, and that he, if possible, attends a few lessons together with children of his own age.

If the child's disease is cronical or prolonged, the instruction should be under the supervision of the school psychologist, and it should be planned subsequent to a psychological examination.

The aids necessary to support the child in his day to day existence are obtainable from the rehabilitation centre, while those aids which are necessary for the child's education, on the other hand, must be supplied by the school. As such aids are often very expensive it is contemplated to let the County Councils purchase them and place them at the childrens disposal as a loan.

In connection with State supervised examinations the motor-handicapped will be allowed exemptions from definite subjects (f. inst. needlework and woodwork) and for certain marks (f. inst. for neatness). And he will be allowed to use certain supplementary aids, f. inst. electrical typewriters, and if very handicapped he may be given additional time for working out his examination papers.

It is clearly emphasized in the school law that children must receive teaching even if they, for reasons of health, must spend a considerable period away from their home. It is the duty of the school system into which the child moves to provide teaching, but his home school must defray the expenses.

It is important that children who must be hospitalized for an extended period get teaching that will enable them to return to their original class when they are discharged. The teaching will also have the effect of reducing the unpleasantness of a long stay in the hospital. The children's thoughts will be led away from sickness, and through teaching they may be able to achieve a degree of contact with the normal world outside the hospital.

In large hospitals a permanent teaching staff and an educational programme corresponding to the curriculum of the school should be set up. If the hospital is not large enough to require the services of a full time teacher the lessons that are required should be included in the normal teaching load of one of the local school teachers. In small hospitals the number of hours of teaching will be highly variable. Therefore this instruction should be carried out by teachers as extra lessons. Every hospital should have one or more rooms equipped as school rooms, with the necessary teaching equipment such as desks or bed desks.

As elsewhere, the teaching must be adapted to the individual child's needs and abilities. Educational materials may be obtained from the child's school. The hospital should receive information from the school concerning the child's scholastic standing at the time of admission. The hospital should have up-to-date information on the progress of the child's class and content of the lessons, so that when the child is discharged he may resume his normal school work without too great difficulty, and his school should receive a report on his progress.

The pedagogical supervision of the teaching in the hospital is the responsibility of the education committee but in most cases this committee will delegate it to the school psychologist.

All the foregoing information concerning hospitalized children also holds true for children in sanatoria, orthopedic hospitals, speech institutes and other therapeutic institutes. Where such children are able to, they should report to the local school system, but where this is not possible special teaching should be available at the institution, and arranged by the local school system. This is apart from cases where the child is subject to special compulsory education under the welfare department, and from cases where the institution itself has established satisfactory education.

In general it may be said that every child is entitled to a satisfactory education, also during periods in which he is prevented from attending school. Education should be limited only to the degree that may be desirable from the point of view of health.

#### Transition from school to the outside world.

It ought to be an established principle that a handicapped pupil when leaving school should always be entitled to further training in accordance with his abilities, but before starting such training he should be informed about his possibilities for utilizing it in a job.

Thanks to the technical development an increasing number of handicapped persons becomes capable of filling a post in practical life, and the school must always have this goal in view. It must try to develop the various abilities present, concentrating more upon these than upon deficiencies apparent.

The collaboration between the school and the rehabilitation centre is essential with regard to the education and training of the severely handicapped persons. In less severe cases the school vocational psychologist will have responsibility for helping to find a situation for the child in which his deficiencies will not be too conspicuous.

If the pupil is unable to work the school should inform him about his possibilities for attending continuation schools

correspondence courses and special arrangements for handicapped people.

#### Preventive Measures.

Special education is absolutely necessary for some of the public school pupils if they are to benefit from an education. However, a number of conditions speak for an attempt to limit the need for special education as much as possible. It is obvious that everything that is possible must be done to remove the causes of the child's reduced ability so that he may benefit from his education. All efforts, for example, to fight the diseases which cause deafness or blindness, should be supported. One must also take care that in the school or in the instruction or the methods used, conditions which will lead to a decreased benefit for the child are eliminated.

There are of course important drawbacks connected with the transfer of a child to a special class. Among these is the large expenditure it entails. Along with this it must be remembered that difficulties in school which are not combatted effectively can lead to difficulties later in life. Therefore, preventative measures which are taken in school may lead to greatly reduced expenditures for welfare work, special institutions and other social services.

More important, however, are the unfortunate psychical consequences of separating a child from his class for special education. In the first place such a separation sets up a distinction between children - a distinction which one otherwise tries to avoid. If the child is taken out for a group instruction it means that his education in some subjects is disturbed.

It is therefore important to take advantage of every opportunity to secure a satisfactory education for the child without resorting to special instruction. Where special education is necessary, one should choose the form which makes the fewest inroads into the child's regular school life. At the same time one should be certain that the choice will insure the best possible results and one which does not extend over a longer

period than necessary. It is usually preferable to give more intensive instruction over a short period of time.

It must, however, be strongly emphasized that the drawbacks must be accepted if special education is the only way to attain a satisfactory education for a child. For all children who cannot be effectively educated by other means, special education must be used to the extent necessary.

