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ABSTRACT: Intended for teachers of severely and profoundly retarded children, the book presents principles of management and education used at a special day care center in Warsaw, Poland. It is stressed that the educational goal is to give the retarded child a chance to develop personally and to play a positive social role in the home and family structure with emphasis on socialization skills. Individual chapters focus on the following topics: guidelines for educational work in the day center, pupil characteristics, an individual therapeutic approach, teaching purposeful motor behavior (including socialization through rhythmic movements), education for socially oriented behavior, and developing verbal communication. Case studies, photographs, and actual dialogue are used to illustrate main points. (DB)
STUDIES IN THE
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OF THE SEVERELY
AND PROFONDLY
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...what we want to do is to give each of them the fullest chance to develop his personality and to play as positive a social role as possible in his home and family.
STUDIES IN THE
SOCIALIZATION OF THE SEVERELY AND PROFOUNDLY RETARDED
The Day Center
of the Psychoneurological Institute,
Warsaw

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STUDIES IN THE SOCIALIZATION OF THE SEVERELY AND PROFOUNDLY RETARDED

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Foreword

The Day Center described in this book is an institution for severely and profoundly retarded children and adolescents. Our pupils live with their families and spend with us from 6 to 10 hours daily, depending on their parents' working hours. There are 20 pupils, aged 9 to 22. Three pupils over 18 are the most severely retarded and, despite their age, can adjust better in the company of children than in the Day Center for Young Adults in Warsaw. The pupils differ markedly in their degree of retardation, their I.Q.s ranging from as low as 7 up to 32. There are also four deaf children, three of whom surpass the mental level of the group but because of their hearing handicap cannot attend the school for moderately retarded children. These children have contributed considerably to enriching the social contacts in the Center.

The parents of our pupils are unwilling to part with their handicapped children by placing them in an institution. They have very difficult problems to solve in managing their children, whose behavior is by no means easy to accept. Our parents — even those most successful in fulfilling their difficult parental task — need support from without. To give this support is one of the paramount goals of our work in the Day Center. We believe this task to be no less important than the educational work with the pupils themselves.

The scope of this book does not allow us to develop fully this aspect of our work; it is all the more important therefore to stress here the significance we attribute to our close collaboration with the parents.

This is the place to answer a question that may be put by many who are not acquainted with the family problems of the severely retarded, namely, is it worthwhile to develop sophisticated
methods of educational work with children so severely retarded that their progress is minimal in terms of skills and perspectives for future work? The answer is yes, this work repays the effort invested in it.

These seemingly “hopeless” children are to a large degree accessible to educational influence. By this we do not necessarily mean obtaining marked progress in particular skills. It is not our goal to make our pupils “more intelligent” or to make them “normal”. What we want to do is to help them live their lives in a way that gives each of them the fullest chance to develop his personality and to play as positive a social role as possible in his home and family.

Thus the chief problem is to help them organize their behavior, render it purposeful, acceptable, socially controlled and socially oriented, and — as far as possible — self-controlled as well. “Socially-controlled behavior” means that the child becomes more manageable not only at the Center but, more important, at home as well. In this way the child becomes more acceptable to his family; this, needless to say, is essential for the psychological equilibrium of his parents and siblings. An attitude of greater acceptance by the family has a favorable influence on the child’s behavior and, in turn, the child is still more easily accepted. And so the wheel turns in a direction helpful to the climate of the whole family’s life.

That is why there is no method of work that can be judged “too sophisticated” for the child who is retarded, even to a very profound degree.

There is another argument as well for this viewpoint: the kind of educational methods used has a strong impact on the sense of professional achievement and on the attitudes of the teaching staff.
Obviously, to educate children is the teacher’s obligation. But we cannot disregard the fact that the teacher of the mentally retarded child is exposed to all the frustrations arising from working with children whose progress is minimal, and whose management is in many cases extremely difficult. In this situation, the teacher may easily succumb to a sense of helplessness, boredom, and professional indifference — or, on the other hand, may adopt a stern and rigid attitude. It is not an easy task to help the teacher to gain a motivation strong enough to work with such children. Some of them are simply not “likeable” children because of their unpleasing appearance, disruptive behavior, lack of noticeable progress, or difficult contact. In such cases the intellectual involvement of the teacher should help. The problem to be resolved by the teacher is no longer “How can I tolerate the behavior of this child?” but rather: “Why does the child behave as he does? What mechanisms underlie this behavior? Is the child really inaccessible to influences of any kind? Let me try to find out. Let me discuss this particular problem with the team, and get some kind of theoretical understanding of this child’s problem.”

It is precisely those staff discussions which concern the most difficult children that have been most challenging and stimulating to us. These are the children who present the most difficult theoretical problems, of which the central one is the search for ways of communication open to them. The teacher’s influence upon the child is essentially a planned, deliberate one, but there also is a wide range of forms of non-verbal interaction of which he may not even be fully aware, for instance, tone of voice or quality of gesture. It should be
remembered that the retarded child is highly sensitive precisely to the quality of non-verbal elements of communication. The personal involvement of the teaching staff is, for our task, no less essential than building attitudes of acceptance in the parents.

As we see in organizing the educational work in the Center, it is necessary always to take into account all three parts of its social organism: the pupils, the parents and the staff. Preparing this book has played a very positive role in bringing us nearer to this goal. Not only has this effort not interfered with the current educational work but, on the contrary, it has helped us to clarify our educational goals and improve our methods of work.

Firstly, it helped the staff to become more deeply involved and motivated as pointed out above.

Secondly, as socialization processes became our main focus of interest, every manifestation of socialized behavior in our pupils evoked immediate comment among the teachers. This evidence of interest acted upon the children as a reinforcer of positive social behavior. We are convinced that this unplanned and spontaneous system of reinforcement creates the very background needed for the success of the planned socializing activities described in chapters IV through VI.

This book has been prepared jointly by a team of teachers, each of whom has dealt with one specialized topic, as can be seen in the Table of Contents.

The reader will notice that all our activities aiming toward socialization are carried out on occasions arising in the performance of a task, e.g., gym or rhythmics, handwork, housework, or some creative activity. It is noteworthy that many children
perform better when the main accent is shifted from the performance itself to its social context.

Creative work plays an important role in the educational style of our Center. Drawing, finger-painting, and collective poster-painting seem to us very helpful in building up the general atmosphere of the Center. After all, work with the severely retarded may easily become dull, even depressing. We feel that the bright colors we introduce into our artistic activities enliven the attitudes and spirits not only of the children but of the adults as well. We might mention here that the "abstract compositions" of our pupils have aroused lively interest in specialists of naive art, who have found in some of them true aesthetic values.

Finally, we wish to stress that the methods described here are not meant to be taken over whole by other Centers as the method to be followed literally, even though for the sake of clarity we have presented some of the material in the form of "model lessons" for teachers. We have formulated the educational rules on which we base our work; they should be treated simply as working hypotheses. What we want is nothing more than to present to others working with the severely retarded the rationale of our work and the ways in which we have attempted to resolve the problem of their socialization in our Center.

Warsaw, January 1973

Hanna Olechnowicz
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All education rests upon a knowledge of the psychological needs of the learner, and education of retarded children is no exception to this rule.

The needs of the severely retarded child do not differ from those of any other child, normal or otherwise, but they differ in the way they are realized. In particular, since these children are incapable of expressing their desires in a normal fashion, it is the teacher's task to read their needs and this he may do through keen and close observation of their behavior.

This is by no means a simple task. The purpose of the present chapter is to help the teacher interpret the behavior, get closer to an understanding of the needs of the retarded child, and increase his own ability to evaluate whether these needs are being met in a proper psychological and pedagogical way.

Need of first importance: a sense of security

Every living creature faced with a threat centers all his forces around one thing: to defend himself against the danger. In a situation of threat all other needs are therefore suspended or at least greatly attenuated.

The retarded child is particularly susceptible to such states of overwhelming anxiety. Ensuring him those conditions in which he will feel safe is of even greater significance for him than for the normal healthy child.

Of all, basic to a feeling of security is satisfaction of the most
urgent biological needs: protection from hunger, cold and physical danger. This is obvious and calls for no further discussion.

Secondly, basic to a feeling of security is the predictability of events. Things and events which are unknown or unexpected always constitute a signal of potential danger.

When the child is small, the element in his milieu which is stable — and therefore predictable — is usually the constant presence of the same persons caring for him, most often his parents. The events whose meaning he does not yet understand do not arouse anxiety so long as there is some familiar person by him. For instance, during the war infants normally were not afraid during the air-raids, but they suffered violent anxiety when separated from their families for evacuation.

As time goes on the child perceives and understands more and more; important now in maintaining his sense of security is reasonable constancy in his surroundings and a stable order in daily events.

Gradually the child’s sense of security — and later the adult’s — comes to rest, at least to a certain extent, on an increasing conviction that “I can manage by myself”.

Let us discuss in more detail what conditions must be met for the retarded child to attain a sense of security which, as mentioned above, rests on three main elements. We shall take them in order of their appearance during development.

**Stable, consistent and affectionate ties with persons tending the child**

The tie linking the child with persons caring for him can be a source of security provided that the following conditions are met. First, the care must be stable. The child must always be tended by the same persons, and be able to become attached, or at least accustomed, to them. For the familiar person to disappear and a stranger to take over, even with the best of intentions, is always a source of anxiety for the child.

The second condition is consistency. It is not enough for the child to be cared for by a familiar person; that person’s behavior should be predictable for the child. Recent research has shown that mothers who are uneven, who swing from exaggerated displays of tenderness to excessively stern and punitive attitudes, have a more negative
influence upon the child's psychological equilibrium than mothers who are consistently cool or even harsh in their treatment of the child. Their behavior, though disagreeable, is predictable. The child is not threatened by unexpected shocks and can adjust to the situation.

The third condition to be met if social contacts are to help create a feeling of security is that the child should be treated in a warm and affectionate way. Manifestation of affection is for the child a kind of guarantee that he will always be cared for regardless whether at any given moment he receives praise or blame.

In retarded children, fear of emotional rejection is particularly strong. They experience failure more often than does the normal child; they meet disapproval a greater number of times; moreover, they have limited ability to size up a situation in respect to themselves.

It should always be borne in mind that when we say for "pedagogic" reasons: "I don't love you any more because...", the retarded child in most cases takes it literally and can really believe that he is unloved.

The mentally retarded child, particularly in the first years of life, needs to be handled with warmth and tenderness, exactly as any other child. But overdoing it by oversolicitousness and a profusion of caresses does not help build a sense of security. The nervous system of the retarded child is very weak, and too intense excitation, even when caused by tenderness, can upset his equilibrium.

The retarded child must live in a warm and accepting climate; but, above all, he must always feel that the events of the surrounding world are predictable.

**Stability and predictability in the external world**

All of us need a certain degree of stability in our external surroundings. This simply means that we feel safer when we know we will not come across anything unknown. A heightened need for stability in the world around us appears in the normal course of personality development at about three years of age.

The retarded child, whose psychological development compares in some respects to the developmental level of the two or three year old, may also display an exaggerated need of this sort. But if such children have the opportunity of acquiring a sense of security through
fully satisfying social contacts, then a change of surroundings and the daily round does not evoke in them serious anxiety reactions.

There is, however, a group of children who are described (not too precisely) as "autistic". These children almost totally lack the capacity to acquire a feeling of security from contact with other persons. We observe in them an exaggerated need to maintain stability in the world of inanimate objects. These children panic in unknown surroundings. Some may even show violent anxiety when someone removes only one block from their block constructions. Moving to a new house can be very traumatic for them.

Another category of children who display an excessive need to maintain constancy in the world of objects are those who have been reared in institutions, particularly from birth. This also occurs in children considered to be healthy, but takes a particularly glaring form in the retarded child. He becomes so accustomed to monotony that any new event or strange situation arouses anxiety instead of curiosity.

The anxiety evoked by unfamiliarity, which is found in the very limited group of "autistic" children and in those reared in badly run institutions, is still regarded by many as a feature of all the severely retarded. This is not so. How far this conviction is erroneous will be shown in the following chapters which contain observation records of our pupils' behavior on excursions to unknown places.

In some retarded children, mainly those in the "autistic" category, we often find pathological forms by which the regularity and sameness of events is ensured. These are stereotyped behaviors. By repeating one and the same movement over and over again, the child creates for himself a substitute "system of events" which, although extremely impoverished, is nonetheless fully predictable: after every stereotype movement, the same movement follows again without fail.

In considering what avenues exist for rehabilitating the child who displays stereotyped habits, we cannot neglect these questions: What sources of the feeling of security are accessible to this child? What obstacles prevent either social contact or independent activity from being as the main source of the sense of security?
Self-sufficiency in daily life

As the infant grows and develops, he becomes more and more independent in practical affairs and also gains some emotional independence: direct manifestations of love and approval by the adult are no longer needed at every step. The child is already to some extent aware that he is approved of and loved even when this is not actually shown to him.

Mentally retarded children are incapable of attaining full independence in their practical performance or in emotional life. They will always remain considerably dependent upon others.

This by no means implies that the mentally retarded child is not endowed with a need for independence. He, too, needs to make his own decisions to some extent in matters affecting himself. He, like the normal child, displays a growing readiness to take an attitude of independence—to oppose another’s will or consciously accept it, to give and to take on his own. He begins also to accept for himself the rules which up to now have been imposed on him and usually at the same time begins to impose these rules on others. The degree to which the need for independence can be satisfied may vary, but there is no child who cannot execute by himself at least one simple action and take the decisions relevant to it.

The more fully a child experiences his first “I want to...”, “I can...” and “I will...”, the greater his sense of security and the greater possibilities of development lie open before him.

Needs to be satisfied for achievement of personal-social development

The goal of all education—for the superior and retarded child alike—is to progress step by step to the point where the child can guide his own behavior within the limits of his capacities, and take responsibility for it in a certain, however restricted, area. Without this, the child’s behavior is a haphazard affair depending on moods and events of the moment. In such cases we usually speak of an underdeveloped social personality.

Ability to steer one’s own behavior is largely dependent on mental capacity, but these terms can by no means be equated. Each of us knows cases of bright children incapable of ordering their behavior;
on the other hand, there are many retarded children who display a degree of socialization and sense of obligation to the utmost of their limited possibilities.
Without entering into a detailed discussion of the structure of the social personality, we shall limit ourselves to presenting those psychological needs which should be met if the personality of the retarded child is to develop to the fullest degree of which he is capable.

To be cherished and to feel a sense of belonging to someone
Among the social needs of the retarded child, these take first place. They have already been discussed in the foregoing sections of this chapter.

To understand and be understood
The retarded child starts to speak several years later than the normal child. He has considerable difficulty in grasping the meaning of complex sentences. Yet his need for mutual comprehension is no less strong than in any normal healthy child.
In this situation, non-verbal communication has basic significance as much for the child's psychological development as for the emotional balance of both child and parent.
Parents and teachers face a difficult task in getting to know, and learning to read correctly, those forms of expression which are at the disposal of such children and then finding a medium to transmit information to them in a way they can grasp, i.e., through gesture, facial expression and the whole situation.
The term "communication" is used here, therefore, in a very broad sense. It is a concept that embraces every form of behavior involving two persons, based on reciprocity, on meaningful — but not necessarily verbal — transmission of information, states of feeling, intention, and so on. For instance, it includes also the behavior of the severely retarded child whose inarticulate sounds are modified somewhat according to the responses of his mother.
The teacher of retarded children must therefore be especially sensitive to every non-verbal signal emitted by the child (gesture, tone of voice, facial expression). The teacher who assumes the attitude, which in our Center we call "set for reception", is at the same time satisfying the next basic social need of the child, i.e., the need to be noticed.
To be noticed

Pedagogical literature has always stressed the need for social acceptance, success, reward and praise. Recently, a higher place in the hierarchy of rewards is being given to merely paying attention to the child, noticing him — or the converse, ignoring him or removing attention from him, which is felt by the child as one of the heaviest of punishments.

We cannot overestimate the importance of the teacher’s developing the habit of paying frequent attention to each individual child, that is, turning to him from time to time in a non-evaluative manner (neither injunction nor interdiction, neither approval nor disapproval). Illustrations would be: “Oh, here you are”. “I see you’ve finished your breakfast”, “You’ve got new boots on”, “Where is Tommy sitting? There he is”.

One can also show a child he is being noticed in a non-verbal way, by putting a toy in front of him; or picking up the object the child is working on and looking it over, then giving it back to him. One can place a hand on his shoulder for a moment. One can merely look at the child, making sure that he is aware he is being looked at.

A child on whom attention is regularly bestowed becomes more attentive and heedful. His own attention becomes more often directed to the external world because he is constantly expecting the next sign of interest from the adult.

This accounts for the fact that what we call in our Center the “therapy of noticing” is especially effective in counteracting stereotyped behavior or persistent lack of interest in the environment.

If the child is often and systematically noticed when he behaves acceptably, he does not need to draw attention to himself in a provocative way. Teaching experience shows us that a great many manifestations of educational difficulties as well as badgering, noisy or aggressive behavior are simply the result of a lack of other means to draw attention to oneself.

The “therapy of noticing” is indispensable especially in cases of deaf and blind children. Their deficiencies often prevent them from “noticing that they are seen”; on the other hand, it is harder for them to draw attention to themselves in an active way.

The child who is regularly noticed learns in turn to take note of
himself. This is the way — and the only way, we believe — he can attain an elementary feeling of his own identity and worth. Once he has acquired the ability to perceive himself as a person, the child begins gradually to gain a certain degree of independence in his evaluation of his own behavior. Waiting for the next evidence of attention directed to him, he begins to anticipate: "Do I now deserve praise or blame"? In this way, by degrees, he learns to control himself also in the absence of adult attention.

It is important here to differentiate clearly between signs of neutral attention, and bestowal of praise or reward as ways of taking heed of the child. Neutral attention evokes less emotional strain in the child. Remember that the severely retarded child often displays excessive emotional sensibility; even a word of praise can overload the weak nervous system when the child is in a low frame of mind, and all the more taxing is prolonged uncertainty: "Will I get a word of acceptance, and when will it come"?

The teacher should therefore work toward maintaining a balance between "neutral noticing" or non-evaluative attention, and praise or disapproval of the child. The more pronounced the child's retardation, and particularly behavioral disturbance, the more mere noticing should have precedence over evaluating.

To be among other children

The need for contact with others of the same age usually appears somewhat later in retarded than in normal children. Yet it is a very strong need, even in cases of very severe retardation where the only available form of contact is simply to be among children. In some cases, we have observed such retarded children join spontaneously with other children encountered for the first time. But little is gained by introducing a child into a group of his own age too early or too abruptly; this can only lead to anxiety caused by separation from familiar adults and home surroundings.

A small number of severely retarded children cannot suffer being in a group, even in later childhood. This is thought to be due to sensory hypersensitivity. These children tolerate poorly any noise or movement around them. In such cases methods of individual therapy, described in more detail in Chapter 3, may help. Hyper-
sensitive children are brought into group activities gradually and with extreme care to avoid anxiety and general malaise.

**Feeling of personal worth and possession of a social role**

Irrespective of the level of development, the social personality can take shape only when a balance exists between the feeling of a task's difficulty and the feeling of its manageability. More simply put, the child is ready to try to do something only when he sees a real chance of success.

We know very little as yet about the mechanisms governing the maturation of consciousness of self. In respect to retarded children, this has not been studied at all. But we do know that such children use the words "I", "me", or their first names, or simply point to themselves, most often in situations where they have accomplished something with success.

The experience of success is a very important condition — though not the only one — for acquiring a feeling of one's own worth. To start with, the small child's only source of such a feeling is adult love and approval. Then, as the social personality matures, we observe more clearly that the evaluation of oneself rests increasingly on objective criteria, such as fulfilling some useful social role. The need comes to the fore to perform useful jobs and to collaborate in those activities needed for the whole social group of which the child is a part. There are many retarded children who show a persistent dislike for any nursery-school or "academic" type of occupation but enjoy doing something that is of real use to someone. There is spontaneous delight in doing a job whose sense is fully grasped. For instance, older children perform household tasks willingly and with sustained effort (see Chapter 5).

Viewed from the vantage point of psychological need, it is of no importance whether the child's task is of real value; of sole importance for the child is that in doing this task — even the simplest — he feels that he is needed.

Only very few of our pupils will ever be capable of earning their living in a sheltered workshop. But to involve every child, even to the smallest degree, in some useful work is to meet one of his most essential psychological needs.
Socialization of drive needs

There is a group of needs directly connected with preservation of the individual and the species as a whole. These needs, though basically instinctive, are not blindly automatic in human beings as, for example, in insects. In humans they involve learning and, what is more important for our present topic, they are always satisfied in social situations. For instance, eating takes place in a group setting and involves strictly socially defined behavior; sexual needs are met in the framework of custom-set forms, laws, and so on.

It should be remembered that primitive drives may become socialized even in the profoundly retarded. In considering needs connected with instinctive drives, account should always be taken not only of the biological goal of the drive but also how far it may be socialized and to what degree there is understanding behind it.

Need for food

Bodily nourishment satisfies — or ought to satisfy — four psychobiological needs:

a) providing food for the stomach and eliminating hunger pangs,
b) eating, sucking or chewing as activities pleasant in themselves,
c) sensations of taste and smell as sources of pleasure, and
d) the agreeable social contact of a shared meal.

Limiting satisfaction of the need for food to the first element, with neglect of the other three, is a lopsided educational approach, the effect of which can often be found in the retarded, i.e. a blind greed based on the uninhibited drive to ease hunger with anything in any amount.

The act of eating can and should, even for the profoundly retarded, contain a cognitive element (taste, smell and appearance of food, as well as attempts to learn how to eat by oneself) and also a social element (collaboration with the feeding partner, imitation of other children during eating, serving and passing food to all sharing in a common meal).

Socialization and "intellectualization" of the act of eating is especially important in educational work with the profoundly retarded child. For many, it may be the first situation in which the child can be socially.
Sexual need

From the early childhood of both normal and retarded children, there is evidence of their striving to acquire the psychophysical features belonging to their sex. This striving plays a significant role in the formation of the social personality, for the accepted mature social personality is either male or female.

By adolescence the need emerges for boy-girl friendships. Retarded young people should be able to realize this need in a socially acceptable way, in co-educational training centers and later in youth centers and clubs, where conditions exist for socializing the sexual drive. Many teen-age girls — and boys as well — display a strong protective attitude to young children. Most likely this is a form of expression of the parental need, and at the same time an imitation of parental roles. The need for sexual activity in the strict sense is, on the whole, weaker in the retarded than in normal persons. It is highly probable that this is related to an overall biological deficiency.

Manifestations of non-socialized sexuality in the form of attacks upon girls, exhibitionism, and the like, are rare in the severely retarded. They may develop only in cases when — due to lack of proper educative influence — optimal social personality development has not been attained. This is similar to symptoms of blind greed in cases when the eating drive has not undergone socialization.

However, a very frequent and persistent symptom in the mentally retarded is that of masturbation. In some cases it substitutes for the satisfaction of sexual needs, but most often there are other mechanisms underlying masturbation. Like rocking and finger-sucking, masturbation has the role of "universal comforter".

Each of the above activities providing auto-satisfaction is limited to experiences within the area of one's own body. Behind them all, including masturbation, lies an incapacity to derive pleasure and security from the outside world, and first of all from social contact with familiar adults. To counteract the masturbation habit, we should consider therefore which needs have not been satisfied, and constitute the cause of the tension released through masturbation. In the severely retarded it is usually the unsatisfied need for contact with an adult that is the main source of tension; and it is often accompanied by symptoms of anxiety.
Masturbation is not necessarily connected with sexual maturity; very often it occurs in small children, both normal and retarded. But even when the main reason is an unsatisfied sexual drive, masturbation can be decreased or even stopped through satisfaction of other social and affective needs (see the case of Tom in Chapter 3).

Need to display aggressive and defensive behavior

Outward manifestation of aggressive impulses is one of the basic needs of both the normal and the retarded child, but it should be expressed in a socially acceptable form. A total incapacity for aggressive-defensive activity ranks among the most serious symptoms of a disturbed social personality. Thus we cannot equate the term aggressive with naughty or bad, or the term non-aggressive with well-behaved.

Knowing how to defend oneself in the normal conflicts that arise among children is one of the important constituents of the child's sense of security and independence. Like the drives discussed earlier, aggression also must be socialized, held within bounds, expressed in forms that are acceptable and — above all — it should be balanced with friendly interplay. That is why children's games should include those that facilitate the release of aggressive tensions in an admissible way, such as tug-of-war, snow-ball fights, dramatized conflicts, and the like. If not socialized, this drive may find an outlet as blind aggression, i.e., attacks upon the first person at hand, destructiveness or — as in cases of severe personality disorder — in autoaggression.

Excessive aggressiveness is usually caused by an intense feeling of threat or the incapacity to acquire a feeling of one's own worth by other means. Blind aggression goes generally with impoverishment of other forms of social contact.

In short, the child needs an outlet for his aggressive drives within limits of reasonable tolerance but never to a degree that would interfere with his position as a socially accepted individual.
Needs to be met for achievement of psychomotor development

To achieve mastery of body movements

This need cannot be overestimated, for the motor element is integrally tied up with every manifestation of psychological activity, barring none. We shall present here only a few brief statements to substantiate the point of view that satisfaction of the need for purposeful body movements constitutes one of the most important goals in the education of the mentally retarded.

1. Physical exercise has a favorable effect upon all the basic physiological functions. This refers especially to heart action and respiration, which enhance the oxygen supply to the whole body, including the cerebral cortex. Thus, movement fosters a general sense of physical well-being.

2. By the same token, physical exercise promotes general psychological well-being. This is best illustrated by the vivid reactions of pleasure displayed by children while moving, especially when accompanied by music.

   Observe a group of children during a rhythmics class. As their running speeds up, faces light up. Color brightens in the cheeks, eyes sparkle, breath deepens. If curves were plotted for increasing speed of movement and for intensification of pleasure in the children, these curves would undoubtedly run parallel.

3. Muscular strength is a necessary condition for any effort in work or play. In particular, arms and shoulders should be strong enough to serve as adequate supports for the hand to perform its precise movements, as in building and drawing, just as a tool must be well gripped to work effectively.

4. Loss of balance is known to be one of the strongest stimuli evoking fear. The retarded child ordinarily starts walking later than the normal child. Due to his larger bulk and weight his tumbles are more painful than those of younger children learning to walk. This early experience lies behind fear of heights and fear of falling, which in turn enhance an attitude of anxiety. For these reasons, exercises that
gradually build up confidence in motor activity are of considerable significance for the general attitude of the retarded child.

5. Psychological tension and a sense of uneasiness is often externalized in tense movements such as wriggling, grimacing or general restlessness. These manifestations are among the most common behavioral problems in the mentally retarded. Commands ("Stop squirming at once!") rarely serve any purpose, and if so, only briefly, for reprimands intensify still further the psychological tension subsequently externalized in hyperexcitation.

However, these movements may be greatly reduced by helping such children to master voluntary performance of gross body movements. Maintaining an immobile position may look like passivity but is in fact a form of real, though invisible, motor effort. The child must therefore be helped to learn how to execute deliberate movements accurately, which includes how to stand still.

6. Mastery over gross body activity, in particular an erect head while walking, is of utmost importance from the point of view of the attitude of others toward the mentally retarded person. Motor awkwardness is often the reason why children reject the retarded playmate. Likewise it frequently evokes tactless and hurtful remarks of pity from passers-by or fellow passengers in public means of transportation.

7. Perceiving his own motor activity is essential for the image the child creates of himself, which is an extremely important factor in proper personal-social development. Physical exercise involving the whole body helps the child build an image of his own body as an effective instrument of action.

In many disorders, not necessarily neurological but also emotional, this internal image of one's own body is incomplete or deformed, as shown with particular clarity in self-portraits with missing legs (drawn by the child who cannot or refuses to walk) or with missing arms (drawn by the child who often refuses to use his arms).

8. A rudimentary non-verbal awareness of general conceptual notions of time and space is normally acquired during the first year of life. Such notions include, for instance; together and apart, far and near, the other side, and many others; they are acquired as the
infant is carried about by his mother, and later when he creeps or walks in a purposeful way. He learns them in a non-verbal manner as he bypasses objects, moves around and behind them, crawls over and under them.

Severely retarded children most often have a very poor grasp of these notions. Purposeful gross motor activity helps them to acquire such an orientation. Therefore physical exercise has basic importance for their mental as well as physical development.

