Guides for Special Education No. 1

The Education of Children and Young People who are Mentally Handicapped

By Dorothy M. Jeffree

Unesco, 1986
Significant advances in teaching techniques and important innovative developments have taken place in the field of special education, particularly during the past decade, and much more can be achieved in the teaching of handicapped persons than has previously been thought possible.

The existing body of knowledge, however, remains limited to a few centres and the information available is often found in highly specialized form and in languages not accessible to most practitioners in developing countries.

The New Series on Guides for Special Education published by Unesco represents the Organization's contribution to the development of the training of educational personnel intervening with handicapped children and adults and its response to the incessant demands from Member States for technical co-operation in this domain.

The series, which primarily addresses itself to teachers - but also to parents and community workers - aims at stimulating discussion on basic knowledge, methods and techniques relevant to the education of handicapped persons and offer practical advice for enhancing action in this field.

The first guide is on 'The Education of Children and Young People who are Mentally Handicapped'.

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Special Education Programme
Unesco, Paris, 1986
This book sets out guidelines for all those concerned with the education of children and young people with severe to moderate mental handicap. This includes those who are already trained in the teaching of normal children, those who have not had the benefit of formal training and teachers in training. In fact, the word 'teacher' has a wider meaning to include all who are in close contact with these children, especially their parents and care assistants.

Before reading about the 'special' needs of these children, it is important to remember that they are children first and foremost and share all the needs and emotions of childhood and their handicap takes second place.

However, if we are to help these children to learn, intuition and empathy is not enough, although it is vitally important. These children, because of the nature of their handicap, are 'special' and their education has also to be 'special'. Any type of handicap interferes with learning, a child who is blind or partially sighted needs special treatment and equipment in order to learn and become independent. Mental handicap, above all makes learning difficult and slow.

In fact, in the past, it was considered that these children were incapable of learning or of any form of independence and all that was offered was lifelong care. Now we know that ALL children can learn if we choose the right way to teach them.

This book is the outcome of many years of research into the teaching of children who are mentally handicapped as well as years of teaching experience. So the methods of teaching are not only theoretically sound but have been tried and tested and proved beneficial.

It is the result of sharing ideas with research colleagues, with teachers of children who are mentally handicapped and with their parents, and, last but not least, in being able to share learning experiences with the children and young people themselves.

Teaching a child who is mentally handicapped is a challenge to any teacher. Other children can meet us half way and take an active part in their own education. These children demand all our skill in interaction, observation and precision teaching if they are to learn at all. For successful practice the teacher needs to remind herself continually of the following points:
All new learning has to be built upon the solid foundation of previous ability. The 'special' teacher needs to be able to assess exactly how far a child has reached in every area of development.

The primary concern of the teacher will initially be on the basic skills on which all future learning depends. These will include the fundamental skills of reaching and grasping, walking and climbing, imitating and listening, interacting with others and using language. Until these skills have been acquired the child will not be ready for 'school' subjects.

Many of these basic skills are learnt by the normal child before school through play. The special teacher needs to know how a child learns through play and how she can learn about the child through careful observation of their play.

A successful teacher cannot afford to be vague. She needs to know exactly what she expects the child to learn, to be able to break down the task into small steps, to make learning rewarding for the child and to assess his progress towards the objective.

A teacher who assiduously follows precision methods of teaching will find the progress of her pupils very rewarding. She will also have a firm foundation on which to be creative and adapt methods to suit individual pupils and different cultures.

It is neither possible, nor advisable to produce a 'cookbook' of recipes for all difficulties or emergencies. By using her ingenuity to deal with these a teacher grows in stature and also learns to respect her pupils who have even more difficulties to contend with.
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(iii)
Teachers of children who are mentally handicapped are often at a loss as to just where to begin to educate them. They may wonder whether they are expecting too much or too little. They rightly feel that it is an important question. If too much is expected of a child he is almost bound to fail and this is stressful both for the child and for his teacher. On the other hand if we expect too little, this may be just as bad. We will probably get no more than we expect. The child may then be given few opportunities to develop and may become lazy or bored and this may also lead to bad behaviour.

Of course it is important to find the right level for any child. We know that we cannot expect a child to run before he can walk or to read before he can understand language. The foundations have to be there before any learning can begin. We have to know beforehand just how much the child is able to do competently already before we can extend his skill in any direction either physically or mentally. If we do not pitch our education at the right level it is bound to fail. This is true for all children but it is especially true of children who are mentally handicapped and it is also much harder to find the right level for them. For one thing, the age of the child who is mentally handicapped is no guide to their level of development or understanding. It is different with a normal child where their age at least gives us a general idea of what would be appropriate. We would not expect a normal 4-year-old to read or work out sums like a 7-year-old. With a child who is mentally handicapped we cannot expect his understanding to be like that of a normal child of his own age. He may be 7 in years but only have developed the level of understanding of a 2-year-old child.

Not only this but his development may be very uneven and in this way, too, he differs from a normal child. In some ways, physically perhaps, he may have reached a stage of development appropriate to his age, in other ways lag far behind; for instance in his ability to express himself in language. This lack of synchronization in different areas of development brings its own problems and it also means that, before we begin to teach, we must establish the child's level in the appropriate area and not rely on a global estimate.

N.B. For convenience and ease in reading we have usually referred to pupils as 'he' or 'him' and to teachers as 'she' or 'her'. However, what we have to say applies as much to girls as to boys and to male as well as female teachers.
However, although it would be wrong to try and oversimplify the assessment and education of the child who is mentally handicapped or to suggest that the teacher can do without the advice of people with specialist knowledge such as the doctor, psychologist or speech therapist, we will be giving you guidelines in this book to enable you to form a more realistic estimate of a child's abilities and so be in a better position to help him. Even when experts are available for consultation, we have to remember that it is important for the teacher, who is in daily contact with the child, to know how to find the right level to begin teaching and also to have a means of measuring the child's progress. This is even more important where no expert advice is at hand.

In this chapter we are going to consider the younger child or those who, although older in years, are so severely handicapped that they are functioning at a very immature level, e.g. under 5 years. In the later chapters we will consider the older teenager and young person who is mentally handicapped.

**PLAY AND ITS IMPORTANCE FOR THE CHILD**

One of the characteristics of childhood is play. Not only children but also young animals engage in play. This seems to be an expression of sheer high spirits and enjoyment indulged for its own sake. However, we are now beginning to realize just how important this early play of childhood is. Although apparently just done for the fun of it, play is a child's way of learning about the world he was born into.

A new born babe, although well able to use his senses and equipped with useful reflexes, has no knowledge of the world around him, in all its richness and variety. However, it will not be long before he starts a simple playful activity such as kicking his little arms and legs in the bath water. He may need the encouragement of his mother at this stage, who will enter into his enjoyment and follow his lead.

This early mother/child playful interaction is not just a delightful spectacle, it is vital to the baby's development. He is already starting to learn to control his own limbs, to take turns in the interaction, to recognize his mother, to recognize objects by sight and sound as well as by smell and feel.

A child's first plaything is his mother who will be the one to encourage his interest in the toys and objects around him. It is through playing with toys - dropping them, mouthing them, scratching them and so on, that a baby discovers their properties - which are hard and which soft and which make a noise and what happens when they are dropped.
Much later the child will learn to fit two toys together and realize that toys still exist when they are out of sight. He will learn to imitate and discover the uses of different toys and start simple games of pretence. At the same time he will be learning to cope with his emotions. The baby will also be learning to listen and to play with sounds and eventually use words meaningfully.

It is on this foundation of experience and exploration through play that all future learning is built. With a child who is mentally handicapped this period of play may have to be encouraged and extended because, for him, everything takes longer to understand and acquire.

THE OBSERVATION OF PLAY

We have tried to show how important play is to a child's early development. Through play he is learning about the world and the people in it. He is also learning about himself and his developing abilities.

The sensitive teacher needs to be aware of this and to be willing to follow the child's lead and to join in and encourage his playful activity.

Just as a child can learn about the world through play, a teacher can learn, through careful observation of play, about the child.

Watching a child at play gives us a window into his private world. His play mirrors his stage of development exactly. Backed with knowledge of normal development, the observation of play can help the teacher to answer the question, 'Where shall I begin?'.

THE DEVELOPMENT OF PLAY

We know that a child's play passes through an ordered sequence of developmental stages. Nearly all children pass through these stages in the same order, and this includes children who are mentally handicapped. Each stage is built on the foundation of the one before and mirrors both the physical and mental development of the child.

Once we know what these stages are, we are able to map a child's development by watching his play.

In this chapter we will show how this can be done by the teacher in the classroom without any special apparatus or disruption of routine.
STAGES OF PLAY

Before the age of 5, a normal child will have passed through five main stages of play.

These stages we will call:

stage 1: exploratory play
stage 2: relational play
stage 3: self-pretend play
stage 4: simple pretend play
stage 5: sequence pretend play.

Normal babies will have passed through all these stages of play by the time they are 2 years old. The child who is mentally handicapped may take much longer to reach the stage of sequence pretend play. Indeed a few young people who are very severely mentally handicapped may never get so far.

Looking closer

A detailed knowledge of each level of play is needed before informed observation of the child can begin.

Stage 1: exploratory play

This stage of play with toys or objects starts at 1 or 2 months with a normal child, or as soon as the baby is able to hold a toy when it is put into his hand. The baby is only able to attend to one toy at a time and, if given a second toy, will drop the first. If we watch the baby in his cot we will note that all toys are treated alike and that it is through his senses that the baby is exploring the material properties of the different objects. At first, all the baby is able to do, is to hold an object for a moment when it is put into his hands and before letting it go. After this the baby will discover another possibility and this is to bring the toy to his mouth and mouth it.

At the next stage you will see that the baby is not only able to mouth a toy or object, he will also be able to hold it still and look at it for a few seconds at a time.

Soon after this the baby will not need to be handed each toy, but will start reaching out to pick up the one that he has seen. He may now enjoy banging it on the table top or banging it with his hand or fist. After this he may start shaking different toys and objects from side to side. Soon he will be inspecting them more
closely and possibly turning them over to view the other side or feeling their different textures or listening to the noises they make.

Once a baby has acquired all these different schemes or ways of exploring toys, he will start to realize the difference between the properties of different toys. He will now no longer treat every object in the same way e.g. hitting them all or shaking them all. He now begins to realize that some objects (like pieces of paper) are fun to tear, whilst others can be stretched and others rubbed or slid along the surface of the table. He finds that some make an interesting noise when shaken but others do not.

At about 8 months the baby will discover, perhaps at first by accident, the pleasure in deliberately dropping toys on the floor. If someone then picks them up again, the game is even more enjoyable. Later he may find that he is able to throw a toy or object and watch where it lands and listen to the sound it makes on impact.

So you see that, at the stage of exploratory play, the baby is adding to his repertoire of actions and at the same time discovering about the properties of the things around him.

Of course, when a baby has discovered a new way of manipulating his toys, this does not mean that he drops the old way. Although he is now able to shake, throw and hit objects, he may still choose to mouth them as well.

So the baby adds to his ways of exploring the world through play. Each new action heralds a new stage of development.

By observing many babies it has been found that the sequence of the stages of exploratory play is the same for all babies. Between the ages of 1 to 9 months they acquire these new actions in this order:

1. Holding a toy for half a minute before releasing it.
2. Mouthing: grasping a toy and bringing it to the mouth.
3. Inspection: grasping a toy and holding it in front of the eyes and looking at it.
4. Hitting: hitting a toy with the hand or holding it and banging it on a surface.
5. Shaking: moving a toy from side to side, usually by movements of the lower arm. At about this time the baby will be able to reach out and grasp a toy which is in front of him.
Stages of exploratory play from about 1 to 9 months

1. hold
2. mouth
3. inspect
4. hit
5. shake
6. examine
7. different actions
8. drop
9. throw

6. **Examining:** the baby will now inspect toys more thoroughly by manipulating them and turning them over and poking them to feel the different surfaces.

7. **Using different actions:** the baby is now beginning to discriminate between the material properties of toys and will tear those which can be torn and slide or stretch others and shake those which make a pleasant sound (like a rattle).
8. **Dropping:** before this the baby was already able to let go of objects when he lost interest. Now the dropping is more deliberate. The baby will now look to see where the dropped toy had landed. He will listen to the sound it makes on impact. If someone is on hand to pick up the dropped toys he will make it into a game and repeat the action.

9. **Throwing:** this is an energetic movement followed by the release of the toy. At first the actual release may prove difficult. The throwing is deliberate and the baby will follow the path made by the toy in the air with his eyes.

The normal baby will add one of these new schemes to his repertoire at the rate of one per month. By 9 months they will all be available.

**Stage 2: relational play**

At this stage the baby is no longer only able to attend to one toy or object at a time. He now discovers the ability of relating objects one to another. Much time will be spent in putting toys and other objects into containers and taking, or tipping, them out again. The baby will also experiment by holding a toy in each hand and banging them together. This is the time when toys will also be stacked on top of one another. The most obvious example is that of building a tower of bricks, but the baby will stack other toys on top of one another as well. By experimenting he discovers which will stay put and which fall over. The baby is now beginning to realize that some toys belong together. He may now place a toy cup on a toy saucer or a toy spoon in a toy cup. So the baby is now extending his understanding of objects and of relative sizes and weights and beginning to appreciate the special relationship of some everyday objects.