The three periods during which preventative measures may be applied are 1) pre-school age, 2) at the beginning of school, and 3) during the school years.

1) In general, the public schools are responsible only for the children of school age who are registered in school. This, however, does not hold absolutely true for the handicapped children.

A portion of these children will have received help from welfare services before their school years under one form or another. This is true for a large number of hard of hearing children who are reported either through the hearing centres or in other ways to the Board for the Deaf. Such children are examined at the State Examination and Guidance Clinic for the Deaf and Hard of Hearing. After this examination a representative of the district school for the deaf makes periodic visits to the home for counselling of the parents. Where it is possible the child will be placed in a regular kindergarten, if not in a kindergarten attached to school for the deaf. Great weight is laid upon giving the hard of hearing child help as early as possible, especially in the interest of their linguistic development. When these children reach school age decision must be made whether they should continue in the State schools or enter public school.

Similarly, in connection with the State Institute for the blind and partially blind a guidance and counselling service for parents has been established.

As previously stated, some of the children with severe speech handicaps are already treated before they reach school age. For other difficulties it is better to put off treatment because in many cases the difficulty will disappear after the child has started school. It is important that a close collabo-

ration should exist between the welfare organization and the schools, especially in the case of children who will begin in the public schools or will later transfer to them, but who presently receive welfare help. The public schools should take the responsibility for the education of a child who needs special help, for example speech training, before he begins school, when he is considered able to enroll when he reaches school age. It is impractical, for example, for a child to begin instruction under the welfare agency only a year before he is to begin school when similar education is available within the framework of the public schools. In this way, one also avoids the necessity for the child to change teachers after only a short time.

2) Education is compulsory for those children who are seven at the beginning of the school year. A child who completes his seventh year in the first six months of the school year may enter school at the beginning of the school year if requested by his parents or guardians. The result of these rules is that the children starting school will be between six and a half and eight years of age. In addition, the school commission may enroll children before they have reached the age of compulsory education. Besides the fact that there can be a difference of  $1\frac{1}{2}$  to 2 years in the children's ages in the first form, the children's intellectual development - which to a greater degree than age is responsible for their school possibilities - may vary highly. Thus, the spread among pupils in the first grade from the standpoint of their development, can be three to four years, disregarding extremes.

This obviously makes great demand on the preparation of the work in these classes.

For the children who complete their seventh year during the first six months of the school year, the regulations contain provisions for adjusting their entrance into school to agree more closely with their maturity. They may either begin school when they are  $6\frac{1}{2}$  or 7 or when they are  $7\frac{1}{2}$  or 8. Children who become seven in the last six months of the school year must usually enter school when they are between 7 and  $7\frac{1}{2}$  years old. It is only in special instances that such children can be enrolled when they are 6 or  $6\frac{1}{2}$  years old.

Lately many school districts have used school readiness tests as a basis for counselling the parents with respect to the right time for their children to begin school. Through a rational use of parent counselling based on these tests it is possible to take advantage of the possibility of matching the time of beginning school with the child's maturity. This will be an advantage for the individual child, but at the same time it will simplify the curriculum for the first form, since the maturity spread will be reduced to two or three years.

The test results may also be used to establish the first classes, as it will be possible to arrange somewhat homogeneous classes with more or less the same spread of intelligence in each class. The school must, however, enroll the children who are of school age if their parents demand it, whether the school finds the children sufficiently mature or not. School readiness should always be regarded in relation to the type of work which is carried on the first form, and the things that are required of the pupils. Where the education is an acclimatization between play and work, and the methods are chosen with respect to the children's educational problems, there can be a little talk of immaturity.

In instances when it is felt to be impossible to set up education so that children who will be expected to have great difficulties in the learning of ordinary school skills can be occupied in a fruitful manner within the ordinary classes, an attempt must be made to solve the problems in another way. This can be done through the establishment of "school readiness classes" or individual classes.

Quite a few municipalities make provisions for kindergarten classes to be established for children a year before they enter school. Kindergarten teachers teach three hours a day. Besides providing for a more flexible transition to school life for the child, the kindergarten provides possibilities for observation which might be useful if one wishes to put together classes which are as homogeneous as possible.

In some instances parents will request that a child's school attendance is postponed for one year. It is the practice of the Ministry of Education to comply with these requests in exceptional cases where it concerns children whose mental or

physical development is such that one cannot expect them to profit from school. In situations where there is a request for a postponement of school attendance based on an extended illness in the early years, or something similar, home instruction should be set up instead, if a medical and psychological examination confirms that it would either be harmful for the child to go to school or that he could not benefit from attendance.

3) When the basis for special instruction is that the child is unable to follow the ordinary class teaching to advantage, it must be remembered that the climate of instruction in the ordinary classes has a great deal to do with when such a need will occur. It should be remembered that, in the beginning classes especially, the children should have time and opportunity to fit themselves into the school life and its many new demands before there is any discussion relative to beginning special education.