9. Similarly, moving about plays a role in developing the most elementary forms of social awareness. Moving among others, passing by them, following them in a line, standing together in a row, holding hands in a circle, are obviously social behaviors, even if any other form of interaction is missing, as is the case for many severely retarded children.

10. Severely retarded children understand physical exercises much more easily than any other educational activity. This is probably explained in part by the fact that the child is better able to understand a command in a situation where he can imitate others performing the same actions. Moreover, if the order is accompanied by music; the rhythm of the child’s own movement is a reproduction of the rhythm of the music, and therefore is much more easily perceived, and more accurately performed.

Therefore, the more the child is retarded, the greater is his need for motor activity.

**To make use of all sensory modalities**

Touch and feel of one’s own movements. The sensory organs have a natural order of maturation. The senses we call proximal, i.e. touch, perception of the position and movement of one’s own body (kinesthetic sense) and sense of equilibrium are ready to work earlier than the “distance” senses — hearing and sight. For instance, when both visual and tactual stimuli act simultaneously on the one-month-old baby, he will most likely react to the latter. But the two-year-old will probably react more strongly to the visual stimulus.

For the child on the pre-verbal (or non-verbal) plane of mental development, tactual and kinesthetic experience, combined with visual
and auditory sensations, form the basic source of knowledge about the surrounding world.

In addition, touching objects can be a source of pleasure in itself, for instance, caressing a soft fur, running sand through one's fingers, squeezing and molding clay, and so on. Some children, normal as well as retarded, who are reared in urban conditions, often show a fear of touching anything that might soil them. This fear usually is the outcome of an exaggerated stress on clean hands, and it makes some children feel distaste at touching materials like plasticine, cake batter or dough. This prevents the child from participating in many household and creative occupations.

Equilibrium is another sense modality that plays an important role. The soothing effect of rocking is universally known. Rocking lulls the crying infant. Normal adults often relax to the to and fro movement of a rocking chair. Retarded children in particular often seek relaxation and pleasure in rocking movements. While this is not abnormal in itself, the habit, if persistent, is evidence that for some reason the child is unable to find pleasure in other forms of activity. This is the signal for the teacher to pay close attention to other forms and possibilities of satisfying the child's needs, and in particular his social needs.

Readiness to hear and see. Stimulation through the proximal senses often has a stronger effect on the mentally retarded, even of school age, than stimulation through eye and ear. The more profound the retardation, the more this holds true. Also in psychotic and “autistic” children the proximal senses are relatively more sensitive than the “distance” senses.

Children with immature sight and hearing, i.e., with predominance of proximal sensory perception, have particular trouble in making social contact. Due to difficulties in focusing attention on the face of a person (visual stimulus) and on what he is saying (auditory stimulus), they act as if contact with people held no interest for them. And yet these children are generally in great need of close contact with people and cooperation with them. However, communication with such children is possible mainly through the proximal sensory organs. Children with apparent “lack of contact” can feel lively pleasure when touched...
When we address a child with immature “distance” senses, our words should be supported by touch. A verbal command may not be carried out, but the same task will be willingly executed when, for example, the child is gently taken by the hand and led to the object to be picked up.

How to promote visual and auditory awareness in the severely retarded. First of all, we must create for the retarded child conditions that favor the ripening of his perceptive processes and that permit sight and hearing to gain a superior sensitivity, though never to the exclusion of the other senses.

There are three important points for the teacher:

a) Visual and auditory stimuli should be connected mainly with gratifying experiences. The child who is “rewarded” in this way will show a mounting readiness to look and listen. This is particularly pertinent for children habituated to pleasure-seeking in the body area, having sources in the proximal senses (as, for instance, masturbation, rocking, or blind greediness), and constituting for them a form of escape from the anxiety aroused by visual and auditory experience.

b) Visual and auditory stimuli should be comprehensible to the child. Stimuli that are not understood evoke a feeling of insecurity. Therefore, words addressed to the child should be clear and simple, and strengthened by gestures. Also, what is given to the child to look at should be either already known to him or shown in a way that does not arouse uneasiness.

This point is of major importance for children with stereotyped behavior involving seeing and hearing, for example, stereotyped speech or rhythmic swaying of objects in the field of vision.

c) The third principle is that intensity of visual and auditory stimulation should be set according to the child’s level of sensitivity. It has to be borne in mind that hypersensitivity, especially of hearing, is a very frequent symptom in the severely retarded.

Ordinarily a child can protect himself from excessive visual stimulation by turning his head or shutting his eyes. But it is more difficult to cut himself off from the world of moving things and persons, an object in motion is always a stronger magnet than an object.
Thus many retarded children are especially restless and excitable in moving vehicles, in crowds and at social gatherings. But the hypersensitive child is particularly handicapped amid excessive noise, as he is unable to escape from it. Therefore we shall devote more space to the problem of auditory hypersensitivity.

**Hypersensitivity to auditory stimuli.** Mentally retarded children often show special liking for music, which should be clearly differentiated from mere noise. Musical sounds form a sequence of stimuli arranged within a melodic and rhythmic frame. Besides simply stimulating the ear, music contains the element of order and predictability. Noise acts quite differently. Under the influence of non-musical noise the children become restless or react aggressively and inadequately to the situation; some children even begin to cry. Remember that the mentally retarded (especially those with symptoms of “autism”) are hypersensitive to non-musical sounds in proportion to their fondness for music.

Ordinarily, retarded children have trouble listening to speech even in a quiet setting; in noisy surroundings the teacher’s words are practically incomprehensible to them.

Another aspect of the same problem is the particular sensitivity of the retarded to instructions and commands given in a raised voice. A harsh shouting voice evokes in them an extremely strong feeling of discomfort, regardless of what is said, and produces irritation and failure to obey. The teacher’s most common error is to respond to the child’s lack of comprehension or failure to react by repeating the same command in a louder voice, as if in this way the child will better grasp the instruction.

Such a procedure is effective with children who are hard of hearing, but with the hypersensitive child it totally misses the point. In the latter case, lack of response is certainly not due to failure to hear the instruction but rather to failure to understand it or to slow intake of the content. Of course, in such cases the command should be repeated, not more loudly, but more clearly and with greater stress.
Need for learning and exploration

Let us recall that familiarity with one’s surroundings is necessary for one’s very existence. In the life of primitive man, recognizing dangers and differentiating between what is edible and non-edible were factors that determined his survival. In present conditions of civilized living this connection is not so direct but undoubtedly continues to exist.

The need to acquire knowledge has developed in man to an immensely high degree. This need manifests itself in the mentally retarded as well. In earlier textbooks the view was often expressed that the severely retarded child was totally bereft of the spontaneous need to know and learn. This followed from the implicit assumption, accepted until fairly recently, that learning only means getting knowledge through the spoken or written word. Now it is recognized that cognitive needs appear strongly in the years of infancy and are met by spontaneous activity to explore the external world through all the sensory pathways.

Accepting this newer and broader outlook on cognitive needs, it is our claim that the severely retarded also display a spontaneous need to cognize the world, but on a plane corresponding to the level of mental development they have attained. This means that in the retarded child the successive forms of cognitive needs appear later, since in his case each developmental stage lasts longer.

Most of the children of this category will never be able to know the world through words and abstract concepts, but the need to acquire knowledge shows itself clearly even in the severely retarded child provided he is given the opportunity to explore on his own level of mental development.

Recognizing the fundamental value of non-verbal learning

An experiment conducted in our Day Center has provided some interesting findings on non-verbal cognition. A group of severely retarded children (I. Q. of 20 and below), who displayed a lack of interest in almost every type of nursery-school occupation, were given the opportunity to explore at will objects new to them (flashlights, rims of eye-glasses, boxes of all sizes and shapes, machinery and so on). Given full freedom to examine these objects by
eye and hand, with no effort made by the staff to teach them names or issue verbal instructions, these children showed a normal exploratory behavior at the level corresponding to their mental age, that is, comparable to that of children aged 15 to 24 months.

When we analyze the ways that cognitive needs are shown in the mentally retarded, we should always bear in mind that the fullest manifestations of these needs will be found in the child’s own spontaneous activity and not in response to verbal explanations from the teacher.

Lack of interest in talking or even in pictures does not imply a total absence of the need to cognize; it merely means that the child is still on the pre-verbal plane of development and that we must deal with him precisely on this level.

Spontaneous play is the fullest expression of the child’s cognitive need. It is therefore a major task for the teacher of the retarded to create opportunities for this need to be realized. Too often, desirous of “accelerating development”, we get the child into overly complicated play for which he is yet immature and remove from him those toys which we think are too childish and “uneducational”. The result is that many retarded children withdraw from any kind of play at all. For instance, some girls never play with dolls because doll play was forced upon them when it would have been appropriate for them to indulge in sand play. Then when the child matured to an interest in dolls, she was in turn forced to look at picture-books which again were too difficult for her, with the result that they failed to arouse her interest.

Some factors inhibiting the natural need for activity

The natural need for activity is quite often inhibited due to inappropriate approaches to the child. Let us discuss the mistakes most frequently made in this respect.

Excessive corrective interference. Spontaneous activity develops best when it is crowned with success. A pupil willingly performs a task for which he is rewarded. If his poor performances are regularly punished, he will become disinclined to carry out those and will do so only under pressure. As a result, his performance
will continue to deteriorate. These are obvious statements, but it is worthwhile to recall them in respect to the mentally retarded.

Of course, it is far from easy to apply the principle of the "pedagogy of success" with such children, and it demands much effort and invention from the teacher. The retarded child performs every task with less skill than his age norm: by comparing one with the other we would never have grounds to praise the retarded child. But it is different when we take into account the amount of effort that he must make to overcome his shortcomings.

A further difficulty we face in applying the "pedagogy of success" to severely retarded children is the corrective attitude called forth by the child's helplessness. Trials at doing something independently, especially the initial trials, are always blundering. The child's early block constructions are askew; his efforts to eat alone are messy; he clears the table sloppily; he pronounces badly or unintelligibly. The teacher's natural reaction is to intervene in the child's activity. Even if he abstains from critical comment, he usually tends to improve upon the child's work and dictate what to do next, such as "Put the block here", "Speak clearly", or "Make a sandpie now". Thus the child's activity takes place in an atmosphere of continual strain.

In extreme cases this may lead to authentic cases of "allergy" to any verbal instruction and to a complete refusal to comply. Some such children require a rehabilitation program of collaboration with a therapist excluding for a time all verbal contact.

Some educational pressure is clearly a necessity for the mentally retarded as well as for the normally developing child. But, if excessive, it has an especially wearing effect upon the former child and often causes anxiety. If such pressure is applied constantly, the child may in time lose all need to be active on his own. His natural and normal pleasure in activity becomes repressed by fear of disapproval and constant intervention in the spontaneous stream of behavior. Therefore, corrective pressure should be limited to a few minutes at a time.

Over-training. The nervous system of the mentally retarded is weak and tires easily; in consequence such children need more rest than their normal age-mates. If we fail to take account of this and require the child to make too intensive or too lengthy an effort, we can eventually bring about the symptoms of "over-training". Over-
training may even lead to a complete loss of capacity to carry through any task calling for mental effort. In drastic cases the child may refuse any cooperation with the teacher, and sometimes acute symptoms of neurosis are also displayed. Such symptoms are often treated as laziness, disobedience or the badly defined term "negativism". As a matter of fact, signs of lack of cooperation from the child — if systematically occurring over a long period — are simply the way the child protects his over-loaded nervous system. This is biologically purposive behavior, similar to our unwillingness to exert ourselves after a wearing period of physical exercise.

In cases of extreme overtaxing of the nervous system expressed in a total refusal to cooperate and in a state of chronic irritation, the only way out at times is to excuse the child from any occupation for several days or even weeks, while bestowing on him signs of interest and friendliness. Usually after a time the child will spontaneously join in activities.

It should be remembered that for the retarded child activities involving mental concentration require much more effort than those merely calling for physical effort, and his power of endurance during the former activities is much less than in the latter. Therefore the general rule is: exercises requiring full focus of attention and engaging the associative functions should not last longer than about ten minutes at a time. Manual work involving neither associative effort nor comprehension, and gymnastics, can last longer but not more than half an hour, and should be followed by a break.

In the next chapters the reader will find more detailed descriptions of the way we attempt to follow these guidelines in the daily life of our Day Center.
In this chapter the pupils of the Day Center are introduced to the reader in brief characterizations. Each pupil who is here described has been with us for the entire three year period of systematic observation reported in this book. For those pupils who were not at the Center during this whole period, only essential data are given. Later in this chapter, the group pattern of social behavior is graphically presented.

Our intention is to show our pupils as they are perceived by the staff in the daily life of the Center. They are not presented as “cases” but rather as persons interacting with other persons, expressing the way they feel and contributing in their own unique fashion to the social life of our community.

Each pupil has been given a common English name selected at random to avoid any resemblance to their original names.

Section 1
Short characteristic sketches

by Hanna Deles

We have chosen to introduce our pupils by starting with those who are doing well at the Center, without regard for degree of retardation. Alice and Jack are examples of very good social adaptation, beyond expectations that might be warranted by their low I. Q.’s.
Alice, aged 18 to 21 years, I. Q. 22. Down's disease.

Alice is short, corpulent in build, and moves in a well-coordinated way. Her features are mongoloid.

Once Alice starts a task, she finishes it; she works systematically and precisely, with a long attention span. Her favorite occupations are household tasks, such as washing dishes, sweeping, tidying, helping to prepare meals, and so on.

Alice also draws well, cuts out and paints. From the point of view of color and pattern, her work is interesting; her subjects are usually human forms, of which the central and dominating one is “mother” (see Plates IV and V).

Alice’s well-controlled behavior is best seen at rhythmics lessons, where she displays a good sense of rhythm.

Although Alice takes pleasure in signs of approval and overtures of friendliness, her emotional attitude to her surroundings is lukewarm. In general she is passive in her attitudes and lacks initiative. She does the tasks that are set for her. Being highly suggestible, she copies other children’s behavior, including their poor behavioral forms. She also imitates the teachers and often takes over the role of “mentor” to others. She particularly enjoys Francie’s company.

At times Alice masturbates, using a plush teddybear.

Alice speaks rarely and rather unintelligibly; despite this she is able to communicate freely and can convey the wants of the other children. Fairly recently, Alice’s speech has made considerable progress. She is using longer sentences, in which appear such conjunctions as: also, either.. or, and others. Alice uses the pronoun “I” in reference to herself.

As Diagram 1 shows (see page 54), Alice’s score on personal-social development is higher than that predictable from her mental age.

Jack, aged 19 to 22 years. I. Q. 10. Spastic.

Jack is tall and big-boned, with very large hands. Despite his large head and protruding teeth, his looks are not displeasing. He is always dressed cleanly.

Jack’s motor coordination is poor. When he was admitted to the Center he could not walk without support. After he had received individual lessons, he began gradually to walk with great caution, hands outstretched, fear written on his face. But this new-found ability
seemed to release in him an interest in the world about him and arouse a desire to be more active. His favorite occupations are throwing objects on the floor or spilling numerous small objects from a container; he watches with satisfaction the attention which he evokes this way. But Jack is not otherwise neglected by the staff. He is much drawn to people; he often clutches at their hands as they pass by and strokes his own head with them. But no one except his mother has been singled out affectionately as far as we have noted. Situ on a chair, Jack likes to watch the other children moving about and often smiles at them. Earlier, when accosted, he was unable to defend himself; he backed up with half-closed eyes and pressed his arms against his chest. He is very fearful of his own movements and of motion in his surroundings.

Jack does not talk; his vocalizations are inarticulate but supplemented with specific gestures understood by his mother and the Day Center staff.

Jack enjoys coming to the Center. From the moment he began to walk, considerable progress in several areas has been noted. He grasps conversation and joins in by pointing to what is being talked about. He has learned to defend himself by hitting and kicking, and occasionally accost others. He displays less fear of walking.

Dick, aged 11 to 14 years, severely retarded. A deaf and spastic child. Dick is short and thick-set with a gentle smiling face. He drools, slouches over, walks uncertainly, rocking with his whole body, dragging his feet and often failing to notice obstacles in his path.

Dick is very industrious. When he finishes one job he looks immediately for another. His favorite occupation is block-building; he produces complicated constructions of houses. His greatest pleasure is derived from performing familiar occupations, always much the same.

During the past three years, Dick’s development has gone through three distinguishable stages. At first he was a terrified child, often in tears. When accosted by other children he curled up in fright. Often he used to laugh in a loud disagreeable way without obvious connection with the situation. He seemed to think up reasons to stay home from the Day Center where he clearly felt ill at ease.
After a few months, Dick adjusted to the Center. He established no contacts with his surroundings, however, and fenced himself off from others by his block constructions. Then, in the winter of 1970 special attention was directed to Dick. Every teacher at least once a day devoted some attention to him. Individual sessions with him were conducted before the mirror to improve his posture and make him familiar with his body build and movements. The effect was that Dick began, on his own, to find opportunities to contact others. At present Dick (who is deaf) uses his eyes in radar-like fashion, even when busy with his favorite blocks. He is ready at all times to take in information visually, answering very promptly with a smile. He demands signs of approval from an adult for his behavior. Often he points to himself with a look of satisfaction as if to make plain that "I did that!" He can now defend himself when attacked, and at times can punch others himself. He displays generally neither attraction nor antipathy toward the other children. Dick does not speak; he communicates through gestures. Recently he has begun to gesticulate to recount his experiences.

It is worth noting that Dick's drawings remained for many months on the level of scribbling. Following the therapeutic treatment mentioned above, Dick began to draw. He reproduces human forms. In his self-portrait (see Plate VIII) the legs are asymmetrical (it is to be noted that his left leg is more affected by spasticity).

Dick is a multiple-handicapped boy who is now well-adjusted in the Center. Part of the credit is undoubtedly attributable to the individual attention he received in 1970.

The next three pupils to be introduced are deaf children. As mentioned in the Foreword, they are intellectually above the average of the group attending the Center. If not for their hearing handicap they would be attending the "Life School"; in Billy's case, he would probably be even above that level. But due to the fact that these children are unable to benefit from the special methods of instruction of the deaf, for which normal mental development is a necessary condition, they remain at the Center, with the perspective of passing directly to the sheltered workshop at the age of 18.
Francie, aged 15 to 18. Deaf, moderately retarded.
Francie is of average stature, thick-set and physically mature. Her broad face has prominent cheekbones and slightly slanting eyes. Her thick black hair is none too well groomed.
Francie has very good motor coordination. She is willing to undertake any task. Her orientation in everyday situations is excellent and she displays much initiative. Francie has a sense of community with the group, particularly with the other deaf children and especially with Johnnie. For Johnnie she feels an obvious and mutual attraction and acts coquettishly with him. Francie’s attitude to the other children is a nurturing one. She likes to dress them, organize their occupations, watch that they do not squabble or break away from the group. She clearly identifies herself with the teachers.
Francie enjoys practical occupations such as tidying up, getting meals ready, washing up. She can focus attention on the task at hand and carry it through to the finish. In handwork activities and in unknown situations Francie waits for instructions. In the manner typical of the deaf, she constantly checks on what others are doing. She often forgets instructions or else has not grasped them well. She learns through imitation.
Despite her deafness, in everyday situations Francie comprehends most orders excellently. She communicates with ease through gestures, best of all with the other deaf pupils.
She is very sensitive to praise and insistently demands approval by displaying her work. She claps her own hands to show her satisfaction with herself. Francie suffers from an insatiable hunger for affection. She appreciates the slightest show of friendliness: a smile, a pat on the head.
Francie has times when she is stubborn. These are moments of insurmountable difficulty and have to be allowed to pass; afterward she excuses herself. These times occur most often in unfamiliar situations, as for example at the summer camp or when things happen contrary to her expectations. On being scolded she takes offense ostentatiously, shrugs her shoulders, and makes loud angry noises. Most of her movements are over-exaggerated; she expresses her feelings by broad swinging jerks of her whole body. This is most glaring when Francie is deeply moved; clearly this is dependent on the intensity of her states of feeling.
Of late Francie is less ready to take offense; her noise-making is tempered.

**Johnnie**, aged 14 to 17. Deaf; moderately retarded.

Johnnie is tall, strong and handsome. His appearance is rather sloppy; he is not overly clean and his clothes fit badly.

Johnnie has good motor coordination but does not like to exert himself. He lacks consistency, gives up work that is too difficult or dull. His favorite occupations are "adult" ones. He likes to join in sports, walks and excursions. He has a broad range of interests.

Johnnie displays leadership traits. He enjoys organizing games, issues orders to other children whom he often prods and pokes. He can be malicious and provocative in dealing with the weaker children. He knows polite forms of behavior, but can be arrogant to adults who oppose his will; on the other hand, he is smooth and even wily when it is a matter of winning something he wants.

Johnnie is hyperactive and hard to control. He does not speak but can communicate excellently through gesture. He knows the sign language of the deaf.

In 1972 Johnnie obtained a hearing aid and has learned to talk a little. Recently his behavioral excesses have become mitigated: he harries other children less and seems aware that more can be expected of him than of other children.

Johnnie's finger paintings give impressive evidence of his extreme impulsivity (see Plate VI).


Billy is slight, hunched, with uncertain gait and shaky balance. His small face is often lit with a friendly smile which, because of his neurological impairment, looks more like a grimace. He likes doing things and shows interest in every occupation. Often when by himself he looks for occupations that present problems, such as looking through a random pile of periodicals for the next installment of a comic strip. Billy always lays down a good plan of action, which compensates for his multiple handicap. His memory is excellent, his efforts sustained, his interest lively in everything going on around him. He likes to explore the workings of various apparatus, tools and machinery. Despite his lack of speech, one can communicate with Billy on any
topic. He transmits information about situations and experiences from home life. He establishes no close contact with the other pupils, to whom he is superior intellectually, and leans more toward adult company. The one exception to this rule is Johnnie, also a deaf mute on a relatively high level of mental development.

Since Billy is somewhat spoiled at home, conflicts often arise at the Center. He seems to assume that he has special rights. Despite knowing very well what is permitted and what prohibited, he dislikes finding himself in the wrong. Even when his misdemeanor is beyond doubt, he takes offense, breaks into tears and hides in a corner. Yet Billy is well liked by the children.

By mid 1972 Billy obtained a hearing aid and began intensively to learn to speak. From the start of the school year, he has been attending the "Life School" where he is managing very well.

In November 1972 Billy paid a visit to the Day Center. His former associates welcomed him warmly and he himself enthusiastically greeted everyone, most heartily Johnny.

In his mosaic composition Billy creates a self-portrait.

The next two children to be introduced have suffered from the effects of improper assessment of their true developmental capacities. Both Phil and Liza have fluent speech, a fact which undoubtedly was responsible for the impression that they were of sufficient intelligence for admission to the "Life School". However, their verbal skills were the only well-developed abilities they possessed. Phil, with his symptoms of severe brain damage, could do nothing with his hands. Liza was so severely maladjusted emotionally that she was unable to concentrate and share in any activity with others. Both of these children were removed from this school by the authorities.

In our view, their adjustment at the Center would have followed a different and more favorable course had they not suffered a prior frustrating experience of longterm school failure.

Phil, aged 12 to 15 years. I. Q. 22.

Phil is tall, slim and well-built. His pleasing, smiling face betrays no sign of retardation. Hyperactive, Phil never sits still but is constantly on the move except at meals; even then he has difficulty in remaining in one place; he gets up and sits down again, leaves the
There is a clear lack of coordination between motor action and verbalization. Phil often states what he is going to do, makes a plan, and then does something quite different. Despite adequate motor dexterity (he can ride a bicycle), he is incapable of executing some gymnastic exercises which are much simpler but demand understanding of instruction. For instance, he cannot walk from brick to brick spaced at normal stepping distances on the floor. He most often fails to grasp the whole spatial situation in relation to the instruction. His attention span does not exceed 3 to 5 minutes. In effect, he does nothing all day long; only during the final half hour does he perform a single task when it is made the condition for going home, and even then an adult must sit by him and keep urging him along.

Phil is well-spoken. His utterances have a logical quality lacking in those of other children at the Center. He possesses a large store of concepts. He joins in with adult conversation. However, aphasic features have been found in his speech.

What Phil says is unconnected with what he does, both in the emotional and executory spheres. Phil can criticize his behavior verbally, but this criticism is not accompanied with the normally expected emotional reaction. Even several disapproving comments addressed to him fail to evoke a reaction observable on his face, in his posture or in his behavior. He was noticeably impressed only when other children condemned his action by their attitude toward him, manifesting it non-verbally (see Chapter 5). Phil shows more reasoning power and more common sense in assessing his own behavior in those situations when he has a tactual contact with the teacher, for example, holding the adult's hand while walking. (Is this related to a sense of security?). Phil often holds small toys or objects in his mouth.

Phil likes to come to the Day Center. Separation from the group of children is a form of punishment for him. Yet he constantly attacks the others, pinching and hitting without provocation. On two occasions he has struck a teacher.

Phil's attachment to his mother is profound. During her absence for sanatorium treatment, he yearned for her and spoke of her constantly.

Phil's favorite occupation is taking walks. He must be closely guarded as he often darts out into the street without regard for traffic.
This boy possesses good manners and knows polite forms of address, offering his hand in the customary form of greeting. He can assist others to remove outer clothing, hang it up and offer a seat.

During the three years that Phil has been under observation, no progress has been noted in his behavior apart from an increased store of concepts on the verbal plane. His speech is practically normal (see numerous citations in Chapter 6), but his manual and graphic skills are, to all intents and purposes, nearly non-existent.


Liza is small and slight with mongoloid features. Her sparse hair is arranged in two plaits. Her appearance is clean but she is often dressed in overly tight or badly fitting clothes.

Liza came to the Day Center after five years spent in the "Life School". Requirements placed upon her in this school were too heavy for her capacities. Both at school and at home Liza was unaccepted. During the first two years at the Center Liza was decidedly against everybody and everything. Most of the time she sat by the stove, drilling and scolding dolls. During this period we did not force her to join in organized activities. Since then, dolls have been superseded by younger and weaker children. Liza's main dealings with these children consist in ordering and shoving them about. When invited to take part in some activity she usually refuses or resists stubbornly. She dislikes working at anything; an adult must sit by and keep encouraging her. The one occupation she enjoys is painting; most of her colors are dark and cover the entire surface of the paper.

Liza is very talkative. What she says often has no link with the immediate situation. She reproduces snatches of overheard talk and repeats stereotyped phrases such as "in the Hawaiias", "diapers", or "herring". Often her phrases would not pass the censor. Her favorite expressions are generally repeated at moments when all is quiet and others are concentrating on their tasks, thus distracting them. But sometimes her speech is meaningful; she can for instance excellently describe a person.

Liza is disliked because her behavior toward others is aggressive to the extreme. She hits and pinches; under the pretense of making advances, she can press and squeeze so as to cause pain, for which she slyly chooses moments when no adult is watching.
But ever so often Liza bestows attention upon one of the teachers. She follows her about, cuddles up to her, sometimes pinching and squeezing her forcefully, turns toward her constantly, speaks about her. No interest in rhythmics or music has been noted in Liza.

Recently more emotional stability is observable; she is less bullying toward the other children, and on occasion has joined in ongoing activities of her own free will.

Liza's projective expression has helped us to understand and help her. In 1970 her mosaic compositions were randomly made in black with some deep violet shades. In 1972 she began to choose bright colors as well, beginning with red, and arranging them in some orderly fashion (see Plate I).

Another pupil who is obviously performing below his potential is Jerry. We have not discovered the reason why he does not talk. Many observations point to emotional maladjustment; a background of anxiety might be the explanation for absence of speech.

Jerry, aged 12 to 15. I.Q. 25.

Jerry is sharp and observant. His great fondness for animals makes him eager to perform any activity connected with this topic. But Jerry dodges other activities he does not like, finds a hiding-place where he can stay unnoticed.

While dexterous at manual work, Jerry's general physical condition is only moderately good, due mainly to a slight contracture of the knee joints. But he enjoys performing gymnastics and, on his own, practices rather difficult movements. Ambition forces him to keep on practicing until he wins a word of praise; when other children ridicule him he becomes embarrassed and perturbed. On the whole, Jerry is quiet and well balanced, but he can behave very maliciously to the other children. He attacks from hidden positions, pinches and shoves. Jerry has a long memory for real and imaginary wrongs and can extort a revenge long after the event. He is a telltale.

Jerry manifests an insatiable emotional hunger. He snuggles up to adults, kisses them, waits for a warm smile or gesture in response, always seeks approval and displays jealousy when interest and praise is directed to another child.
Jerry tolerates with difficulty the presence of active mobile children. His preference is for passive children whom he can nurture. His attachment to Harry is described in Chapter 5.