**Stage 3: self-pretend play**

This is a very important stage in a child's play. We can see the development of a recognition of the use of various toys and objects by the way the baby varies her actions with different toys. She will now briefly 'pretend' to comb her hair with a toy brush or comb, or pretend to drink from a toy cup, but not the other way round. Not only is the child beginning to be able to imitate the actions of others, she is starting to use her imagination and let one object (a toy cup) stand for another object (a real cup) which is not present.

This ability to let one thing stand as a symbol for another is a prerequisite for the understanding and use of language. However, the child is still only able to pretend with one toy at a time.
She cannot yet relate two objects together in pretence, like a
doll and a toy cup. Also most of her pretence is related to herself,
e.g. pretending to feed herself with a toy spoon.

A child at this stage will also use a toy car appropriately and
push it along a surface with car noises.

Stage 4: simple pretend play

At this stage a child begins to relate her actions to a doll or
toy animal. The child will pretend to feed the animal or doll. She
may put it to bed or make it 'walk' and hug and kiss it as if it
were real. This is the start of true imaginative or symbolic play
where one object (a rag doll) stands for another (a real person).
Much of the pretend play at this stage may not last long and may be
followed by less mature play such as piling toys on top of one
another or rubbing them together. However the child is now able to
play with two toys together in pretence (e.g. putting a doll on a
toy chair).

Stage 5: sequence pretend play

At this stage a child is able to sustain her pretend play for
much longer and link her actions into a simple sequence. The
earliest sequences involve using the same pretend action for differ-
ent people or toys; for instance, a child may pretend to feed her-
self and then the doll and then the teddy bear and then mummy.

Later the child will begin to link different actions into a
simple theme. For example, she will first put the pillow on the toy
bed, then lay the doll on the bed with her head on the pillow and
finally cover the doll with a sheet and take care not to cover her
face.

This is a pretend sequence of three actions all linked together
in the theme of 'bed-time' and it involves some mental planning on
the part of the child and so represents a major advance in her
abilities.

The first sequences may be very simple but later they may
follow the sequence of the day, e.g. getting up, having breakfast
and going to school.

At this stage a child may also begin to use entirely imaginary
objects in her play and 'pretend' to fill a toy cup from an imagi-
ary tap or drop an imaginary lump of sugar into the cup.

Having described the main stages in the development of imagi-
native play and before going on to describe how we can assess a
child's stage of play, there are a few points which need bearing in
mind.
Stages of relational and imaginative play
from about 1 to 2 years

Relational play
with bricks

Self-pretend
(combining hair)

Simple pretend
(feeding doll)

1. Pillow on bed
2. Doll on pillow
3. Sheet over doll

Three actions in sequence pretend play

Points to consider

1. A child does not suddenly jump from one stage of play to another but development is gradual with the child adding new actions to those he already has. When watching a child at play, we can see actions at many different stages of development in a single session.

2. The boundaries between one stage of development and the next are not clear cut. The observer must use her own judgement to decide which stage to ascribe any one action. This comes with experience, and, when in doubt, underestimate and opt for the lower stage.
Assessing a child's stage of play development

As has already been pointed out, the age of a child who is mentally handicapped is not a reliable guide to their present abilities. Only when you have made an accurate appraisal of the child's present level of development, can you help him to develop further.

This does not necessarily mean trying to 'push' him on to the next stage. A child who is mentally handicapped may, in fact, play very little. The best help you can give him is to encourage more varied play at whatever stage he has already reached.

HOW TO ASSESS THROUGH OBSERVATION

Setting the scene

Always choose a room or corner with which the child is very familiar and feels at home. Also try to choose a time of day when both you and the child are relaxed and when you are not likely to have too many interruptions. You do not need more than 10 to 15 minutes for an individual observational assessment. However, you do need to assess the child more than once. Children do vary from day to day and if you only observe on one day you may hit on a particularly bad or especially good day. This will not give you a representative picture of the child.

Selecting toys

It is a good idea to keep a selection of toys especially for the observation sessions, but this is not essential. Novel toys often encourage play more than the well-worn favourites.

The toys should be selected so that they naturally lead to imaginative or symbolic play. They should also be of a size that the child can handle easily.

A good basic set might be as follows:

one rag doll or teddy bear with removable clothes. The doll should not be too obviously a boy doll or a girl doll but should leave something to the child's imagination. Instead of the doll a soft toy can be used such as a toy monkey or dog;

one simple doll's bed, cot or sleeping mat with pillow and bed-clothes to fit;

one chair and one table to fit the doll or animal;

a toy cup, knife, spoon, dish, chopsticks, etc., and a toy comb or brush;
one box big enough for the doll or soft toy to lie in which can be used in play as a car, bath, boat or bed as the child fancies.

Note: If the same set of toys is used when assessing different children this makes it easier to compare one child with another.

Getting ready for the observation session

1. Be sure you know what to look for. The five stages of play have already been described. Make yourself familiar with these so that when you see the child feeding the doll or animal with a toy spoon, for instance, you will know that this action is at the stage 4 level (simple pretend play). Table 1 should prove helpful here. Get into the habit of thinking of the different stages whenever you see children at play.

2. Keep a record of the observation session using the play checklist. Without this record you will not be able to realize the changes which occur over a period of time.

Watching what the child is doing and decide which level the action is at and put a tick in the box for that level. When he picks up a new toy or changes what he is doing with the old one, decide what level the new action is at and add another tick in the right box on the checklist. If the child has reached stage 5 (sequence pretend) then, instead of entering a tick for each action, watch until the sequence is finished and enter the number of actions in the sequence. For instance, if a child puts the pillow on the bed, lays the doll on the bed with its head on the pillow and then covers it with a sheet, this is a sequence of three actions all with the same theme.

If the child combs his own hair and then the teddy bear's hair and then the monkey's hair then this is a sequence of the same action repeated three times with different toys.

3. Do not attempt to record everything. If the child does something very briefly with one of the toys and you are uncertain where to place the action, then do not record it. You cannot record everything when changes are taking place very rapidly.

4. Have as few distractions as possible. It is easiest to record one child at a time. If there are other children in the same room you could perhaps screen off a corner for this purpose.
<table>
<thead>
<tr>
<th>STAGE 1</th>
<th>STAGE 2</th>
<th>STAGE 3</th>
<th>STAGE 4</th>
<th>STAGE 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mouthing</strong></td>
<td><strong>By physical properties</strong></td>
<td><strong>Mouthing</strong></td>
<td><strong>By usage</strong></td>
<td><strong>Sequence pretending</strong></td>
</tr>
<tr>
<td>Shaking/hitting</td>
<td>Banging two objects</td>
<td>Spoon in cup</td>
<td>Spoon in</td>
<td>Doll/object</td>
</tr>
<tr>
<td>Examining</td>
<td>Placing objects from another</td>
<td>Pillow on bed</td>
<td>Spoon/cup</td>
<td>Doll alone</td>
</tr>
<tr>
<td>Dropping/throwing</td>
<td>Placing objects on top of another</td>
<td>Chair to table</td>
<td>Combs hair</td>
<td>Feeds doll with spoon/cup</td>
</tr>
<tr>
<td>Feeling/rubbing</td>
<td><em>Sheet on</em> bed/table</td>
<td>Washes self</td>
<td>Washes doll</td>
<td>Doll alone</td>
</tr>
</tbody>
</table>

**STAGE 2**

**Relational play**

- Feeds self with spoon/cup
- Combs hair
- Washes self
- Sleeps on doll's bed or pillow
- Drinks self with doll's clothes
- Doll alone

**STAGE 3**

**Self-pretending**

- Feeds doll with spoon/cup
- Combs doll's hair
- Washes doll
- Lies doll on pillow/bed
- Drinks self with doll's clothes
- Fees doll alone

**STAGE 4**

**Simple pretending**

- Doll object
- Combs doll's hair
- Washes doll
- Lies doll on pillow/bed
- Drinks self with doll's clothes

**STAGE 5**

**Sequence pretending***

- Doll alone
- Doll alone
- Sleep sequence
- Pillow on bed
- Doll on bed - head on pillow
- Covers doll with sheet
- Combs doll's hair
- Washes doll
- Makes doll jump
- Doll sits on chair
- Doll undresses doll

*These actions are only credited here if they occur in isolation. If they form part of a pretend sequence they are credited within stage 5.

**This action is more likely to occur when the child is playing with the toys on the floor.

***These are example sequences. At first the children may show sequences of only two actions.

Later they will add other actions to their sequences, making them more elaborate, e.g. in the sleep sequence - kissing the doll goodnight, folding down the sheet and tucking it in.
McConkey and Jeffree

Child's name: Thomas  Date: 2/12/77

Length of session: 11 minutes  Observer: P.T.

Comments: ........................................

<table>
<thead>
<tr>
<th>STAGE</th>
<th>TICK EACH NEW ACTION</th>
<th>TOTAL</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Exploratory play</td>
<td>HTH III</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>2. Relational play</td>
<td>HTH HTH HTH I</td>
<td>16</td>
<td>31</td>
</tr>
<tr>
<td>3. Self-pretending</td>
<td>HTH III</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>4. Simple pretending</td>
<td>HTH HTH HTH</td>
<td>15</td>
<td>29</td>
</tr>
</tbody>
</table>

5. Sequence pretending

(1) same action

(2) same theme

<table>
<thead>
<tr>
<th>Enter number of actions in sequence</th>
<th>Feeding</th>
<th>doll bed</th>
<th>cover sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Imaginary object*

TOTAL OVERALL: 52

* Actions with imaginary objects are ticked but not included in the total as they will usually occur in a sequence.
5. Make sure the child is comfortable and that the toys are in easy reach. Some children prefer to play on the floor and others like to sit at a table; choose whatever you think is best for that child. If the child is physically handicapped, you may have to prop him up with cushions or make special arrangements so that he is able to play with the toys.

6. Some children may be reluctant to play with the toys. Give them plenty of encouragement without being too directive. Hand them the toys and show interest and pleasure in their play. If all else fails and the child still will not play, then start playing with the toys yourself. It is best to use a second doll or soft toy so that you can feed it or make it 'walk' and the child can copy you. Once the child starts to play you can gradually withdraw and become a spectator. If the child flatly refuses to play then it is best to end the session and try again another day.

7. Make sure that the child is not bored or made anxious by the play session. Encourage play but never try to force it. The important thing is to observe what the child does naturally without your help. Do not make the session too long and always stop when the child loses interest. Ten minutes to a quarter of an hour should be long enough.

The completed checklist

Once you have completed the checklist you can start to analyse the results. First analyse the developmental level of the child’s play. Secondly find how varied the child’s play is and lastly record his favourite toys or playthings. When you have completed checklists for several children you will note that some children are very active in their play and are credited with many items and others are passive, and play very little. Note which children play very little as this is a cause for concern.

FINDING A CHILD’S DEVELOPMENTAL LEVEL OF PLAY

In order to do this it is best to turn the scores into percentages after adding them up. If you look at Figure 1 you will see that Thomas has been credited with 52 ticks in total and that eight of these were at the stage 1 (exploratory play). To find the percentage of actions at stage 1, we must multiply the score of 8 by 100 making 800 and then divide this by the total number of actions (52) and the answer is 15 per cent. Similarly for stage 2 (actions), if we multiply the 16 actions by 100 making 1,600 and divide this by 52 we get just over 30 or 31 per cent. You can check the arithmetic for stage 4 and stage 5 actions which come to 29 per cent and 10 per cent respectively.
You will see from this result that Thomas has just begun to play at the stage 5 level but the most part of his play is either relational or simple pretend.

The activity level

The total number of ticks for each child will give you a measure of their activity level. In this case Thomas had 52 ticks which is a reasonable number for 11 minutes. For comparison purposes it is best to make the sessions last for the same length of time.

Varied or stereotyped play

Some children who are mentally handicapped and particularly those with autistic tendencies, are very stereotyped in their play and keep repeating the same action over and over again. It is well worth noting this on your checklist and you will see that room has been left for comments.

Preferences and the very immature child

If a child shows a marked preference for a particular toy or a marked dislike of another, then it is worth noting this also on the checklist. Children at the stage of exploratory play often discard some toys completely yet play happily with others.

You may find that, for children at this stage, the checklist is not giving you sufficient information and you might find it useful to look at exploratory play in greater detail. We will describe how to do this.

On page 6 you will find the developmental sequences of exploratory play actions, i.e. holding, mouthing, inspecting, hitting, examining, different actions, dropping and throwing. At this stage the child will only be able to attend to one toy at a time except, perhaps, putting a brick into a container. However, he will already have developed a preference for certain toys and not for others. In order to find the level he has reached in his exploratory play, you need a varied collection of toys which you hand to him one at a time. If he is able to pick them up you can place the toys in front of him one at a time instead. In the checklist in Figure 2, you will see a suggested list of toys at the top. You do not need to use exactly these toys, other available toys will do, but choose a good variety and do not have more than ten.

When you have handed the child a toy, watch what he does with it. Does he take it to his mouth (in which case put a tick in the box for mouthing). If this is all he does with this toy (keep putting it to his mouth) you only credit him with one tick. However, if he then inspect the toy you give him a tick for this stage also.
<table>
<thead>
<tr>
<th>Actions</th>
<th>Toy dog</th>
<th>Bricks*</th>
<th>Rattle</th>
<th>Foil</th>
<th>Blocks</th>
<th>Car</th>
<th>Doll</th>
<th>Kelly doll</th>
<th>Toy cup*</th>
<th>Cotton wool</th>
<th>Total objects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Mouth</td>
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<td>Inspect</td>
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<td>Shake</td>
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<td>Examine</td>
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<tr>
<td>Varied</td>
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<td>Throw</td>
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<tr>
<td>Total stages</td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

* When handing the child a brick, have a box or beaker there as well. If the child puts the brick into the box or beaker, make a note of this. After having given the child a cup on its own, offer a toy spoon or brick and see whether these are put into the cup.