#### The School Psychological Work.

The task of the school psychologist with respect to special education can be described as follows:

The Planning of Special Education. The school psychologist assist in the planning of special education in the various communities and sees to it that suitable locations, instructional materials, the required number of lessons, and qualified teachers are available. He may try to interest qualified teachers in acquiring the necessary training.

In situations where establishment of special education requires a collaboration between communities, he should see to it that such collaboration be established.

Selection of Children for Special Education. The school psychologist has important tasks in connection with the selection of children for special education. He carries out intelligence testing of children who are referred to him, but his task in selection is in no way restricted to this. He must undertake a series of psychological and pedagogical tests which are necessary for a decision about whether or not special education

should be given and, if so, what kind of special education the child in question should have. He must then collect all the other necessary information, including statements from the school on the child's school work, statements concerning the child's general behaviour from the home, school and others and statements from the school doctor on the child's health.

On this basis the school psychologist must present his recommendation with respect to the child's education. As to children with speech and hearing handicaps, the psychologist will not usually be in a position to undertake all the special examinations needed, or to evaluate their results. With regard to these and other children, he must therefore depend upon the examinations and evaluation of expert teachers. Special advisors should be attached to the schoolpsychological office.

Supervision of Special Education. The school psychologist must be kept informed about the children who are referred to special education, with a view to instructional guidance for the teachers concerned and possible changes in or cessation of education. He must, in this respect, see to it that the necessary follow up tests are made.

Supervision of Students after the End of Special Education. The school psychologist must keep informed about the further progress in school of the children who have had special education. When the child leaves school he must arrange the necessary vocational counselling with respect to the pupil's possibilities. With this in mind he must remain in contact with the vocational counsellor. He must undertake the establishment of counselling activities.

Meeting and Courses. The school psychologist should call together the teachers within the different branches of special education for discussing mutual problems and for instruction in the use of new teaching methods. He should also hold joint meetings for these teacher groups with an eye toward their orientation in the various branches of special instruction and their coordination.

He should further work together with the Danish College of Education in setting up local courses, as he should also cooperate with the advisory officer in courses concerning the

the teaching of beginners and other matters which can have preventive effect in connection with special education.

Where there is an independent school principal in one or more special education areas, many of the aforementioned duties will be carried out in collaboration with him.

Other tasks. The degree to which the school psychologist should have other duties depends on local possibilities and requirements, and decisions concerning this should be taken according to the relevant instruction from the Ministry.

Children with Behaviour Problems. Where the school system takes measures to help in cases of behaviour problems, the school psychologist is in charge. Even when the school system does not take special measures, it is natural that the school psychologist undertakes the examination of children with behaviour problems in order to offer guidance to the school and the home. In such instances he can contact the child guidance clinics operating under the Child and Youth Welfare Services.

At present an improvement is going on, trying to give the "public school" better possibilities in helping socially and emotionally handicapped children. The help will be given in the form of establishment of observation schools. They are boarding-schools, and maladjusted children can be sent to these schools for a period of up to 6 months if the homes consent to it.

The office of school-psychology will take up a central position in the function of these schools.

School Readiness Tests. Mention was made of "school readiness tests" used as a basis for advising regarding the proper time for a child's enrollment in school. Further mention was made of the possibility of postponing enrollment for a child of school age. It is natural that the school psychologist should administer such tests. In cases of ordinary group tests, these may be administered by teachers who have had a course in test giving, but more detailed tests should be administered by the school psychologist. This is always true when it concerns measures which will effect the parents' plans for the child.

Experimental Teaching. It will be desirable to set up achievement tests, etc., to obtain as accurate a picture as possible of the results of any experimental teaching being carried out.

Ordinarily this is the work of the Danish Pedagogical Institute which has a special department for experimental teaching activities, but the study will often be arranged so that the institute cooperates with the school psychologist involved.

Home and Hospital Instruction. In agreement with the school law, special education is set up for the children who cannot participate in the regular school work. The school psychologist is especially qualified to set up such instruction, supervise it and give as much pedagogical information as possible to the teacher who will teach the child temporarily.

Qualifications. The qualifications for appointment as a school psychologist should be:

1. Teacher's qualification.
2. Five years experience as a teacher.
3. University degree in applied educational psychology.

It is of great importance that at any rate the child psychologist has been trained as a teacher. This is necessary so that he may act as an adviser to the schools in pedagogical matters. It is for the same reason that several years' experience as a teacher is required. His teaching experience should include ordinary classes as well as the most important aspects of special education.

Work of the School Psychologist's Office. The office of the school psychologist should have sufficient personnel at its disposal. It should include people trained as clinical psychologists and some whose special training supplements that of the school psychologist. The latter includes speech and hearing consultants, social advisers, medical specialists and psychiatrists.

Speech and hearing consultants should be attached to the school psychologist's office where the school psychologist does not have the special training necessary to undertake the examination of hard of hearing children and those with speech handicaps.