Though lacking in active speech, he can say "Mummy" and "joojoo" (his own word) and his hearing and comprehension of speech is very good.

Initially uneasy in a group, he cried and hid in corners. He has now stopped crying, shown more readiness to take on tasks and falls less frequently into conflict with other children.

Jerry is the only child who has produced a "group portrait" in which he alone figures. The rest of the sheet seems to portray nothingness. Plate IV compares group portraits by Jerry and the sociable Alice.

Of all our pupils, Harry has the best manual skills but is among the least self-sufficient.

Compare Harry, for instance, with Alice. Alice cannot do much; her I. Q. is low; but she is not likely to behave in an irrational manner when unsupervised. Not so Harry.

Harry is very likely to commit absurdities. In respect to his low tolerance threshold he is comparable to the group (described below) of hypersensitive, profoundly retarded children. Compare also the place occupied by Harry in Diagram 1.


Harry is tall, slim, well-built, with a pleasant countenance and no features indicating retardation. He is not very carefully dressed. Despite his excellent physical coordination Harry fails in many gym exercises because he breaks away from the group activity and occupies himself with quite different things. He can perform precise tasks such as sewing, embroidery, and household chores such as washing, window-cleaning, house-painting and floor-waxing. But lacking a plan of action he is unable to execute many tasks for which he possesses the necessary skills. Often he falls into an undecipherable mood: he goes about the room humming, smiling, tapping, looking out of the window. Sometimes he searches for something for days and, if he cannot find it, is so disturbed that he sleeps badly at night and loses his appetite. When upset he squeals and slaps his right thigh; calmed by monotonous activities and situations.
Harry is very much attached to the Day Center and spontaneously recounts his experiences. Seemingly, he has no emotional contact with anyone here, but often he places his hands on the shoulders of persons he likes, strokes them, looks at their hair, and so on.

Harry is greatly attached to his mother and is disturbed by her absence. For a year after his father's death he kept asking: "Is Daddy coming?"

Harry is totally defenseless even to the point of failing to react to attack. His only form of self-defense is a piercing squeal. He reacts badly to any kind of change, such as a stay at the summer camp, his mother's absence, new teachers, and so on. Though he often detaches himself from his surroundings, he is well oriented in what is going on about him. He has a desperate fear of insects; if he spots one in his vicinity, he squeals with all his might.

Harry speaks in a high unnatural tone and with artificial scanning intonation. He never refers to himself as "I", but always in the third person. Often he is unintelligible as if speaking in mental short-cuts. When asked a question, he will repeat it a number of times, after which he appears to gain in awareness and finally his answer is fairly to the point.

Harry approaches cars, puts his hands on the hood. He has been known to jump out into the street for this purpose.

Harry sniffs at objects. He masturbates.

For a year Harry has been gainfully employed. This job involves counting valves in sets of five, cutting them to equal lengths, fastening them together, putting them into bags and gluing the bags shut. He works steadily for several hours daily.

Harry will remain on at the Center and there do his work since a transition to the noisier milieu at the sheltered workshop would inevitably evoke a state of hyperexcitation preventing him from holding a job.

Plate VII shows a finger-painting by Harry. It lacks a compositional axis as in the case of the profoundly retarded children. Despite this Harry can draw more skilfully than any other pupil at the Center (see his "group portrait", Plate IX).

Tom, Sam, Susan, Ted and Rose each have very different personalities but share one common trait: they have a strong tendency to react by different forms of autostimulation. The first three are acutely
sensitive to music, noise and excessive motion around them. (As mentioned above, Harry belongs to this group in this regard).


Tom is rather tall, slim, with a thin face and close-set eyes; his gait is asymmetric, rigid, poorly coordinated.

Tom loves to come to the Day Center though he shares in no collective activity other than rhythmics, walks and excursions. Best of all he likes solitude in the gym hall, lying on the floor and playing with a ball in an extremely elaborate stereotyped fashion. Often he goes out into the play-yard where he runs about or swings on the gate. He often breaks away, goes to the window, looks at the trees or simply stares straight ahead. He is fascinated by motion and can gaze for long stretches of time at rotating records, flying birds, swaying branches.

Tom is highly sensitive to music; his greatest reward is permission to go into the office and “play” on the xylophone, clarinet, or other instrument. He dislikes noise; hubbub perturbs him so much that he shouts, claps his hands, or strikes them vehemently against objects, rocks back and forth violently. Tom calms down when the time comes to dress for a walk; he walks quickly and often breaks into a run.

His hand-eye coordination is fairly good but his attention span is brief.

Tom masturbates. He eats from the plates of other children, leaving his own food untouched; drinks the remains of liquids from glasses and cups, and sips water from flower vases.

Tom knows polite forms; he can greet with a “military” salute, heel-clicking and hand-kissing. He kisses persons he likes on the forehead.

Tom’s speech is practically nil; he does not use verbal forms in expressing his wishes and experiences. But he knows some words and sometimes he talks with his father in the cloakroom. He also uses his own “words”.

For a long time Tom made contact with neither children nor staff. He did not permit himself to be touched or patted; he did not look anyone in the eye or in the face.

**Note**, since his individual therapeutic treatment, certain changes
for the better have occurred. Masturbation has almost disappeared; rocking is lessened; speech is more frequently used. Tom often looks a person in the eye now and at times spontaneously seeks contact with an adult. For a detailed description of individual therapeutic work with Tom, see Chapter 3.

Tom’s finger-painting (see Plate III) reflects his high impulsivity in vigorous leftward sweeping circles and a coexistent anxiety attitude (dots to the right).

**Sam**: aged 13 to 16. I. Q. 18. Down’s disease.

Sam is loved by parents and siblings. Father, who takes charge of him at home, is the object of Sam’s deepest attachment. Sam waits for him daily and resists leaving the Center if someone else comes for him. Sam tries to hide his misdemeanors from his father.

Sam is short and tubby, with a broad mongoloid face. He limps, one leg being shorter than the other, and dislikes walking.

On his own Sam will not join in any activity other than rhythmic and even then not always. When urged to take part in activity, he feigns aches and pains (headache or toothache). If involved in some activity despite his resistance, he becomes angry, throws objects, soils himself and everything about him.

Sam enjoys coming to the Center; to be kept at home is for him a kind of punishment. He is hypersensitive to noise; a sustained racket or loud instructions evoke a state of tension displayed in a terrified facial expression and sometimes tears or outbursts of anger. Outbursts can also happen unexpectedly. Some minor event may infuriate him and he will begin to shout, throw chairs about, and sometimes strike out at anyone within reach (most often his mother). Attacks of rage are uncontrollable, and eventually pass; afterward Sam is mild and friendly.

Evidence of Sam’s tendency to avoid stimulation is his exceptional attachment to Peter, a profoundly retarded boy with a pleasing countenance, who neither speaks nor moves on his own and whose facial expression never changes. For hours Sam can gaze upon the silently sitting Peter. When Peter is absent Sam misses him. In Peter’s presence, Sam can be more easily induced to do something.

Sam has a good ear. He distinguishes between musical ensembles, their songs and performers, whom he knows by name. Best of all
he likes records, which comprise the only true reward for work or
good behavior. Sam has little to say though he can speak with ease
and fluency. He often indulges in monologs in which he evaluates
his own behavior critically. He is a good imitator of voices and ges-
tures by other children.
He has enuresis, intensified at times by situational change (summer
camp, reduced attendance of children at the Day Center, delayed
return home of his father).
Most of the time Sam sits on a chair with a leg tucked up under him,
holding his "talisman" (a wooden hammer) in his hand. At an earlier
period he used to wave this object before his eyes.
Sam makes no progress; on the contrary during the last few months
he has deteriorated, for unknown causes. He is again enuretic in the
daytime. He resists constantly, often falls into a fury, totally
refuses
to work or converse.

Susan, aged 19 to 22. I. Q. 7.
Susan is of medium height, very stout, with short spindly legs and
a face marked by profound retardation. Susan constantly masturbates
and frequently wets herself.
Susan recognizes familiar persons to whom she offers her hand with
a smile.
Susan takes no part in activities. She displays interest only in rhythmic
lessons on condition that no novelty is introduced (see detailed record
of her behavior during rhythmic lessons on page 110).
Susan likes everything of a ritualistic nature. She takes home daily
her currently favorite object-talisman. Lately it has been a little toy
house. She cannot stand doors left open or dishes lying around or
chairs out of place; she immediately rushes from her chair and tidies
everything up. Every change in her surroundings disturbs her mood.
At the Day Center, Susan spends all the time in a chair. Either she
laughs or cries; her moods seem very often independent of the situa-
tion. From time to time she strikes herself on the head, or tears her
hair with a piercing cry. She often clutches at the hands of persons
passing by, and plunges her head into a person's abdomen. In gusts
of good humor she minces about the room cackling.
During the last 3 years, a deterioration has occurred in Susan's be-
behavior and psychological condition. Probably this is related to the changed home situation following her grandmother's death.


Ted is short, slightly built, with a narrow face and close-set eyes. He is very excitable, constantly in motion, easily upset. When disturbed, he draws his head in between his shoulders, covers it with his right arm and chews on the top of his left hand.

Ted poses as a "he-man". He spits, rolls "cigarettes" out of paper, "smokes" them, and curses. He acts in male fashion (not very cultivated, however) toward familiar female adults, slapping their behinds, clutching at the bust, kissing them generously. He often masturbates. Ted is aggressive toward smaller and weaker children whom he pinches, hits and hair-pulls. He shows displeasure at pupils who have an unaesthetic appearance, eying them with open disgust and then spitting ostentatiously.

Ted does not like to join in sedentary activities; he prefers to potter about and tinker with things. He displays proudly what he has done. Sensitive to praise, he tries to carry out every instruction from the teacher but due to his hyperexcitability is not always successful. He manifests sympathy toward any staff member who has a pain or ache.

Ted speaks little but intelligibly, having commenced only recently to talk. Of late he speaks more; he appears actively and consciously to be trying to control his aggressive and unaccepted behavior.

Ted's finger-painting reflects his great impulsivity and his difficulties in striving for greater self-control (see Plate II).


Rose is stout, of medium height and pleasing appearance. She has a rapid waddling gait (one leg shorter than the other). Rose is tidy and clean in appearance, her fair hair smoothly groomed. When she overflows with good humor she wears a broad smile.

Rose has no liking for active movement other than rhythmics. If she is urged to change her seat or take part in some activity, she will often hit out, pinch or hair-pull, all in total silence, with tightly buttoned lips.

Rose enjoys coming to the Center, tumbles into the room in the morning, greeting all the staff effusively. She makes no contact with
other children, but she watches them as they cross her visual field. She has her favorites among the staff members but this does not diminish her aggressive behavior toward them; on the contrary, she strikes, pinches and hair-pulls these preferred persons more often. Despite this, Rose has from the beginning been liked by the staff. Rose is extremely stubborn; if she has no desire to do something, nothing can prevail upon her to undertake it. She used to masturbate continually.

Rose does not talk, but communicates her feelings and needs through gesture and rich mimicry. She can "act out" a situation which occurred several days previously. She has several differentiated vocalizations for greeting, joy, affection and refusal. She can excuse herself, which she does very willingly and openly; displays pleasure over being pardoned for misconduct. She fawns for caresses, which she returns in kind; she likes to draw attention to herself and responds to a smile with a smile.

The most important thing in Rose's world is eating. One hour before mealtime Rose used to start whimpering monotonously, pointing toward her mouth. After the meal is over, Rose will carry her dishes to the kitchen.

More recently, following individual therapy, Rose can be got to do some short job, and has ceased whimpering before dinner. She is rarely aggressive now and is particularly fond of gym practice. Her masturbation has diminished.

Other children in the records are not characterized in this chapter since their attendance at the Center does not cover the full three-year period of observation of the present Project. Their birth dates and I. Q.s are given below.

<table>
<thead>
<tr>
<th>Name</th>
<th>Birth Year</th>
<th>I. Q.</th>
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<tbody>
<tr>
<td>Bob</td>
<td>1955</td>
<td>22</td>
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<tr>
<td>Charlie</td>
<td>1954</td>
<td>14</td>
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<tr>
<td>Colin</td>
<td>1959</td>
<td>I. Q.*</td>
</tr>
<tr>
<td>Eddie</td>
<td>1957</td>
<td>22</td>
</tr>
<tr>
<td>Ernie</td>
<td>1954</td>
<td>21</td>
</tr>
<tr>
<td>Frank</td>
<td>1954</td>
<td>29</td>
</tr>
<tr>
<td>Jim</td>
<td>1953</td>
<td>22</td>
</tr>
<tr>
<td>Lem</td>
<td>1948</td>
<td>17</td>
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<tr>
<td>Mike</td>
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</tr>
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<td>Peggy</td>
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<td>22</td>
</tr>
<tr>
<td>Peter</td>
<td>1954</td>
<td>I. Q.*</td>
</tr>
<tr>
<td>Ricky</td>
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<td>I. Q. 24</td>
</tr>
<tr>
<td>Vic.</td>
<td>1964</td>
<td>I. Q.*</td>
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Section 2
Graphic presentation of the social life at the Center
by Hanna Okobnowa

To help our teachers to better understand the place occupied by each pupil in relation to the others, we have used a very simple graphical method to present the data relevant to socialization.

Three parameters were taken into account: mental age, personal-social development and social links between pupils.

Mental age was assessed by the Psyche Castell and Terman-Merrill tests standardized for a Polish population.

Personal-social development was assessed by an inventory which included items related to this aspect of development. Social links were drawn on the diagram on the basis of estimates arrived at by a consensus of staff opinion. Social links refer to inter-child contacts displaying some stability over the last school year.

Pupils included in Diagram 1 are the twelve who were tested in May and June, 1972. Assessment of personal-social development was made at the same time. For some of the pupils MA scores could not be obtained due to deafness or lack of cooperation during testing, or because attendance at the Day Center was interrupted or discontinued. The latter group is included in Diagram 2 only, where their scores are distinguishable from those of the others by circles instead of dots.
Diagram 1 shows the Mental Age (MA) scores of the 12 pupils tested, which can be read along the bottom horizontal scale, and their personal-social development raw scores, which can be read up the vertical scale. As this diagram clearly demonstrates, the higher the MA of a pupil, the higher his personal-social development score tends to be. Thus, nearly all the names can be found located on the shaded diagonal band running from lower left to upper right. There are, however, some exceptions. Harry’s score on personal-social development is lower than could be predicted from his MA; Alice and Jack, on the contrary, scored higher on personal-social development than we would expect from their MAs. This result seems not to be accidental in view of the characteristics of these three pupils presented in the previous column.

Diagram 2 is drawn on the same pattern as Diagram 1. The second diagram differs from the first by the fact that it includes all the pupils attending the Center in 1971-72, i.e., also those pupils who could not be tested for intelligence and are assessed only for personal-social development. Therefore, no numerical values are marked on the horizontal axis of this diagram. The place of the added group of pupils along the left-right dimension corresponding to MA in Diagram 1 was arbitrarily estimated on the basis of a common staff judgment of overall performance level as compared to that of the tested children. To illustrate, Francie’s performance was judged to be a little better than that of Leo; Billy’s performance was better than Francie’s, but both were inferior to Johnnie’s.

Once all the children were located on this diagram in the manner described above, lines linking their names were drawn, continuous lines to represent positive, friendly or nurturing contacts, and broken lines to represent aggressive contacts. In each case the arrow points in a direction from the active to the passive partner. In many cases, where contacts were reciprocal, double-headed arrows are used.

Diagram 2 shows, firstly, that occurrence of aggressive contacts tends to diminish with growing mental age and personal-social development, and, secondly, that the profoundly retarded are often the passive social partners or objects of nurturance on the part of the less retarded and in this way are not excluded from the social life of the group. This we consider to be one of the main achievements of our educational program. The total number of positive connections mounts as we look
Location of 12 pupils in terms of score on Personal-Social Development Inventory and Mental Age.
Fig. 2 DIAGRAM 2

Social contacts among Day Center pupils during school year 1971/72 (see text for explanation).
toward the upper right of the diagram, i. e., toward the rising MA and PS scores. Two of the moderately retarded deaf children form the focus of the group’s social life.

It should be stressed that the graphic representations contained in Diagrams 1 and 2 do not meet the requirements of a psychometric tool, and ought not to be used as such. Their purpose has been merely to aid the staff to gain a better understanding of each individual pupil by seeing him within the context of the group’s social life. They are included here to illustrate the group pattern of social behavior.
What follows is a description of an attempt to cope in the daily life of the Center with some pressing problems which are still far from being thoroughly understood. We have tried to present our experiences in a systematic fashion, fully aware that they can only be treated as material for discussion by professionals.

Individual therapeutic approach is to be distinguished from the individual approach applied in group activities. In the latter case, the group is under the care of one or two teachers who use their knowledge of each child to select occupations that correspond to their individual likings and capacities. The former refers to dealing with those children who are unable to work even within the context of individualized group activity. These children require an individual therapeutic approach, that is, an approach somewhat like that applied in psychotherapy by which one adult has contact with one child.

**Children selected for individual therapy**

Between 1970 and 1972, thirteen children were selected for individual therapeutic treatment. They fell into three categories, as follows: firstly, children with difficulties in social contact usually accompanied by undesirable habits such as masturbation, rocking, and uncontrolled vociferating; secondly, children not participating in group activity for various reasons, of which the most important were (a) functional incapacity due to poor physical condition or short attention span and (b) disinclination to be active; thirdly, candidates for the Day Center coming from home environments lacking previous contact with other children and adults, or habituated to parental protection.
Goals of individual therapy

The purpose of our individual therapy sessions is not to teach or train the child in any specific skill but to enhance his motivation for cooperation, through achieving the following ends:

a) to "open" the child to influences from the outside world,
b) to foster a readiness for spontaneous activity,
c) to correct the total behavior profile,
d) as a final goal, to prepare the child to share in group activities.

The first three of the above goals also serve as criteria for assessing progress made during the course of treatment.

The therapist

Individual therapy is conducted by a person other than the teacher of the group to which the child belongs. The reason behind this lies in the difference in their respective roles. The group teacher has the task of making demands on the child and consistently requiring their fulfillment, whereas the therapist takes a more tolerant and permissive attitude to the child, in a setting of mutual interaction and interplay.

The therapist should have three attributes: interest in his work, clinical knowledge and a therapeutic attitude. If the therapist is aware of his own attitude to the child entrusted to him and the goals toward which he is striving, he is then able to select the best methods of work.

Individual work with children who are severely or profoundly retarded calls for a high degree of inventiveness, self-control, and, above all, a positive attitude to the task. Quite simply the therapist has to find satisfaction in his work and be convinced of its efficacy.

The therapist is subject to many kinds of influences from the outside. These include evaluations of his work from his supervisor and staff colleagues, and from the child's parents; the child's progress also influences him and his own evaluation of this progress. There are cases when the child refuses to accept a particular therapist and may simply not wish to cooperate with him; then the child should be referred to another therapist. There are also cases when the opposite occurs. The therapist, despite all his efforts to the contrary, cannot overcome his repugnance to working with a particular child. If, over
a trial period the therapist feels irritated while in contact with the child, loses his inventiveness and derives no personal satisfaction from the therapeutic task, he should then break off sessions and entrust the child to someone else. Therapeutic contact can be successful only if it affords a certain measure of satisfaction both to the patient and to the therapist.

During the period of treatment there are moments of hesitation, discouragement and even breakdown. Therefore a good therapist should be open to the therapeutic influence of other members of the team. In his moments of poor form or loss of confidence in his own abilities and achievements, the therapist can turn to informal contacts with the entire pedagogical staff, with excellent results. "Having it out" with a group of friendly and critical colleagues is beneficial not only to the therapist but also to the whole staff.

Preliminary observation period: Discovering what forms of contact and cooperation are within reach of the child

Often our pupils are "allergic" to certain forms of contact and certain types of occupations. For example, a child may not be able to tolerate verbal instruction addressed directly to him; "bombardment" by superfluous stimuli may surpass his threshold of tolerance, though for another child such stimuli may be pleasant.

We need orientation in effective ways to communicate with a child, and preliminary trials with different approaches are necessary. To illustrate: for one child, gesture will work best; for another the most effective way is the indirect form of address. Instead of saying: "Irene, how about building a house?", we can try: "I think Irene is going to build a house now". Sometimes the effective way is to direct the instruction via a third person, for example: "Would you ask Irene if she will build a house?"

The majority of children selected for individual therapy require relative reduction of external stimuli. For example, they prefer being in a small room to taking part in activities in the large classroom. For these children stimuli must be given in small doses, otherwise they are likely to evoke neurotic reactions. It is therefore important to remember to speak quietly and intelligibly to the child. If an instruction is given, it should be very simple (e. g., "Play on this", "Give to...") pointing to the object in question. During the time that
the child is carrying out an instruction or is engaged in spontaneous activity, interference is contraindicated; many children react to interference as if it were a form of punishment. Some children — particularly those who have difficulty in concentrating — like to be talked to during their work. Such conversation, however, should not take the form of commanding, praising or scolding. The child should not be expected to answer the therapist; it is not even necessary that he understand very clearly the meaning of the words. The purpose of talking in this type of situation is solely to maintain contact, to create a sort of emotional background for his work. In addition, in some instances it may form a kind of barrier that isolates the child from other auditory stimuli. There are some children who do not need to be fenced off from incoming stimuli. These, in contrast to the above case's, prefer a setting for their activities in the presence of other children even though they take no part in the activities of the latter. These are children who in general prefer contact with people rather than with inanimate objects. During the period of preliminary observation the therapist should also find out: (1) what, for the given child, constitutes real reward and real punishment; (2) when and why he offers resistance to the adult; (3) what form of cooperative activity he likes best, and (4) what he likes to do when alone.

Descriptions of individual therapeutic sessions

Overcoming contact difficulties and stereotyped behavior

Tom (19 years)

Tom avoided looking people in the eye. He edged off from others and did not listen when spoken to. For many years he masturbated persistently, rocked back and forth continuously, vociferated in an uncontrolled manner, and simultaneously clapped his hands loudly. He made no visible differentiation between various staff members of the Day Center. It must be clearly stated that Tom was not a likeable boy. His behavior was never a source of reward for anyone. Reward, in this context, refers to satisfaction gained by teachers or parents, resulting from
the child's behavior or the educational results obtained: The teacher is rewarded, for instance, by the child's progress, show of affection, or pleasing appearance. Tom's external appearance was rather repellant. In frank discussion with the other staff members, the therapist made known her lack of spontaneous rapport with Tom. Despite this, it was agreed that she would undertake therapy on condition that sessions be broken off in the event of persistent disinclination on her part, discouragement or irritation. As subsequent events showed, the therapist's awareness of her attitude to Tom, and staff consultation on the matter, was a step which in itself had a therapeutic effect upon her. By discharging inner tensions, the therapist was able to undertake treatment with Tom. After a certain period, Tom began to reward her with his behavior.

Contact between the therapist and Tom developed in three phases. The first phase was, as we say in the Day Center, contact "by presence". The contact was limited to a mutual tolerance of each other's presence in the same room. Each side discreetly observed the behavior of the other. By degrees, and with caution, the therapist initiated non-verbal contact but avoided looking into Tom's face.

September, 1971.

The group teacher brings Tom into the office.

**Therapist**

Is sitting at the table; turns her head slightly toward the boy entering the room; continues writing.

Is writing notes. Moves several objects to the middle of the table: a xylophone with stick, and a box of blocks.

**Tom**

Stands for a moment at the door left ajar, as if about to leave; goes to the window and looks out for a moment; then goes to the bookshelf and eyes the toys. He avoids looking at the therapist, and moves behind her chair slowly and cautiously.

Goes to the door, opens it and closes it again; comes to the table and looks at the objects laid out; picks up the stick, sniffs at it, begins to "play" on the xylophone. He repeats several notes in rhythm. (approx. 5')
Glances briefly at Tom.

Catches the glance, looks down at the xylophone; turns over the box of blocks, gets up and goes to the window, looks out for a moment, exits, closing the door behind him.

Session lasted 18 minutes.

September, 1971

**Therapist**

Stops writing, looks at Tom for a moment, arranges some colored blocks beside her (more blocks lie on the shelf nearby).

Takes the stick and strikes the xylophone.

Carefully builds a tower of 6 blocks.

**Tom**

Closes the door, behind him and goes to the window, then comes and stands beside the table, sits down.

Glances sidewise at the blocks laid out, takes the xylophone from the shelf, starts playing on the xylophone (as in the previous session).

Stops playing, puts his ear to the xylophone, strikes it and puts his ear to it again. After 3' of this, he puts it to one side, takes blocks and builds a tower of six. The tower, unsteady, totters and falls.

Watches briefly, gets up shaking the table so the tower falls over; looks at the therapist, avoiding her face; goes out of the room, leaving the door open.

In the second phase, open visual contact was established and some elements of cooperation appeared. Both therapist and boy openly looked at each other in situations where they expected something
from the other or approved of the other’s action at the given moment. At this stage, words were scarce, and served mainly to emphasize a gesture or convey approval.

Sessions were held most frequently in the forenoon when Tom was rested and at moments when no behavior occurred which the therapy aimed at uprooting, e.g., masturbation, rocking. If the invitation to a session with the therapist came during or immediately following manifestation of undesirable habits, it acted as a reward for that behavior and had the effect of reinforcing it.

After the boy entered the office, no proposal was made for activity but his moves were discreetly observed. For instance, if he took a toy from the shelf and played with it spontaneously, the therapist would smile now and then, and say an approving word, e.g., “That’s a nice tower”, or “That sounds very good”.

December, 1971

After dinner, Tom started to clap loudly as he went toward the office.

**Therapist**

“No, Tom, that’s not good”. Takes his hand and leads him back to the classroom. 15 minutes later, Tom is quiet.

“That’s a good boy, Tom, come along now”.

“Tom, let’s play with this”, handing him a box containing wooden building materials.

“Shall we build something?”

**Tom**

Looks at the therapist, and docilely goes out with her.

Smiles, goes into the office; goes to the shelf and takes the trumpet; blows into it, lays it down. Looks around, fingers various boxes of toys.

Takes the box, opens it; begins to thread discs onto a stick; puts one stick into his mouth.

Looks at the box, then reaches to the shelf for the wooden blocks; builds
Spreads out her arms as if to say: "Too bad!"

Smiles and re-arranges her glasses on her nose.

Takes the xylophone stick.

"Time to go now. It's gym period."

"Aren't you going to go with the others to gym?"

Reaches for the xylophone box, takes off the cover and accidentally knocks the therapist's glasses off her nose; carefully peers into her face; begins to play on the xylophone, strikes carefully to make a loud sound; plays an octave from low to high; licks and sniffs the xylophone keyboard; puts it to his ear, strikes two or three times as before, rhythmically but not paying attention whether he hits the keyboard or not; licks, sniffs and listens.

Takes a tower of blocks, smiling; picks up a plastic box; puts it on top of his tower covering the last block; looks an instant, takes off the box and lays it aside; places another block on the tower. The tower falls over. Looks at the strewn blocks, then at the therapist.

Reach for the xylophone box, takes off the cover and accidentally knocks the therapist's glasses off her nose; carefully peers into her face; begins to play on the xylophone, strikes carefully to make a loud sound; plays an octave from low to high; licks and sniffs the xylophone keyboard; puts it to his ear, strikes two or three times as before, rhythmically but not paying attention whether he hits the keyboard or not; licks, sniffs and listens.

Strikes the xylophone with his hand, listens, picks up an oblong block and strikes the keyboard with it, listens.

Strikes himself twice with the oblong block; looks very attentively at the therapist; goes to the window; turns the dial of the telephone; emits a long inarticulate sound; kisses his own left palm.
"Tom, you did very well today. Here’s a candy.”
Places a candy in his open hand.

Looks at the tape-recorder case, the record-player, the electric stove; takes the candy, puts it into his mouth; goes out, leaving the door open behind him.

By the third phase affective contact had already been formed between therapist and boy; cooperation with her had begun. This was expressed in a show of joy at the sight of the therapist, bestowal of objects upon her, signs of jealousy and efforts to contact her.

February, 1972

Tom entered the outer office, watched the cleaning-woman at work; went out to the cloakroom where the therapist was talking with the group teacher. Tom came up close, peered into the therapist’s eyes, then went toward the office and stood by the door. Smiled at the therapist.

**Therapist**

“Just a minute, Tom. I’m coming right away”.

Takes the key from Tom and opens the door to the office.

**Tom**

Reaches into the drawer where the office key is kept; hands the key to the therapist.

Enters the office; looks a moment attentively into the therapist’s face, smiles.