Do not encourage the child with words or suggestions until you have seen what he will do on his own.
After about a minute, gently remove the first toy (the dog) and give him the next (the brick or bricks). See which stage actions he does with this and give him a tick for each stage.

When the child has been handed each toy once (in about 20 minutes) the session is completed.

Looking closer

Now add up the ticks across the columns and also down each column. The most important information is the highest stage the child has reached. You then want to look at the effect of the different toys on the child’s performance. You may find, for instance, that he explores the beads for longer than any other toy. This will give you an idea of what playthings to provide when trying to encourage this child’s exploratory play. Some toys may get pushed aside and you should not persevere with these. Think about it, the child may not like the texture or the sound or colour or smell of certain toys. Some children are averse to the feel of furry toys, for instance. You need to make a note of this and make use of it when teaching the child.
CHAPTER II: AREAS OF DEVELOPMENT

The observation of children at play has given us useful insights into the development of their ideas or concepts in the early years. However, a child is developing in many different areas and, before we can decide on the appropriate level to start helping him to learn, we must look closely at other areas of his development.

This is doubly important with the child who is mentally handicapped, as his development may have got out of step. He may be able to walk, climb and run like any other child of his age, but not be able to talk at all. Alternatively, he may be completely unable to move about but able to carry on a conversation with an adult.

We have to be aware of this uneven development if we are going to help the child to learn. It is important to know where his strengths lie as well as his weaknesses. We can often help a child to overcome his weaknesses by developing his strong points.

By and large, all children pass the same milestones in each area of development and they pass them in the same order. This enables us to chart the developmental stage they have reached in each area.

Some important areas

The following are some of the most important areas of development:

1. mobility;
2. handiness;
3. play;
4. language;
5. social development;
6. self-help skills.

These will be considered in turn, showing the order in which development takes place and the milestones on the way. We can imagine child development as a ladder up which the child climbs as he grows.
We will chart some of the most important rungs on this ladder. We must remember that it takes months, or even years, for the child who is mentally handicapped to climb from one rung of the ladder to the next.

A series of such ladders will serve as a pictorial checklist to find how far an individual child has reached.

These checklists should never be used as a curriculum as the steps are too far apart.

MOBILITY

On the following pages we have drawn up a pictorial checklist in the area of mobility. A series of ladders will show the milestones of development from birth to five years of age. Check how far your pupils have climbed up the ladder towards complete mobility. The approximate age at which normal children reach these milestones of development has been included. Each developmental ladder starts at the top and goes down.
Mobility checklist

The developmental milestones from birth to 5 months. Check how far your pupil has climbed up the ladder towards mobility. The approximate age at which normal children reach each milestone is included. If your pupil has reached the top of this ladder, go on to check the second ladder on the following page.

5 months
makes vigorous splashing movements with arms and legs in bath

4 months
sits if back is supported
lifts head from pillow

3 months
holds head steady when sitting on knee

2 months
lifts head when lying on tummy

1 month
kicks vigorously when lying on back
The developmental milestones from 6 months to 1 year (12 months).
Check how far your pupil has climbed up this ladder.
The highest development is at the top.
If your pupil has reached the top of this ladder go on to the next page.

12 months
stands alone and
crawls on hands
and knees

10 months
stands holding on to
furniture and walks
with help from an
adult

8 months
if held upright, makes
stepping movements

7 months
sits up for a short time
without support and takes
own weight on feet if
held upright

6 months
makes crawling movements
with arms but does not
move forward.
rolls over front to back
MOBILITY CHECKLIST

The developmental milestones from 13 to 21 months.
Check how far your pupil has climbed up the ladder.
The highest development is at the top.
If your pupil has reached the top of this ladder go on to the next page.

21 months
climbs on to furniture
and gets UP stairs in
an upright position but
usually crawls down

19 months
gets UP and DOWN stairs
but not in an upright
position
rolls ball to adult

18 months
walks confidently and throws
a ball
picks up ball without
falling

15 months
walks unsteadily and
climbs stairs on hands
and knees

13 months
gets up off floor on
own and walks a few steps
unsteadily
The developmental milestones from 2 years (24 months) and 5 years (60 months).
Check how far your pupil has climbed towards mobility.
The approximate age at which normal children reach each milestone is included.

60 months
- bounces a ball and catches it
- runs up and down stairs
- climbs trees
- hops on one foot

54 months
- goes up and down stairs using alternate feet

48 months
- runs to kick a ball
- runs on tiptoe
- rides a pedal cycle

33 months
- jumps from a bottom step with both feet together
- walks on tiptoe

24 months
- goes up and down stairs in an upright position with two feet to one step
- runs well
Developmental ages

Developmental ages have been included at the side of this mobility chart. These are ROUGHLY the ages at which normally developing babies reach these milestones. However, all babies differ and it is no cause for concern if a baby is a little later in learning to walk than 15 months, for instance.

A child who is mentally handicapped may be MUCH later in learning to walk. Why then have we included the normal ages against each milestone?

This is mainly in order to compare a child's development across different areas. It will help to pinpoint relative strengths and weaknesses.

This will be explained later when other areas of development have been charted.

The first thing to do is to note the milestone your pupil has reached in the area of mobility.

A physically handicapped child may come very low down the ladder but some of your pupils who are mentally handicapped may come near the top.

Handiness

This area is sometimes called fine motor development and is mainly concerned with the ability to co-ordinate the movements of hand and eye, to use fine finger grasp and to co-ordinate the movement of both hands together. This 'handiness' only develops gradually but is of vital importance in all practical activities. Most of these need the use of both hands - one to hold the work and the other free to manipulate. Think of any task you might do yourself: sewing, cooking, planting, washing, dressing and even eating. In all these tasks you will realize how skilfully the two hands work together in concert.

One hand is usually the 'boss' or dominant hand (with most people this is the right hand) but the other hand is of equal importance in carrying out the task.

There are two things to note when a child is mentally handicapped. Firstly, many of these young people seem slow to learn to use both their hands together. They are inclined to use them 'one at a time'. First using the right hand and then the left for the same task but not both together. A simple experiment will show how clumsy this can be. Try to eat, dress or write a letter with one hand tied behind your back and you will appreciate the difficulty. As soon as
the child is developmentally ready, it is as well to encourage the co-ordinated use of two hands. Before he is ready for this the child will learn to use each hand separately.

One milestone of great importance to the child is 'visually directed reaching'. This marks a stage in hand-eye co-ordination when the baby can reach out and pick up an object in sight. When he has reached this stage, watch just how he picks the object up and also notice whether he can pick up tiny objects such as very small toys and tiny sweets. At first the baby will grasp all objects with his whole hand (palmar grasp). It is very difficult to pick up small objects in this way. Being able to pick up fine objects between the tip of the thumb and the index finger is a great advance. This leads to the ability to do much finer work and makes more accurate drawing and painting possible.

The next three pictorial ladders show the milestones on the way to skilful co-ordination of hand and eye, from birth to 5 years of age. Once you have seen how far an individual has reached you will be able to devise suitable activities for that stage of development.
The developmental checklist from birth to 8 months. Check how far each pupil has climbed up the checklist. The approximate age at which normal children reach each milestone is included. The highest development is at the top. If a pupil has reached the top of this ladder, check the next ladder overleaf.

8 months
- picks up objects with intermediate grasp and is able to grasp the string attached to a toy

6 months
- palmar grasp
- transfers objects from hand to hand

5 months
- visually directed reaching
- reaches for and grasps toys that are in sight

4 months
- can grasp a dangling ring if it is at the right height

3 months
- finger play

1 month
- follows moving light with eyes
The developmental checklist from 9 to 15 months. Check how far each pupil has climbed up the checklist. The approximate age at which normal children reach each milestone is included. The highest development is at the top. If a pupil has reached the top of this ladder, check the ladder overleaf.

15 months
Delicate grasp of small objects, such as string, between tip of finger and thumb. Likes to scribble

14 months
Rolls ball to another person, has developed a hand preference

12 months
Has a mature grasp of objects and will scribble a little if encouraged

10 months
Will throw objects and toys and watch where they land

9 months
Will poke at small objects with finger
CO-ORDINATION OF HAND AND EYE - CHECKLIST

The developmental checklist from 18 months to 5 years (60 months). Check how far each pupil has climbed up the checklist. The approximate age at which normal children reach each milestone is included. The highest level is at the top.

- **60 months**: draws a man with head, eyes, mouth, body, arms and legs. threads large needle and does coarse sewing

- **48 months**: draws a man with head and legs

- **36 months**: threads beads on shoe lace, starts to cut with scissors, can copy a circle and catch a large ball four feet away

- **24 months**: can open screw-top jar, throws ball into basket two feet away, copies a line drawn on paper

- **18 months**: can put a lid back on a box, enjoys scribbling, searches sensibly for lost toys
What do we mean by language?

Speaking

Any teacher of children who are mentally handicapped will be aware of the fact that many, or perhaps most of her pupils do not speak very well. Some may not talk at all, others will only have 'baby talk' and others will chatter away but you will have great difficulty in understanding them. A few may talk fluently and clearly but what they say may be nonsense. The minority will be able to speak sensibly and well. We only need to listen to these pupils to know that many of them have difficulty in speaking. Is that what we mean by language? Being able to speak?

Well, speaking IS an important part of language but LANGUAGE IS MUCH MORE THAN SPEAKING.

Understanding

A parrot or minah bird can speak but he is unlikely to understand you if you talk to him. He cannot even understand himself!

Communication with a parrot is impossible because, although he can speak, he does not understand. Because you cannot hear whether a child understands you or not, it is easy to forget what a vital element it is in language. Until a child can speak he will be unable to let you know how much he understands.

If we teach a child to speak BEFORE he can understand, we are training him to be like a parrot!

Communication

Communication is a social act. It is not talking to ourselves without looking at the other person or pausing to listen and wait for our turn. Some children are so wrapped up in themselves that they cannot communicate in a social way. Social communication is an essential element in language use.

Something to talk about

Language is not just words strung together. We only need language when we have SOMETHING TO TALK ABOUT. Put in another way, we use language to express ideas and thoughts about the world around us and our own inner personal world.

Language is only a tool that we use in order to convey ideas and thoughts. If we do not have any ideas in the first place, we cannot make proper use of the tool. Our language becomes a tinkling
symbol. In your class you may have pupils who are a little like this and whose language consists of echoing what another person has just said, and is in no way an expression of their own ideas. In this case spoken language has got out of step and run ahead of the development of thinking.

Imitation

How do children learn to speak their native language? In order to do so they need to be surrounded by people who already speak it. Their parents or caretakers are all important. Copying or imitating fluent speakers is one of the ways of 'picking up' language.

As we have seen, language does not only consist of imitation, but a child DOES need to be a skilled imitator in order to speak his native tongue. The ability to imitate is a skill which gradually develops during infancy.

Self-direction

The movements and actions of a young baby are at first fairly random. They are affected by numerous outer and inner sensations.

Gradually he learns to control his own actions. He begins to realise the consequences of a past action. If they were pleasant the action is likely to be repeated. Soon he will be able to plan ahead and be less at the mercy of the changing world around him. As his understanding grows he will be able to follow his mother's directions and wave when she says 'wave bye-bye'. Later he will be able to use language to direct himself. This is inner language and is not usually spoken aloud. We need this inner language to organize our life. Just consider remembering what you need to buy at the market without words!

Use of symbols

Only when we try to learn another language do we begin to realize how highly complicated our native language is. Throughout life we keep adding new words to our vocabulary and learning the meaning of new expressions. All languages throughout the world have this in common. They are all conventional, symbolic signing systems.

What exactly do we mean by this?

A symbolic system is one that uses a sign or a sound to stand for something else. Language is not the only symbolic system in use. On city roads a red circle is part of a symbolic system which stands for, or means, STOP.
Spoken language is a system of symbolic sounds which stand for something else. For instance the sounds we make when we say 'cat' are not the actual animal but only a symbol for it. A picture of a cat is another, simpler, symbol for the real cat.

A small baby is a realist and, at first, cannot understand or use symbols. This ability develops gradually and we can map its development by watching a child at play. When the child starts to pretend this is an indication that he is starting to use symbols. In other words he is beginning to make one thing stand for another. This starts in a very simple way. A small boy may 'pretend' that a stick of wood is a gun or an upturned chair a boat. He may also use sounds as symbols and 'pretend' to moo like a cow or crow like a cock.

We cannot expect him even to begin to master the difficult symbolic system of language until he is able to 'pretend' in this simple way. In the world of pretend a child is free to please himself ... a chair can stand for a boat, a house, a car or a bed just as his fancy chooses.

In the adult world of language this is no longer so. Language is conventional and you cannot change the rules at will. The word BOAT cannot mean a 'house' one minute and a 'bed' the next or no one would understand you. It takes a child a long time to master adult language and he is not even ready to begin to do so until he has learnt to 'pretend' and to remember what he has seen and heard from one moment to the next.