The attachment of experts to the school psychologist's office will depend partly on what kind of problems the office accepts. If work concerning children with behaviour problems

is accepted there will be need for clinical psychology and psychiatric knowledge. These experts are, of course, available from the various institutions, for example, a hospital child psychiatry department and the child guidance clinics which are set up under the Child Welfare Department.

Where possible, however, it will be an advantage to have personnel with the desired training attached to the school psychological office, since this will permit a closer collaboration between the school psychologist and the psychiatric experts than is possible if they are attached to another organization. A psychiatrist permanently working with the schools will attain a greater degree of insight into the problems and possibilities of the school situation.

The presence of a social worker on the staff will relieve the psychologically trained personnel from the duties of home visits. It will often be possible for the health nurse to assist in this respect, but in general it is not completely desirable to leave this work to those not connected with the school psychological office. In many cases it will be an advantage for the school psychologist to make home visits, partially to gain an impression of the home environment, partially to inform the parents of the child's problems and the educational measures being taken with respect to them.

The expansion of the staff in the various localities will be dependent upon local possibilities and needs. In larger school districts there are school psychological offices with large staffs of psychologically trained personnel besides the chief school psychologist.

The assistant school psychologist usually teaches a number of lessons a week. Chief school psychologists do not, but it is desirable that the school psychologist maintains contact with the teaching aspects of education, if possible both with respect to special instruction and regular public school instruction. On the other hand the psychologist must be able to devote the greatest possible amount of time to his psychological work.

All urban school systems must employ a school psychologist. In the case of small communities arrangements may be made through the country council to obtain psychological service.

Collaboration with other Institutions. In order that the school psychologist may effectively carry out his duties he must cooperate with other agencies which have to do with children's problems.

A natural collaboration has grown up between school medical officers and school psychologists. The way they work together varies from place to place, but usually the psychologist receives a statement of the child's health in connection with referral of children for examination. In case of referral for remedial training, it will be desirable that a statement of the child's health, in the form of a transcript of his health card, is forwarded to the school psychologist. The discovery of hearing or visual losses will, in fact, usually depend on the school doctor's examinations. The school doctor's visual examinations have until now been aiming only at discovering distant visual acuity. As extreme far sightedness and differences in vision between the left and right eyes can cause difficulties for the child's school work, it is necessary that the examination is supplemented with tests which show these and other conditions as well.

The school psychologist must have authority to request a supplementary medical examination of the child. The doctor, in turn, must have authority to request a psychological examination of a child. It is desirable that the school psychologist should also have authority to request examination by medical specialists, especially eye, ear, nose and throat specialists, psychiatrists, and pediatricians.

Other possibilities for psychiatric examinations exist in the form of the child guidance clinics, established under the Child Welfare Department.

The school psychologist should inform the school doctor of the results of psychological tests. This can be done merely by forwarding to the doctor a copy of the school psychological report to the school.

Collaboration with Vocational Counsellor. It is suggested that the vocational counselling of backward children should be undertaken by the counsellors described previously. With respect to the children who have received special education, it will be helpful if the vocational counsellor has access to the records

held by the school psychologist. It would scarcely be practical, however, merely to pass over to the counsellor the cumulative file of material held by the school psychologist. It is usually preferable that the counsellor discusses with the psychologist the children about whom he wishes more information than is available from the school reports. He should also be able to request written statements on matters which can be important for vocational counselling.

Collaboration with Special Welfare Institutions. It is obvious that there is no sharp distinction between the children who receive special education within the public (municipal) schools and those who are educated in the special state schools for the deaf, blind, feeble-minded and for those with severe speech handicaps. This is partly a result of the fact that children are often transferred from one to the other and partly because the measures taken in both are often equally beneficial and effective for the same cases. These conditions call for a close collaboration between teachers in the state schools, the public school teachers, and the school psychologists.

Collaboration with Child Welfare Institutions. Many of the children who have difficulties in school will also cause problems elsewhere, and they will often be children from poor home environments. This means that a number of these children with whom the child welfare department comes into contact will also be known to the school psychologist. It is desirable, therefore, that the school psychologist and the child welfare agencies work smoothly together. Such collaboration will be especially important if the school system undertakes measures to help children with behaviour problems.

Collaboration with the guidance clinics will also be desirable with respect to children with behaviour problems. Many of the cases, and those where the problems have not yet affected the school, will probably be handled by the child guidance clinics. This will remain true because it is not likely that in the near future the school psychological offices will be expanded to an extent necessary to handle all the cases which occur. Close cooperation, then, between the child guidance clinics and the schools is quite essential. This cooperation

also finds a natural basis in the fact that many of the behaviour problems with which the child guidance clinics deal also appear in the school. The school psychologist is often aware of these children at an early date, and often has obtained information about them through tests, etc., which can be of help to the clinic.

The idea of this collaboration is not that the school psychologist simply sends the child, accompanied by pertinent information, to the child guidance clinic which accepts the child and sends a receipt for the information. Rather it should be the practice to have the school psychologist participate in conferences on the treatment of any child he has had referred to him.