Sits down at the table “What would you like to do today, Tom?” Goes over to him, passes her hand over his head.

Turns aside, knocking her glasses off her face (accidentally? or with desire to see her “naked” face?); looks very attentively at her with a puzzled expression;
Puts back her glasses. Again watches her; strokes her head, smiles; goes out closing the door behind him.

After ten individual therapeutic sessions, Tom visibly “opened up” emotionally. He looked people in the eye more frequently and occasionally made contact with adults. His rocking behavior was considerably reduced. Masturbation at the Day Center almost disappeared.

Regular sessions with Tom were dropped from the time he himself began to seek contact with the therapist, smile, focus his eyes on people and question them. Tom was not happy with this change. Often at the sight of the therapist he became upset, clapped his hands, came and went to the office door. At such moments he was invited by the therapist to play together (but only when he had stopped clapping or clamoring).

On the present occasion he was seated in the classroom during individualized group activities. He was doing nothing in particular, listlessly throwing blocks into a box.

April, 1972

**Therapist**

“Tommy, what’s the matter? Nothing to do?”

“Come, let’s go into the office and you can build a little house”.

“Wait a minute. I’m going for some paper”.

“Oh dear, Tommy, you know better than to play with the electric heater. You were going to make a house”. Puts hands her back the glasses and strokes her head, smiles; goes out closing the door behind him.

**Tom**

Looks at the therapist, rises from his chair.

With alacrity goes to the office and opens the door.

Fiddles with the electric heater which is turned on, eying it attentively.
The box of plastic blocks on the table.

"Tom, that wasn't right. Look what you did"—pointing to the red marks on the sill. Hands him a wooden nest of eggs.

Leaves the heater and comes to the table; sits down and hooks together 4 green blocks and 2 red ones, placing the string on the table. Turns toward the window; spies two metal plates lying on the sill; takes one, knocks with it, then places it on its edge and begins to "saw" at the window sill; puts the plate down, looks around the office.

Takes the object, looks at it, opens the nest of eggs and begins to place the halves in a row on the table; then twists one half like a top; looks around, tries to make the same movement with the ashtray but without success. Knocks the half eggs off the table in a sharp movement. Looks over at the shelves; smiles at the sight of the toy piano; plays on the piano, hitting with two index fingers alternately; then breaks into a laugh, thumps on the piano; turns his head from side to side, laughs, twists his head sharply, looks at his hands, waves them in front of his face, laughs again; picks up the ashtray and strikes the piano keys with it; plays as if on the xylophone; puts the piano aside, gets up; looks out the window, sits down at the desk, looks at the vase, utters "ah-zech", gets up, smiles; goes out the door, returns, smiles and peers into the therapist's face; goes out.

bye, Tom".
Individual sessions with inactive children

Profound retardation is often the primary reason for lack of activity. Moreover, inactive children have as a rule great difficulty in concentrating. Therefore the sessions with them must be short and frequent, i.e., more than once daily. To influence these passive children, an especially high degree of emotional involvement on the part of the therapist is required.

To illustrate, we present the description of several sessions with a boy whose inactivity was due to deep psychomotor impairment combined with poor physical condition.

Jack (20 years)

Jack is profoundly retarded, with motor underdevelopment due additionally to spasticity. He shows no spontaneous activity. He has no difficulties with social contact, therefore in his case there was no need to limit contact to one therapist. All staff members conducted therapeutic sessions with Jack, each according to his own specialization.

Excerpts from his records depict the path along which this boy has came, as he gradually engaged in many tasks.

As with all other pupils, Jack was free to choose the topic of his play during sessions and to follow his inclinations for the length of time he wished. His sessions took place in the presence of other children.

December, 1971

Therapist
Arranges 4 red and yellow toys on the table: a mushroom-shaped piggy-bank, a telephone, a music-box, and a rocking doll.

Jack
Is playing with a block; throws the block down on the table, picks up the music-box, turns the handle and listens to the sounds, smiling. First turns the handle, then by holding the handle he turns the music-box; places it on the floor, picks it up and gives it to Liza; Liza
Gives Jack a 10 grosz coin.

Picks up the coin and gives it to him again; holds his arm and directs it so as to help him insert the coin into the slot in the mushroom.

Opens the mushroom by detaching the stem and shows Jack the coin inside the stem.

Closes the mushroom. Gives Jack the coin again.

Hands the coin again to Jack; helps him to insert it.

Opens the mushroom and shows Jack the coin.

gives it back to him. Takes the music-box, gives it to the teacher, listens to how it sounds when played. Takes back the music-box, turns the handle 60 degrees (his maximum). Throws a block on the floor; picks it up, gives it to Peggy. Picks up the rocking doll, twists it, shakes it, throws it to Peggy. Peggy catches it. Looks at the mushroom.

Takes the coin, throws it on the floor.

Takes the coin and makes a movement to throw it. Turns the coin in his hand, drops it into the slot in the mushroom.

Smiles with pleasure, turns the mushroom upside down so the coin falls out, tries to put the two pieces of the mushroom together.

Throws the coin down on the floor.

Inserts the coin into the slot.

Takes the two parts of the mushroom; with one movement puts it together. Picks up the toys on the table one by one, looking at them and turning them in his hands; makes inarticulate sounds. Throws down the doll, music-box and mushroom. Gives the
telephone to Peggy. Takes 2 plastic blocks, tries to put them in his mouth, throws them on the table, laughs and makes inarticulate sounds.

Gathers up the toys; says: "Jack did a very good job today."

Leaves the room.

February, 1972.

This was the first time that Jack played with blocks that hook up together. He had never before displayed an organized approach to these objects. Exercises began by showing him how to grasp a block between thumb and forefinger. At first Jack had difficulty bending the thumb joint, but after demonstrations and by having his hand steered by the teacher he learned how. The next was to learn how to attach a block accurately to a base. This was also accomplished by guiding Jack's hand. However, Jack was highly distractible as long as the therapist guided all his hand movements. Only when he initiated all the movements independently, with the therapist guiding the hand at the final phase only, and handing him blocks, did Jack manage to persist and to build a tower of blocks. The fact that the boy concentrated best when he was actively performing a movement and failed to pay attention when his movements were passively performed (i.e., guided by another), is an observation worthy of note.

After 15 minutes, Jack's attention began to wander, whereupon the session was terminated with a word of commendation; the boy himself displayed high satisfaction and smiled broadly.

During individual sessions Jack not only mastered a large number of movements but, more important, learned to find new areas of activity for himself. During group occupations he clearly expected tasks for himself. He also eagerly took part in group gymnastics despite the fact that these exercises cost him no small physical and mental effort.

Individual sessions with children lacking in motivation to be active

The inability of some children to take part in organized activities may be due to various reasons. In some cases, it was due to extreme hypersensitivity: merely to listen to instructions and to gather work
materials together was sufficient to bring the child to such an excited state that to focus attention was out of the question. In other cases, the child had never become accustomed to working at something. In still other cases, the child had been negatively conditioned through errors in upbringing, the most frequent being the following:

- premature forcing of the child into activities beyond his powers;
- instructions phrased in an incomprehensible form, arousing uneasiness and apprehension of reprimand;
- frequent scolding and punishment for refusal to cooperate.

Individual sessions with children who resisted activity were conducted without a prepared plan. We had to “play it by ear”, by improvising activities at the child’s better moments.

In the case of Rose discussed below, the therapist several times daily brought to her attention objects that were pleasant to play with, such as brightly colored toys, musical toys, things pleasant to feel and touch, and so on.

Just to show attractive objects was not usually enough to activate the child. It was often necessary to make contact between the child’s hand and the object. In this case, the first reaction was often to withdraw the hand.

Rose (12 years)

Therapist

Places in front of Rose a large red-and-yellow musical rocking doll and also another nonrocking doll. “Look here, Rose — a doll” moving one doll toward her.

Shakes the rocking doll which emits musical sounds.

Rose

Glances at the therapist, smiles, keeps her eyes off the table.

Turns aside, avoids looking at the table.

Casts a glance at the rocking doll but shows no sign of interest.
Holds the object close to Rose's ear, rocking it and making it play.
Stops the movement and musical sounds coming from the doll. Takes Rose's hand and tries to place it upon the object; repeats the trial.

Makes contact between the hand and the toy, producing rocking and playing musical notes.

Praises Rose and strokes her hands.

**Therapist**

Places in front of Rose the following toys: the rocking and playing doll, the piggy-bank shaped like a mushroom, a music-box and a telephone. All toys are red and yellow.

Picks up the music-box, turns the handle; shows that Rose is to do likewise. Stretches out Rose's arms, claps her hands lightly together, tries to arrange her hands so that

**Rose**

Sits at the table, hands on knees. Looks around the room, fixing her gaze in passing upon the therapist.

Right hand reaches out for the doll, sets it rocking; picks it up by the head, shakes it, puts it down; looks around the room; again starts the doll rocking.


Laughs, shakes her head; does not look at the toy.

Turns her head, looks at the table as if surprised.

Withdraws her hand abruptly.

Draws back her hand; allows her hand to touch the doll for a moment as it begins to rock; pushes the doll by herself, laughs.
Rose can turn the handle of the music-box.

Resists; pushes the music-box away, hides her hands under the table; then picks up the mushroom, knocks it against the table; resists releasing it, holding tight.

Reaches for the mushroom; pushes the telephone closer to Rose.

Fixes her eyes on all the objects without interest; hides her hands; looks at the children seated at tables around her.

“Rose, I see you don’t want to play. Goodbye for now”.


Therapist

Picks up a sponge rubber cube and moves it into Rose’s field of vision, bringing it to about 2 or 3 inches from her face.

Apathetically holds her gaze for a moment on the cube, then looks toward the window.

Tries to place the cube in Rose’s hand.

Touches the cube with her hand laughs; approaches her face to the cube; rubs her nose on it, laughs; does not take it in her hand, withdraws her hand, laughing and shaking her head.

Laugishly tosses the cube at Rose; repeats the trial.

Laughs and dodges her head; grinds her teeth, swings her leg, looks out the window, grinds her teeth, makes “rrr” sounds, pays no attention to the cube; looks out the window, hums to herself.
Scatters over the table some rattling blocks; picks up one block and shakes it about 4 inches from Rose's ear, puts it down. Picks up another block and hands it to Rose.

Repeats the move;

Takes the block in her hand; places it beside the first block.

Repeats the situation, ten times; repeats for the 11th time.

Takes the block and places it beside the second. After the third trial, reaches for the block herself.

Laughs as she places the block. gets up, articulates a sound like "ra ra"; opens the door and goes out.

We were not successful in developing spontaneous activity in Rose. However, the effort expended in individual sessions with her was not without its effect: behavioral disturbances that isolated her from the milieu were reduced. Rose's masturbation nearly disappeared. The intensity and frequency of her angry outbursts diminished.

**Individual sessions with candidates for the Day Center**

Candidates for the Day Center are mainly children who have up to this point passed their lives in the home, most often without any sort of contact with adults and children of their own age outside of the immediate family circle. Such children often lack the basic habits and skills necessary to tend to their own needs.

For some of these children the first contacts with the Day Center are terrifying. They wail, cling to their mothers, behave aggressively, sometimes urinate.

The purpose of individual sessions is to overcome little by little their fear of the strange surroundings, familiarize them with the premises, the other children and the staff, and accustom them to the parents' absence and to being among a group of children.

The initial visit to the Center is usually brief and the parents are present. Care should be taken that the child is not the center of attention. Parents often try to show the child in his best light, demonstrating what he can do, but most often producing the opposite
effect: the child becomes upset and behaves worse than he would in ordinary circumstances.

Subsequent visits are also short. The parents are not present throughout this time, but wait for the child in an adjoining room. The same person always conducts the sessions with the new child. At the start sessions are limited to watching over the child and protecting him from hazards, eventually presenting opportunities for play with others, while leaving him freedom to accept or reject the proposal.

Here is a description of therapeutic sessions with a candidate for the Day Center who manifested particularly strong anxiety reactions:

Vic (9 years)

We present the case of Vic as an illustration of the difficulties we must be prepared to meet in dealing with newcomers. For the first two visits, in November 1970, Vic held out no longer than 5 minutes, after which he started to sob and shiver nervously. He was then returned to his mother. The parents were also very upset. During the third and fourth visits, Vic behaved quietly. He did not stay with the therapist in her office but preferred to be in the classroom with her; he was beginning to display interest in the children and adults at the Center. It should be noted that he was allowed to decide on the duration of the therapeutic sessions and their content.


On his fourth visit, Vic entered the office in the company of the nurse. Both sat down. Vic did not play with any toys. He sat and kept repeating from time to time “Very nice”, which seemed to mean that he was a “very nice” boy. After a moment the therapist entered and gave her hand to Vic in greeting. Vic responded, smiling, and repeated again “Very nice”. The therapist picked up a doll in a striped dress. “What’s this, Vic?” He answered, “Stripe”. The therapist gave Vic several dolls in turn; he took them and threw them down on the floor. He repeated over and over, “Very nice”. After a few minutes the psychologist entered with a boy named Jerry. Vic greeted them with a smile as they sat down. The psychologist
seated herself on the floor and started to play at block-building with Jerry, who also sat down on the floor. Vic then sat down spontaneously on the floor. At first he observed Jerry and the psychologist. Then, with a few inarticulate cries, he took up several blocks and threw them down on the floor. Jerry became irritated at Vic's cries. The psychologist and he left the room. The therapist continued to observe Vic and the nurse who remained seated on the floor. They began to play with blocks. Vic scattered about a few blocks, whereupon his interest in them faded. For a moment both rested, that is, they sat silently without moving. However, when the nurse got to her feet, Vic began to move about restlessly and to ask for his mother. No one restraining him, he left the office to join his mother.

April, 1971

Vic arrived with both parents. In the cloakroom, getting undressed, he kept repeating "Very nice" or "Nice boy". At sight of the therapist he extended his hand in greeting. He quietly entered the classroom, crossed the room and looked into the bathroom and office. In the office he sat down for a moment on a chair, then went out to get some blocks. He walked around the children seated at tables busy pasting colored paper cutouts. He repeated three times "To Mummy" and "With Daddy". A teacher's assistant gave her hand to him and said "Hullo Vic". He looked into her face and extended his hand to hers. He went up to Liza, and put his arms around her neck, touching his lips to her hair. Liza kissed his hand and stroked his shoulder. Vic sat down in a chair close to Liza and watched what she was doing. Once or twice he waved a box containing screws but without enthusiasm. Liza was busy at her work and occasionally addressed Vic saying, for example, "See, Vic. See what I'm doing". Vic remained thus, seated in his chair, a smile on his face, beating time with his arms and legs, letting out the odd ejaculation: "Ugh! Yey! Oh!" Meanwhile he observed the children at their occupations with curiosity, though not inclined himself to do anything. Vic's eye rested on another girl, Francie. She smiled back and shouted to him. The therapist beckoned to her to come over but Francie waved her hand indifferently. The therapist handed Vic 5 nested plastic cubes that rattled together. Vic took them and shook the set so that the cubes, one after another,
fell out onto the floor. His eyes followed each falling cube. Then the therapist handed him a nest of eggs. Vic lifted the object to his mouth, shook it so the eggs rattled, laid them down on his knees. They slid off onto the floor but Vic paid no heed. His attention returned to the children whom he seemed to take pleasure in watching.

The therapist struck a toy piano key with one finger. Vic turned his head away with a cry and caught at the therapist’s hand. The therapist repeated the situation. This time Vic reacted with a slight delay but without sign of upset; he caught the therapist’s hand and let it go after a moment.

Suddenly, at the sound of water from the kitchen and of pots rattling in a wash-basin, he stopped swinging his arms and legs and turned his head in the direction of the source of the noise.

The therapist placed the toy piano within closer range and struck a note, saying: “Now you play, Vic”. Vic struck the keyboard with the flat of his hand, saying: “No — go to Mummy”. He pushed the piano away and again turned his attention to the children.

“You like the children?” To this question he turned his head toward the therapist, smiling broadly. He was watching the moving figures of the children with lively curiosity. When they got up from their seats, he rose too. “To Mummy” he said, as he saw his parents through the open door.

“Vic, your mommy’s come”, said the therapist. But Vic ignored this, walked over to the cupboard, opened the doors one after the other, and looked inside each. Then he headed toward the cloakroom where his parents were waiting.

While the therapist was conversing with the father in the cloakroom, Vic returned several times to the classroom.

The case of Vic was a particularly difficult one. His assimilation to the Day Center took exceptionally long. The fact that his parents were very upset before his visits to the Center was of crucial importance. His mother was wrought up to the point of nausea. Several times Vic vomited during preparations to come to the Center. It is highly probable that the condition of parent and child had a reciprocal effect.

In such a situation contact between the therapist and the parents is of great importance. In Vic’s case, the father initially displayed some
distrust toward the Day Center staff, which by degrees disappeared. This factor was certainly not without its effect upon the child's adaptation.

Cooperation with the parents is indispensable for any fruitful educational work, but particularly so with children requiring individual therapeutic treatment. The parents know the child well and know how to communicate with him. We can and ought to benefit from this knowledge. On their side, the parents want to learn from the teaching staff what more they can do for their child as well as how to do it.

Usually the candidate for the Day Center soon becomes attached to the therapist and feels secure in her presence, even when the therapist does not share in what is going on. The child can then be gradually transferred to the care of the teacher of the group for which he is qualified. Contacts between the child and the therapist are then limited to greetings and leave-takings, and to brief contacts such as interchange of glances, gestures, short utterances, gratifying words during occupations. The therapist, however, should never, under any circumstances, stop noticing the child.

There are, of course, cases of failure when every effort to bring the child into the group is ineffective. There are, for instance, certain children who react to collective activity with mounting excitement. In such cases it is recommended to leave the child at home for a certain period, obtain medical treatment if necessary and then repeat efforts once the child's state of health has improved.

It is worth mentioning that the behavior of candidates for the Center often improves when they are introduced to rhythmics and gym exercises. The specific attraction of these occupations is discussed in detail in Chapter 4.

Final comments

Through the individual therapeutic approach we have been able to foster cooperative interaction between child and staff in several cases where by ordinary methods we might not have obtained such results for a number of years.

This refers in particular to profoundly retarded children; individual therapy produced results that surpassed our expectations, as for example, in establishing contact with Tom or in activating Jack.
The results obtained from individual therapeutic sessions are of advantage not only for the child himself but also for the whole group. It is not only a matter of socializing the child: individual therapy is also a way — and most often the only possible way — to influence his uncontrolled behavior. And it should be borne in mind that the severe behavioral disorders of a single child interfere with, and may even completely disorganize, the educational work with the whole group.

It is emphasized that, although we are still looking for the most effective methods of individual therapeutic work, there is no doubt whatever that it constitutes an indispensable element of the current work of the Day Center.
It is still a common attitude among educators of the severely retarded to consider physical education and rhythmics as only an adjunct to the "real" educational tasks, that is to say, the manual, verbal and graphic skills. Our experience shows, however, that this order of importance should be reversed.

It is our conviction that the area of educational work to be discussed in this chapter is of paramount importance. At the same time it is the least systematically developed aspect of education of the mentally retarded. We are well aware that our efforts are based upon our limited experience and therefore should be looked on as hypotheses and proposals. However our results lead us to the strong belief that this comprises a fundamental approach which in future will play an increasing role in the education of the severely and profoundly retarded.

The present chapter is divided into two sections. The first part deals with the physical education program followed at the Center, with its stress on the best possible performance; the second deals with guidance of motor functioning through stimulation by rhythm and music.

Section 1
Education for motor skills
by Zofia Pakula

The retarded child, like any child, needs to master steady and safe locomotion and large muscle control. Only then will he be able to
profit from the teaching of fine motor skills and any activity involving them.

The severely retarded are for the most part motor-handicapped; neurological impairments are not uncommon among them, and even in neurologically normal cases the child's movements are ungainly and poorly coordinated due to the general immaturity of the motor apparatus. Therefore educational work should strive for the maximum control of the motor apparatus in each individual child.

At the same time gross motor activity provides an opportunity to further the basic socialization processes in the child. These two goals can be unified in the way we organize our gymnastic activities.

The gym-room situation offers many opportunities for the child to experience pleasure and success — experiences basic to socialization. This point will best be shown through the photographs illustrating this section.

A primary source of pleasure is simply doing what others are doing (Photo 1).
Photo 2. Two partners collaborating on an exercise.
Many exercises are planned so that they involve cooperation between two or more pupils (Photo 2). With the profoundly retarded child, collaboration between child and teacher in the performing of physical exercises is one of the basic ways of fostering socialized behavior (Photo 3). But there is a central difficulty in the physical education of severely retarded children: this is to convey to them comprehensibly what they are expected to do and obtain their cooperation. This section is largely devoted to the methods we have developed to overcome these difficulties.

How to obtain cooperation from the severely retarded child

To achieve a balance between authoritative and permissive attitudes is one of the major problems facing the physical education instructor. As our experiences show, the following conditions must be satisfied to achieve this end:

Firstly, the physical education teacher must be a meaningful person for the child. For this reason, after long consideration, we adopted the principle that the physical education instructor should be a fulltime worker at our Center, a staff member responsible not only for physical training but also for the whole group of profoundly retarded children. In this way, the instructor can come to know each individual child, his ways of reacting to instruction, and his favorite occupations and playthings, equipped with such knowledge he or she will find it easier to induce the child to perform physical movements.

Secondly, the physical education teacher should be an authoritative person for the child. The teacher should be consistent in his demands upon the pupil; above all, he should never be satisfied with poor performance. This does not mean, however, that the instructor should be rigid and punitive. On the contrary, he should avoid situations that could create stress in a child, and should use the incentives proper to each individual child in order to gain his participation.

For instance, often a child will resist standing up and participating in physical exercise. After a few unsuccessful attempts we should not
force him. For the child it is also useful simply to watch the exercises that day. Next time we make another attempt.

With the profoundly retarded child, in whom spontaneous cooperation is rare, we use special incentives suited to their individual moods. Sam likes listening to records; he knows that after he performs his gymnastics he will hear some of his favorite songs. Susan will lean over and bend down if the purpose is to lift up her favorite "talisman" — a small brush; she will balance on her toes to reach up to a high shelf for it or onto the piano top. Vic, lying supine on the mattress, will flex his leg muscles and extend his leg fully if his toes are pointed toward his beloved flower pot. Rose performs exercises attentively and eagerly if she knows that she will then be first to get her dinner.

An important factor is the individual manner of addressing each child. Rose responds best to a mild, persuasive tone and a smile (for example, "Rose is a sweet girl; we all love her; now Rose will show us what she can do"). On the other hand, Sam gives the best response to a firm and determined tone that leaves no choice but to carry out the instruction.

Individualized exercises. In addition to group activities, from which they cannot fully profit, the profoundly retarded need individual lessons. The following is a description of Rose's first such lesson. Rose is not very happy about leaving her chair. The teacher (T) brings her face close to Rose's face, strokes it, and says: "Come Rose, we're going to do some gym now". Rose hangs back, gestures that she is hungry. T strokes her face again, takes her hand—and says: "Afterwards Rose will wash her hands and have dinner; now we will do some exercises".

When they enter the gym room Rose is greatly surprised to see that they are alone together. T marches with Rose around the room first; then they play horse and driver (T pushing Rose into a jog and calling "Whoa, giddup").

Now T tries to initiate more complex exercises. Rose does not resist being helped onto the box but, once seated astride the box, she has no desire to exercise further. Twice she raises one knee while in this position, but reacts no further to instruction or demonstration.

Another exercise is then tried: T demonstrates stretching out prone on the bench and pulling the body along the surface. At this Rose
goes on strike; neither persuasion nor command help. T demonstrates the exercise once more and says: "Now it's Rose's turn". She brings a mirror and sits down on the far end of the bench, saying: "When Rose gets to this end, she'll see her face in this mirror". All resistance evaporates; Rose stretches out upon the bench and starts dragging her ungainly body along by her hands, all the while making funny faces with high glee. But the most joyful moment is when she grasps the mirror and studies her assortment of funny faces. This exercise is repeated three times, each time with equal enthusiasm. Now a more difficult exercise: balancing weight from heels to toes. T tries to convey the idea by placing blocks under Rose's heels but this does not work. T then demonstrates the exercise again, also with no result. Then T tries the following procedure: she takes a piece of chalk and draws a line horizontally on the wall within arm's reach for Rose; then, standing on tiptoes, draws another line above it. Now T hangs the chalk to Rose, stations her at the wall, and indicates that she is to make a line too. Rose reaches up and draws a downward line. T says: "See Rose — up higher", pointing above the line hurled by Rose; "get up on your tiptoes". It works. Rose raises herself slightly, her weight not fully supported on her toes but momentarily lifted off her heels. That is all Rose will do that day. No further exercise is suggested. Rose has a right to feel tired; it was hard work for her, lasting about half an hour.

How to convey to the pupil what to do and how to do it

In general our most frequent methods are:

— demonstration first, then performance together with the pupil, assuring him where and when needed (Photo 4);
— correction by adjusting and aligning the child's limbs and body in appropriate positions;
— helping the child to correct himself by showing him his mirrored performance.

Here again, attention is drawn to the point that the teacher never gives up until correct performance is attained. Sometimes this takes many months, sometimes it never happens, but the teacher will not
stop working for improvement until proper execution is obtained. It should be stressed that working with severely, and especially profoundly, retarded children calls for far greater effort from the physical education teacher than working in a normal school setting where verbal communication plays the dominant role. Apart from the mental effort and inventiveness required, a very strenuous physical effort is called for in exercising the retarded child, in shaping his posture, as, for instance, helping the pupil to stand up, to climb, to plant his feet in proper positions, and in performing exercises with him as described in the many illustrations to this chapter.
Illustrations of gymnastic exercises performed at the Day Center

Space does not permit a full presentation of our physical exercise program. The examples presented below are drawn from the records of the year 1971/72. In some of these presentations, descriptions of individual pupils' behavior are included to show the special difficulties of the severely retarded child and the measures adopted by the teacher to overcome these difficulties.

Exercises for correct posture and gait

Correct posture means an upright and symmetrical body position in both standing and walking — head held high and eyes facing front. Most gym lessons commence with postural and walking practice. These exercises are performed every day and on every suitable occasion, such as outdoor walks.

Let us illustrate our methods with a set of exercises for Dick. He is a deaf boy with severe motor handicap and special difficulties in coordination and equilibrium.

- Raising the arms upward and lowering them to the front and at the sides. The arms should be symmetrically raised to horizontal or vertical positions. The teacher corrects with the aid of the mirror.
- Bending the trunk forward from the hips.
- Bending the trunk forward, hands on hips and head held up.
- Raising and slowly lowering the arms to horizontal position, while the teacher counts to four.
- Raising the left arm slowly to vertical position above the head, lowering it; repeating with the right arm.
- Hands on hips, raising the knee flexed to form a right angle (teacher assists Dick to maintain his balance in this position).
- Raising one foot so that the weight is supported on the other (also with teacher's assistance).

We shall now describe some exercises for developing the erect head position.
Adjusting posture in the mirror

The child stands facing the mirror, hands on head and fingers touching; he corrects his posture until he obtains a symmetrical upright stance.
The teacher assists by adjusting shoulders, head, etc. in correct alignment.
This exercise can be rendered more difficult (and interesting) by placing a beanbag on the head, which will fall off if the head is not maintained in an erect and steady position. Another variant is to place wooden bricks in the child's two hands for this exercise.

Marching holding a pole

Marching with a pole held behind the head on the shoulders, using both hands.

Looking forward while marching

This exercise is an example of combining posture training and group activity.
The pupils march in a circle, the instructor marching inside counterclockwise and trying to establish visual contact with each child in turn as
he passes. Her aim is to counteract the tendency to drop the head forward and reinforce the effort to hold the head erect with eyes front. As usual, the individual approach is needed for the best results. Passing Rose, the instructor calls to her: “Rose, look at me!” Rose lifts her head and smiles. Johnnie, who is deaf, does not hear the instructor pass; she takes his chin as she passes and directs his gaze at her.

Lifting the knees while marching

Everybody (both groups) marches in a big circle. The instructor in the center demonstrates correct gait by lifting her knees high and explaining verbally. The deaf children receive individual demonstrations.
Most of the children raise their knees only momentarily and fall back into their former positions. The best result is obtained when the instructor marches counterwise inside the circle, lifting her knees with marked exaggeration; thus the children have a constant visual contact with the model.