Conclusion

TRUE LANGUAGE IS MUCH MORE THAN JUST WORDS.

It includes:

- speech;
- understanding;
- social interaction;
- thinking;
- imitation;
- self-direction;
- use of symbols.
Hindrances to the development of language

A child who is mentally handicapped may also have additional physical handicaps and/or his senses may be impaired. These additional handicaps can be hindrances to the smooth development of language.

Here are a few examples:

**Physical handicap** may affect the voluntary movement of the speech organs. In order to be able to speak we must be able to control the posture and movements of the speech muscles, such as the tongue, lips and vocal cords. Breathing must be co-ordinated with the movements of the vocal cords for voice to be produced and the tongue and lips must move very rapidly from one position to another to make up the sounds of speech.

Control over these co-ordinated movements may be severely impaired by physical handicap. The patterns of sucking, biting, chewing and swallowing may also be affected in some children.

**Sensory impairment**

In order to be able to understand the language of others and to monitor our own speech we must be able to hear the subtle differences between speech sounds. Good hearing is essential for accurate imitation and the development of spoken communication. Hearing loss is one of the major causes of language-learning problems. Even a mild hearing loss may impede the development of intelligible language and, wherever possible, hearing should be tested, if any difficulty is suspected. It is important to remember that some deaf children may hear certain sounds, especially loud noises, but not be able to distinguish the different sounds of speech.

Also we need to be able to see in order to be able to communicate and in order to imitate the speech of others. Babies watch their mother's expression and her mouth movements, as well as listening to her words. This ability to watch is essential to understanding. Sight is needed when building up an early vocabulary. Without sight a baby cannot tell what is being referred to when his mother says 'cup' for instance. A baby must learn to associate the sound of the word with the sight of the object.

**Feeling loss** can also be a hindrance to language development. A child with little sensation in his tongue, lips and palate finds it very difficult to control his utterances.

Very often, a child who is severely handicapped may have more than one of the problems outlined above. It is very important for the teacher to try to discover which of the impairments may be hindering the development of language.
### Figure 3: Language and Play

<table>
<thead>
<tr>
<th>MONTHS</th>
<th>FEED</th>
<th>COGNITIVE</th>
<th>SOCIAL</th>
<th>IMITAT.</th>
<th>PRETEND</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td></td>
<td>Play with rules</td>
<td></td>
<td></td>
<td>Sequential role play</td>
</tr>
<tr>
<td>48</td>
<td></td>
<td>Simple co-op play—hide &amp; seek</td>
<td></td>
<td></td>
<td>Role play—postman, etc.</td>
</tr>
<tr>
<td>36</td>
<td></td>
<td>Joins in play with one person, kick ball, etc.</td>
<td></td>
<td>Imitates action sequence</td>
<td>Sequential doll play</td>
</tr>
<tr>
<td>24</td>
<td></td>
<td>Shares toys with others</td>
<td></td>
<td>Imitates person sweeping, etc.</td>
<td>Puts doll to bed, etc.</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>Searches for lost toy</td>
<td></td>
<td></td>
<td>Pretends to feed self &amp; comb own hair</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>Picks up small objects</td>
<td>Rolls ball to adult</td>
<td></td>
<td>Hugs doll, kisses teddy</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>Feeds self with fingers</td>
<td>Finds toy hidden in box</td>
<td>Co-operates in pat-a-cake, etc.</td>
<td>Waves bye-bye</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Chews biscuit</td>
<td>Looks for dropped toy</td>
<td>Peek-a-boo</td>
<td>Rings bell in imitation</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Soft food</td>
<td>Looks for toy rolled just out of sight</td>
<td>Enjoys being lifted, swung, etc.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Shows interest in toy</td>
<td>Smiles at Mum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOOKS</td>
<td>GESTURE</td>
<td>SPEECH</td>
<td>COMP</td>
<td>PHONOL</td>
<td></td>
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<td>--------</td>
<td>------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Recognizes phrases in storybooks</td>
<td>Uses correct grammatical sentences</td>
<td>Can follow 2 part instruction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joins in repetitive lines in story</td>
<td>Uses telegraphose</td>
<td>Uses 3-word sentences &amp; plurals</td>
<td>Can fetch 3 objects from another room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoys being told stories from picture book</td>
<td>Asks questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can identify 7 pictures &amp; photos of family</td>
<td>Will pull person to show toys, etc.</td>
<td>Uses 2-word sentences</td>
<td>Follows directions with propositions 'in' &amp; 'on'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can recognize a few pictures</td>
<td></td>
<td>Jargon &amp; many single words</td>
<td>Follows simple direction i.e. 'Get your coat'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Points to objects</td>
<td>4-5 single words</td>
<td>Responds to 'Give me ball' when ball in sight</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shakes head for 'No'</td>
<td>Babbles &amp; 1 or 2 words</td>
<td>When familiar person is named will point to them</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Puts arms up to be lifted</td>
<td>Tuneful repeated babble</td>
<td>Responds to own name</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coos to self</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Throaty noises</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. JEFFREE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Keeping in step

In normal child development, all areas of development keep in step with one another - vocalization, understanding, social interaction, the ability to use symbols, thinking, imitation and self-direction advance together hand in hand. If any one of these lags behind the rest or races ahead of them, then the child may be in trouble and abnormal development may occur.

The development of a child who is mentally handicapped will, by definition, be slower than that of a normal child. He will be behind another child of the same age. In order to teach him appropriately we need to know just what stage he has reached in his development. However his development may not only lag behind a normal child, it may also be uneven and it is important to know this also.

A comparative chart

In order to help you we have drawn up a comparative chart. If you look across the page at, say the 24 month level, this will give you the stages a normal child will have reached in each area by the time he is two. If your pupil, who is mentally handicapped is also at this level in all areas, this will give you an idea of how to treat him appropriately. However, there may be some areas of development in which he has lagged further behind and these should be noted. It is also important to note whether he has raced ahead in any area of development.

Interpreting results

A few examples may help you to interpret your results with individual pupils. The following are fairly typical.

A. Even development

This is a girl of 5 years of age who is mentally handicapped. By looking at the chart and observing what she can do, we see that she has reached a stage of development which we would expect from a normal 2-year-old (24 months).

She can play with other children and share her toys with them. She will imitate her mother when she is sweeping or cooking and she will play 'pretend' games with a doll or soft toy. She will pretend to feed them and put them to bed. She likes looking at pictures and photographs and can recognize at least seven of these. She will often pull her teacher's skirts in order to involve her in an activity. She is speaking well in two-word sentences such as 'milk gone' or 'want potty' and she can also follow simple directions like 'sit down' or 'put on your coat'. She is also using new speech sounds which she did not use before.
So, although the girl is mentally handicapped, she seems to be developing normally but slowly. The pace of this development will depend upon her getting a great deal of stimulation at her own level. It is important that those close to her take time to listen to her talk and respond to it and gradually introduce new words and sentences. She will need to be shown pictures of familiar objects and to be told their names. By joining in, it will be possible to encourage her play and to elaborate it. She should be encouraged to be active and given simple tasks to do and directions to follow such as 'give me the shoe' or 'put the cup on the table'. She needs to be actively involved in a rich variety of experiences at a simple level.

B. Uneven development

This is a boy who is also 5 years of age and mentally handicapped. We can see that he is capable of many of the behaviours we would expect from a normal child of 3 years of age. He can join in a sociable game with one other person such as playing ball. He is also well able to imitate a series of actions (getting a wheelbarrow and fork out of the shed, digging up the weeds and tipping them on to the 'heap'). He plays imaginatively in a sequential way and will pretend a box is a bus and load the 'passengers' in and 'drive' it to its destination and then unload the 'passengers' again.

However, this little boy becomes very restless at story time, although he likes to look at pictures in a book. Also he is hardly speaking at all but uses a few gestures to make his wants known and will pull people by the hand to give him what he wants. This boy does not seem to respond when called by name unless he is looking directly at the person. He is also slow to respond to spoken commands unless accompanied by gesture.

Obviously this is a case of uneven development. This boy's speech and his understanding of spoken language lag far behind other areas of development. In his case, we would suspect some sensory deficit and, in particular, a hearing loss. It is important to have this checked. A great many children who are mentally handicapped have also some degree of hearing loss. With some, the hearing loss is fluctuating and they may appear to hear very well some of the time. At other times they may hear very little. This is a common pattern for children with ear, nose and throat infections. If this child is found to have quite normal hearing OR if he has a hearing loss but nothing can be done about it, then you may have to consider teaching him an alternative system of communication such as signing.

C. Another case of uneven development

This is a boy, who is 6 years of age, and who is functioning like a boy of 4 years of age in most respects. He can play simple
co-operative games with others and keep the rules. He enjoys role
play and dressing up and pretending to be a farmer or a doctor, and
is good at mime. This boy very much enjoys listening to stories and
rhymes but when he tries to repeat them they are unrecognizable.

He follows instructions well and can be trusted to get two
objects from another room. This boy is very sociable and likes to
speak to people but they cannot understand a word he is saying. He
still finds it difficult to chew solid food and will sometimes
choke. He has a very limited range of speech sounds and this is
probably what makes him unintelligible. In this case it is quite
likely that this boy has some motor or sensory impairment of the
speech organs. If possible, professional help should be sought from
a speech therapist.

D. Very advanced spoken language

It is not unusual to find at least one child, in a school for
children who are mentally handicapped, who fits this description.
This is a 10-year-old girl, who is mentally handicapped, yet whose
spoken language seems exceptionally good. She sounds rather like an
adult and has a large vocabulary of words and also uses long sen-
tences which are grammatically correct.

We would assess her speech at a 5-year-old level, at least, and
possibly beyond that.

However, this girl is quite unable to follow even simple
instruction at the 2-year-old level, such as 'get your coat'. Also,
although she speaks a lot, much of what she says is not to the point
and is often a repetition of something she had been told previously.
Neither is she a good communicator and if asked a question about
something that has taken place recently, she is unable to reply and
will change the topic and talk about something completely different.

This is an example of language with no real meaning behind it
and may be associated with certain forms of physical or mental
handicap.

If we continue to encourage such a child to chatter on all day
long, we are only increasing the gap between her spoken language and
her understanding. It is best, therefore, to concentrate on trying
to improve her understanding and functional use of language.

E. A child with Down's syndrome

This child has Down's syndrome and many children with Down's
syndrome, but not all, will have some of these characteristics.
He has a lot to say and his understanding is well up to his other areas of development. He is extremely good at imitating other people especially in mime and his imaginative play is also well advanced. However, his articulation is poor and his speech is often incomprehensible. As he grows older, this child will probably be able to form longer and longer sentences and have plenty to talk about. Unfortunately, as his understanding develops and he has more to say, his speech may become harder, and not easier, to understand. This can lead to a breakdown in communication and to frustration on both sides. These difficulties are often very persistent and their cause is not yet fully understood. Sometimes, as they grow in understanding, it is helpful to teach these children to recognize the printed word and to read. It is also important to check for hearing loss as this is a common additional handicap with children with Down's syndrome.

F. Poor social interaction and imagination

You may have a pupil whose cognitive ability is not far behind that of any child of their own age. He may be particularly good at constructional games and puzzles. He may also be good at imitation of lines of songs or long sentences and able to follow simple instructions that have to do with the here and now, such as 'take off your coat' or 'sit down'. His spoken language in conversation is not nearly as good and is rather strange. He may, for instance, use the words 'I' and 'you' inappropriately and talk about himself as 'you' and the other way round. Alternatively, he may have developed no spoken language at all and understand very little. He seems to have little imagination and is never seen to play 'pretend' games. Even more striking is his inability to interact socially with the other children, or with the teacher. He often avoids eye gaze and seldom changes his expression. He does not respond to his own name and seems to prefer things to people. He may develop strange habits like spinning on his toes like a top, or twiddling sticks or pieces of string. He may have a tantrum if these are taken away. He likes a routine and will often get very upset if this routine is broken or things are put in new places.

Such children are said to have autistic tendencies and teaching has to be highly structured and systematic and is often slow.

SELF-HELP

A new born baby cannot help himself and if he is not fed he will starve. He has no control over his bowel or bladder and needs to have his nappy changed or he will be dirty. He cannot move himself from place to place or pick anything up and has to be dressed and undressed. In a school for children who are mentally handicapped, we may have a few pupils who are almost as helpless as a new
born babe, in looking after themselves. As teachers, one of our aims will be to encourage independence in the following areas: feeding, toilet training, dressing and washing.

To help us we will chart a normal child's progress towards mastery of these skills.