From time to time he will be able to undertake the counselling of parents and schools in connection with a child's referral to an observation camp, hospital or treatment home, and in other ways take part in the psychological treatment and guidance work. He must be entitled to be informed of the progress of the children he refers to the guidance clinics for treatment. It is obvious that he will consider these reports confidential unless there is an express agreement to the contrary with the head of the clinic.

#### Economic and Administrative Problems in Special Education.

The special education as a part of the public school is a community responsibility.

It is the responsibility of the local authorities (the council and the school board) to provide the necessary special education within the community school system, or, if necessary, through cooperation with other communities.

The community school plan must state which forms of special education are set up within the community school system. The requirements for admission to special education for those children for whom it is necessary, must also be stated. In other words, the school syllabus must guarantee admission to special classes in all the areas of special education. For most

communities this will require cooperation with other communities.

If there is a hospital, sanatorium or other such institution which admits children of school age for longer or shorter periods the school plan must explain how these children are assured education.

The plan of the school system must contain detailed directions for the organization of special education. Within the educational syllabus there should be a separate syllabus for special education. For remedial reading classes, speech classes, classes for the hard of hearing, and classes for visually handicapped, the syllabus will have the same goals as the general syllabus. At the same time the syllabus for the retarded children should provide another framework. The curriculum here is worked out with regard to the individual pupil's abilities, limitations and needs.

Selection of teachers for special education is made by the school board after considering the recommendations of the teachers' council. It will be required that all teachers who undertake special classes have prepared themselves for the work through special courses. It is further desirable that the teachers selected have an active interest in these children and their problems.

The question of special education for children should be raised by the class teacher. He should support his position with achievement tests and other materials which are available to him. It is, furthermore, important that before he takes any action he discusses the child's problems with the parents, who should be informed that special measures might be necessary. The fact that the parents are opposed should have no decisive effect, but every effort should be made to convince them that examination and special instruction will be to the benefit of the child. If the parents do not accept the suggested provisions and the school insists upon these provisions, the parents are allowed to move their child to a private school.

The request for an examination in view of setting up special education should be sent through the school principal, who should be orientated with respect to such questions. The request should preferably be made on a special form, so that all necessary information will be present.

The request must be accompanied by a statement by the school doctor. This can usually be in the form of a transcript of the child's health card. An examination of the child is not necessary in this respect, though where it is called for in special cases the school has the right to order a special examination by the school doctor.

The request is sent to the school psychologist who undertakes a psychological examination and collects possible missing information. The school psychologist's evaluation of the child and his educational possibilities will ordinarily be final. Should it be decided to institute special education, he should decide which kind, except in instances where there is a local supervisor of special education.

The decision to begin special education in public schools is not dependent upon the consent of the parents or guardian. However, it is of great importance for the success of the work that the family has a positive attitude toward it. Therefore, the information which is given the parents should emphasize the fact that it is special help given at a considerable expense to society which is being given their child. A spirit of cooperation should be established which will continue throughout the period of instruction.

In some school systems so much weight has been laid on the parents' consent that their opposition has caused the school to refrain from instituting special education. It is not right to deny the child the proper education because of the parents' lack of understanding of the situation. It is possible, however, to postpone the start of special instruction if it is thought that the parents' attitude might be changed to a more positive one.

In cases where the parents oppose the decision to give a child special education, the case may be laid before the school board for decision. But it is not very often the case that parents oppose special education for their children. Only a few years ago it was said about the pupils in special education that they were of less value, but this attitude has changed. Most parents accept special education.

It is of great importance that special instruction is planned and carried out in the most effective way in each indi-

vidual case. Since special instruction is an encroachment upon the child's regular school attendance, it should be completed as quickly as possible. Special education is also quite an expensive measure. These conditions speak for the use of the most efficient arrangement of education, based on psychological examination, and for supervision of the teaching and checks on its results with respect to possible changes. In the case of group instruction a check card should be used, showing when instruction is given and what material is used.

Where conditions warrant it should be expedient to set up the post of pedagogical supervisor within the various branches of special education. It is especially desirable that remedial classes, whether they are grouped in a school for the mentally retarded or are located in one or more of the public schools, should be supervised by an adviser who has had training and experience in the teaching of mentally retarded children. Among other things, this results in the child's education being watched over and coordinated by this supervisor who can advise the teachers regarding selection of materials and methods. Teachers who have had only little experience in teaching of this kind need careful guidance. The purchase of instructional materials is also best undertaken by such a supervisor. He also has an excellent opportunity to build up and maintain contact with the parents, something of great importance in connection with the teaching of these children.

Besides supervising teaching, the pedagogical supervisor has authority to decide questions relating to enrollment in and discharge from special education. These decisions should naturally be supported by the information made available through the psychological examinations before and after the beginning of special education.

When there is no supervisor, the school psychologist must decide when special education should be discontinued.

Inter-Community Collaboration.