With the pupils of Group I we also use individualized instruction: We lift the child's leg, flex it at the knee joint, and replace it on the floor. We repeat this exercise at every lesson. In time the child him-
self begins to rise; his flexed knees alternate, first, marching in place, and then forward.
The next stages of this exercise are: taking high steps over large blocks; walking along a horizontal ladder to establish proper step length (Photo 7).

Exercises for balance

These exercises are also repeated daily. The simplest exercise for equilibrium is to stand erect and hold this stance without swaying or wavering; then, balancing on one foot at a time.

Balancing exercises while walking: walking along a straight line, placing the feet on a line drawn on the floor; stepping over obstacles such as the gym bench (Photo 8); walking along the gym bench first on the broad side, then on the rail.

In most cases the pupils require assistance for these exercises.

Standing on one foot, holding hands in a circle

After marching in a circle, the group stands with joined hands. The instructor now demonstrates and explains the raised flexed knee.

But for Rose, Jack and Ted, leg movement is minimal. To improve their performances, the instructor tries this procedure: she extends her leg forward and upward and calls on each child in turn to touch the sole of her foot with his. To do so he must raise his leg with knee flexed. Each child tries to lift his leg higher and support his weight on the other foot longer. Each time this exercise is repeated, better results are obtained.

Walking along of the bench

The bench is placed in proper position, broad top up. The instructor demonstrated the new exercise; to step onto the top of the bench, walk along it to the end (about 4 yards), step or jump down.

Jack often comes forward spontaneously when the bench is so arranged and does his favorite exercise: stretching out flat on the bench and pulling himself along it. The instructor grants him this whim, then demonstrates the exercise.

First Johnnie tries. Despite all his efforts, he shuffles his feet and lurches forward when walking. The instructor steps up on the bench.
facing Johnnie and demonstrates. Johnnie straightens for a moment
but at once slumps down again. Then the instructor takes Johnnie’s
hand and walks beside him. Now, feeling safer, he walks erect to the
end of the bench.
Dick, Francie, Billy, Rose, Sam and Jack all walk the length of the
bench with help. The remaining children manage by themselves.

Exercises for general muscle building

This is also an extremely important category of exercise in our gym-
nastic repertory. Most of the severely retarded children arrive at
the Day Center with flaccid muscles, underdeveloped and undertrain-
ed. For these exercises special equipment is necessary, the main
being the following:
large leather balls weighing 3 or 4 pounds;
spring expanders (See Photos 9 and 14);
weight and pulley equipment (See Photo 10);
“Bicycle” (See Photos 11 and 12);
a device for building muscles of hand and forearm (See Photo 13).

There are three general rules for muscle building. Firstly, the effort required should be gradually increased; secondly, all the muscle groups should be involved; and thirdly, the exercises should be performed regularly for brief periods daily.

A set of exercises is outlined below for muscle building.

- Warming-up: marching around the room in a circle, clockwise, then counter clockwise; then running with hands joined.

- Knee bends. The children hold hands in pairs. The instructor and assistant also participate with weaker pupils.
— Bending trunk forward from the hips (instructor helping).
— Raising the trunk from prone positions (See Photos 13 and 17), and when lying on the back (Photos 15 and 16).
— Seated cross-legged on the floor, pulling on the spring expander while the instructor pulls on the other end. The children perform in turn, at first holding with both hands, then with each hand separately.
— In prone position, arms forward, holding one end of the spring expander. The instructor, straddling the child, pulls on the other end so that the child raises his trunk to the maximum (See Photo 13).

For the above exercises, a fair amount of assistance is needed from instructor and assistant, but in all cases the muscular effort is the pupil’s.

Photo 10. Weight and pulley equipment.
Moving heavy equipment

Very useful both for muscle building and for child socialization are the daily tasks of carrying, arranging, shifting, replacing the heavy gym equipment. As the following description shows, it took much time and effort to induce the children of Group I to collaborate in these tasks, yet, despite poor coordination, difficulty in grasping instructions and lack of spontaneous collaboration, these children can take part in this daily routine.

The instructor set the aim that the children tidy away the equipment as a regular daily task (she had previously arranged the equipment herself before and after the lesson with Group I).
Photo 12. Leg muscle training.

Photo 13. Raising and lowering the trunk in prone position with the aid of spring expander held by a partner.
For a few sessions, the children moved the heavier equipment with the instructor. This was the way it worked: the instructor took Sam by the arm and said: “Watch how Sam pushes the box”, as she stationed him behind the box; then he put his hands on it and pushed. Rose collected the hoops, one by one, bending over for each, lifting it and carrying it to its place. Dick and Ted together shoved the bench against the wall, Ted urging and shouting “Hey! You!” to his slower partner. Charlie needed no supervision to pile the blocks. Jack was the only pupil unable to contribute; he would pick up an object but toss it back onto the floor.
**Photo 15.** Raising the trunk from lying position on the back.

**Photo 16.** Raising the trunk from lying position on the back.
Exercises for promoting gross motor dexterity

These exercises should be so planned that they involve a number of body positions (standing erect, walking, crawling, lying prone or on the back). The trunk as well as the extremities should be involved. A set of dexterity exercises:

- Raising body from sitting position on the floor to standing position (See Photos 18 and 19).
- Crawling on all fours in different positions (Photo 20).
- Stepping over the gym bench (also an equilibrium exercise).
- Crawling underneath a table about 25" high.
- Climbing up and descending the vertical gym ladder (Photos 22, 23, and 24).
- Climbing onto the gym box and straddling it (horseback riding), sliding along the box using hands only, descending with a jump, if possible at the far end (See Photo 25).
As skill develops, more difficult exercises can be used, like the following:

- Pulling the body upward along a tilted bench and sliding back down without support.

One end of the bench is raised to about a 40 degree angle from the floor and fixed into the vertical ladder. A mattress is placed at the other end. The instructor demonstrates: she kneels on the mattress, grasps both sides of the bench, lies on it and, body prone, pulls herself along to the top of the tilted bench; then she slides down, pushing her prone body along with her arms.
Both groups take part in this exercise. Group II manages without difficulty. Group I needs help both in pulling up and sliding down; but they try willingly, even the least fit children (Jack, Rose, and even Sam who dislikes activity). After a few repetitions, the children beg for turns. This exercise calls for physical effort as well as good motor coordination; it may evoke some fear in the child, but the reward of the slide is very attractive.

— Passing the body through a hoop. The child passes his head and body through a hoop, squats and places the hoop on the floor, then steps out of it.
Photo 20. Crawling on all fours.

Photo 21. Lying on back, knees bent and slightly apart, then raising seat off floor by weight on hands and feet.
— "Wheelbarrow walking" (See Photo 26). The pupil manoeuvres himself along, weight on arms and hands, while his legs are held by a partner, instructor or another pupil.

— "Slaloming", or walking alternately to right and left of a row of blocks placed on the floor. This needs the teacher's help, as the children tend to ignore the blocks as they walk.
This exercise resembles a competitive game and can have many variants. The pupils are paired more or less equally in terms of motor skill. Such competing pairs are Johnnie and Francie, Jerry and Alice, Friaie and Phil, Billy and Dick, Tom and Ted, Rose and Jack, Sam and Lem. They compete on an obstacle run. Such obstacles may be: (a) passing through hoops; (b) stepping over barriers without knocking them (big wooden blocks about 2 feet apart); (c) climbing over the box and a slightly higher table placed side by side.

The teacher demonstrates the whole performance, then the best pair performs first.

Johnnie and Francie are the first to compete; they perform correctly and gleefully. Then the next pair starts; Alice stops to wait obligingly
for Jerry who is slower than she. The third pair has trouble from the start: Phil withdraws and goes back to his seat; he needs to be accompanied throughout by the teacher. The remaining pairs manage only with assistance. But no one is left out.

Corrective exercises

For pupils with special handicaps, such as flat feet and vertebral deformities, which are not uncommon among the severely retarded, individual corrective exercises are required. Such exercises are also conducted in small groups of pupils needing the same type of remedial exercise or to prevent deterioration of their condition. These exercises are not described here as they may be found in orthopedic books.
Conclusion

The experience we have gained during the three years of intensive physical education in our Center has convinced us that, through continuous systematic work, it is possible to improve physical pos-

*Photo 25, Climbing onto the box.*
ture, fitness and motor ability in both severely and profoundly retarded pupils. This experience also demonstrated that even rather difficult exercises are accessible to them. As the above examples show, our pupils have not only learned to perform physical exercises, but also to cooperate with a partner and to adapt to the pattern of activity of the whole group; that is to say, they have been learning acceptable social behavior.

An important aspect is that, unlike many other activities of the Day Center (see following chapters), these diverse motor activities do not exclude or isolate the profoundly retarded but allow them to act with the more developed Group II children.
Section 2

Socialization through rhythmics

by Krystyna Mrugalska

“Cooperates only during rhythmics classes” — this is a comment we often come across in the characterizations of our pupils (see Chapter 2). And, indeed, rhythmics lessons with music have a place of special importance among the activities of our Center.

The rhythmics class creates a setting in which the child is most susceptible to socializing influences. This is because several key factors act on the child. They include:

The stimulating effect of music

As we all know, the general effect of music is to arouse and to energize. Especially when it has a distinctive rhythm, music evokes animation, the desire to participate, an urge to accompany sound with movement. This spontaneous reaction to music may be unconscious and chaotic, or it may become conscious and controlled. The latter reaction is the goal of education through rhythmical movement.

Music as a factor introducing order into activity

The transition from music's chaotic and unconscious excitation to a conscious and orderly reaction calls for lengthy and systematic work with the retarded child.

In the rhythmics classes conducted at our Center, music takes the lead; it directs the activity of the child. By no means do we regard music as a background for free expression, a form often employed in respect to normal children. Nor is music a form of play; on the contrary, rhythmics requires maximum concentration from the child.

Predictability of the rhythmics class situation

Music creates predictable situations and thus fosters the feeling of security. The melody enables the child to feel intuitively a regular, able beat, tempo, timbre and form.
During the rhythmics class we introduce many other anticipatory elements. These include habitual roles played by the children, "ceremonies" of greeting and leave-taking, regularly repeated musical signals.

When the child participates in a group activity in which all perform the same repeated actions together, guided by music, the child's situation is free of the unexpected, from a partner or in the experience itself.

The non-verbal musical message as directly understandable

The typical way in which the instruction is transmitted to the child during a rhythmics lesson is, in our view, the chief factor responsible for the success of this kind of activity: the medium for the message is the musical signal. The verbal instruction, so often poorly grasped by the retarded child, plays but a secondary, supplementary role here. More attention to this point will be paid below.

Unification of the group during rhythmics classes

Rhythmics has a unique role in accomplishing our central goal: the socialization of the child. The essential aspect of musical-motor activity is that a group of persons move in the same way, at the same time and pace, and in the same direction. They are bound together by emotional participation in musical movement, sharing the joyful feeling of involvement. Many children who are unwilling to execute a movement when verbally instructed will do so without opposition through participation and imitation.

Rhythmics as a special opportunity for the profoundly retarded

To develop a social orientation in these pupils is an extremely difficult and yet one of the most important goals of our educational work. Perhaps our problems, methods and results are best presented by describing in detail the behavioral changes effected through rhythmics in one of our most deeply retarded and inactive pupils, Susan (see a sketch of Susan in Chapter 2).
The socializing of Susan

Susan is a particularly instructive case of the socializing effect of participation in the rhythmics class upon the profoundly retarded. A rhythmics lesson in 1965 was Susan's first experience of organized activity in a group of children. From the first day, it was apparent that Susan liked music; she responded to it with a rapid series of short steps, a waving of arms at elbow and wrist, laughs and squeaks. But while the others marched to the music in a round, Susan moved with mincing steps along the wall, now away, now toward the piano. The first attempt to bring Susan into the circle met with violent resistance; she was then left to her own devices. After a few weeks Susan began to turn her steps away from the wall and toward the marching children. The changes that followed are represented in four-stage situational sketches shown in Fig 1.
One day, after about two months, Susan halted beside the children as they were preparing to join hands in a circle. Then the teacher took Susan’s hand, put it into the hand of one of the more able children, she herself taking Susan’s other hand. At first Susan did not know how to move in a circle. She dropped her neighbor’s hand and kept moving into the circle, pulling the other children with her. In time, Susan learned to march in a circle, holding hands in an orderly way, that is, adjusting to the other children’s movements. Then one day, as she stood amongst the children joining hands for a circle, Susan spontaneously offered her own hands.

During this process, Susan began to single out the instructor. When she spied her in the hall, she uttered a great laugh, waved her arms, and jiggled up and down. Often while greeting Susan the instructor received the distinct impression that the girl was looking at her with awareness and recognition. The impression that Susan knew the instructor’s face and linked her with given situations was soon confirmed.

Eight months after the first rhythmic lesson, Susan began to create situations that afforded her a similar pleasure. Upon sighting the instructor, this usually immobile child rose briskly to her feet, came up to the instructor, pushed her rather forcefully toward the piano and onto the stool. Then she opened the piano and waited. When she noticed that the instructor showed no sign of playing, she placed one of the instructor’s hands on the keyboard, shoving down the fingers until they struck the keys. Not content with one hand, Susan reached for the other and placed it nearby on the keyboard.

One month after this incident, Susan’s orientation had reached the point where, one day, she herself got the songbook from the cupboard and set it on the piano stand, as if asking the instructor to play from the notes. She displayed considerable irritation when the song played was not her favorite, then she changed the songbook for another one.

Contrast the above observations with the sketch of Susan in Chapter 2. It is astounding to note how much detail she was capable of perceiving in the rhythmic-music situation, how many causal relations she grasped, how consistently she strove to construct the situations from which she derived her pleasure.

Today, Susan marches and plays a percussion instrument. Despite
her disregard for the rhythm itself, it is one of the features of music that evoke activity in her.

In order to analyze more closely Susan's responses to musical and group stimuli, we present a full record of a rhythmics lesson, focusing on Susan's participation. This is the first lesson after an absence of the instructor (author of this section), during which classes were continued by another instructor. All the exercises in this lesson were previously known to Susan.

November, 1972.

A rhythmics lesson

1. Greeting by individual handshake.

2. Greeting with the group: clapping out the syllables of "Good-morn-ing" on the instructor's upturned palms.

3. Musical signal is played on piano and sung by the instructor.

Let-us-make-a circle, let-us-make-a circle, let-us-make-a circle now.

Susan listens with an attentive expression. When the other children join in a circle, she offers her hands too.

Joyfully, Susan trots and jogs with the others; as the tempo increases, she tries to speed her steps (but rather is pulled along by the other children). Susan stands still for about 25".
Again the music starts; again the circular march. Signal for change of direction (glissando in higher key).
4. Musical signal is played and sung.
5. Instructor brings over the songbook from the cupboard and ostentatiously places it on the piano top, sits down on the piano stool, places the book on the stand, opens it, turns the pages.
6. Instructor plays the theme of Susan's formerly favorite song.
7. "Susan—come here".

Susan is given a drum and stick. The instructor starts to improvise.

The music stops.

The music is renewed.

8. A polka

Children form pairs, hold partner's hands and dance in circular fashion.

Susan gives her hands to her neighbors.
Susan turns around with help.
Susan goes to a chair and sits down.
Susan follows the instructor's movements with her eyes, face expressing awareness and watchfulness, mien serious.

No reaction.
Susan rises, makes half a step toward the instructor, then sits down on the first chair in her way.

Susan strikes the drum with a series of short rapid thuds, at random. (The observer then placed the drum directly in position below the stick). After the music ends, she makes a quick drumroll: The observer takes the drum.
Susan starts to reach out for the drum, then withdraws her hand ("half-action", the beginning of a directed response, but uncompleted).

Susan dances with the instructor. Smiling broadly, she turns quickly, pulling her partner with her.
9. "Obstacle race"
Hoops are laid down on the floor in a line. The child is to walk down the line stepping only inside the hoops; at the end, he has the reward of striking the gong. To add a complication, the instructor moves the gong while the child strikes it — upward, downward, from side to side by changing hands.

The instructor goes to Susan, places the gong under her hand for her to play further.

10. Again the musical signal to form a circle.

Offers her open palms to her partner, holding them for a moment in this position; her face shows concentration, with no trace of smile.

Susan is led along the line. Sometimes she steps inside the hoops, apparently accidentally.

Susan keeps striking the gong. Her hand moves with the changing position of the gong. This lasts 30 seconds. Now she clutches at her hair, pulls at the instructor's blouse, apparently discharging tension.

When the gong is transferred to the instructor's other hand, Susan stops, moves off, sits down on the chair beside the observer.

Susan pushes the instructor away; after about 15 seconds, she strikes her head against the observer's shoulder.

Susan gets to her feet quickly, joins the circle. She beams with pleasure.

Basic principles and procedures for a rhythmics class with retarded children

In developing her work with severely retarded children, this author did not start from any theory. During the seven years of work at the Day Center, procedures and principles were gradually devised and tested in practice. Those yielding the best results are summarized below.
The rhythmics class requires careful planning

Classes are held twice weekly and last from 30 to 40 minutes. Classes are held separately for Groups I and II.

In selecting the set of exercises for the lesson, a number of factors are held in mind. These are:

— degree of difficulty,
— extent of movement involved,
— kind and variety of body positions during performance of the exercise,
— degree of concentration required.

Every rhythmics lesson combines constant elements and variants or novel elements. Constant elements include the ceremonies of greeting and leave-taking, the march in a closed circle, the unvarying musical signals. Variants, or novel exercises, once introduced, are repeated at every second or third lesson until gradually they are brought to a good level of performance, and become interchangeable parts of a lesson.

How can we get the best performance?

Superficially viewed, the requirements placed upon the child are minimal. However, the aim of all our efforts is to obtain the best possible result, for each successive performance of an exercise to be a little better than the one before. How can we achieve this?

Let us illustrate. Tom is walking with the others in a closed circle, shuffling his feet. First we say: “Higher! (Feet higher)”, then “Everybody lift his feet!”; and only then: “Tom — feet higher, higher”.

Our correction is made without singling out the child for negative attention, or embarrassing him. Often we correct a child’s performance by assisting him physically without comment. When a child is brought to the middle of the room for individual help and no negative verbal evaluation has been expressed, he often considers it a mark of distinction, and makes a special effort to come up to expectations in his solo performance.

Positive reinforcement always has priority over corrective intervention. Our principal aim is for the child to want to be active, and for activity to give him pleasure. These conditions determine whether
the child’s activity is amenable to guidance, whether he himself will strive for greater precision.

**Individualized exercise as initiation into group exercise**

Depending on the state of socialization of each child, we select the approach best suited to him. Consider Susan, or Rose, or Jack; for these children individual contact will always dominate, even when the exercise is conducted in a group. By this we mean that, more often than for the other children, we must attend to them directly: we must catch their eye, approach them, address them by name, touch them, place the appropriate object into their hands.

But the individualized approach is more than this: we must often plan the lesson so that each exercise can be performed by one child at a time.

The question arises: does this not hinder rather than foster the group spirit? On the contrary, individual contact is precisely the necessary condition for the child to grow into the group. As we will see throughout this book, there is always the double aspect to all activities in the Day Center: the individual and the group, one integrated into the other, one building on the other.

Later in this section we shall return to this problem, but now, to illustrate the individualized approach in the rhythmics class, we shall describe one exercise for Group I and show how it is adjusted to meet profoundly retarded children’s capabilities.

**Example of an individual exercise**

The children are seated in a row on the floor against the wall, the instructor at the piano, and a drum and drumstick on a chair beside her. Each child in turn comes to the piano, picks up the drum and drumstick, and plays a rhythm to accompany the instructor’s piano improvisation. When the music stops, the child replaces the drum on the chair and returns to his place. Then the next child comes, and so on. There are 10 in the group; each child plays for about one minute. Thus the exercise is relatively long.

Despite this, the children all await their turn quietly. When Tom’s turn comes, he literally leaps to his feet in his ungainly and uncoordinated manner. He knows his turn has come, though during the pre-
ceding performances he was looking out of the window at a car in the yard, scratching himself, rocking back and forth, and generally conveying the impression of not knowing what was happening around him.

Susan occupies the last place in the row. She sits in a chair because of her special difficulty in getting up from the floor. Being last, she can benefit from the fact that nine children perform the exercise ahead of her, a fact which gives her more opportunity to take in what they are doing. Susan has advanced to the point where she can barely wait her turn; she struggles up ahead of several children, comes over to the piano and demands the drum.

We see from the above description that, although the exercise is done one-by-one, each child is aware of taking part in a group performance and of having his position in that group; he cannot but realize that his situation is dependent upon that of the other children in the group.

Another important aspect of this exercise is that the child has contact with the same single action over an extended period of time, and thus from time to time his attention can wander without fear of failure or reprimand. This is a particularly favorable situation for the severely retarded child who is easily fatigued.

Even those children who are able to react to an instruction addressed to the whole group require an individual approach, if only to maintain their motivation. For example, they benefit from such remarks as: "Did you see what Liza did?" or "Didn't Alice do that well?"

**Multiple media transmit the same message**

The rhythmics class is a situation in which instructions are communicated through diversified and mainly non-verbal media. The words employed have only a supportive role; they do not demand an analysis of meaning by the child; they are simply one medium through which the message is conveyed.

Consider the situation where the verbal medium is the only one. "Now let us change direction".

The child would have to comprehend three essential elements at once to perform this action:

1. The expectation that he is to do something;
ii. the complex informational content of "change direction", notions far beyond the grasp of the severely retarded child;

ii. the precise timing of the action.

Now, when this complex instruction is "translated" into a single, simple and consistent musical message, even the profoundly retarded child is capable of reacting appropriately.

There seems to be a specific role played by words functioning as rhythmic stimuli, as the following description illustrates.

On the whole, Alice was always very good at rhythmics. But she was unable to adjust her stepping rate to a gradual change of musical tempo. As the diagram shows (Fig 2.), instead of gradual acceleration, she reacted only to extreme tempos, slow or fast. Various techniques were tried with Alice to convey graduality of rhythm change as, for example, beating on a percussion instrument, tapping out the rhythm on her shoulder, waving the hand — but to no avail.

Then we tried chanting words according to a given beat — "Alice/Bety/Jane/and/Sally". This began to take effect; Alice started to adjust her pace to the accelerating beat. Then, as if trying herself to

![Diagram showing acceleration of musical tempo and change in Alice's performance](image-url)

**Fig. 2. Acceleration of speed by Alice.**
improve her performance, she started to repeat the words with the same accelerated tempo.

This observation, one of many we have made on this technique, points to the exceedingly important role of verbalized rhythm for guiding and ordering the movements of the retarded child.

Little is yet known about the individual difficulties of severely retarded children in perceiving rhythmic stimuli. It seems most reasonable, therefore, to transmit rhythm through many receptive pathways, thus providing varied opportunities for the child to achieve success despite his specific handicap. The surest road to success seems to be to transmit the message to the child through more than one sensory modality. In view of these experiences we adopt the policy of employing the maximum number of differentiated ways to convey a rhythmic message, including:

- rhythm through piano music or percussion instrument;
- rhythmic hand and arm movements;
- rhythmic tapping on the child's body (nose, chest, shoulder);
- chanting or recitative voice;
- imitation of others' movements as the elementary mechanism for guiding the child's movements.

We present below several exercises which employ different sensory pathways for communicating a rhythmic instruction to the child. We have selected exercises which induce the child to perform along with other children.

Simultaneously reproducing a rhythm in pairs

Children are seated on the floor in pairs, partners facing each other. Between each pair lies a drum on the floor.

Stage 1 — Each child strikes the drum with his right hand to the rhythm of the music. (They must strike the drum in such a way as not to interfere with each other)

Stage 2 — Partners take hands across the drum. With joined hands, they strike together on the drum in time to the music.

“Rhythmic conversation”

alternately reproducing rhythm in pairs
Stage 1 — Instructor and child stand facing each other, each holding an instrument of the same kind. The instructor beats out a rhythm, i.e., she “asks a question”, taking into account the perceptual and executory capabilities of the child. The child answers with the same rhythm.

Examples of rhythms:

Stage 2 — The instructor chants a rhythmic beat, for instance, the words of a song (without instrument). The child replies, reproduces the same rhythm on the instrument, e.g.,

Passing the ball on the down beat

Children are seated on the floor in a circle. They pass a ball to their right-hand neighbor, but only on the down beat of the musical bar. To perform this exercise, the children must listen carefully to the music and refrain from passing the ball immediately it is received. They must begin the transfer at the exact moment indicated by the music, and in a given direction, into the hands of the right-hand neighbor.
As soon as the child begins to master this exercise, he usually keeps his eye on the ball. Many children mark the stressed beat with rocking or head-nodding.

Synchronizing rhythms of word and movement

Stage 1 — The children form a circle, facing inward. To the beat of stamping feet, the children chant the following words, loudly and clearly. The final word is accompanied with a loud stamp of the foot.

Ma — ry, Bet — ty, Jane and Sal — ly,
Ma — ry, Bet — ty, Jane and Sal — ly,
Ma — ry, Bet — ty, Jane and Sal — ly,
Ma — ry, Bet — ty, Jack!
Stage 2 — Children take partners and face each other. They recite the text and clap once to each syllable. On the final word, each stamps a foot.

Each word can be clapped out differently, giving many variants. For example:

Ma — ry — the child claps his own hands twice
Be — ty — the child claps his partner’s hands twice
J a n e a n d S a l — l y — the child claps his own thighs four times.

Imitating rhythmic movement

The children stand in a circle, together with the instructor, each holding a handkerchief. The instructor waves the handkerchief in various rhythmic movements which the children imitate.

For example,

a. raising the handkerchief upward with a flowing movement, holding it with both hands at two corners, and lowering it. Duration: one 3/4 beat
b. “shaking” the handkerchief held with both hands at two corners. Duration of each shake: 1/4 or 3 shakes on 3/4 beat
c. “dropping the handkerchief” on the floor and picking it up only after two or more beats.

Reproducing rhythm of a bouncing ball

The children sit in a row on the bench facing the instructor who bounces the ball. The children clap to the bounce of the ball.

In conclusion, our practice shows that rhythmics is one of the most promising methods of socializing the severely retarded: it is an introduction to other joint activities which will be described in the following chapters.
Photo 27. Clearing away after a meal.
Section 1
Education for cooperative action

How far our pupils will be able, now and in the future, to live in harmony with the social environment is primarily determined by their ability to consider the needs of others and by their readiness to cooperate with others.

It is not our intention to underrate the necessity of teaching the retarded particular skills and techniques. But the extent to which such skills will be employed is determined by the ability of these children to live and work with others.

It is for this reason that the educational program and methods of the Day Center are aimed at creating conditions that favor reciprocal contacts. We have discarded the principle, still recognized by some in the teaching profession, that a pupil should primarily do a thing by himself without aid from another (the rules of “don’t copy” and “don’t prompt”). We take the opposite view: most of our time is devoted to those very kinds of activities that involve our pupils in diverse forms of collaboration and mutual assistance. These activities take the following main forms:

1) working in pairs,
2) working in teams involving the majority of the pupils,
3) the chain method of team work, used when a task consists of producing a series of similar products.
Such tasks are divided into a number of smaller ones differing in degree of difficulty and assigned to particular children according to their skills and abilities.

These methods will now be described and illustrated from our observation records. They are applied differently in the two groups: Group I, comprising the profoundly retarded pupils, and Group II, the severely retarded. We shall start with some illustrations from Group I, then go on to Group II.

Socializing activities with profoundly retarded pupils (Group I)

The developmental level of these pupils is comparable to that of the one to two year old child (see Diagram 1 in Chapter 2) who has not yet attained the stage of spontaneous collective play with other children. Socialization in this group rests mainly on cooperation with an adult (see examples in Chapter 3 on individual therapeutic approach). However, our goal is not limited to this; we work toward inducing these children to establish contacts among themselves.

The most favorable setting for establishing cooperative links, if only in the form of synchronized individual movement, is that of the gym or rhythmics class. This aspect of work with retarded children has been fully dealt with in the preceding chapter. What we wish to stress again here is the essential educational effect of this type of activity in inducing the child to adjust his own activity to that of another, a purpose served far more effectively by a physical and rhythmic program than by any other type of program. However, there are also many possibilities for blending the various types of activities: motor, manual, artistic and so on, for the purpose of exploiting their possibilities in socializing the deeply retarded child. A number of approaches and procedures will be presented below which have proven successful in helping to overcome the social isolation of the profoundly retarded child.

We present this material in the form of our recorded observations.

Passing the ball along a row October, 1969.