### Washing

**Age in months**

<table>
<thead>
<tr>
<th>Age</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>Washes completely and adequately without much help.</td>
</tr>
<tr>
<td>48</td>
<td>Brushes own teeth.</td>
</tr>
<tr>
<td>42</td>
<td>Washes face but needs help with ears and neck.</td>
</tr>
<tr>
<td>36</td>
<td>Washes and dries hands without much help.</td>
</tr>
<tr>
<td>24</td>
<td>Washes hands without much help but does not dry.</td>
</tr>
<tr>
<td>12</td>
<td>Co-operates when being washed by holding out hands, etc.</td>
</tr>
<tr>
<td>5</td>
<td>Enjoys having a bath and splashes about.</td>
</tr>
</tbody>
</table>

### Feeding

**Age in months**

<table>
<thead>
<tr>
<th>Age</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>Uses knife and fork together well or other instruments e.g. chopsticks.</td>
</tr>
<tr>
<td>48</td>
<td>Uses knife to spread jam or peanut butter.</td>
</tr>
<tr>
<td>42</td>
<td>Eats skilfully with spoon and fork or other instruments.</td>
</tr>
<tr>
<td>36</td>
<td>Can drink from a nearly full cup without spilling.</td>
</tr>
<tr>
<td>30</td>
<td>Uses spoon and fork together not very skilfully.</td>
</tr>
<tr>
<td>24</td>
<td>Feeds self with spoon occasionally spilling.</td>
</tr>
<tr>
<td>21</td>
<td>Manages a cup well without spilling.</td>
</tr>
<tr>
<td>15</td>
<td>Feeds self with spoon but spills a lot.</td>
</tr>
<tr>
<td>Age in months</td>
<td>Toilet training</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------</td>
</tr>
<tr>
<td>12</td>
<td>Drinks from cup with help.</td>
</tr>
<tr>
<td>11</td>
<td>Feeds self with fingers.</td>
</tr>
<tr>
<td>9</td>
<td>Puts hands round cup when drinking.</td>
</tr>
<tr>
<td>9</td>
<td>Holds, bites and chews a biscuit.</td>
</tr>
<tr>
<td>6</td>
<td>Takes solids well.</td>
</tr>
<tr>
<td>5</td>
<td>Will take liquid from cup when held to mouth.</td>
</tr>
<tr>
<td></td>
<td><strong>Toilet training</strong></td>
</tr>
<tr>
<td>48</td>
<td>Completely toilet trained and attends to own needs using toilet tissue and flushing toilet, etc.</td>
</tr>
<tr>
<td>36</td>
<td>Toilet trained with infrequent accidents.</td>
</tr>
<tr>
<td>30</td>
<td>Can take down pants and go by self.</td>
</tr>
<tr>
<td>24</td>
<td>Lets you know when he wants potty or toilet.</td>
</tr>
<tr>
<td>21</td>
<td>Usually dry by day. Bowel control complete - rarely dirty.</td>
</tr>
<tr>
<td>15</td>
<td>Will indicate when wet and/or dirty and will use potty when put on it.</td>
</tr>
<tr>
<td>5</td>
<td>Usually stays clean and dry for up to one hour.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age in months</th>
<th>Dressing</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>Dresses and undresses without much help.</td>
</tr>
<tr>
<td>48</td>
<td>Can dress and undress but needs help with some fastenings.</td>
</tr>
<tr>
<td>30</td>
<td>Removes simple articles of clothing, e.g. vest or pants.</td>
</tr>
<tr>
<td>24</td>
<td>Helps actively to dress and undress - pulls pants down.</td>
</tr>
</tbody>
</table>
Dressing (continued)

<table>
<thead>
<tr>
<th>Age in months</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Takes shoes and socks off.</td>
</tr>
<tr>
<td>12</td>
<td>Co-operates in being dressed - holds out arm or foot.</td>
</tr>
<tr>
<td>10</td>
<td>Pulls hat off.</td>
</tr>
</tbody>
</table>
Not so long ago the attitude towards pupils who were mentally handicapped was very negative because, although efforts were made to teach them, they did not seem to learn. This led to the belief that at least some mentally handicapped children were unteachable and would not benefit from any form of schooling. In the last decade it has been realized that all children who are mentally handicapped CAN learn if the right methods are used to teach them or to encourage them to learn. However, the methods used for ordinary schoolchildren did not result in much learning because they were not precise enough.

In this chapter we will outline the elements of precision teaching which are essential for pupils who are mentally handicapped.

CHOOSING A REALISTIC OBJECTIVE

All schools work to a curriculum which indicates what the staff intend to include in different areas of learning. In a school for the mentally handicapped this might include self-help skills, language, physical education and so on. These areas of the curriculum indicate general AIMS but they are not OBJECTIVES. An OBJECTIVE is a statement of the precise change in a pupil's behaviour to be expected as a result of your teaching in a short period of time. For instance if your AIM is to increase self-help skills, then your OBJECTIVE at a given time might be to get a pupil to put on his own coat before going out to play. With some pupils even this may be a long-term objective ... the short-term objective being for the pupil to accomplish one small part of the task, e.g. to pull up the zipper or secure the fasteners once the teacher had put his coat on.

The value of having such precise objectives is that they are attainable and lead to success where previously the pupil may have become accustomed to failure. They also refer to something which can be observed and recorded.

What is a realistic objective?

The following guidelines will help you in your choice of realistic objectives for your pupils.
All learning is built on the foundation of previous learning. You must know precisely what your pupil can already do before you can teach him a new skill or extend his old skill.

We all know that we cannot put the roof on a house before the walls have been built. You can start the next layer of bricks. In estimating where a child has reached in his previous learning it is not enough to rely on guesswork or hearsay, you must have seen him in the act. It is not acceptable to assume that a child could do something if he tried. If you have never seen him do it he probably can't.

The previous section will have given you a rough idea of where to start in each area of development. Now you will need to look closer still. For instance, if you are going to teach a child to put on his coat, you will have to observe just what he does with his coat already. Does he pick it up? Does he try to get an arm in? And so on.

When choosing an objective you have to consider how useful it will be for that particular child. For instance, when choosing a language objective for a child at the one-word stage of spoken language, a teacher might decide to teach the child to name colours. Is this a functionally appropriate objective? Is the child going to need to know the names of colours at his stage in life? Is he likely to use these words from day to day? Are there other words you can teach which would be more useful and meaningful to him and help him to tell others of his needs? In order to answer these questions you must know your child and consider which words would be most use to him.

A realistic objective is one that can be attained by your pupil in a short period of time ... in a matter of days or weeks rather than months or years. If it is not attained in this time, you need to think again as to whether or not it was realistic, i.e. whether it was at the right level, whether it was useful to the child and so on.

In order to know whether or not your pupil is making progress, choose an objective which can be observed and recorded. For instance trying to teach a sulky child to be pleasant, is not a realistic objective. Getting the child to smile more frequently during the day could be, as it can be measured and recorded.

In order to record progress, you must know how you are going to decide when the child has reached the objective. For instance, if he once puts on his own coat and never again, is this sufficient proof that he has reached this objective? Before credit ing him with the ability you need to be more precise and perhaps decide that he should put his coat on at least four times in five consecutive days before going on to another task.
When choosing a precise objective, you should never forget your overall aim for this pupil. In other words you should ask yourself WHY you are teaching this particular skill. Why, for instance did you want to teach a child to put on his own coat? Probably to help him to be independent when it is time to go out for a walk. If this is the reason then you will probably arrange to teach him at the appropriate time of day. Taking a coat on and off in the classroom is a highly artificial activity. Other objectives should be put in a sensible context also.

BREAKING THE TASK DOWN INTO SMALL STEPS

An infant cannot climb into a high chair because the distance between the floor and the seat is too great. He might have been able to climb on to a low stool which was nearer the ground.

Ordinary children often seem to learn in leaps and bounds. A child who is mentally handicapped has to be taught one small step at a time. Even putting on a coat may be much too big a step for a pupil to learn at one go. If it is, try breaking the task down and teaching one step at a time. It is not easy to imagine that such a task has to be broken down into small steps, because we are so used to putting on our own coat without thinking. Trying putting on your coat slowly. Make of list of each of the different actions – picking it up, holding it the right way up, putting an arm into the sleeve, putting the other arm into the sleeve, wriggling your shoulders to get the coat up at the back, pulling the two sides of the coat to meet, aligning the zipper or fastening and fastening it up from the bottom upwards. There is quite a lot to think about when putting on a coat.

Some pupils will have to be taught one step at a time . . . picking the coat up . . . making sure the collar is at the top . . . putting an arm into the sleeve and so on. Even picking the coat up correctly may be a hard task for some of your pupils. Each stage in the task can form a new objective.

BACKWARD CHAINING

Some tasks are best taught back to front. Putting on a coat is a good example. Instead of teaching a pupil the first stage of the task first, i.e. picking the coat up, you teach them the final stage first, i.e. pulling up the zipper or doing up the fastening. First you help the child on with his coat completely. The next time you do it all for him except the last action of pulling up the zipper.

You show him how to do this for himself. Once he can do this well, you might leave two stages of the task for him to do on his own, e.g. aligning the two sides of the coat and then pulling up
the zipper. Once he is competent in this, you leave him three stages and so on. This back-to-front way of learning has the advantage of always ending up on a note of success for the pupil. He finishes the task each time and is rewarded by being ready to go out to play.

This method of teaching is known as 'backward chaining' but it is not a suitable method for all tasks.

PROMPTING

When teaching a child a new skill, it is usual to TELL him what we want him to do. Sometimes telling is not enough and we then have to SHOW him how the task is done. Often we use GESTURES and point to the next stage in the task and so on. When none of these methods work, we may take hold of the child's hand and GUIDE him through the task. TELLING, SHOWING, GESTURING and GUIDING are all different ways of prompting a child.

TELLING is called a VERBAL PROMPT, SHOWING is known as MODELING, GESTURES are called GESTURAL PROMPTS and GUIDING the child's hand is a PHYSICAL PROMPT.

Most teaching in ordinary schools is done verbally. The teacher tells the children what to do. A child who is mentally handicapped may make no response when told what you want him to do.

Why is this? Is he being naughty or obstinate?

Probably not. It is very likely that he has not understood what you said. You will have noticed that mothers of small babies seldom use verbal prompts alone. If they want a baby to wave 'bye-bye' they usually take hold of his arm and wave it for him until he learns to do it himself.

So, it is important to check how much a pupil UNDERSTANDS spoken instructions before relying on verbal prompts. He may have no understanding of language and then you may have to guide his hand to show him what to do. He may understand a little and then you can help by speaking simply and modelling the task as well and perhaps using gestures.

You may have to check your pupil's development to see whether he is yet able to imitate. If he is not yet able to imitate, modelling will not be effective and physical prompts will be needed.

Whatever prompts we decide to use, we do not want to continue prompting for too long. Our aim is to make the child independent so that he can do things for himself without prompting.
If prompting is stopped too suddenly the child may fail.

Prompting has to be faded out gradually.

For instance, if we are using physical prompts and holding a child's hands to show him how to post shapes into a posting box, we can stand behind him and gradually move our hands further back, until we are directing his movement from the elbow. Eventually, we move our hands away altogether.

When using VERBAL PROMPTS we may, at first, have to guide the pupil through the whole task. Later a word or two will be enough when he gets into difficulties or perhaps a gesture might be sufficient. Soon he will be able to complete the task on his own.

DO remember to fade out the prompts ... it is easy to get into the habit of helping and prompting a child that you forget to stop. Give the child the satisfaction of finding he can do things for himself.

Making it all worth while

As teachers, it is we, and not the child, who usually decide what we want him to learn. If we can make the chosen task rewarding so that HE wants to do it himself then this is half the battle.

Sometimes it is difficult to get a child to want to make an effort and learn something new. He may have got so used to failure that he has learnt to avoid trying. It is often possible to motivate a child who is mentally handicapped by using the following methods.

REWARDS

For each pupil make an individual list of LIKES and DISLIKES. The list, which will be different for each child, may include sweet things, drinks, having your attention, being praised, being tickled, playing with a special toy and so on.

Once you know what a child likes, you can use it to motivate the child to carry out a chosen task. For instance, one child may like sweet things and not much else. The chosen task may be getting him to name three pictures correctly.

With a very reluctant pupil or one who finds it difficult to understand what you want him to do, you might use something sweet as a reward. Only give him a TINY bit at a time. Every time he names a picture correctly give him a sweet but NOT when he is wrong. The sweet must be given IMMEDIATELY the picture is named or he may not make the connection. Such edible rewards (food and drink) are not
2. **Tapping**: the teacher may make a noise by tapping his/her finger on the line where the saw is to go.

3. **Tracing**: if a teacher is reminding a student to follow several steps to cook rice, the teacher may point in order to the rice, a can for measuring, a pot, water for cleaning, and the stove. The teacher will slowly move his/her hands to each object and pause briefly at the object. Usually, the teacher will also use a verbal prompt with the gestural prompt and say 'rice', 'measure', 'pot', 'clean', and 'cook' at the same time as the objects are pointed to.

4. **Signals**: during the group instruction example when the teacher made a request raised her hand to her shoulder, paused and then dropped her hand to signal that everyone in the group was to answer. This hand signal is a gestural prompt.

5. **Clapping** may also be used as a signal. During group instruction when students are being taught to read, the teacher may clap his or her hands each time the students are to read a new word in a sentence. The pause between each clap gives each student time to practice the word before reading it aloud. The students can hear the clap without looking up from their work.

Rules for using and fading gestural prompts:

1. Make sure you have the student's attention before using the prompt.

2. Be consistent; use the same prompt each time.

3. Be brief; do not use extra movements.

4. **Use a gestural prompt only if a verbal prompt is not sufficient.**

5. If a gestural prompt is used, use a verbal prompt at the same time.

6. Fade the gestural prompt first, then fade the verbal prompt.

7. Fade the use of a gestural prompt by:

   (a) **Delay**: when it looks as if the student may not need a gestural prompt, give the verbal prompt first, then delay giving the gestural prompt for a moment. Over several trials, increase the length of the
Modelling delay until the student responds before the gestural prompt is given. At this point stop using the gestural prompt.