While certain forms of special education, such as reading groups, can be set up without great difficulty in every school system, in other cases a prerequisite for effective and efficient organization of special instruction will be a large school system or several cooperating smaller systems.

Setting up special classes presupposes a certain minimum number of children who have need for such help. In the case of those branches of special education which require teachers with a high degree of training, it will be expedient to have them working in an area where there are enough children needing special education so that they can use their special training a significant part of the time. On the other hand, it may be desirable for teachers to work with handicapped children of normal intelligence to continue teaching part of the time in the ordinary classes, so that contact with ordinary teaching of non-handicapped children may be maintained.

It is difficult to lay down rules for the establishment of classes and the obtaining of teachers. In the first place, it is impossible to set a limit to how many children are needed for the establishment of special classes. It would be a distinct advantage if it was possible to gather children enough from one area to set up separate classes for each form level. However, if this means an unreasonably long trip to school for some of the children, it would be preferable to set up multi-grade classes with children from a smaller area.

The children who need special education will vary widely in their needs and abilities. There is a higher percentage of slow learners and retarded readers among the group than children with visual or speech handicaps. But even within the individual areas it is not possible to make legitimate estimates as to the number of children who will need special education. This is due partly to the fact that local conditions may differ, partly to the fact that there are no hard and firm criteria for selection of children for special education.

Consequently, only statements of a general nature can be made in this respect, and they should only be used for guidance. It will be desirable to try to set up classes for children from as large an area as possible, so that one form classes can be set up. This will be especially important for the eighth, ninth and tenth school years. If the area from which the students are drawn is so large that transportation problems are involved, it will be expedient to undertake centralization only in the upper grades. The establishment of one form classes for slow learners requires an area with 3000 to 4000 children.

Since most retarded readers can obtain satisfactory instruction in groups, fewer of them will be referred to special classes. Therefore, these classes will have to draw from an even larger area.

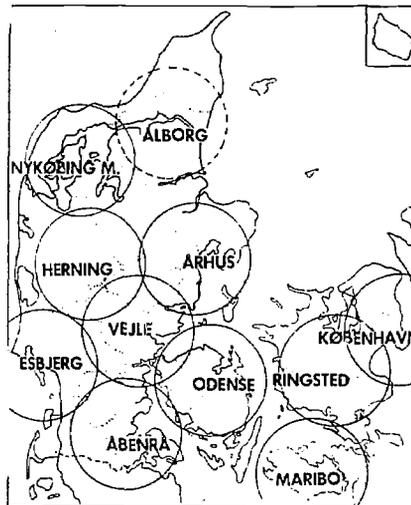
In order efficiently to utilize a trained speech and hearing teacher, he must be employed in a school district with from 2000 to 3000 children. The establishment of classes for hard-of-hearing children or those with speech difficulties will require a larger number of children. The number of children needed to assemble a class for visually handicapped children will be even greater.

It is of the utmost importance that the different school boards endeavour to work out a common plan for the various branches of special education through collaboration between local school authorities.

Placing the classes in cities may carry with it the advantage of better transportation connections.

Centres for Special Education.

In Denmark 11 - 12 centres are planned for special education of severely handicapped children within the public school system.



As an example of a centre the education centre in Herning may be mentioned. It is set up with a view to enable handicapped children to remain in their homes.

The pupils come from a district with 50.000 pupils. The district covers an area the radius of which is 50 km.

Efforts have been made to place only one group of handicapped children at each school in order to promote the best conditions for the group to integrate in the everyday life of the school.

As to the subjects and number of lessons, the syllabus of the ordinary school is followed in an adapted form.

Part of the special training takes place in lessons in which the pupil is removed from his ordinary class for individual tuition.

Those with defective hearing are trained in articulation, lip reading and the use of the auditory senses. Children with motory defects are given physiotherapy and speech exercises.

Partially sighted pupils are given individual lessons in Braille and sense-training. Those with speech defects get specialist training in articulation. The pupils in classes for slow readers are not taught individually, but receive supplementary instruction.

Furthermore, as far as it is practicable, handicapped pupils will join the ordinary classes of corresponding age levels.

In the lay-out and the furnishing of the classrooms each category of pupils has been taken into consideration.

Teaching in the special classes is conducted by teachers who have attended special training courses.

If the pupils are to be accepted on equal terms with non-handicapped children, it is necessary for their teachers to be accepted members of the staff of the school in question. They must be good and respected teachers with educational experience in ordinary classes.

Admission to the special classes of the centre is obtained on the basis of a report submitted by the school psychologist subsequent to negotiations with the parents and consultation with local school of the pupil.

It has proved useful to have at least one annual conference at the central school psychological office, in order to discuss forms of cooperation and planning.

The children in the special classes are on an equal footing with the other children as regards medical health service, dental treatment for school children, and various other services in the nature of health and education.

Furthermore, agreements have been made with specialists so that the children may be examined by an orthopedist, a neurologist, an eye specialist, and a specialist in ear, nose and throat diseases.

The State Hearing Centre at Århus gives technical assistance to testing and adjusting of hearing aids.