The children are seated side by side in a row of chairs. The game...
is to pass the ball along the row. To do this, the pupil must: (1) turn toward the neighboring child; (2) look at that child; (3) take note when he passes the ball; (4) grasp the ball in his own hands; and (5) transfer it into the hands of the child on his other side. The children taking part are: Tom, Susan, Jack, Rose, Sam, Dick and Charlie. Tom's eyes are fixed on the window most of the time, but the moment he is to pass the ball to Susan on his right, he turns toward her and places the ball in her hands. Susan reacts immediately to the teacher's instruction and passes the ball on to Jack. But Jack does not have the skill to grasp the ball; when the teacher places it in his hands, he gives it back to her or throws it on the floor. Rose understands her instruction at once. Once she receives the ball, she turns with a big smile to Sam and places the ball into his waiting hands. Sam rapidly hands the ball to Dick. But he is in too big a hurry and the ball tends to slip out of Dick's hands. When Charlie, at the end of the row, receives the ball, he runs up to the top end with it and the game starts over again. Later, the direction is reversed. Five times the ball is passed along the row from hand to hand.

Tossing beans into a hole in a can  December, 1969.

The children are seated at tables arranged in U shape. A handful of beans is placed in front of each child. The teacher, with a can in hand, goes from child to child requesting a bean to be inserted in the hole. Each time the child performs the task well, he is complimented. The teacher makes the rounds twice. By the third time the players pass the can and each adds a bean by himself. As the can goes from child to child, the teacher continues to compliment each good performance and to encourage those who have difficulty. The last child to insert a bean into the can brings it to the teacher. In conclusion the teacher thanks all the players for their cooperation.

Pasting a picture montage  May, 1972.

The following excerpt from our records reflects, in our view, the typical behavior of Group I children when assigned tasks that are too difficult and have an unclear outcome. In this case the task is to combine elements into a composition of a landscape and a house. 

The following children are seated around a table: Rose, Tom, Charlie
and Jack. The teacher (T) makes a few opening remarks telling the children what they are to do. Her purpose is to create a work atmosphere. T’s words only evoke interest in Tom, and only momentarily. He responds with “Laa...” (“las”, “meaning “woods”) and points to a green tree-top. But after a moment Tom gets up from his chair and sits on the floor. Rose shifts her chair to face the window, as if offended by the proceedings. Charlie, the only one to participate in the work, mutters “Uh huh”, nodding his head up and down. He seizes the paste-brush and begins to spread paste on the cardboard background.

Then T hands around the cut-outs, pasting side uppermost. (Group I pupils do not differentiate the two sides of a sheet). Charlie settles down to the work of pasting the cut-outs. Rose does not take part despite persuasion, and objects with a shove of the table. She is then left to her own devices. Jack now starts to toss the colored cut-outs onto the floor. When scolded, he kneels down to collect the crushed scraps and lays them out on the table-top. For awhile he is removed to a seat away from the work-table. Now Tom comes over and sits down at the table. With rapid movements he starts spreading paste on the cut-outs as they are handed to him by T; who then takes them and places them on the cardboard background. Meanwhile the assistant (A) has returned Jack to the table and is guiding his hand in pasting on the windows and doors of the house. Tom now starts to stick the pasted cut-outs on the cardboard at random. T readjusts their positions. Soon Tom gets bored with pasting and leaves the table. Despite urging he refuses to return to the job. Rose now succumbs to persuasion and starts to take part. She pastes the backs of several cut-outs. Soon a house, trees and a sun emerge clearly.

As the above account shows, this type of group activity with profoundly retarded children has little chance of success. Better results are obtained when we bring one pupil from Group I into activities with the more advanced Group II. This approach is illustrated below.


Rose (from Group I) takes part in a Group II game. The children are seated on chairs distributed about the room. One
chair is empty. The child nearest to the free chair calls out or points to the one he chooses to occupy this place. Sometimes the teacher has to do this for the child.

Rose is immensely fond of this game; she can play it tirelessly and is active from start to finish. As soon as her name is called, she struggles to her feet and hurries to take the empty seat. Her face is lit up with smiles of glee and she remains animated throughout the game.

Let's draw the teacher March, 1972.

Ted from Group I joins Group II for this activity.

The popular holiday, "Women's Day", is approaching. The children do not possess the general concept of "woman"; they must associate the word with a given person. One of the teachers — Helen — serves as this model.

Alice starts. She draws the head — a largish circle, slightly askew. Hinting at what comes next, T points to Helen's hair. Francie takes an orange crayon and draws spirals of hair. T selects a crayon for Bob and tells him to draw the eyes. He makes two circles and adds two short lines for the lips with the same crayon. Then he laughs and points at Helen. Francie is still at work on the hair. The other children look on with longing expressions; Ted keeps asking: "And me? And me?"

T enquires what is still missing from the drawing. Alice points to her own nose, then draws one. T helps Ted draw the eyebrows. Francie shows by gesture that the trunk is missing. Bob draws the hands, Ted colors the blouse and Dick the skirt which is outlined for him by T. Now Bob draws shoes. Dick is handed a blue crayon to make the sky; he exchanges the blue crayon for a yellow one, and draws lines instead. Did he intend this to mean sunshine?

Ted draws a flower, his hand guided by T. Now the drawing is ready. Together we hang it on the wallboard. Ted goes for the box of thumb-tacks, and holds it during the tacking. Dick holds up one side of the drawing, Francie the other, as T tacks it in place.

Ted participates spontaneously and actively in a task which is far more complex than that in which Rose shared. Although his hand is guided by the teacher, he shows the feeling of having participated in collective work. This is precisely the result we seek.
After several months of involving Group I pupils in Group II activities there were noticeable changes. Contacts among the children were now often the result of a spontaneous need.

All the pupils, with the exception of Susan, now carry their plates to the kitchen after meals. Jack and Tom gather up others’ dishes as well as their own. Rose has learned to distribute the table napkins to the children before the meal.

The most important aspect of our work on socialization at the Day Center is to keep fanning the spontaneous manifestations of helpfulness and friendliness. This applies to Group I as well as II.

Each sign of cooperation, sympathy and mutuality between pupils is immediately reinforced by the teacher with a glance, a smile or a favorable remark about the pupil to another adult. Even the smallest incident is noticed by the teacher, for example, when one child offers

Photo 28. Serving each other at table.
his hand to another; smiles at another, helps another with his clothing, initiates some joint game together. "Help him", "Give him a hand" and "Hold that for him" are suggestions often made by the Center's staff. Self-initiated cooperation among our pupils represent, in our opinion, our fundamental educational achievement. Examples will be found in excerpts from records given later in this chapter.

Socializing activities with severely retarded pupils (Group II)

Group II consists of 7 severely retarded children and 3 deaf pupils on a higher level of development.

Working in pairs

Many activities which, according to classroom tradition, are performed individually are in our Center performed in pairs, i.e., two pupils working together as partners. For instance, in cutting cloth or leather, or in sawing wood, the more dextrous pupil cuts or saws while the less skilful partner holds the material.

At first our pupils were baffled by the new style of work, but were quick to note its benefits for themselves. For instance, when Johnnie cannot manage cutting leather by himself, he goes to Jim and asks him by gesture to hold the leather for him to cut. (Johnnie cannot talk).

A typical illustration from our records of paired work follows.

Punching holes in leather November, 1971.

Materials: pieces of leather, a punching tool.
T chooses Johnnie and Jerry as partners for this task. She spreads a blanket on the floor and sets a wooden stump in the middle. The three sit down around it, cross-legged. T explains what is to be done as she demonstrates. She folds over a piece of leather and places it on the stump. Using her left hand she sets the puncher in place and strikes the top with a hammer several times. T removes the puncher, unfolds the leather and shows the boys the two round holes in it. T's demonstration is repeated several times.
Now Johnnie goes to work. He folds the leather over, puts it down on the stump, arranges the puncher in position (checking whether the distances are equal from the two sides of the puncher to the edge of the leather). Then he strikes it lightly, removes the puncher and unfolds the leather. There is no hole visible. Johnnie flings out his arms in disappointment. T shows him again how the hammer must be struck hard. Now, at the sight of two holes in the unfolded leather, Johnnie’s reaction is to leap up in joyful excitement. Next Jerry is told to do the same task, but he withdraws in fear and refusal. So Johnnie makes all the holes in the remaining pieces of leather and Jerry helps by handing him the pieces after first folding them in two. This is his own idea. But each time Johnnie hits the hammer Jerry covers his ears with his hands. Afterwards, the boys tidy up, fold the blanket and take all the materials back to their places.

**Teamwork**

As a general rule, the optimal number for a team is four to six to avoid obstructing one another. Meanwhile the remaining pupils are occupied with auxiliary or unrelated tasks. But sometimes eight, nine, and even the whole group of ten are involved since the excluded pupils stand around looking on and wanting to participate. “I want to paint!” from Phil, or “Me, me!” from Ted. Though their actual contribution is minimal, their willingness, engagement and enthusiasm count far more than the effective part they play. Pupils selected for a teamwork project feel important and proud of the fact. Even Liza, who usually sits on the sidelines, enjoys a part in this type of occupation. In fact, the first time Liza showed the least desire to be active was in this manner. Several recorded observations of teamwork projects are presented below:

A model garden December, 1969.

Materials: Large plate or tray, wooden sticks, kleenex, clay birds (made earlier).

Preliminary steps: The pupils are divided into small groups. T explains what is to be done: “Yesterday we made a lot of birds out of clay, we are going to make a little garden for our birds. The boys
are to line the bottom of this tray with clay and get little sticks ready for the fence. The girls are to paint the birds. When the garden is done, two children will put on a layer of white kleenex — that’ll be the snow on the ground.”

Report of the activity:

Bob and Jim line a large tray with clay and “plant” little sticks to make a fence. They work together smoothly and efficiently, in good spirits. (They are inseparable pals).

Frank, Johnnie, and Ricky break up the sticks into proper lengths, using one as a measure.

Johnnie disapproves of Rickie’s work, throws his sticks to one side. He shows Ricky they are uneven in length.

Frank also criticizes Ricky (“Shut up, y’broke’em wrong.”)

Alice and Francie paint the clay birds.

Francie feels responsible for their part of the enterprise; she continually shows Alice the slightest imperfection in the latter’s work.

Eddie and Phil prepare the snow for the garden by tearing sheets of kleenex into narrow strips. Eddie is absorbed in this task. He calls for someone to take Phil away (“He spoiling it — I do it”). He works with sustained ardor, gluing and laying the kleenex strips over the garden.

Bob joins Eddie at his task, helping him tear the kleenex strips.

Francie and Alice set the birds down in the garden.

Termination: T talks over the work with the pupils. Each pupil, as far as he can, tells what he has accomplished. Each receives a word of appreciation for good work. Eddie and Bob are singled out for special mention in view of their perseverance and thoroughness.

Materials: flour, sugar, eggs, baking powder, flavoring, cream. Utensils include tumblers, cookie board, rolling pin, baking tins.

Preliminary steps: Francie and Ted lay the utensils and ingredients on the table. The others indicate these items as the teacher points them out and names them.

Seven children take part.

Record of the activity: Bob pours some flour onto the cookie board. A helps Ernie pour sugar into the measuring glass, then Ernie pours the sugar over the flour, adds a little cream. Dick and Phil follow the same procedure. First T demonstrates, then each child in turn practices kneading the dough. The other pupils are busy carrying ingredients and utensils. Francie greases the baking tins. Bob kneads "like a real baker", a compliment from T, which produces a grin of delight. (When Phil first tried to knead dough, he was incapable of making the movements; but after only a few tries he began to press down from the wrist and knead properly. Now kneading dough is one of the few motor operations Phil can perform well.) Ernie is trying to knead but his efforts are even more awkward than were Phil's first attempts. As soon as some dough is ready, Dick rolls it out; Francie and Alice cut out the cookies with a tumbler, and place them on a plate. T and some of the other children transfer the cookies to the baking tin.

The participants show real pride in the task and its product. Once the cookies are baked, the pupils pass them around to the staff members and the children of Group I. Often they take cookies home with them, to the pleasure of their parents.

Cookie-making is an activity that lends itself easily to teamwork. The pupils can be largely independent at this undertaking. Now, after many repetitions, a word or sign to show the plan for the day is enough to set the children in action moving tables, putting on aprons, getting the equipment and ingredients ready. Nor is there any difficulty with cleaning up afterwards. Once a suitable division of labor has been made, the teacher's role is almost negligible.

Cookie-making follows customary Polish procedures. But probably cookie-making anywhere can be adapted to this purpose.
Once again we stress the aspect of social acceptance of work done. The product of a joint effort is, without fail, commended aloud by the teacher, assistant, Day Center director and other staff members. But the greatest pleasure of all is derived from the opportunity to proffer one’s work to an adult. Sometimes this is done by each child individually; sometimes it becomes a form of reward, the best workers forming a delegation to make the presentation. Always, before beginning a task, the children are informed beforehand for whom they are doing it. This has a mobilizing effect, particularly if that person is one with whom the pupil has an emotional tie (his mother or teacher).

The chain method

Teamwork activities by the chain method require more careful preparation than do any other forms of collective work. This type of activity consists of a chain of operations in a given order, which terminate in a final product or series of products. Each link in the chain is a task performed by one (or more) children, and is part of a whole sequence of tasks. Thus each child receives his task at some stage of progress toward the end product; he does his part, and passes the work on to the child working on the next stage.

Group activities by the chain method have the advantage that all pupils can participate regardless of degree of capability and knowledge; simply, the less able pupil performs the less skilled operation.

The chain method is illustrated in the following examples from our records.

A greeting card for Women’s Day March, 1970

Materials: Bristolboard cut up into rectangular cards of desired size, an office puncher, fancy ribbons, scissors, illustrated magazines, glue, brushes, envelopes to fit the cards, postage stamps.

Preliminary steps: T tells the group that Women’s Day is coming soon. The pupils then name those who will be honored on this occasion (including their mothers). Now they are informed that these are the persons for whom they are to make greeting cards, to be sent by mail.

With A’s help, T distributes the materials to each child according to the operation he is to perform.
The children are excited at this new activity and pleased with the idea of making a gift.

Report of activity: (see Scheme 1*)

Each child began to perform the part of the task assigned to him. Jim punches 2 holes with the puncher on the left side of each piece of cardboard and hands the cards to Johnnie. Meanwhile, Bob cuts the string into appropriate lengths and also hands them to Johnnie who sits across from him. Johnnie matches two cardboard pieces together and threads the string through the holes, joining them. Harry ties the bow knot. At the same time, Francie and Alice cut out pictures from children’s colored magazines. Now Frank glues these pictures on the inner side of the greeting card. Ernie also cuts out pictures, but since his performance is not up to standard, these pictures are not used. However Ernie appears to be getting real satisfaction from sharing in the work and doing something for his mother. Ricky inserts the greeting cards into envelopes and pastes postage stamps on the upper right hand corners. Eddie takes the envelopes from Ricky, glues down the flap, and hands the closed envelopes to T, who addresses them to the parents.

Framing postcards  April, 1970.

Materials: Heavy cardboard, postcards (selected according to topic), colored paper, white paper, scissors, glue, brushes, linen string.

*S-Scheme* does not necessarily refer to the seating arrangement but to the sequential organization and flow of work.
Jim cuts the colored paper into strips along pencilled-in lines. Bob glues a postcard in the center of each piece of cardboard, and hands them on to Johnnie. Johnnie glues strips of colored paper on four sides of the postcard, making a picture frame. Francie evens the edges by trimming the lengths of the strips. Meanwhile Frank is cutting bandaid-sized strips of white paper, and Ricky is snipping 2-inch lengths of string. They both pass these materials to Bob, now on his second job gluing the ends of the cord to the back of the framed picture held fast by the white paper strips, thus making a loop for hanging up. The picture is now ready.

T and her assistant have helped on the more difficult parts of the task: helping Bob to center the postcards, guiding Ricky's hand in cutting the lengths of cord, aiding Bob to glue the loops.

Painting cubes

February, 1970

Materials: 3 x 3 cm lumber 1 m long, a saw, poster paints (3 colors), brushes.

Preliminary steps: The children are seated appropriately. Harry, the most efficient pupil, is to saw the lumber into cubes. The others are to paint them different colors. Alice spreads a protective paper on the table.

Report of activity: (see Scheme 3).

Harry saws the lumber into cubes and hands them to Jerry. Jerry
paints four sides of each in blue, and hands them to Alice beside him; Alice paints one end another color and passes them on to Francie. Francie paints the other end and lays the cubes down to dry. Harry is the only one to need help. The teacher holds firm the pieces of lumber as he saws them. Then Johnnie joins in and takes over the teacher's role of assistant. The work moves along smoothly; each manages his own part of the task. Alice waits patiently until she receives the cube from Jerry, while Jerry waits till Harry hands him each sawed segment. No intervention on the teacher's part is necessary.

The chain method requires of the child that he pay constant attention to what his work-mates are doing and to their working pace. If one is slow, the next must wait for him. Each must keep in communication with the other.

As a teamwork task becomes more standardized, less guidance and help is needed from the teacher, which is one of the advantages of this method. The greater the children's independence, the more their satisfaction in a common production. Even the least skilled among them, for example Ernie (see Scheme 1), is exposed to the climate of working together; he, too, feels himself a collaborating member of the team despite his nonproductivity. The teacher evaluates the work according to the effort and enthusiasm put into it by the pupils. The beneficial results of the chain method were once eloquently expressed by Eddie. This boy, whose share in the common task is minimal, was first one day to answer the question: "Who did that piece of work?" His proud response was, "Me!"

Significance of the teamwork method in contrast to the traditional method

Let us begin by contrasting activities conducted by the traditional method and by the teamwork method, using graphic models for this purpose. Scheme 4 shows the traditional approach, while Schemes 5, 6 and 7 present various teamwork models.

Scheme 4 shows that 5 children (C1, C2, etc), under the eye of the
teacher (T), execute the same task (t); there is no cooperative give-and-take among them. The less able child (Cx) in the traditional system has no chance at all of successful participation in the task as a whole, but is necessarily exposed to failure. Contacts among the pupils are limited to taking instructions issued by only one person, the teacher.

On the other hand, we see from the teamwork models (Schemes 5, 6 and 7) firstly, that social contacts (the arrows) are richer between all participants. For example, in Scheme 7, C2 must attend to the teacher’s instruction and at the same time attend to C3 (who is waiting for his work) as well as to C1 (who is handing him his finished part). Secondly, we note that Cx can be a useful participant in the whole task. For example, in Scheme 7, Cx might put the finished product into a box. Thirdly, we note that each participant not only fulfils his particular share of the task, but sees it as part of the whole, and all other tasks (t1, t2, etc) as parts of the whole as well. He is particularly interested in the final stage (t6) which is the finished product. As a result, interest in the whole task, as well as in each part, tends to rise.

Teamwork has importance, therefore, not only for enriching social contacts but also for fostering mental concentration.

The child who takes part in teamwork must be vigilant and ready for a large number of contacts with others; he cannot restrict his attention to his own segment of the task. He must see what his neighbor is doing and what material he will have to deal with in a moment; on the other hand he must pass on what he has done to the next
child and make sure it is prepared for that child as well as possible. At the same time, he anticipates the result of the whole task, which requires a mental grasp of the complex situation and of his own place in it. This calls for an enlarged perceptual field, attention focus and switching, which in a word constitutes a greater mental effort than is required by the traditional system.

Teamwork-modelled activities favor the growth of a sense of one's own worth, even in very severely retarded children (C₄) who by working individually have little opportunity of experiencing success.

Such activities are particularly beneficial for anxious and tense children who are excessively prone to fear of failure. When an activity is run by the traditional method, the child feels he is bearing the entire
responsibility for the task. Often such a child is exposed to states of extreme tension, waiting for either praise or reprimand. But when an activity is run by the teamwork method, psychological strain is alleviated, since praise or blame is addressed to the whole team.

In the Day Center we have organized activities systematically along the lines laid down above. As mentioned earlier in this chapter, the teacher's approval was displayed at every show of mutual aid and cooperation among the pupils. With time, this led to the emergence of spontaneous cooperation in the daily doings of our pupils. In the next part of this chapter we present some examples which seem to us to be good illustrations of these results.

Section 2
Diversity of social life at the Day Center

Interest in the other person and adjustment to him, which is in large part due to a systematic application of teamwork methods, led in time to the spontaneous emergence of a specific social structure among the Day Center children. In this structure, each had some social role to play: play partner, co-worker, friend, care-taker or care-object, or simply a passive but involved spectator.

On Diagram 2 in Chapter 2 we have shown the social links observed among our pupils as compared with their mental age and personal-social maturity levels. Here we present some descriptive material. The excerpts from our records which follow show how diversified and qualitatively different the social contacts can be among children who not long before were labelled "uneducable".

Being among age-mates as a source of enjoyment

The kind of social experience accessible to the most retarded child is that of being in a group of others of his own age. Mere presence in such a group is, for such a child, a source of rich sensations and deep feelings, though rarely exteriorized (for lack of speech). On occasion, however, these states of feeling are expressed in eloquent ways.
"Rose is always aglow on Mondays. She often kisses her school smock." Rose overheard this remark by Helen to another teacher, came over gesticulating, embraced Helen and kissed her.

November, 1971.

Jack often changes his seat to be nearer a group of children. When Rose or Jack are alone in the Center for some reason (for example, when the other pupils are out on a longer excursion than usual), they grow disconsolate. Jack looks around impatiently and accosts anyone passing by.

December, 1971.

"All gone". For several days Sam has kept repeating this and spreading his arms. There are only a few children now at the Center because of the Christmas holidays. Sam does not usually join the group life openly; almost always he refuses to take part in an organized activity. He dislikes moving around because of his bulk and defective posture (one leg shorter than the other;) he likes watching from his seat by the wall. He likes to know what is going on.

April, 1970.

Phil is one of the best developed mentally at the Center. At first he could not contact the others and to all intents and purposes did not seem to need them. But, as it soon turned out, he also wanted the company of others his own age. When everyone was back after the Easter holidays, he told us: "It was okey with grandpa, we went for walks. But I like school. It’s better here.”

From his grandfather’s account, Phil missed the other children greatly and looked forward eagerly to returning to the Center. He came in wreathed in smiles, highly elated, and greeted all the children ceremoniously. He told the teachers he was going to be very good. Despite the greater restrictions on his freedom, Phil prefers group life at the Center.


Charlie never makes any overtures toward the others. But the children take an interest in him and express their good-will. Charlie, in return, always smiles at every gesture of friendliness.

April, 1972.

Liza is sitting beside Charlie and talking to him. She makes him sit
down and get up, leads him everywhere by hand. Charlie submits with a smile to all her orders. He is obviously very pleased over the interest shown in him.

Liza is often aggressive toward the other children. With Charlie, though, she is gentle and even-delicate in her ways.

**Helping the weaker ones**

The presence of weaker children, less able physically, is often a stimulus evoking assistance from the more skilful pupils.

October, 1970.

For the first time Phil spontaneously offers to help another child: he helps Lem go down the stairs.

October, 1971.

Alice looks after Dick. It is very obvious that Alice singles him out for special attentions. She ties his bib around his neck, helps him get dressed and undressed. She strokes and kisses his forehead. But she is severe with him, too. Today after Dick had scratched Liza, Christine (the teacher) asked Alice whom she liked best. When Alice did not point to Dick, Christine asked in great surprise, “Don’t you like Dick?” “Liza cry—Dick hit ’er”, said Alice very disapprovingly. Her preference for Dick was gone for a while. Today she chose not to favor him.

Alice’s attitude to Dick is one of many examples that could be given of more able children ministering to younger and weaker ones. It is also worthy of note that our pupils often are attracted to small children, either their younger siblings or the children of our Center’s personnel.

April, 1971.

Ted likes babies. He approaches them, looks at them as if at a toy, and touches them gently with his finger-tips. Today, after watching a small child, he asked for some money. When asked what for, he smiled ever so sweetly, pointed to the child and said, “Buy”.

June, 1971.

Johnnie played ball today with a little boy he met in the park. Johnnie is a big strapping fellow, temperamental and highly excitable. But he handed the ball to the little boy very gently, knowing full well
he was playing with a younger and weaker child. This required controlling his strength and normal energy. The two played together this way for about 10 minutes.

**Grasping the social situation**

Evidence that our pupils feel empathy with others and grasp the social situation is contained in the following observations.

November, 1970.

Harry has just been to the dentist’s. He becomes the centre of general concern by the staff, whereupon both Ted and Peggy develop “toothaches”.

May, 1972.

Sam, who is sitting at some distance from Charlie, keeps casting glances in his direction and repeating: “Upset... upset”. The teacher asks him: “Who’s upset, Sam?” He answers, “Sam upset”. “Why?” “Charlie burn hand”, is his reply.

November, 1969.

Johnnie keeps squirming in his chair at the table. Finally he jams my leg between the chair and table leg. As a measure agreed on beforehand with the other staff members. I put on a very upset expression and have the nurse bandage my leg. Most of the children flock around to see, and show concern over the “accident”. Johnnie is upset, too, and even grows pale, begging my pardon with gestures and pleading eyes. He takes my arm and helps me into the office. He understands the situation and helps as much as he can.

**Mutual assistance and solidarity**

September, 1972.

Francie (who is deaf) is confronted with a task beyond her powers during rhythmics. She is to distinguish between the sounds of different instruments outside her visual field. Duplicates of these instruments are lying in front of her. She is to point to the one she has just heard played. She looks as if she were listening carefully, but is trying to see which instrument the instructor is holding. When all attempts fail, she fixes her eyes upon Alice and in rapid succession points to the two instruments before her. Alice’s reaction is instantaneous; she nods her head each time Francie touches the right in-
This exchange of information is so discreet and rapid that if one didn’t know that Francie is deaf, one would not guess it from her responses.


Francie, usually the first pupil to arrive at the Center, always waits for Alice. Today she sees Alice arriving with a heavy parcel in her arms. Francie runs down the steps into the yard and helps her friend carry the parcel upstairs.

February, 1972.

The whole school is leaving on an excursion. As it turns out, there is one place short in the car and — unfortunately — it is decided for Johnnie, the most mature of the group, to stay behind. But Francie, Alice, Phil, Billy and Jerry all begin to beg the teacher to let Johnnie come.

So of course Johnnie comes, despite the tight fit in the car. He is very pleased at this turn of events and so is everybody else, as witnessed by the laughter and merrymaking. Johnnie himself greets everybody as if he has been away for a long time.

This shows how much the children are used to being together, how they feel they belong in a unified group.

June, 1972.

Slices of cake are being served. Jerry is overlooked as he is sitting apart from the others. First Francie, then Johnnie, notice him and begin pointing him out significantly.

May, 1972.

Johnnie is always slow getting dressed despite every urging. Today, I was slowly getting ready to leave with Harry, Billy and Liza. Liza, who was holding my hand, kept turning around and calling, “Come on Johnnie” and “Hurry up”. The others stayed with Johnnie, Francie handing him his clothes, Alice and Jerry helping to tie his laces. Johnnie started to move a little faster, and soon all four caught up to us together.

The profoundly retarded children (Group I) also display some forms of mutual assistance, as the following observations show.

May, 1971.
concentration; he is collecting play materials and carrying them to their places in the cupboard. He picks up Rose’s apron and hands it to her.

December, 1972.

Jack goes over to Rose and hands her a gramophone record which he picked up from another table. Nowadays Jack frequently offers an adult or another child some object or toy. Before, he used to throw anything he had in his hand down on the floor.

Displaying tact and good manners

As mutual contacts grew in frequency, we noted certain signs of tactfulness and even gallantry toward the teachers. Typical of this is Harry’s grasp of a situation “in company”, as the excerpt below illustrates.

June, 1972.

We had entered a sidewalk cafe for lemonade and biscuits. Each had received one biscuit. After Harry had eaten his, he reached to the plate for another one. I said, “That’s Christine’s biscuit. Leave it for her”. Again Harry reached out for it and I spoke sharply. But Harry just picked it up, saying, “Take to Christine”. Sure enough, he took it to Christine (the other teacher) who was sitting at an adjoining table.

October, 1971.

We had all sat down at the dinner-table. The children had already received their plates and were starting to eat. I alone had no plate of food. I covered my eyes with my hands as if crying. Billy rose at once to his feet and rushed to the kitchen, Francie after him. Alice, bemused, began to look around and stopped eating. Billy and Francie (both deaf children) brought the teacher’s assistant from the kitchen and showed the missing dinner-plate. All were very concerned, and refrained from eating until I had received my dinner.

June, 1972.