(b) Shorten: the length of the gestural prompt may be shortened. Rather than tap the line the saw is to cut, on several trials, the teacher may only touch the line, then over several trials the teacher may only point to the line from an increasing distance away. When the student puts the saw on the line without the tapping, touching or pointing, the gestural prompt is no longer needed.

Modelling

Modelling involves teaching by demonstration. A teacher demonstrates how a task is done and the student is expected to imitate (do the task in the same way). Modelling may be used as a prompt. When a student cannot perform a task following a request, the teacher may use a verbal, gestural, and/or a modelling prompt. Alternatively, modelling, usually used with verbal instruction, is a commonly used general method of teaching a broad variety of skills. In the discussion that follows, modelling is described both as a prompt and as a general method of teaching.

Rules for using and fading modelling

1. Get the student's attention before beginning to model.

2. Model slowly enough so that the student can see each part of the demonstration.

3. Focus the student's attention on important parts of the demonstration by labelling those parts. For example, rather than merely showing a student how to hold a pencil, point (a gestural prompt) to where the pencil rests on the hand between the thumb and the forefinger and say 'It touches here'. The teacher may later confirm that the student has seen the important features by asking the student to point to 'where the pencil touches'.

4. If a task involves a long series of steps, the demonstration may be divided into parts. The teacher may demonstrate the first five steps for the student to imitate several times. Then the teacher may model the next four steps. The student may then perform the first five steps followed by the next four steps. By imitating the entire sequence, the student practices earlier learning and joins it together in the right order with new learning. The number of steps that should be modelled at any one time depends on the difficulty of the task and the skills of the student.
These are not difficult to make or adapt and this is the time to enlist the help of a handy man or women who is interested in the school. For instance, if a child will not attempt to put rings on a stack, you could make a stack with a light which comes on when the ring falls on the base. This might encourage the child to have a try on his own. It is important that children are active when they are not having individual attention.

One-to-one teaching

Having found the developmental level of each of your pupils, you will realize that no two of them are alike. Each pupil will need some individual teaching sessions. For learning to take place these sessions must be REGULAR and SHORT. How is this possible with many pupils in the class? It is only possible if you have precise OBJECTIVES for each child and have planned how to reach these objectives. Then everyone who comes in contact with the child will need to know what these objectives are as well. By working out the number of hours in the school day which can be given over to individual programmes, and dividing this by the number of pupils in the class, you will know how long each programme can last. Remember, you may only have a few minutes to spare for each individual pupil. If these minutes are used well and the programme is given EVERY DAY the pupil should progress. A little and often is the golden rule.

Recording progress

The progress of your pupils may be very slow. We will only know if they are making any progress at all, if we devise an easy way of recording. It must be easy otherwise it will interrupt the teaching. Also it should be simple enough to anyone to use who is going to work with the child.

Some simple ways of recording progress

A bottle of beads

Carry around, for each session, a bag containing beads, pebbles or nuts and also a bottle or box. Decide what you want the child to achieve. For each correct action, drop a bead into the bottle. This will be an added reward for your pupil also. He will begin to appreciate his own progress when he sees the bottle filling up. By counting the beads at the end of the session you have a simple record of, say, the number of pictures named correctly. Sometimes you may need a record of incorrect as well as correct responses. In this case you need two containers, one for correct responses and one for incorrect responses. Let the child see the first one but keep the other hidden under the desk. At the end of the session you can count the number of correct and incorrect responses and enter them on a record card.
Here is an example of a record card for picture naming.

| OBJECTIVE: Appropriate naming of pictures: CUP, MAN, DOG |
| SITUATION: Looking at a picture book |
| DATE: 7.12.86 |
| OBJECTIVE: Appropriate naming of pictures: TREE, HOUSE, CAR |
| SITUATION: Posting pictures into box |

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>7</td>
<td>7</td>
<td>12</td>
</tr>
</tbody>
</table>

COMMENT: All pictures named correctly.

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

COMMENT: House & car named correctly. Tree not named correctly.

Making out a record card will help you to be clear in your own mind exactly what you are hoping to achieve, as well as what has already been achieved. It will also be a record of the method which proved successful and the one which did not. Similar records can be kept for a number of skills which you plan to improve. They may not always be confined to individual sessions. You might, for instance, have a pupil who speaks very little throughout the day. You might ask every member of staff to put a bead in a bottle whenever they hear him utter a word. At the end of the day the beads can be counted and recorded that for day. This record should be started before you start a regime to increase his output. It should then be continued throughout the regime and after it is finished. Comparing the scores before and after will provide a measure of your success.

Putting beads in a bottle is only one of many ways of recording progress.

Ticks can be marked straight on to a record sheet and so on.
Whatever method you choose, it must be simple enough to carry out.

Records are USELESS unless they are kept regularly.

It is a good idea to make out individual record cards for each area of the curriculum, e.g. one for language, one for self-help and so on.

GROUP ACTIVITIES

Most of your pupils will need individual sessions daily. They also need the experience of interacting with one another.

It is important to keep a balance between individual 'one-to-one' sessions and group activities. For the younger children the group will need to be very small. You will choose pupils are are at roughly the same stage of development. For example, you may have taught two of your children to name pictures in 'one-to-one' sessions.

These children can then be put together to play a naming 'game'. They will be shown how to take turns and play fairly. This will help their social development and is very important.

You must always be aware of the danger of teaching children to rely too much on teacher-direction. They need to learn both to work on their own and to work with one another.

Larger groups

Some activities lend themselves to larger groups. You may, for instance, gather round in the morning to talk over the days NEWS. This news may concern what the pupils had for breakfast or what they saw on their way to school. In such a group children learn to take turns and above all to LISTEN.

Dance and movement may also be in groups as well as music and painting.

A chance to watch

Much of learning takes place through imitation. This cannot take place unless the child has a model which is worth imitating. Unless they can watch other people at work they will grow up in an unfamiliar world. Most infants watch their parents at work before starting school. They have a chance to see cooking, cleaning, washing, digging and gathering fruit. They learn a great deal through observing and imitating the adults. Children who are mentally handicapped may miss out on this. Before they started school they may
have been too helpless to be able to appreciate the activities around them or to imitate them. Once they have started school they will seldom see their teachers working in this way. This is a great loss. Perhaps with a little planning they could be given this opportunity. It might be possible to arrange for them to see the school being painted, the meals being prepared or seeds being sown in the garden.

Perhaps the pupils could be taken out to watch people at work in the neighbourhood. As the pupils grow older this chance to watch becomes increasingly important.

GENERALIZATION

The success of your teaching lies in the extent to which a child uses what he has been taught outside his individual sessions.

For instance, a child who only knows five words, but uses them frequently and meaningfully throughout the day, may be functioning more successfully than a child who knows 20 words but only produces them on demand and never uses them to communicate.

It is often more important to help a child to become proficient in the use of language he has already learnt, rather than trying to enlarge his vocabulary still further.

Before deciding on the next step you might ask yourself these questions.

When we have taught a child to name objects appropriately in a one-to-one session, does he use these words spontaneously at other times of the day?

Does he use the word 'milk' to ask for a drink when he is thirsty or only when given a picture of a glass of milk?

Children who are mentally handicapped find this generalization particularly difficult and here are some ways of helping them.

(1) By our choice of objective, only choose objectives which will be really useful for that pupil. If you are working on a child's vocabulary, think about the words which will help him most and which can be used in a number of different situations or events. It might be useful to teach the words MORE or MINE, DOWN or GONE before trying to teach more object names, such as CAR or TREE. Action words and words describing a need are often more useful than names of objects. Also note what a pupil is trying to tell you without words and then give him the appropriate word to use.

(53)
STAGES ON THE WAY WHEN HELPING A CHILD TO LEARN

START HERE

OBSERVATION AND ASSESSMENT

1. Use the developmental charts to make a profile of strengths and weaknesses.
2. Watch closely what the child can do already in the area you plan to teach. Observe him closely in other situations as well.

SELECTING AND ANALYSING THE TASK TO BE LEARNT

1. Choose:
   a) a task that is relevant and useful to the child
   b) a task that is at his developmental level
2. ANALYSIS: break the task down into the smallest possible steps. Let him master one step before going on to the next. State exactly what you expect your pupil to be able to do.

PRESENTATION OF THE TASK

1. Choose favourable conditions to make learning ENJOYABLE
2. Decide on the best time and place for both of you
3. Proceed one step at a time and master one step before going on to the next
4. Reward the child appropriately, consistently and immediately

EVALUATION

Check whether your pupil can now do what you set out to teach. Watch your pupil during the day and see whether he ever USES what you have taught him.

GO BACK AND START AGAIN
This does not only apply to language. No time should be wasted in teaching useless skills such as tying laces when the pupil only wears slip-on shoes or none at all.

(2) By variety of presentation.

If a task is always presented in exactly the same way, the pupil may simply learn an automatic response which will be confined to that situation. Try to vary the ways you present a learning task. A pupil may name pictures in a book correctly. Try giving him these separate pictures to post in a posting-box. Does he name them now? As well as pictures use actual objects. See whether he can fetch these objects when you ask for them.

(3) A meaningful context.

Wherever possible present the task in a meaningful context. Teach the child to put on his coat when it is time to go out or to say 'more' when having a snack. In practice it is not always possible to do this. Alternatively you could present the task in the form of a game. Always try to help your pupils to understand the meaning of what is being taught.

The pupil who is profoundly handicapped or developmentally very young

You may find that some of your pupils are so profoundly handicapped or so young developmentally that they are at a developmental level below 12 months or 1 year of age.

Extra guidelines may be useful to make any headway with these pupils.

Remember, a normal child with a developmental level of under 1 year WOULD NOT BE AT SCHOOL. He would be at home and being looked after by his mother or mother substitute. She is unlikely to have mapped out any special programme for him. Yet, at this developmental level, a child's mother is probably the best teacher he will ever meet.

We can learn a great deal by observing mothers interacting with young babies. Some of these lessons can be applied to the handling of pupils who are profoundly handicapped or very young. These are as follows:

1. Do not try to DIRECT the child but interact with him playfully as his mother does.
2. Follow the child's lead. In most mother/child interaction it is the child who initiates the game or routine. The mother follows the baby's lead and then gradually takes it a step further.

3. Be an opportunist. Much of the time a child may seem inert and you may make little headway. Then, behold, for a moment he is wide awake, alert and interested ... do not miss this opportunity - it may not come again for a long time.

4. Do not be afraid of physical contact with a profoundly handicapped child. He may need this as much as a baby needs the physical contact with his mother.
One of the most difficult tasks for teachers of children who are mentally handicapped is to decide upon the curriculum. What guidelines can be followed when deciding what to teach our pupils?

The children are at school and have a right to be educated. To some teachers this means teaching 'school subjects' such as reading, writing, arithmetic and physical education. Others may think that they should, at least be introduced to these subjects and be taught the letters of the alphabet, the days of the week, to count, to recite nursery rhymes and so on.

We do usually start teaching these subjects the moment a child starts school. This is right, because a normal child of 5, 6 or 7 years of age is 'ready' to begin school subjects. BEFORE he came to school he developed all the basic abilities on which these 'school subjects' depend. He is already able to dress himself, to feed himself and go to the toilet on his own. He can sit at a table and attend to instructions. He can ask and answer questions, he can play imaginatively on his own and join in games with others, he can write with a pencil and think things out for himself. He probably knows his own name and address and can run and jump and kick a ball.

One glance at the checklists will show the amazing amount a child learns in the first five years of life. All this learning has taken place at home without any formal 'teaching'.

However, when a mentally handicapped child starts school, it is unlikely that he will have acquired basic competence in these areas.

This means that, in the first four or five years of school life he may not be ready for 'school subjects' at all. Instead we may have to help him to reach the developmental milestones, which he will have to reach, in order to be ready to learn other things.

This groundwork may have to be laid in all areas of development as outlined by the charts.

Once this groundwork has been laid it will be appropriate to introduce more 'school subjects' into the curriculum. This may be only in the second four or five years in school.
At the top end of the school, when the pupils are in their teens, other things have to be taken into consideration. Very soon these pupils will be leaving school and taking their place in the community. This must be uppermost in the teacher's mind when planning the curriculum for the pupils' last few years at school.

So, in this chapter, we have divided the curriculum into three stages. The stages will be roughly divided according to the chronological ages of the pupils. There will be some overlap between the three stages. Some pupils may be ready for stage 2 before they are 8, 9 or 10 years of age. Some will be ready for stage 3 before reaching their teens.

In this chapter we will cover the first two stages. The early years from 5 to 8, 9 or 10, the middle years up to 13, 14 or 15.

Each stage is a preparation for the next and whatever aged pupil you are going to teach it is important to learn about the stage before.

In the next chapter we will consider the teenage years when we are preparing pupils for school leaving.

STAGE ONE: THE EARLY YEARS

At this stage the curriculum will not be divided into school subjects such as reading, writing, arithmetic, physical education, cookery or music. Instead it will be organized into different AREAS of development such as mobility, handiness, play, language, social development and self-help. These are the same areas as those covered in the developmental charts in Chapter II.

You will be guided by the developmental assessment which you have already carried out. Thus you will avoid being one-sided in your teaching. The assessment will help you to pinpoint the strengths and weaknesses of your pupils. However, it is important to remember the WHOLE CHILD. We cannot, for instance, teach MOBILITY in isolation. Every area of development is related to all the other areas. While concentrating on mobility, for instance, we will also introduce LANGUAGE and SOCIAL DEVELOPMENT as well.