Parent - teacher cooperation is of extremely great importance to facilitate effective educational work. By means of a contact book it is possible to establish daily contact between the home and the school. In addition to this communication, it is the duty of the class teachers to visit the homes; to meet their transportation expenses they are given travelling allowances. The teachers will report on their visits in the pedagogical journal.

There are at least two annual parents' meetings and two visiting days, on which the parents may have the opportunity of observing work in classes and discussing problems with the teachers.

The pupils generally make use of public transport if this is possible; but the majority are transported in school buses the routes of which are planned and operated from the central office of the school psychologist.

Society has, with changing motives and attention made attempts to isolate the handicapped. The question for us is whether we will accept the handicapped as a natural and equal group of our community; indeed, not only accept them, but also see to it that the handicapped themselves feel accepted. If we desire to work on these lines, we must support the ordinary schools in their attempt to solve the problem. The school is not the only factor, but it is an extremely important one for the accomplishment of this end.

Number and types of classes:

1961/62	1 class for motory defective	6 pupils
	2 classes " auditory "	<u>11 "</u>
	total	17 pupils
1962/63	1 class for motory defective	6 pupils
	4 classes " auditory "	25 "
	1 class " speech "	9 "
	1 " " slow readers	<u>9 "</u>
total	49 pupils	
1963/64	1 class for motory defective	9 pupils
	5 classes " auditory "	28 "
	2 " " speech "	15 "
	1 class " visually "	7 "
	1 " " slow readers	<u>10 "</u>
total	69 pupils	
1964/65	2 classes for motory defective	14 pupils
	5 " " auditory "	29 "
	3 " " speech "	20 "
	2 " " visually "	12 "
	2 " " slow readers	<u>19 "</u>
total	94 pupils	
1965/66	3 classes for motor defective	17 pupils
	6 " " auditory "	36 "
	4 " " speech "	26 "
	3 " " visually "	16 "
	3 " " slow readers	<u>28 "</u>
total	123 pupils	
1966/67	3 classes for motory defective	17 pupils
	8 " " auditory "	43 "
	(including 1 grammer school student)	
	4 classes for speech defective	33 "
	3 " " visually "	
+ 2 blind pupils	14 "	
3 classes for slow readers	<u>29 "</u>	
total	136 pupils	
1967/68	4 classes for motory defective	21 pupils
	8 " " auditory "	42 "
	(including 1 grammar school student)	
	5 classes for speech defective	38 "
	1 class " visually "	
+ 1 blind pupil	<u>6 "</u>	
total	107 pupils	

to be continued

1967/68	continued	107 pupils
	8 home-taught pupils	
	+ 1 blind pupil	8 "
	3 classes for slow readers	<u>27 "</u>
	total	142 pupils

#### The Ministry of Education.

Even though special education is a part of the public school system, it is proper that the State should establish certain institutions as branch of special education. Thus, the Ministry of Education has taken the initiative in the establishment of camp schools for the hard of hearing children. State institutions are especially appropriate where there is need for only one or two in the country.

The Ministry also promote joint planning and coordination of special education within areas of local school authorities.

A Superintendent of Special Education (inspector for special education) has been appointed. He is the professional adviser to the State department of education, and he will supervise all branches of special education. He is coordinator of the various areas of special education, and thus promotes uniform administration of the regulations governing special education and school psychology.

He supervises psychological guidance, hospital classes, observation schools, vacation camps and continuation education for the handicapped, established in connection with special education in the public schools.

He supervises the training of teachers for the various branches of special education, and the training of psychologists, and, if necessary, suggests changes.

He must be in contact with special education abroad, especially in Scandinavia, and must utilize experience and results of investigations from abroad.

He values the applications for positions in connection with psychological counselling, submitted to him by the nominating authorities. He undertakes purchases in connection with a national centre for special educational material. He takes the initiative in the formation of a general policy in the collaboration between the public schools and the welfare institutions.

In order that the many problems, organizational, social, professional and personal, arising in such an undertaking may be solved, it is necessary that personnel with special training is connected with the superintendent's office including advisers for mentally retarded, children suffering from reading difficulties, speech and hearing deficiency, weak-sightedness, for teaching in hospitals and homes, and for techniques of testing seriously handicapped children.

#### The Economics of Special Education.

The public schools are municipality schools and their expenses must be met by the municipal authorities. Under various laws, however, substantial subsidies are granted by the State. The most important regulation in this respect is the "Law governing Wages of Public School Teachers" according to which the State pays a subsidy of 85% of the teachers' salaries.

The State does not directly subsidize special education. However, because the costs of special education will vary greatly from place to place, depending on the number of pupils and geographic conditions, the administrative practice is that special State subsidies amounting to fifty per cent of working expenses are granted to these communities with disproportionately high expenses.

#### Transportation Expenses.

In widely dispersed communities it will be impossible to set up special education in all its forms in each community. The children's right to a satisfactory education must then be met by transporting them to another school. In instances where

a special teacher teaches in more than one school, or even in more than one community, there will be transportation expenses. These transportation expenses, which the large cities do not have, are reduced through a subsidy from the State amounting to fifty per cent of expenses incurred.