Usually the bus we take is crowded. The children are quick to note when a seat is freed, and point it out to the teacher or to each other with the idea of someone taking it, usually the teacher. Politeness to a teacher carries over to strangers as well. Often if the children
see an elderly person in the bus, they inquire if they should give up their places.
Liza is talking steadily to Alice. Johnnie places Jerry on his lap and "talks" to him, too. But when Liza's chatter goes on too long, Johnnie places a finger on his lips in a gesture to be quiet. Since Liza pays no attention, Johnnie waves a finger at her threateningly, at the same time putting his finger again on his lips.

Initiating collective play

Johnnie (who is deaf) began the game. You could call it a TV interview. He holds one end of the skipping rope to his lips and "says" something, holding the other end to the mouths of different children seated on the bench.
Of greatest interest to us are those games and play contacts involving the profoundly retarded pupils of Group I.

November, 1970:
Ted (Group I child) is constructing something together with Jerry, one of the most clever pupils in our Center. This is not an uncommon sight.

October, 1971.
Liza often plays with Jack and Charlie (Group I pupils). Today she got Jack to move over to the table and sit up straight in a chair; now she teaches him how to clap his hands. She takes his huge hands, which demands considerable effort, and brings them together in a clap. If the clap is not as loud as she wants, she repeats the action. If it is a good clap, Liza kisses Jack.

May, 1971.
Alice is seen running around the yard, catching Billy and hitting him with a twig. You could not call this aggressive behavior. It looks more as if Alice were challenging Billy to play with her.

Work in pairs at various activities organized by the teacher has also inspired spontaneous partnership play.

April, 1972.
Yesterday, Francie and I put together a mosaic puzzle, pressing variously colored thumb tacks into a special board. Francie put in
Johnnie and Francie are seated across from each other at the table, each working on mosaic patterns. Johnnie works first on a floral design, then on a traffic-light drawing. Francie imitates him and reproduces his pattern on her board.

May, 1972.

In a free period Francie starts a game. She plays with Jerry, rolling a ball to him under chairs that serve as gates. Then she gets Jerry to help her place the chairs in various positions. Jerry follows her lead.

May, 1972.

Phil begins a game with Jerry. It is a game for two players, each throwing to the other simultaneously a big plush block. Phil calls out “Hop!” and they both throw to each other. They are much amused by this game and play it for about 10 minutes.

Assisting one another at work


Harry saws lumber into small cubes, the teacher holding the wood for him. She leaves him for a moment to settle a dispute between Phil and Liza. Johnnie seizes the opportunity to take the teacher’s place. He has been observing how Harry is working. Now he holds the piece of lumber firm and straight until it is cut up into cubes, then hands Harry the next piece to cut. The whole time he “talks away” to Harry as if to instruct him how to do this. Harry smiles calmly, unlike his usual reaction when he is disturbed at his work. He accepts Johnnie as his assistant. (See “Painting cubes” for fuller description).


Alice, Francie and Johnnie are all three stirring a cake. Alice and Francie hold the bowl, each on one side, and Johnnie mixes the batter with a large wooden spoon. He is a strong boy and the job is easy.
He keeps “telling” the girls by gesture to hold on tighter to the bowl. Alice takes her hands off altogether. Johnnie gestures at her to keep on holding it for him. The teacher intervenes and changes their roles. Now Johnnie holds the bowl while Alice does the mixing; then Francie has a turn. Johnny, a boy bursting with life and initiative, soon tires of an activity calling for concentration and immobility. Phil takes his place, but neither can he carry out this task for long. All the children, to varying extents, give a hand at this task.

May, 1971.

Jerry was cutting pictures out of a children’s magazine. This is his favorite occupation. Alice was taking his cut-outs and pasting them on a cardboard. Harry was now free after finishing another job and I asked him to cut out some pictures too, handing him some magazines and a pair of scissors. Johnnie sat down beside us; he had been watching Jerry and Alice at work. Now he went and got a brush and pot of paste from the cupboard, and asked for a card. He wanted to do what Alice and Jerry were doing.

June, 1972.

I asked Jerry to cut out some narrow strips of tissue paper needed for the job we were doing. Jerry took the tissue paper and scissors, and tried to carry out the instruction. But he did not have much success. Jerry (who does not speak) gestured to Francie to help him. Francie held the tissue paper for him while he cut. Jerry ‘explained’ something to Francie. They kept exchanging smiles throughout.

Whenever something new happens at the Center, every pupil is interested, and joins in spontaneously. An illustration of this follows:

November, 1971.

I was busy hanging up some hooks for towels in the bathroom, and was looking for some in a drawer. During the search Jerry joined in. He handed me a hammer. Then Johnnie and Francie came along. They held the nails and tools. I signed to Johnnie to bring me the screw-driver and pliers, which he did. Francie ran off for a nail while Johnnie worked on extracting some nails from the wall. Tom came into the bathroom and attentively watched us at work. Then he
helped pull some nails out of the wall. Dick also came to see what was happening.

The entire group was interested in the job at hand and pleased at finding an opportunity to do something useful. After the nails were in, Francie brought her towel to hang up. Later, she caught Christine by the hand and brought her into the bathroom to show her what new thing the children had done.

Managing without adult help

Gradually we try to reduce our help, especially during dressing and undressing. When the new school year (1971-2) opened, it was decided that the children should from now on dress by themselves. While adult help could not be totally eliminated, it could be cut down to a minimum, as, for example, in buttoning and lacing boots. In fact, the pupils soon learned to manage. They called on Harry who obligingly tied and untied laces and even sewed on buttons. By now pupils in Group II do not need the teachers' help in dressing.

June, 1972.

Group II pupils were preparing sandwiches. The work was going well. Alice and Jerry peeled and sliced the cucumbers. Liza and Francie, Harry as well, buttered the bread and rolls. Dick sliced the radishes. Jerry came running over as I started getting the drinks ready. He stayed and helped me throughout. Later the children brought the mugs, the sugar-bowl and the spoons to the table. Jerry started to add sugar to the drink.

Harry wanted to eat the sandwiches as soon as they were made; he did not understand there had to be enough for everybody. He looked very unhappy when scolded but did not touch the sandwiches again.

The children offered the sandwiches to the adults first. Then they sat down to the feast. Two of the more restless children (Liza and Johnnie) were absent that day, so the mood was relaxed. Harry, Francie, Alice, Jerry and Dick sat quietly eating and drinking. For part of the time they were left on their own. When I returned they were sitting peacefully at the table. Afterward they cleaned up by themselves.

After lunch they set to work getting dressed for outdoors. Francie
gave Dick a hand with his boots but could not cope with the laces. Meanwhile, Harry had the idea to dust the doors. Francie grabbed him by the hand and led him to Dick who needed help with his boot laces.

Comparing present activities with those 3 years ago, we note that the children are both more efficient about their work and more independent. The teacher’s share is reduced to the odd instruction and to general supervision. To a considerable degree our pupils are able to organize their work and play. It is worth noting that the number of aggressive behaviors have diminished. Moreover, the children began to solve their conflicts by themselves.

Resolving conflicts without adult intervention

May, 1972.

Phil kicks Jerry, who cries. Johnnie runs to Jerry and starts to comfort him. Then Francie sits beside the injured one and begins to cuddle him and stroke his head. Meanwhile, Johnnie greatly worked up, tries to reconstruct the event. He signals to Jerry, enquiring whether Phil kicked him and if his leg hurts. Jerry begins to sob all the more. The children cluster around Phil with threatening gestures. Phil is worried; is more concerned over his playmates’ attitude than over the teacher’s reprimand. Ordinarily he shows no penitence when scolded; either he fails to react or laughs it off. Now, confronted by general indignation, he grasps that his behavior had been at fault. For a long time he sits in silence.

October, 1972.

Phil again disturbs the peace, but this time the children really fix him. They push him under the table, shove the table against the wall, and sit on chairs around the table so as to prevent Phil from crawling out. They are Johnnie, Francie, Alice and Jerry. The initiator of the move is Johnnie.

Developing friendships

Friendships between pupils play a large role in their lives. Each friendship has a different quality. Alice’s attitude to Dick has already
been mentioned. Another example is the comradeship between the small slight boy Jerry and the tall lanky Harry. Of this pair, the former is the one to take care of the latter.

October, 1971.

Harry is a little “lost” in this world. He is totally incapable of defending himself against aggressive attacks from others. On his own Jerry started to take him in charge. When we are out on a walk, Jerry takes Harry’s hand. He is the one to look around before crossing a street, and to pull Harry along faster when a car approaches. He chides Harry when he does not approve of the latter’s behavior. If anyone tries to harm Harry, Jerry yells at him or calls for the teacher’s aid.

It cannot be said with certainty what factors determine this friendship. Perhaps Harry’s height and potential physical strength give Jerry the sense of security and power he himself lacks.

May, 1970.

Sam has singled out Peter and Liza. But of the two Sam is most attached to Peter, of whom he is passionately fond. He sits motionless for hours looking admiringly at Peter while the latter does nothing but sit placidly. Sam will not move from his seat without Peter.

December, 1971.

Sam refused to carry out a test task set by the psychologist. To change Sam’s mood, Peter is brought into the office: In the latter’s presence Sam performs all the tests rapidly and efficiently.

The above documentation constitutes evidence that the daily life of severely retarded children can be rich and diversified, full of novel experiences, conflicts, enjoyments, upsets and readjustments — all of which are linked to their sense of belonging to a living social organism.
Unquestionably the task of teaching the retarded child to use language is an extremely important one. Yet one should never lose sight of the fact that speaking is not in itself a teaching goal but is only a means toward the maximal development of the child’s social personality. Let us consider the main functions served by speech.

Speech as a form of social contact

In the course of any child’s growth, whether normal or retarded, there are several successively emerging forms of social contact. First of all, the child seeks the presence and proximity of a social partner. Then, non-verbal emotional communication develops, such as smile exchanges, interest in and gradual comprehension of facial expressions. With further development of the individual, this form becomes more refined and elaborated. Thirdly, non-verbal communication develops through the medium of objects: the child offers someone something, points it out, gives and takes it back again, manipulates it together with another. Only as non-verbal communication expands does the need arise to use a new, richer form of communication, that of language. It should never be lost from view that the non-speaking child who has developed good tools for non-verbal communication can live among others as practically a full-fledged member of society. On the other hand, the child who speaks but is unable to make non-verbal social contacts is difficult and maladjusted, unequipped to share harmoniously in the life around him.

Teaching verbal communication should, therefore, always start from establishing non-verbal forms of social communication, and retain the connection with them.
Key words indicating progress toward social personality development

The use of verbal symbols is closely connected with the development of social personality. Without going deeply into this subject, let us limit ourselves to pointing out the significance of a few key words whose use shows that the child is making successive steps in personality development. It should be stressed that the child's use of key words has greater significance for his development than a large vocabulary and fluency of repetition. These key words are:

"Mommy", which indicates that the child is expressing his wants and addressing them to a given person whom he is able to single out from all others;

"no", which means that the child has reached the stage when he no longer opposes the adult as the infant does — by physical resistance, agitating, grabbing, and so on, but in a socially acceptable verbal manner;

"I" or "I do it" (or equivalents), which indicate that the child has attained a rudimentary notion of his own separateness and identity. He is now capable of feeling that his worth depends not only on affection and praise from others but also upon his own enterprise (see examples in Chapter 5);

"yes", which signifies that the child is no longer passively submitting to adult will but is capable of complying voluntarily through reasoning based on comprehension. It is to be borne in mind that the maturity to say "yes" with understanding must always be preceded by the ability to say "no".

"we (us)", signifying that the child has gained the ability to see himself as a social partner with others, and has grown out of the stage of egocentrism in which all events were referred to his own person and wishes. This is a word very rarely used by the severely retarded although the concept is surely accessible to them. The Day Center's pupils have not attained the mental maturity necessary to use the form and concept "we (us)", yet we have been able to educate them in the direction of lessened egocentrism.

Here, as illustration, is a conversation during which the child's attention is directed not to his own person but to other children.
February, 1970.

Teacher: I saw Frank help the others get undressed for gym. I was proud of him. Does anybody else know how to help?

Phil: Francie tidies up, sets the table.

Alice: Alice washes Eddie.

Teacher: Tell us how you help at home.

Harry: Helps.

Teacher: Harry washes the floor and then he waxes it. Harry carries heavy parcels for his mommy. What can Jim do?

Children: Clean up.

Teacher: Jim can sweep very well, and place the tables. Now what can Johnnie do?

Ricky: Johnnie he give spoons, he wipe tables.

Teacher: Tell me, which of our children need help?

Alice: Eddie.

We see from the above conversation\(^1\) that most of the children are not speaking about themselves. Phil speaks about Francie, Alice about Eddie, Ricky about Johnnie.

**Speech as a tool to express desires**

It should be stressed that, even where the child has a very poor repertory of words and concepts, the ability to communicate by means of words has an extremely favorable effect on harmonious interaction with others. If a child cannot put into words his experiences, needs and desires, he uses gesture and mimicry which may not be

\(^1\)Utterances of children were noted by the teacher as accurately as possible immediately following each conversation. The English translation is of course an approximation. It is intended to reflect as far as possible the various levels and characteristics of speech retardation. The following conventions were adopted for translation:

1 — Normal speech (represented only by Phil) is noted by standard English written forms.

2 — For utterances produced with difficulty (halting, delayed, indistinct speech) breaks are indicated by dashes, and words are broken by hyphenation of syllables.

3 — Rudimentary grammar is translated according to differentiations found in recent research on English developmental grammar.
understood. When the adult fails to make a correct guess at what is preoccupying the child, it may lead to an outburst of anger or desperation. These in turn meet with reproof or punishment, contributing to mounting tension and leading to the next emotional outburst. This forms a pattern which frequently underlies severe behavioral disorders, difficult to uproot later. The child who is capable of expressing his wants in words is less exposed to this type of situation. Research findings on the normal infant have shown that uncontrolled emotional outbursts begin to diminish when speech emerges. Here is a record of a conversation in which words were intentionally used by the child to transmit his desires.

November, 1971.

Harry has just returned to the Day Center after a holiday break and is trying to share his experiences with someone.

Teacher: Where did you go, Harry?
Harry: Pomiechowek. In a bus.

Teacher: And would you like to go back there again, Harry?
Harry: No. Won’t go back. Doesn’t like it. (Harry always refers to himself in the third person singular).

Teacher: Why don’t you want to go back there, Harry?
Harry: ’Coz they hit.

Teacher: Who hit you?
Harry: Jennie. Come back in a bus. Won’t go back.

Teacher: O. K., Harry, you won’t go back there again. You’re staying right here with us. Here the children don’t ever hit you.

Harry: Here, school. Mommy come. Won’t go back.

Harry is dominated by anxiety feelings. He is particularly distressed in new surroundings and with unknown situations. Despite his primi-
tive speech forms, he is fully intelligible about his desire to remain in the Day Center's familiar surroundings and under his mother's care at home.

Speech as a means to express emotional states

At every level of human development there exists a need to express, communicate, or exteriorize one's inner experiences and emotional states. Even the baby exteriorizes his feelings, most often in a generalized manner through chaotic motor activity, inarticulated vocalizing, laughter and crying; later through aggressive outbursts as well. Such forms for release of emotional tension are tolerated and accepted within limits in the infant and small child, but in the mentally retard ed school-age child they are looked on as abnormal and "wild" ways of behaving. They evoke disapproval and lead to rejection of the child at the very moment when he most specifically needs human contact and understanding.

It is therefore important for backward children to have the opportunity to express their inner experiences through various means: movement, dance, song, drawing, free play — and through verbalization as well.

The teaching program should include the kind of activities that not only presents patterns for the child to reproduce but also permits him a certain leeway to select his own means of expression for emotional tensions. This approach is known as the projective method. During such activities the child projects his feelings into what he does. For instance, he chooses bright colors when he is in a cheerful mood, or dull colors when he is feeling unhappy (see as an example Plate I). Or he selects a topic for drawing which relates to his momentary preoccupation. Both the need and ability to give free expression to one's experiences, in some form or other, prepare the way for verbal expression.

Certain outdated textbooks tell us that the mentally retarded person is only capable of passive and mechanical reproductions of the simple acts taught him. This is untrue; at all levels of human development the individual possesses the capacity to express his experiences spontaneously and in his own fashion. He can use words as names of his own and others' feelings, just as to
express them through movement or drawing, helps the child to experience them in a more controlled, less impulsive way. After all it is better when the child says: "I'm afraid", than when he runs away howling. It is better for him to say: "I love you", than to keep embracing. Therefore our verbal teaching program includes conversations that name affective states. Spontaneous utterances from the children on this aspect are always reinforced by the teacher's show of interest.

The story of Susie's adventure


Teacher: Listen. Today I'm going to tell you a very interesting story. (She holds up two puppets, one small and one large). Look: The big lady is the Mommy and here is her little girl. The little girl's name is Susie. Mommy and Susie are going to the store to shop.

"Mommy": Susie, let's go shopping. We'll buy some decorations for our Christmas Tree.

"Susie": Oh, oh! Yes, yes! We'll buy lots of Christmas things! (She hops about and laughs).

Teacher: What is Susie doing? Is she feeling happy?

Phil: She's going out with her Mommy. She's feeling good.

Alice: She laughing.

Teacher: Now Mommy and Susie are walking along the street. Here are the shop windows full of lovely toys. Susie wants to stop and look at them all.

"Susie": Oh! Oh! Look at the dollies — and the big red balls! Buy me one, Mommy.

Teacher: Susie runs to the shop windows and looks at everything. But her Mommy goes on ahead... Then Susie looks around, and her Mommy isn't there.
“Susie”: Where’s my Mommy? I can’t find my Mommy!
Teacher: Well, how is Susie feeling now? Is she still feeling good?
Phil: No. She’s feeling bad now.
Alice: She cry-ing.
Ernie: No... Mommy... (Mommy isn’t there).

Teacher: Look, Ernie came and helped Susie cross over the street. See, here is her Mommy.
“Susie”: Here’s my Mommy (She jumps about, laughs and hugs her Mommy).
Teacher: Harry, is Susie crying now?
Harry: No.
Phil: She’s laughing because she found her Mommy.
Eddie: Dey kissing.
Teacher: And her Mommy is glad too. She feels very happy. Now she and Susie have gone into the store. They are buying some Christmas Tree decorations.


At dinnertime the teacher, Mary, tells the children she is very hungry and is going to cry if she does not get her dinner right away (she covers her eyes with her hands).
Billy: (Runs to another teacher, violently gesticulates, insists on help.)
Alice (Very upset, runs to the teacher’s assistant): Halinka. Dinner, teacher. She cry-ing, hung-ry.
Francie: (Runs to find a plate and a fork, brings the dinner plate, sets it down before the teacher, smiling with pleasure).
Alice: Look — teacher — dinner.
Second teacher: What was the matter with Mary?
Phil: She cried, she was hungry.
Second teacher: And now — she isn't crying any more?
Alice: No, smiling.
Second teacher: That was very nice of you children to get Mary's dinner for her. See how happy she feels now, how pleased she is.

The following are instances of spontaneous expressions of emotional states and the children's interpretations of their causes.


Teacher: Alice's going to tell us what she did last Sunday.
Alice: Tee-pee.
Teacher: Tell us again, more clearly: I watched...
Alice: Watched TV. Li'l girl dere.
Teacher: And what was that little girl doing?
Alice: She sitting in woods — Mommy all gone.
Teacher: The little girl was sitting all alone in the woods. And what was she doing?
Alice: Alone — she cry.
Teacher: Why was she crying?
Alice: Mommy gone — she 'fraid.
Teacher: The little girl had lost her Mommy. And then what happened?

(Alice makes it clear that the little girl returned to her home).

Teacher: So the little girl got back home again. And was she happy then?
Alice: Yes, she smile, she go to sleep.


Teacher (showing a doll): Tell me, Peggy, what's this?
Peggy: (grasping the doll in delight): Oh! Nice, 'dis (dress).

Teacher: So you like this doll.

Peggy: Yeh, dolly pretty.

Teacher: And now let's put the doll to bed.

Peggy: (putting the doll to bed and covering her with a blanket): Sleep — a... a... a...

crooning).

Teacher: Now take the dolly into the other room.

Peggy: (putting her arms around the teacher's neck): No.

Teacher: Now isn't the time for kissing, Peggy. We're talking about the doll now.

Peggy: Me love.

Speech as a tool for thinking and doing

In the first-period of life, the sole available way to acquire knowledge of the properties and functions of objects is by direct action upon them. Only gradually does an internal image of the object take shape. When this happens the child is capable of performing certain actions by "thinking them". For instance, when he wishes to throw a block into a box containing two holes, one smaller and the other larger, he no longer performs the action by trial and error. In his mind he compares the size of the block with the sizes of the two holes and then tosses the block directly into the appropriate opening. At a still later stage of conceptual development, the child no longer needs to look at the block and the hole. Nor does he need a mental image of the objects, since they are replaced by verbal symbols. For instance, he can correctly answer the question: "Can you put a block into a hole that is smaller than the block?" He can do so without looking at either hole or block.

As a rule the severely mentally retarded cannot reach the stage of operating with verbal symbols alone. But the child's mental develop-
ment is always aided by making connections between his own activity and words describing it.
In our verbal teaching program, verbs have a large part. They are always taught during the children’s activity.

Baking cookies

The teacher shows the children the ingredients for cookie-making.
Teacher: Tell me, what did I bring today?
The children recognize and name the items.
Ernie: Sugar... flava
Phil: You went and bought some flour and some sugar.
Teacher: What are we going to make with them?
Ernie: Cookie.
Phil: We are going to bake cookies.
Alice: Cook...
Bob: Cook-ic.

Teacher (showing an egg): What’s this?
Phil: We’re going to break the egg open.
Ernie: Egg — break.
Teacher: What else do we have to put into our cookies?
Alice: Butter — put in.
Francie: (Deaf — shows by gesture that she intends to cream the butter and sugar.)
Bob: Put butter in.
Phil: Put in butter for cookies to taste good.
Teacher: Now everything is ready. We’re going to m...

1) Adapted into English from our observation records, this conversation follows the Polish cookery procedure for making cookies.
Mix the dough.

The children take turns at mixing and kneading the cookie dough.

- Phil: Mix the dough.
- Me, I'm good at mixing.
- Alice: I'm good at mixing.
- Harry: I'm good at mixing.
- Teacher: Bob, tell us what you're doing.
- Bob: Making cookies.

The teacher asks Francie by gestures what should be done now. Francie takes a tumbler and shows how to cut out a cookie with it.

- Teacher: Look, what is Francie doing?
- Phil: She's cutting out cookies with the glass.
- Alice: Cutting.
- Ernie: Me, I'm good at mixing.
- Teacher: Ernie's going to cut out some cookies. Tell us, Harry, what's Ernie going to do?
- Harry: Cutting cookies.
- Teacher: And now the cookies are all ready. Alice's going to tell us what to do with them now.
- Alice: Baking cookies.

"What shall we do today?"

October, 1971.

Teacher: Alice and Ernie and Phil have been shopping. Let's see what they bought for us.

- Ernie: Dat (pointing to apples).
- Teacher: Alice, tell us where you were.
- Alice: I bought them and you paid for them.
Yes, the children bought some apples. What shall we do with these apples?

Applesauce.

Everyone will take one apple and peel it — very, very carefully — and then we'll cut them up into little pieces. What shall we use to peel the apples with?

Knife.

Johnnie's giving out the knives.

Now everybody knows what to do and so let's get down to work.

(Shows by gesture that he is missing a plate.)

Billy: Harry, we haven't got plates. What are you going to do about it?

Teacher:

Bring plates.

Harry: Tell us what you're doing now:

Teacher:

Giving plate.

And now what do we do?

Teacher:

Here — here (showing how he is peeling the apple).

Eddie:

Me peel apple.

Teacher:

Good — now all the apples are peeled.

What's next?

Teacher:

Cut up into pieces.

Phil:

Let everybody say what he's doing.

Phil:

Cut.

Teacher:

Cut apple.

Eddie:

Cut all up.

Harry:

Let Bob say, too.

Teacher:

Cut-up.
The children tidy up.

Teacher: And now all the work is done. What did we do, Phil?

Phil: I bought apples, the children peeled them and cut them — and now applesauce is cooking.

In the two activities described above, the teacher uses verbs in various tenses to plan the activities (future tense), to describe the actual course of action (present tense), associating the word with the action, and to report the completed action (past tense). Only a few of the pupils can use tenses correctly but despite this their utterances provide evidence that the verb is serving its appropriate function, i.e., to facilitate comprehension, planning and execution of the task. In the above examples, the choice of activity was made by the teacher. Other conversations were conducted with the purpose of providing the occasion for the child to use words as tools for making their own decisions. Here is an excerpt from a record:

Choosing an activity by oneself

February, 1970.

Teacher: Sit down, children; at the tables and let’s think. What do we want to do? I’m going to ask each child what he wants to do.

Hammer.

Teacher: All right. Go and get the hammer. Do you remember where it is?

(looks in a drawer in this room) Teacher... where...

(Tells him the hammer is in the cupboard in the cloakroom.)

(Brings back the hammer and hammering board, and settles down at once to work.)

Now what’s Alice going to do today?

Pine.
Good, get everything you’ll need for painting.

Alice fetches cardboard, paints, water, forgetting nothing. Francie copies Alice and chooses the same occupation.

In another conversation the children named the implements for their work.

“What a thing is for”
February, 1970.

Preparation: The teacher has prepared a number of objects of daily use, e.g., brushes, combs, mirror, kitchen utensils, etc.

Teacher: See what we have here. Lots of things, just like in a store. Now you’ll see what we’re going to do.

Teacher: Alice will get an apple and she’s to tell me what else I’m to give her.

Alice: Apple, knife.

Teacher: (Gives Alice a spoon.)

Alice: No — knife, peel!

Teacher: What does Alice need a knife for?

Phil: She needs a knife to peel the apple.

Billy (deaf) is told to comb his hair. The teacher hands him a toothbrush instead of a comb. Billy objects and demonstrates through gestures what a toothbrush is for.

Teacher: Harry, what’s Billy going to do with that toothbrush?

Harry: Brush teeth.

Billy takes the comb, looks at himself in the mirror and carefully combs his hair.

What’s Billy got in his hand now?
Phil: Comb. He's combing his hair.
Alice: Comb-ing hair.
Phil: He's looking at himself in the looking glass.

Johnnie: (Deaf. Receives a shoe-brush, and brushes his shoes.)
Teacher: What's Johnnie doing?
Alice: Shoe.
Teacher: He's cl...
Alice: Clean-ing shoe.

Harry: (Takes a match-box off the table.)
Teacher: What will you do with the matches?
Harry: ("Studies" the label of the match-box and does not answer.)
Teacher: (Strikes a match.)
Teacher: What have I got to do? (points to the light bulb.)
Johnnie: (Objects, gesticulating, and points to the stove.)
Billy: (Smiles. He points to the light fixture, then to the plug in the wall. Then he runs to get an ashtray and illustrates how to light a cigarette.)
Phil: I'm going to blow out that match.
Alice: Fire there (pointing to the stove).
Teacher: What do we have to do to put out the match?
Phil: I'll blow it out.
Teacher: Now tell me, what did Phil do?
Alice: Phu-phu.
Phil: I blew out the match.
Harry: Matches, burn, fire.
In conclusion, the teacher displays each of the objects in turn. The children name them and the actions they serve. The children treat such verbal activities as games. They are surprised and highly amused at the "errors" of the teacher in giving out the objects. As a rule, they are eager to show their knowledge.

The children who deviate from the average group level require individual conversation adapted to their level and particular interests. Phil, a boy with fluent speech, can talk about imagined events, unrelated to here-and-now experience. Most of the conversations with the whole group are too easy for him. Phil does not talk with the other children, since he has a superior fund of words and concepts; he looks for occasions to talk with adults.

September, 1971.

Phil: Are we going to look at the bridge?
Teacher: Would you like to go to the bridge?
Phil: I saw a bridge once. We were walking, grandpa and me.
Teacher: Tell me Phil, what's a bridge for?
Phil: Because there's water.
Teacher: Can buses and street-cars cross on the water?
Phil: Naw — they cross on the bridge. Trains, too.
Teacher: And people — do they cross on the water?
Phil: Naw — they wet their shoes and trousers.
Teacher: But how do you get across when there's no bridge?
Phil: Cross over on a boat.

Tom is profoundly retarded. His behavior is dominated by stereotyped activity, and his vocabulary is limited to a few monosyllables. Yet even on this level formulation of a verbal plan influences the course of his activity.
September, 1971.

Teacher: Tom, bring that box of blocks over here, will you?

Tom: (Carries out the instruction. He brings the box of blocks, sits down and eyes the teacher attentively.)

Teacher: Build something nice, Tom. There's a lot of blocks here. Make a house.