Art, singing and dance will also be important to these children.

The curriculum can be divided into the following areas:

- mobility;
- handiness;
play;
language;
social development;
self-help;
art and music.

A structured one-to-one learning situation and opportunities for exploratory play

All young children need opportunities to practice and perfect their new-found skills and this they can do through independent play.

For a child who is mentally handicapped it is not enough to give them plenty of stimulation and opportunities to play.

A structured one-to-one teaching programme will be needed if they are to develop new skills and the child may have to have a great deal of encouragement in order to practice what he has learnt.

These two aspects of the early curriculum (free play and programmed learning) are intimately connected. Before putting them together they will be considered separately.

Structured teaching

Each structured learning situation will be planned individually for each child in each area of the curriculum.

In planning these individual sessions we need to consider the following:

(a) the developmental level of the child;
(b) his strengths and weaknesses;
(c) his likes and dislikes;
(d) what will be of most use to him.

This will be illustrated by an example in the area of mobility.
Jo is boy of 6 years old, who is not yet fully mobile.

(a) His developmental level

Jo is at the level of a 1-year-old child as regards mobility. He can stand on his own and does so frequently. He is able to take a few steps when holding on to someone's hand. He usually gets around by crawling.

(b) His strengths and weaknesses

Jo is more advanced in other areas of development. He is quite adept with his hands and can build a tower of bricks. He can drink from a cup and let you know when he wants the toilet. He can follow simple instructions and also express himself in two-word utterances.

(c) His likes and dislikes

Jo likes plenty of attention from grown-ups and likes an occasional hug or friendly smile. He is a big boy and is fond of his food and drink. His favourite toy is a wind-up musical box.

(d) His needs

Jo's lack of mobility is holding up his general development. He has to depend on others to go to the toilet and cannot fetch his own drink or toys from the table. Jo's mother has a young family to look after and it would seem to be a priority to get Jo walking. Jo appears ready to walk and strong on his legs but afraid to try on his own.

An individual programme for Jo

The AIM of this programme is to get Jo walking independently so that he can explore his surroundings and help himself.

The short-term OBJECTIVE is to get Jo to take six steps forward from the standing position against a wall. This objective is further broken down into steps as follows:

1. Jo will stand against a wall for a few minutes.
2. Jo will put out his hand to the teacher who is standing in front of him.
3. Jo will put one foot forward towards his teacher.
4. Jo will take one independent step without support.

5. Jo will take two steps forward ... and so on until Jo is taking six steps on his own.

Jo will be rewarded by a smile or hug from the teacher each time he reaches a step in his programme.

A STRUCTURED PROGRAMME IN THE LANGUAGE AREA

Amit is at about the 2-year-old level in the language areas.

(a) His developmental level

His imitation is good and he can imitate words as well as actions. He likes to play imaginatively with toy animals and will feed them and put them into a toy 'shed'. He loves looking at pictures and can name pictures of many familiar objects as well as photographs of members of his family. He is able to follow simple directions such as 'sit down', 'fetch your shoes'. He talks quite a lot but only in single words and does not put two words together.

(b) His strengths and weaknesses

Strengths ... he is very mobile and can run and kick a ball. His hand/eye co-ordination is at the 4-year-old level and he is able to hold a pencil properly and draw a man. He is fairly independent and can wash his face and hands and feed himself with a spoon and fork and go on his own to the toilet.

(c) His likes and dislikes

Amit loves playing with the farm animals. He sometimes gets frustrated when people do not understand him and will sulk or have a tantrum. He often carries picture books around with him and delights naming the pictures to his teacher. He particularly likes a book of animal pictures.

(d) Amit's needs

Amit is usually a happy boy but gets frustrated when he cannot put his ideas into words. Help in this direction would be useful for him and also help to cut down his temper tantrums which worry his mother.

An individual programme for Amit

The AIM of the programme is to extend Amit's vocabulary and pave the way to two-word sentences so that he is better able to make his wants known and would be less frustrated.
Before deciding on a specific OBJECTIVE for Amit, it was necessary to take a closer look at his expressive language. In order to do this a record was made of all the words Amit used in one morning. A list was pinned on the classroom wall and when anyone heard Amit speak they wrote up what he had said.

Amit's words

<table>
<thead>
<tr>
<th>MILK</th>
<th>COW</th>
<th>GONE</th>
<th>HORSE</th>
<th>MAN</th>
<th>CAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME</td>
<td>BOOK</td>
<td>GIVE ME</td>
<td>NO</td>
<td>NAUGHTY</td>
<td>DOWN</td>
</tr>
<tr>
<td>MINE</td>
<td>COAT</td>
<td>SHOES</td>
<td>CAT</td>
<td>GIRL</td>
<td>WANT A</td>
</tr>
</tbody>
</table>

A close look at the list shows that many of the words used by Amit are names of things (nouns). All the nouns have been underlined. Very few of his words denote action (verb). The only action words are 'gone', 'give me' and 'want a'. A useful aim would seem to be to teach Amit to understand and use some common action words or verbs such as SIT, EAT or SLEEP.

The specific objective was to choose one of these words and plan how to teach it so that the meaning would be clear.

Amit used the chosen actions in his play with the animals and pretended to get them to eat and drink and he also put them in the shed to sleep. However, he had never been heard using any of these words.

Each of these words was chosen as an appropriate objective and as Amit liked looking at pictures of animals, a picture book was used as the medium for the programme.

The first step of the programme was the use of the word EAT appropriately, first in imitation and then spontaneously.

To avoid a stereotyped response and to aid understanding and generalisation the programme had two forms as follows.

The teacher allowed Amit to play with the farm animals and joined in and they fed the animals in turn. During the game she modelled the words, 'COW ... EAT' as she fed the cow and 'HORSE ... EAT' as she fed the horse.

Similarly when Amit was looking at the animal picture book the teacher 'pretended' to feed the animals in the pictures with suitable food and modelled the words again, 'CAT ... EAT' and so on.
A record was kept during these sessions to measure the success of the programme. This showed whether Amit used the words appropriately and also whether they were used in imitation of his teacher or used spontaneously.

**Language record**

<table>
<thead>
<tr>
<th>NAME: AMIT, J.</th>
<th>DATE: 7-11 December 1986</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBJECTIVE: Use of target word 'BAT'</td>
<td></td>
</tr>
<tr>
<td>METHOD: (a) Playing with farm animals (b) Looking at pictures</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IMITATION</th>
<th>SPONTANEOUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriate</td>
<td>Not appropriate</td>
</tr>
<tr>
<td>A.</td>
<td>/</td>
</tr>
<tr>
<td>B.</td>
<td>/</td>
</tr>
</tbody>
</table>

**Generalisation**

The target had been reached for Amit. Now it was important to discover whether he actually used the new words apart from the teaching session.

A record was again kept during the school day and the staff put a tick on the list if they heard Amit using the word EAT spontaneously and appropriately.

Having learnt to use the first word 'EAT' the second word 'SLEEP' was introduced by a similar programme.

For some children we need daily programmes in more than one target area. However, these structured programmes must not be allowed to dominate. In order to consolidate and use their skills and to combine them in new ways, all children need time to play freely.
Opportunities for spontaneous play

Many children who are mentally handicapped play very little at first. To encourage more play, the imaginative teacher who is willing to enter into the spirit of a game is invaluable. In the following section we have outlined some of the ways of fostering play with the handicapped.

Freedom from stress

A child is unlikely to play until his bodily needs have been met. Undernourished children play very little. Cold, bodily discomfort, hunger and frustration all discourage play.

The encouragement of a tolerant adult

A child’s mother is his first playmate and her interaction encourages a baby to play and experiment. The teacher must often take the place of the mother and be willing to interact with her young handicapped pupils in a playful way. This may be at a very simple level ... playing peek-a-boo, rolling a ball backwards and forwards, hiding toys and making them suddenly reappear. These are all things you see mothers doing with their babies. Nor must the teacher be afraid of physical contact. The child may need the comfort of sitting on your knee and may enjoy boisterous physical play. Your encouragement and interest will later give the child courage to explore on his own. Even then a teacher needs to be ready to join in and take the game one step further.

Opportunities to imitate adult activities

In this chapter we have already stressed the importance of imaginative play in the development of language. The theme of this imaginative play is often ‘mothers and fathers’ or other people at work. In this way children are re-enacting familiar events. However, a handicapped child may have missed out on these events and had little opportunity to watch people at work. Whenever possible, you should create these opportunities. He needs to be able to watch the daily tasks of cleaning, preparing meals and so on. Suitable toys, such as toy brooms, ironing boards and cooking utensils will encourage him to copy the work of his elders in play.

The right toy at the right time

An adult who is tuned in to the child’s wavelength, can often help to initiate, sustain or develop a child’s play. If she uses her imagination she will be able to produce an appropriate toy at the crucial moment. In many circumstances there will be a limited number of bought toys available. However, anything a child can play with is a toy.
Children will often be as happy playing with a wooden spoon, a box of shells or nuts, or a toy made from scrap, as with a toy bought from a shop. In her choice of toys a teacher needs to be guided by the developmental level of the child. An immature child may not always use the toys in the way they were intended. The child's action with the toys may reflect a young age level rather than inappropriate behaviour. For example, if a child is at the developmental stage of 'throwing' he may throw or toss all his toys away from him. The teacher needs to be able to distinguish between developmentally immature, but appropriate, behaviour from naughty or destructive behaviour.

A few toys at a time

Too many toys may be as bad as too few. With so much choice a child may become distracted and flit from one toy to another without settling down to play with any. A limited number of toys, which are developmentally appropriate and have a certain degree of novelty, are more likely to encourage spontaneous play.

It is also important to remember that attention and concentration skills only develop gradually. For example, a normal child has to have reached the age of 5, before being able to listen to the teacher whilst he is busy with his own activities. If a child is still at this stage and only able to attend to one stimulus at a time, the teacher must wait until he has stopped whatever he is doing, before talking to him.

If you need the child's attention to something 'new', you may have to stop his activity first, and then redirect his attention.

Freedom to experiment

Some educational toys (ringstacks, jigsaw puzzles, etc.) have a 'right' way of doing them. Do not be too concerned if a child starts to play with them in a different way. For instance he might start rolling the rings from the stack across the floor. He may be learning as much from this activity as from stacking the rings. By entering into his game for a while he will probably be willing to cooperate in the proper stacking of the rings too.

A responsive playmate

Having established a playful dialogue with her baby and shared many common experiences, she will follow the child's lead and add many variations to the game. For instance, a mother will respond to a child's early random utterances and give them meaning. The importance of such playful dialogue is immense. At school, a responsive
dialogue needs to be built up between the developmentally young pupil and the teacher or helper.

**A responsive environment**

This is particularly important to establish with children who have a limited amount of movement or who are physically as well as mentally handicapped. If their random movements can cause something to happen, they are likely to be repeated, and they will learn to control them intentionally. Sometimes a simple bell tied to a child's wrist is enough to keep him interested and active.

**Establishing a routine**

Young children are creatures of habit and it is important to establish a daily routine. This will include times set aside for toileting, for having a midday drink, for meals, for energetic movement with things to climb on and crawl through etc. It will include time for stories, for music and for quiet toys which need manual dexterity.

Self-help skills, such as dressing, washing, toileting, etc. are best taught at the appropriate period of the day when they are actually functional. Feeding skills can be taught at meal times.

Social development can be encouraged when the children are in groups and engaged in activities such as painting or movement.

In addition to individual language programmes, appropriate language is encouraged and practised throughout the day and enters into all other activities.

**WHAT TO TEACH IN THE MIDDLE SCHOOL**

When the children reach the age of 8, 9 or 10, it will be the time to start introducing some 'school' subjects into the curriculum. The programmes and work in the developmental areas will continue, but many of the children will be ready for pre-reading or reading work. Number work will also be introduced and drawing shapes in preparation for writing.

There will be less time given over for free play and many teaching skills will now be introduced in the form of teaching games with simple rules. More stress will now be laid on social development, on increased independence and on self-help.

There will now be less time given to one-to-one individual programmes and children will be encouraged to work in pairs. Some lessons will be with the whole class together.
The change from lower school to middle school will need to be gradual. The more able pupils may be quite ready for the change but, for some, the preparation may be lengthy.

The following paragraphs introduce some of the new items of the curriculum and will include some practical suggestions.

Communication

The language of communication is important in all school subjects. At this stage certain times of day will also be put aside for communication between pupils and teachers.

(a) News time

This is best timetabled for the morning when the pupils will be most eager to tell their news. As the children arrive, they will form a friendly group around their teacher. Many of the pupils will have difficulty in communicating and it takes a good teacher to listen to them and draw them out at this time. Whilst every effort should be made to encourage the development and expansion of spoken language, a teacher should be prepared to accept gestures, mime or poorly formed sentences from the less able child.

Once the meaning of the child's message is understood, the teacher uses the situation to teach new words which the child needs in order to make his spoken message more successful.

(b) Story time

Story time is often best timetabled at the end of the day. The children will be introduced to new books and will now have simple stories read to them out of books. Active stories are the best kind at holding the child's attention. In these the pupil can take part either through mime or by repeating story lines. Folk stories like 'The gingerbread man' are ideal and contain plenty of repetition. The imaginative teacher will make up her own stories, often centred round the pupils in the class. Some stories can be made more vivid by the introduction of 'props' of various kinds. Children should be encouraged to choose their own stories which may be told over and over again.