#### Instructional Material.

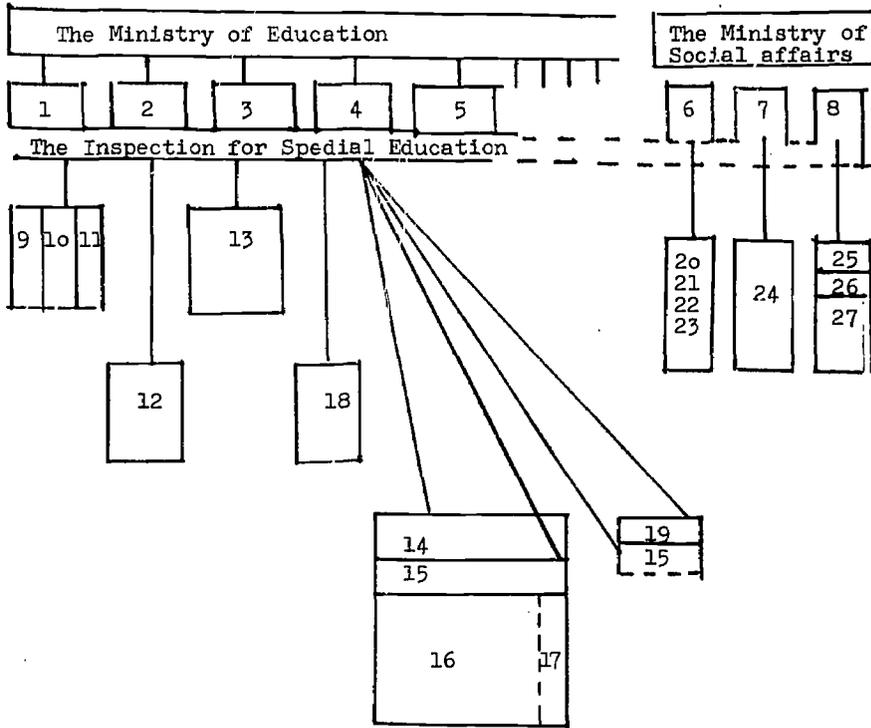
In general, expenses for instructional materials for special education must be met by the community. In certain instances, however, where there are expenses which greatly exceed those for usual educational materials, a special subsidy is granted. Equipment such as amplifiers for the hearing classes, tools and machines for shop instruction, etc., fall into this category.

With respect to certain instructional materials of special character for use in special education for the hard-of-hearing, weak-sighted and invalid children the school may have need for this equipment for only a short period. It is, therefore, arranged that such material is made available to the various communities on loan, through the services of regional centres under the auspices of the inspector of special education. Maintenance and insurance of the borrowed material will be paid by the community.

Aids enabling invalid children to attend school, such as bandages, crutches, wheel chairs, etc., may be obtained through the cooperation of rehabilitation centres. Transportation expenses, however, must be defrayed by the schools themselves.

To facilitate access to suitable instruction materials a number of State institutions have been established - besides the private publishers and firms - and they supply the schools with special books and other materials. They belong partly to professional associations and partly to the state administration. Here the teachers may order materials of their own design manufactured and they can buy suitable materials designed by others.

The organisation of special education to handicapped children in Denmark.



Outline 1.

The organization of the teaching of handicapped children in Denmark.

1. Directorate for the Higher Secondary School and the Higher Preparatory Examination.
2. " " Youth and Adult Education.
3. " " Vocational Education.
4. " " the Primary-and Lower Secondary - School and Teachers' Training College.
5. "Danmarks Lærerhøjskole". The Danish College of Education.
6. Directorate for Rehabilitation.
7. Management for the Care of the Disabled.
8. " " the Care of the Mentally Defective.
9. Handicapped pupils in secondary municipal schools.
10. " " " " State schools.
11. " " " " private schools.
12. " " " voluntary evening schools and youth schools.
13. " " " commercial schools, technical and other vocational schools.
14. Municipal school administration.
15. " offices for school psychological advise and local supervision of special education.
16. The municipal school system with
  - a) supplementary training for the handicapped.
  - b) special classes for handicapped.
  - c) special schools.
17. Teaching centres for seriously handicapped established by intermunicipal cooperation and support from the State.
18. Teachers training college (special teacher training).

19. Private schools.
20. State schools for children suffering from dyslexia.
21. State schools for pupils suffering from speech deficiencies.
22. State schools for the deaf and hard of hearing.
23. State schools for the blind children and youth.
24. Boarding school for the disabled.
25. Inspection for the teaching of the mentally deficient.
26. Local supervision for teaching of the mentally deficient.
27. The State schools for the mentally deficient.
  - a) non-residential schools.
    - x) teaching
    - y) training
    - z) occupation
  - b) residential schools.
    - x) teaching
    - y) training
    - z) occupation

The Structure of The Public School.