(c) Do this, do that time

Understanding is as important as talking. Many games played with small groups can be an aid to understanding. The pupils may take turns to fetch different things for the teacher and the length of the instruction will depend upon the ability of the child.
For mentally handicapped children, the start of reading should not be formal work from 'readers'. It should be active and take the form of reading 'games' and in following instructions.

Long before the written word was invented, men sent messages in the form of pictures. We can see these picture messages on the walls of prehistoric caves. For children, too, the recognition and understanding of pictures is the first step towards the understanding of the written word. Many of the games which were played with pictures in the lower school should be continued. In a picture matching game, such as 'snap' the children can name the picture when they see a pair, instead of saying 'snap'. Many other picture matching games can also be introduced. In the middle school the written word can be substituted for one of the pictures. When the children can recognize one word and match it with a picture it is time to introduce a second word. In the lower school pictures were probably used to mark the child's hook in the cloakroom, etc. Now these can be gradually replaced by printed names.

At this stage reading should be considered as an aid to communication. Early school 'readers' are seldom appropriate. Words printed on cards can be introduced in the news session, on a weather chart or to label containers in the cookery session. Pupil's interests will vary and the first printed words should be individually chosen. A pupil who is interested in animals for instance might make a scrap book including words as well as pictures.

Numeracy

Numeracy is a subject which is very difficult for many children who are mentally handicapped. Many will perhaps be able to 'count' but be unable to put this skill to much use. Daily practice in counting out is important and this should be made as active as possible.

Counting can enter into almost all other activities or lessons. It can come into music and movement, in self-help skills and so on. Table games with dice and scoring are ideal for practising number skills. These have an added advantage of increasing the social skills of the pupils. In playing with one another they learn to keep the rules, to take turns and to communicate with one another.

SOCIAL DEVELOPMENT

Children who are mentally handicapped can easily become over dependent on adult direction. It is important that they learn to get on with other children and this is where all kinds of games are invaluable. The teacher needs to be alert to spot those pupils who are
solitary and gently to encourage interaction. Role-playing (pretending to be mothers, fathers and doctors, etc.) will help the pupils to appreciate another's point of view.

Appropriate standards of behaviour should be insisted upon. The pupils should be encouraged to look at people when they are talking to them. Inappropriate behaviour, such as throwing arms around strangers, should be discouraged.

Pupils should be required to help the teacher by taking messages to other classes.

Independence and self-help

A teacher should never do for a pupil anything that he can do for himself. Our pupils need more of our help than normal children and it is easy to get into the habit of helping them too much. The teacher needs to be patient and to give her pupils plenty of time to carry out a task.

With planning many parts of the daily routine can be carried out by the pupils themselves. They can lay the table, give out the drinks, move the chairs and so on.

As well as this, self-help skills will now feature on the timetable which will now include simple cookery, growing plants and so on.

Music and movement

The music lessons will now be more structured and as well as singing will include simple percussion. Some pupils may be taught to play simple tunes on the xylophone, etc.

Dance will probably feature on the music programme as well as physical exercise, both with and without apparatus. This should not be too formal and should include catching and rolling balls, rolling hoops, running and jumping.

Swimming lessons should be introduced if possible.

ARTS AND CRAFTS

The introduction of a wide variety of artistic activities and local crafts is important. Not only will this give the pupils the opportunity to express themselves, it will be an invaluable aid to manual dexterity.

Pattern making with circles and straight lines is an important introduction to writing. Work with local materials, and particularly
with clay, can be carried out by pupils with varied levels of ability. Some may be at the stage of rolling balls of clay and imprinting them with patterns, while others can be shown how to make coiled pots.

Writing

Once a pupil has shown a degree of dexterity in the art lesson and an ability to form circles and straight lines he can be shown how to make writing patterns and later to write words. The first word to learn to write is his own name.

Drama

With pupils who are mentally handicapped and whose speech is indistinct this can often take the form of mime. Many children with Down's syndrome are good mimics and by this means they can entertain others. Puppetry can often help reluctant talkers to speak out.

The local heritage of story and rhyme can be acted out by the pupils. Drama enables each pupil to contribute to the whole at his own level and should never involve a formal learning of lines.

Drama can be introduced into other parts of the curriculum, for instance, pupils can act out in mime what people do, e.g. the potter at his wheel, the farmer in the field sowing the corn and so on.

Out and about

Children who are mentally handicapped can lead very sheltered and isolated lives. It is important to get them out of the school environment regularly (perhaps once a week) to visit places of interest. It is particularly important for them to see people at work on various trades and occupations - to go to the market, to visit a farm and see the animals, to visit a bakery or pottery and so on. These visits should always be discussed beforehand and they will then make a focus of interest at new time. Other activities can make the visit the focus of interest. New words can be introduced in the reading lesson and pictures can be made of the visit in the art lesson. Occupations in the craft lesson can also be connected with the visits. These visits also help to educate the public and to make them more able to accept the mentally handicapped as part of the community. Interesting visitors should also be invited into the school sometimes.

Religious education

The form that this will take will vary from place to place.
It is important that festivals that mark the different seasons of the year should be observed in a simple way so that the pupils can participate and understand.

Thinking it out

Sorting, matching, classifying games will all challenge the pupils to puzzle things out for themselves. These may be about colours, shapes, occupations, dwellings and so on. They may include finding the odd one out in a set (perhaps a row of animal pictures with one plant included). Here the teacher plays a great part in finding the game which is just challenging enough, but not too difficult for the pupil, and in ensuring that it is replaced by a more difficult puzzle once it has been mastered.

Conclusion

In the first four or five years at school our teaching will be concerned with preparing children to learn.

It will be DEVELOPMENTAL and INDIVIDUAL. The teaching will be by individual one-to-one programmes and also through play.

The teacher will be directive in the individual programmes but interactive in the play sessions.

In the middle school the developmental and individual teaching may continue for a time but a beginning will be made with school subjects. These will be introduced through games and the informal atmosphere of a good infant school will prevail. The aim will be to make pupils increasingly independent, to give them more and more choice as well as opportunities to interact with one another in a social way.

The pupils will represent a great range of abilities and the teacher will have still to consider the developmental level of each pupil when planning her lessons.
The pupils at the top of the school are nearing the end of their school life. Their ability to find themselves a niche as young adults in the community will largely depend on our attitude towards them, as well as what we teach them.

The teacher's attitude

The fact that many of our pupils will still be at an immature stage of development and may not have passed the infant stage in their abilities, must not colour our attitude towards them.

We must now treat them in a manner which is appropriate to their actual age in years, not to their developmental age.

Because a pupil is in many ways babyish this is no excuse for treating him like a baby if he is, in fact, a strapping lad of 17 years. As a young adult this pupil demands as much respect as any other young person of his own age. His opinions must be listened to. He must be free to make decisions and choices and not always be directed by others.

Without this change in attitude the school-leaver will not be able to be accepted as an equal in the outside world.

BUILDING A BRIDGE - TOWARDS SELF-INDEPENDENCE

These last years of school should aim at building a bridge between the sheltered life of school and an independent life in the world outside. Not all our pupils will be able to achieve complete independence. However, the more independent we can help them to be, the rosier will be their future. All pupils can become MORE independent than they are at present.

We should also be concerned with the QUALITY of life after school. The quality of anybody's life depends to a great extent on their ability to get on with other people. A person who is socially acceptable and has many friends will always have somewhere to turn for help and support. Some of these friends should be young people like himself. A young person with no friends outside his family will have to face the day when they are no longer with him.
Leisure and work

It is to be hoped that some of our pupils will be able to make a positive contribution to the community through work and it is our responsibility to explore any possible outlets. Others may be unemployable. However, whether they can work or not, all of these young people will have free time on their hands once they leave school. Without our help they will not be able to occupy themselves in their leisure time. This should be part of the school curriculum.

To each according to his ability

A person of low ability is entitled to as much respect as a very able compatriot. However this does not mean that we expect the same of him. We have to accept him for what he is and help him to make use of the abilities he does possess and play his part in our activities.

In school it sometimes happens that a pupil is excluded from an activity because he is not very able in that direction.

As teachers it is important that we plan to include every pupil in all the class's activities. For instance, the class may have been cooking, and be washing the pots and pans after the session.

If one pupil is only able to put the pots into the water, he should still be expected to play his part. Another pupil can put in the washing-up liquid and wash the pots. A third can dry them and a fourth put them away. All should be considered equally important in getting the work done.

Like real life

Much of what goes on in school is very artificial. We may teach pupils to shop for instance using cardboard coins and a pretend shop in the classroom. We then expect them to be able to transfer or generalize their skills in the real life setting of buying goods from the shop or market. However, pupils who are mentally handicapped find it particularly difficult to transfer their skills from one setting to another. They often learn to do something in the school setting and never use their skill outside because of this difficulty.

The only way to get around this is to ensure that our teaching in the top classes is as real as possible. The pupils should not only be taught in the classroom but must be taken outside to practise:

- Clothing - dressing and undressing - selecting suitable clothes for inside and outside - care of clothes - laundering and so on.
- Simple mending and making.
Helping in the running of a home - setting and clearing a table - washing the pots - drying them and putting them away. Making a bed and cleaning and tidying a room - preparing food - making cold drinks - making hot drinks - preparing and cooking simple meals and looking after the kitchen equipment. Possibly growing salads, etc. and looking after domestic animals.

These self-help skills will have already been introduced lower down the school. They will not all have been mastered and those that already have been mastered must now be put to use in as real a setting as possible and the pupils should gradually assume responsibility for carrying out more of the home tasks.

Out and about

A young person leads a very restricted life if he is not able to find his way around his own neighbourhood and cannot be trusted to beware of common dangers. The first step towards such independence is knowing his way around the school and grounds, and being able to take messages to other parts of the school. Then comes the stage where he can be trusted outside the school and take messages or run errands in the immediate neighbourhood. Later comes the stage of travelling on public transport - at first with others and, later, being able to travel on his own and use the local amenities.

COMMUNICATION SKILLS

Already a great deal of emphasis has been placed on communication skills and these have now to be put into a wider context. The young person needs now to be able to give and receive information outside the home and school. This will include passing on messages correctly - following instructions correctly - speaking to outsiders appropriately and clearly and so on.

School visits and school visitors, will all help in accustoming young people to communicate with people other than their own teacher, and they should be given ample opportunity to do so.

Reading

The written word is a form of communication and the recognition of the written word is becoming increasingly important.

In the middle school the pupils have begun to build up a sight vocabulary of words which they can recognize. These have mainly been words that have a personal interest to them and are concerned with their own occupations and family and friends. As your pupils start to get about independently it will be important that they recognize notices and warning signs as well. A trip around your own locality with a notebook will give you a list of the common signs and
notices. These will be different in the town and in the country and so it is important to select only those which are appropriate. However, in many localities, the list will include STOP, GO, LADIES, GENTS, DANGER, etc.

Having taught the recognition of these words in the classroom, it is essential to take your pupils out to see the actual signs.

Recognition of the words is not enough, the pupils must also learn to take the appropriate action.

Practice should also be given in picking out trade names of goods in the market and these too can first be introduced into the classroom and then outside.

Once the pupil is able to recognize these words they can be put to use. They can be made into a list so that it becomes a shopping list or list of ingredients for the cookery lesson or list of daily tasks. The more able pupils can also be taught to follow simple written instructions and directions on packets, etc.

Writing

Pupils are usually taught to write their own name first and then their second name and perhaps their address.

They will then be helped to put their writing to use in making their own lists for shopping and writing letters and keeping a diary.

Numeracy

Pupils will now be applying their numerical abilities to the handling of money, the recognition of coins, the value of different coins, the checking of change and so on. They will also be learning more about time: the days of the week, the time of day, using a clock and keeping time when arriving or changing lessons, etc., and following a programme.

SOCIAL SKILLS

Pupils need now to be treated in a manner appropriate to their actual age. If they are treated like babies they will not learn to behave in an adult manner. They also need to be given opportunities to meet people socially, to visit friends and be visited, and to belong to clubs and attend functions. For some pupils this will not be enough and they may have to be taught how to behave. They may have to be taught how to control their tantrums or to greet people appropriately. Role play and acting may be a help here and
appropriate ways of talking to a doctor or of behaving when being interviewed for a job may be introduced.

The pupils should be taught to give help as well as receive it. Arrangements might be made for them to weed someone's garden or to talk to only old people, etc.

Leisure

The teacher in school must not despise leisure-time occupations, as it is often through these that the person who is mentally handicapped gets accepted into the community. She should make herself aware of the leisure-time interests of other young people in the local community. She should then consider what skills are required in order to take part in these recreations, and which would be within the capacity of her pupils. She may then have to break down these recreations into small steps (see the chapter on how to encourage learning) and teach the pupils one step at a time. The recreations may fall into different categories such as outdoor pursuits (swimming, rambling, birdwatching), hobbies (model making, painting, music, knitting) and games of chance (board games which depend upon the throw of a dice, etc.). All of these can be introduced initially at school and groups of pupils can be encouraged to share their leisure-time activities with one another.

Once a certain proficiency has been attained the pupils should be introduced to the local amenities, so that they can continue to pursue their interests after they have left school.

In some parts of the world the activities listed above may be quite inappropriate but the idea can be applied to other activities equally.
Table 1


Figure 1


Chapter 3


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