Tom: (Transfers the blocks from box to table, and back again. This activity continues for several minutes.

Teacher: Tommy, when you go home with daddy, you see cars and streetcars and trains.

Tom: Yeh, chug... (grunts) buh buh* (livening up and working rapidly now). He chooses only long blocks, builds a train, using a double block for the engine.

Teacher: That's good. What else will you build?

Tom: Bridge. (He thinks it over a moment).

Teacher: Does your train go over the bridge?

Tom: (very pleased) Tunnel... tunne! (He pushes the train slowly under the bridge he has just constructed).

The following exemplifies an actual exchange of information between child and teacher, despite the rudimentary level of speech.

April, 1971.

Ted notices a new teacher. He points at her with his finger.

Ted: What dat?

Teacher: Not "what's that?", Ted — say "Who's that".

Ted: Who dat?

* Tom's vocabulary this means "go"
Teacher: That's your new teacher. How do you like her?
Ted: Yeh, pretty. She gotta chu-chu?
Teacher: No, she hasn't got a car.
Ted: What she got?
Teacher: She's got two legs to walk with. She hasn't got a car.
Ted: Daddy got three, give one (three means a lot of). ("My daddy will give the teacher one of his cars" was what Ted probably meant.)

We emphasize that deaf children are by no means excluded from conversations.

November, 1971.

Billy: (Has a distressed expression and shows a scratch on his leg.)
Teacher: (Points to the floor with an enquiring look. Did he fall in the classroom?)
Billy: (Points toward the window, which opens into the school yard and the street. He executes a few circular movements around his leg: Have to bandage up the leg. Then he gives a sly laugh, grabs a child by the shoulders — Mommy carries him upon her shoulders.)
Teacher: (Frowns and indicates that mother gets tired.)
Billy: (Reaches out his arms, presses his fists together. His mommy is very strong.)

.......

Johnnie: (Tries to communicate an important family event to the teacher. He imitates rocking movements: his sister has just given birth to a baby.)
(Points inquiringly to a boy and then to a girl. Is it a boy or a girl?)

(Doesn't grasp the question intended. He shakes his head and measures off on the table top a short segment: the baby is small.)

(Draws a picture of a boy and a girl.)

(Breaks into a smile, now understanding the query. He points to the drawing of the girl, and then again shows how small she is.)

The principle of sensory-based transmission of verbal information

Language has no parallel as a source of information about objects and events not accessible to us directly. Such information may be geographical knowledge (about spatially remote objects) or historical facts (about events remote in time), or any abstract concept, such as big, warm, all of.

Transmitting to retarded children this kind of information, unconnected with their own activity, calls, however, for extreme caution. The child may repeat verbal information mechanically; but then the information remains unlinked with his own life experience; it merely charges his memory, without enriching his thinking in any way or serving his activity meaningfully.

Verbalism — as this is called — constitutes a grave error in teaching at any level of instruction, from elementary to university. But in the case of the mentally retarded it is particularly dangerous, for such a child possesses few resources of his own to seek out the lacking empirical basis.

Thus in transferring any information to the child, we must use a concrete case. We must demonstrate, using real-life objects, or three-dimensional models that can be examined by eye and hand, or, perhaps, drawings. A specific form of demonstration is kinesthetic sensation, i. e., through perception of the movements and positions of one's own body.

The following examples illustrate this principle.
Conversation in a tailor's workshop
November, 1969.

Ricky: Hullo.
Teacher: Everybody say good morning nicely to the people here.
Children: Good morning—Hullo
Teacher: Look around, everybody. Tell me where we are now.
Eddie: In a store.
Phil: At a tailor's shop.
Ricky: Man sew clothes. Ricky in factory.
Teacher: Eddie, tell us, what's that man sewing on?
Eddie: On a machine.
Teacher: Look and see, is there only one machine here?
Frank: Dere's lotta machines here.
Teacher: That's right, Frank. There are a whole lot of sewing machines, and there are many men working on them.

The cutter explains and shows how he cuts out cloth to make a coat, and how the pieces are fitted together. Next the children examine the ready-made coats.

The next day the teacher introduces a planned activity by saying:

Teacher: Today we're going to play at being workers in a tailor's workshop. We'll take our scissors and cut out our pieces and paste coats on the boys and girls. Brown for the boys and red for the girls.

"Warm clothes for winter"
November, 1969.

Teacher: Take a good look out the window. Tell us what you see. Why is it so nice and white outside?
Phil: That's snow.
Frank: Snowing now. It's winter.
Teacher: When the snow falls, then is it cold out, or warm?
Eddie: Cold.
Teacher: Well, Eddie says he was cold out. Let's take a look at his coat. Eddie, Alice, bring over your coats. Take a good look, children. Which coat is thick and warm?

The children handle the coats and compare them.

Teacher: Is it warm in this coat? (indicating Alice's).
Alice: Yeh — warm.
Teacher: Alice's coat is very thick — thicker than Eddie's. I guess Eddie's mother is going to get him a warm coat for winter too.

The teacher shows a cap, gloves, scarf. The children name each article of clothing.

Teacher: Look at this cap, children. How do you like it? What's it made of?
Phil: Fur. Eddie's ears will be warm.
Teacher: I can't remember what Jim's coat is like, or Bob's ... or Harry's. Jim, have you got a coat?
Jim: Yeh, gotta coat.
Bob: (Nods his head in affirmation.)
Teacher: Let's say it all again, what do we need to keep us warm in winter?
Frank: Cap.
Ricky: Hafa buy a coat.
Ernie: (Points to the gloves.)
Teacher: Good for you, you've all told me a lot of things. Now let's remember, we've got
to hang up our coats neatly on their hangers (showing) so they won't fall down and get crushed and dirty.

Severely retarded children have little capacity to express themselves through drawing. An appropriate form for them is to participate in making a drawing with the teacher.

October, 1959.

Teacher: Today we'll draw a picture on the blackboard all together. Each of you will draw something.

The teacher draws a line and asks what this is.

Alice: Line.

Eddie: A stick.

The teacher continues to draw a rectangle and asks what it is.

Alice: House.

Teacher: All right. Now, Alice, what do you want to draw?

Alice: Roof.

Alice: (Draws a roof, a chimney and smoke coming from the chimney.)

Teacher: What else shall we draw? What's missing in this house?

Eddie thinks of the windows, Bob of doors. Each child draws the parts he names. Then the teacher suggests stairs, children in the windows, a tree by the house, grass, sun in the sky. Then the teacher draws a fence, and asks what to put on it. Someone suggests a cat. In this way the collective drawing emerges. The teacher continues the conversation about the house. Who lives in the house? What's the cat doing? etc. In conclusion, the teacher again names each element and the child who drew it. The whole group is commended for its performance.
Let's think back to what we saw today on our walk. What was interesting on the street, in the park, down by the river? I'll draw on the board and you tell me — Phil, Ernie, Alice, everybody.

I saw a swing.

Am I to draw just a swing?

There was a girl on the swing. She was swinging up high.

And what does Alice say?

Tree — woods (the park).

Flower.

Rain.

'Twas raining, just a little bit.

See what I've drawn up here — this is a cloud, and now it's raining. Here's a tree and here's a flower. What else shall I draw?

Grass.

Where did the grass and the flowers come from?

Grass grow — don't you know?

It rained, so the flowers grew.

What else did you see on our walk?

Water — river.

What was on the river?

Fish in the river.

What are the fish doing in the water?

Swimming.

No — sitting there.

Fish swim down deep in the water, and what is there on top of the water?

A boat.
Teacher: And what's in the boat?
Phil: There's a man in the boat.
Billy: (Deaf — rushes up to the blackboard and draws a man in the boat.)
Francie: (Deaf — shows by gesture that there are some children in the boat, too.)
Teacher: It's Jerry's turn now. Jerry, tell us what you saw on our walk.
Jerry: (Points to a dog cut-out.)
Ernie: Bow-wow.
Harry: Dog.
Teacher: What was that dog doing?
Ernie: Bow-wow bow...
Phil: He chased us.
Liza: He-barked.
Ernie: Teacher, bridge (bridge), train.
Teacher: Oh — Ernie wants to tell us something now — how he saw a train on the bridge. Was the train standing still on the bridge?
Ernie: No — choo choo...
Teacher: And now let's go over it all again. Look at the blackboard, children, and say what we saw today on our walk. Here's a cloud and...

The conversation continues.

Empty speech and echolalia

Verbal material has formative value only when it is strictly related to the child's own activity — past, present or future. Otherwise we are only dealing with apparent communication, which has no value for the child's development. We should be reminded that not infrequently the severely retarded tend to repeat words in a meaningless mechanical fashion, either to off or as a form of imitative behavior known as echolalia.
(echoed speech). A relatively high percentage of the severely retarded display considerable ability to repeat without comprehension whole phrases and sentences not excluding foreign expressions. Speech of this kind is, on the whole, quite pointless. It serves neither as a medium of communication nor as a form of self-expression, nor does it enrich or facilitate purposeful activity. Some teachers encourage the child to indulge in such senseless talking, on the false assumption that speech is always a sign of intelligence. Thus the child learns to seek approval and recognition from his milieu mainly by saying anything at all; often as a result he gives up the mental effort to explore non-verbal material.

In such children we often find that high speech volume goes along with clowning for the purpose of drawing attention to oneself. In such cases, the teacher's first task is to refrain from reinforcing idle talk by attending to it, still less to reward it with approval; the teacher is best advised to ignore it and to focus full attention upon the non-verbal forms of the child's activity. Only at a later stage can speech formation be started, that is, meaningful speech linked with non-verbal activity and social communication.

Speech as a tool for comprehending the continuity of external events

A necessary condition for the development of both social personality and intellect in the child is the ability to connect cause and effect, particularly effects that can be anticipated from one's own present or past actions. Even the severely retarded person is able to profit from acquired experience and in fact does so to a greater degree than we usually suppose. An important facilitating factor is the ability to express in words the causal connections of events.

It is therefore important to talk about the past and future experiences of the retarded child, beginning with the most recent and gradually including the more remote.

A few examples of conversations follow, referring first to past, then also to future events.

Teacher: What did we see when we were on our walk?
Phil: Cars, trucks.
Harry: Car go by.
Alice: Truck.
Teacher: Which car did you see on our walk? (She shows some models of motor vehicles).
Ernie: Dat dere (Recognizes correctly).
Teacher: What's it carrying?
Ernie: Dat, sir.
Phil: It was loading sand, down by the Vistula.
Teacher: Did you see that, Harry?
Harry: Got big load.
Billy: (Runs up and shows the dumping mechanism on the truck).
Teacher: Billy's showing us how the sand gets dumped out. Now, Manny is going to show us the cars he saw on the street. ... Did Manny show the right ones?
Phil: Yeh, that other car came up to that store.
Ernie: Does, store.
Teacher: What did that truck bring to the store?
Ernie: Bread.
Alice: Buns.
Frannie: (Shows by gestures that sacks were handed down off the truck.)

"What we did on Sunday" March, 1970.

Teacher: Mike's going to tell us what day it is today.
Mike: Monday.
Teacher: That's right. And yesterday — was there school?
Alice: No, Sunday.
Teacher: Yes, it was Sunday yesterday. Think back, what did you all do on Sunday?

Eddie: I went sliding.
Teacher: Who was with you sliding?
Eddie: Brother. (He shows a scratch on his nose).
Teacher: What happened to your nose?
Eddie: Fell down. Nose sore.
Teacher: Better be careful, Eddie, when you go sliding. Better take it easy with your old nose.

The children laugh.

Teacher: And who else was out for a walk? Who else went sliding?
Teacher: Ernie went for a walk to the woods with his Mommy and Daddy. And Alice — what did you do?
Alice: Home — Tea-see.
Teacher: What program did you watch on TV?
Alice: Agatha, Jack (a popular children's program).
Teacher: What did you watch, Sam?
Sam: Guitar.
Teacher: Tell us about it, Sam. Who played the guitar?
Sam: Red Guitars, Red-Blacks (popular guitarists).
Teacher: And which one sang... (name of popular song)
Sam: Polanski. Niemen sang “Funny old world”.
Teacher: Who else heard that program on TV?
Sam: Mei — too.
Ricky: Ricky saw Red Guitars, grandma's.
Teacher: We still don't know what Ted did on Sunday.
Ted: Dad, bah bah.
Teacher: So you went for a drive with your dad in his car, is that right?
Ted: Yeh, Mommy...
Teacher: Jim's going to tell us what he did on Sunday. Jim, did you go out for a walk?
Jim: No—ball.
Teacher: You were playing ball?
Jim: No.
Teacher: Did you watch a TV program?
Jim: Yeh.
Teacher: Well, that was a good chat, children. Now it's my turn to tell you what I did on Sunday. I went for a walk down by the Vistula. And you know, I was watching some big pieces of ice floating on the water. Then a boat came along and some sailors broke up the ice. It made a big boom. If it's nice tomorrow, we'll go down to the river and see what's going on there.

"Summer holidays"
September, 1971.

Teacher: Good morning, everybody. It's been a long time since I saw you all here. Everybody say hello to all the teachers first, and then we'll chat together for a while.

The children greet the members of the teaching staff.

Teacher: And now, can anybody tell me why it's so long since you were all here?

Summer holidays. I went away.
Teacher: Yes, it was summer. Every child went somewhere, because it was very hot in Warsaw. Let's think back now and remember where we went during the summer vacation.

Alice: Camp.

Teacher: Ah, Alice remembers — she was at a summer camp. Who else was at camp?

Alice: Mommy. Francie too.

Teacher: And Harry, were you at a camp?

Harry: Yeah, he was.

Teacher: And what did you do at camp?


Alice: Woods, campfire.

Teacher: What did Harry do?

Harry: Bus went.

Teacher: Now I know! At camp the children went to the woods, played ball and made a campfire. They went on an excursion by bus. Good. Now you, children will get some paper and paint a picture of the woods just like it was at camp. The rest are going to get some magazines to cut out. You can cut out pictures of birds or animals — anything you saw when you were out in the country.

In our examples of conversations, we find the main elements necessary for a conversation to be fully comprehensible and interesting to the child:

— Practically all the topics refer to every child’s individual experience.
— The topics are recent events.
— The topic is linked to visual material. In the first conversation,
car models are used. In the third, verbal activity passes to drawing on the topic of conversation.

Future events

In the first example below, the children help plan what they will do next. In the second and fourth conversations the time anticipated is the following day. The third “conversation”, which is non-verbal, demonstrates that even the severely retarded and deaf child is capable of expressing intention and making a decision largely on his own.

Formulating intentions: “What shall we do today?”

May, 1970.

The teacher prepared materials for various occupations, planning to introduce various verbs into the conversation.

Teacher: Everybody will now choose something to do. But first he must tell me what he would like to do. First Ernie — he’s waiting very patiently.

Ernie: (Chooses plasticine. Tries hard to substitute a word for a gesture, and finally manages to articulate:) Stick-y.

Teacher: Does everybody know what Ernie is going to do?

Alice: Stick.

Phil: He’s going to make something out of plasticine.

Teacher: Now Eddie. Oh, for Eddie I’ve got a can and some beans. What’s Eddie going to do?

Eddie: Gonna throw.

Teacher: Bob, I’ve got something very interesting for you here (clay figures). But first tell me what you’re going to do with them. Here you are — paints, brush...
Bob (considers at length): Gonna... paint.

Teacher: Harry is good at hard work, so today he gets a thread and needle and this picture—a big red mushroom. What's Harry going to do with it?

Phil: G'ing to sew it.

Harry: Will sew.

Teacher: Alice wants to do something. For Alice I've got an apple and a knife. What'll you do with this apple, Alice?

Alice: Peel.

Teacher: Now all of you say what Alice's going to do.

Phil: Peel apples for applesauce.

Eddie: Peel.

Ernie: (Indicates by gesture what Alice will do.)

Teacher: Now for Francie. Oh, look what she's going to do! She's got a basin with some water and a piece of soap and a towel. She's going to wash something.

Eddie: Do a washin'.

Teacher: I'm going to ask each one to say what he is doing.

Eddie: Me throw beans.

Bob (after considering): Car — me draw car.

Alice: Dish — peel apple.

Harry: Sew.

Phil: Me, I'm drawing a house, etc?

Liza: Look — nice painting.

Teacher (asking about the activities of the deaf children): Harry, what's Johnny doing?

Harry: Peel carrots.

Phil: He's grating those carrots.

Teacher: What's Francie doing?
Eddie: Washing.
Alice: Francie washing.
Phil: That's a hankie she's washing.
Teacher: What were you doing? Have you finished your job?
Eddie: Yep.
Harry: Finished.
Phil: Done my painting.
Liza: 'Nuf painting.
Alice: Yes, finish-t.
Bob: All-done.
Ernie: Teacher -- me, now, M... (giving his surname. Shows his product.)

"What will we do on Sunday?"

Teacher: Tell me, what day is it today?
Mike: Saturday.
Teacher: That's right -- today's Saturday. Mike always remembers about Saturday because he likes getting home earlier. On Saturday everybody goes home earlier. Mr. I wonder what you do on Sundays. Mike, can you tell us what you do on Sunday?

Mike: Go for ride with Dad.
Teacher: And the rest of you, what do you do on Sunday?
Ricky: Rocky go to movies.
Phil: My grandpa'll take me for a long walk.
Alice: Tee-tee.

December, 1970.

Dick (dnd) is considering what occupation to select. Teacher comes up and spreads her arms.

(Reciprocates. He understands the gesture.
The teacher goes with Dick to the cupboard. Dick selects the hammering-board, checks whether the hammer and nails are there, with a satisfied smile. It is a considerable triumph for him to have conveyed his message.

"Mother's Day"
May, 1970.

Teacher: Tomorrow is a very important day. Who can say what day it is?

Ricky: Women's Day (a different festivity).
Mike: Tomorrow Mother's Day.
Teacher: That's right, Mike, you remembered about that day. What will you say to your mother on Mother's Day?

Mike: Happy Birthday.
Teacher: And what will the rest of you say to your mummies?

Alice: Happy Day.
Ricky: Ricky gives flowers.
Mike: Me too.

Alice: Yeh.
Teacher: Me, Mommy.

Alice: And will Jim remember to wish his Mommy a very happy day?
Jim:
Teacher:

Yeh, Mommy.
And now let's get down to work. Everybody will make a present to take to his Mommy. The cookies are ready, but we have to make some plates to put them on. We'll paint some nice little plates. Then we'll wrap up a plate with cookies in nice paper for a present, one for each Mommy. They'll be very curious about what you bring them. They'll open up their presents fast and — my, how pleased they'll be!

Eddie:

Give Mommy.

Speech as a tool to formulate evaluations and rules of behavior

Even for the child who is incapable of producing full sentences, verbal formulation is an aid in evaluating his own behavior. In the first conversation the notion of "good boy" is used; the second introduces a more objective notion: allowed — not allowed (forbidden).


Eddie is in a good mood. He initiates the conversation with the teacher.

Eddie:
Teacher:
Eddie:
Teacher:
Eddie:
Teacher:
Eddie:
Teacher:

Me good boy.
That's nice, Eddie, Tell me what you did.
Dinner.
What about dinner?
Me eat dinner.
And now, what are you doing?
Me undressing.
Good for you, Eddie, What will you be doing after that?

Gym with Mr. J.
Teacher: And how will it go?
Eddie: Good. Gonna tell Mommy.

Rules of behavior — Traffic lights
October, 1971.

The children are outside starting a walk.

Teacher: Where shall we go today?
Phil: Out on the street.
Teacher: And now we’re walking along the streets of Warsaw. Ernie will show us where people walk.
Ernie: Here (pointing to the pavement).
Teacher: And where do cars go?
Ernie: Here (pointing to the road).
Teacher: That’s right, Ernie, on the road. Children walk on the sidewalk, two by two. Cars go along the road. Harry, what do you see down this street?
Phil: Cars going fast.
Teacher: Harry, what color is that light?
No answer from Harry.
Teacher: Are people supposed to cross on a red light? (querying the deaf children). (Gesture in the negative). (Aware of the content of the conversation, points to the light and then to a traffic cop).
Ernie: Here — not. Alice: Not allowed.
Phil: You can’t cross over now. Policeman’s watching.
Teacher: Harry, what color is the light now?
Harry: Yes — green.
Teacher: Watch now — it's a green light and we cross over. Where do we walk to cross the street?
Eddie: On the lines.
Bob: Here.
Alice: Here (pointing down to the white lines).
Phil: Got to cross where the lines are.

How to encourage the severely retarded child to attend to the teacher's speech

As mentioned in Chapter 1, the severely retarded child has in general great difficulty in focusing attention, and it is particularly hard for him to concentrate on listening for long. Similar difficulties are encountered by those who listen to a foreign-language lecture, even when the language is fairly well mastered. Speech directed to the entire group rarely commands the attention of the severely retarded, the exceptions being instructions compactly formulated.
The first principle: Each utterance must be addressed to a particular child. If that child displays little interest in verbal activity, his attention must first be mobilized: approach him, encourage him to look into your face, and only then say the sentence briefly and concisely. Link to it the child's own name.
The teacher can then lengthen a conversation around a topic, each remark or question directed to a different child. Gradually, we can be less strict about applying this rule as the children take more interest in speech. But conversation should be mainly devoted to communicating with individual children. We shall not include here any illustrations of this type of conversation; the material cited so far adequately illustrates this principle. The second principle: The topics of conversation should concern things which are of vital concern to the children. For example, Susan — profoundly retarded — is usually passive. Her comprehension of instructions is limited and execution depends upon her mood. Yet almost always she responds with a lively reaction to her mother's voice or to the words "rhythms" and "dinner"
Teacher: Susan, stand up. (Hears, turns away her head, uninclined to stand up).

Teacher repeats the instruction and adds: Go to Mrs. K. and wash your hands. (This is the signal for approaching dinnertime).

Susan: Considers a moment, gets up and goes to the person indicated, takes that person’s hand and leads her to the washroom.

Teacher: Susan, take Lem to this place, please. (Goes over to Lem, takes him by the hand—and leads him to the proper place).

The third principle: The topic of conversation should contain some novel elements; topics should be diversified.

It is not true that the severely retarded assimilate material best when it is given always in the same form. To illustrate this fact we report below part of a conversation containing an incongruity, during which the children displayed a lively sense of situational humor.

A second example is a conversation which occurred during a slide-showing. While the action as a whole was not fully comprehensible to all children in the group, the slides, as a novel form, aroused great interest.

May, 1971.

The children are just back from their walk. The teacher queries whether they had a good walk, where they went, and so on.

Teacher: But weren’t you very cold today? There’s such a frost, and the snow is so deep.

Nessie [at once negating, laughing and pointing out the window]: No — warm out.

Alice: (smiling broadly): No — sun.

Phil: It’s warm outside. We weren’t cold at all.

Liz: (serious mien): No snow! Grass growing in the park. Summer.

Teacher: Well, I heard you children got a ride on the fire engine.

May, 1971.
(bursting into mirth): No — no — walk.

(surprised): We didn’t get any ride, we walked.

(smiling): No, not ride.

Teacher: Maybe you went swimming in the river?

(catching on that the teacher is joking with them, and laughing now): No, of course not.

Well, perhaps it was Mrs. K., who had a swim.

(enjoying the jolly mood): No — Mrs. K. not!

Slides illustrating “Little Red Riding Hood”


Teacher: Yesterday I was telling you a good story. Who remembers it? About...

Phil: Little Red Riding Hood

Teacher: Today everybody is going to look at the pictures and tell that story. I’ll help. Oh, the pictures are starting now. Say out loud what you see.

Ernie: Woods.

Alice: Woods.

Phil: House and flowers in the garden.

Eddie: Lil’ girl, water flowers.

Bob: Wood — lil’ girl.

Teacher: There’s a big woods, and a tiny little house beside the woods. In the house lives a little girl. She’s Little Red Riding Hood. She’s got a little garden with flowers growing in it. What does she have to do to make the flowers grow?

Eddie: Water ’em with watering-can.

Bob: Yeh — water.

Phil: Got to water flowers so they’ll grow.
Billy:
(Watches closely as the story progresses, slide after slide, gesturing to explain the action).

Ted:
(delighted at the sight of the country scenery). Go there — grandpa (Ted was in the country with his grandfather).

Teacher:
The little girl is feeling very happy. Look how pleasant it is here.
Birds flying.

Alice:
(Fox (squirrel)).

Teacher:
There’s a squirrel jumping from one tree to another, see the birds singing. The little girl likes it here. Let’s see what happens next.

Phil:
Girl went inside now.

Alice:
Mommy.

Teacher:
Mommy?

Eddie:
Went to her Mommy.

Harry:
Mommy gave.

Eddie:
Bread ‘n’ butter.

Alice:
Grandma sick.

Phil:
Gives her basket with ten — for grandma.

Teacher:
The little girl was watering her flowers in the garden. Then she heard her mother calling her. She ran fast into the house. Her mother said to Little Red Riding Hood: “Grandma is sick in bed. Maybe she’s hungry, so I’m putting something to eat in your basket — some bread, some honey, some apples”... And now what’s happening?

Alice:
Woods.

Phil:
She’s got the basket.

Eddie:
Pick flowers.

Pony:
Woods — on a trip.
Billy: (Watches closely as the story progresses, slide after slide, gesturing to explain the action).

Ted: (delighted at the sight of the country scenery). Go there — grandpa (Ted was in the country with his grandfather).

Teacher: The little girl is feeling very happy. Look how pleasant it is here.

Birds flying.

Alice: Fox (squirrel).

Teacher: There's a squirrel jumping from one tree to another, see the birds singing. The little girl likes it here. Let's see what happens next.

Phil: Girl went inside now.

Alice: Mommy.

Teacher: Mommy?

Eddie: Went to her Mommy.

Harry: Mommy give.

Eddie: Bread’n’butter.

Alice: Grandma sick.

Phil: Gives her basket with food — for grandma.

Teacher: The little girl was watering her flowers in the garden. Then she heard her mother calling her. She ran fast into the house. Her mother said to Little Red Riding Hood: “Grandma is sick in bed. Maybe she’s hungry, so I’m putting something to eat in your basket — some bread, some honey, some apples”... And now what's happening?

Alice: Woods.

Phil: She’s got the basket.

Eddie: Pick flowers.

Woods — on a trip.
No Mommy (Mother isn’t there).

(Points to the wolf).

(Watching the slides, laughs now).

Fox (wolf):

The wolf’s coming.

Look, he coming.

The little girl met the wolf and wasn’t afraid at all. She told the wolf where her grandma lives. The wolf ran very fast to Grandma’s house. Let’s see what happens there.

Fox sleeping (wolf).

The wolf got into the bed.

House.

Oh — he sleeping.

Grandma was very afraid when she saw the wolf and she ran away. So the wolf got into Grandma’s bed and is waiting for a good breakfast. Oh, here comes Little Red Riding Hood. See what’s happening — Grandma’s gone. And now what do you see?

Man.

The hunter’s here.

(Points to the hunter and then the wolf).

Grandma gone away.

Dat man got gun.

Perhaps Grandma will come back. The man is calling Grandma.

Here Grandma comes back again.

Me love Grandma.

Me too.

And that’s the end of the story. The little girl got her grandmother back and she’s
feeling very happy now. Soon they will have a good breakfast all together.

A puppet show is another form to arouse interest in the spoken word, provided that the action is simple and that individual children are drawn in turn into "cooperation" in the show.

**How to encourage the severely retarded child to talk**

The foregoing excerpts from our records may serve as material for the reader to study conversation-building with severely retarded children. The principal idea in such conversations is that everyone takes part, irrespective of linguistic resources — deaf children as well.

We shall now formulate a few principles of method which summarize the ideas behind this material.

How can the situation be created in which the severely retarded child can feel the need to talk and be ready to make the considerable effort involved in saying something?

In order for a child to put forth effort, he must anticipate some reward for it. This general principle governing all types of learning hold true in this case as well.

What constitutes reward in this instance?

Praise and approval from the teacher may serve as reward; but this form of reward is more typical of the artificial classroom situation than normal everyday life; it cannot be the sole form of reinforcement and encouragement. In the natural situation, the reward for an utterance is the attention and interest it evokes in a listener. Every spontaneous and meaningful utterance from the retarded child, even that most lacking in form and most primitive, should be rewarded, that is to say, it should be accorded the immediate attention of the teacher.

The teacher’s basic technique is always to be ready to listen to the child, and to show interest in the content of his message. Not only is it important what the child says and how he says it; it is even more important that he feels a need to enrich his social contacts through the medium of language.

The most common error made by teachers in relation to the child is
to violate the equilibrium between speaking and listening. When talk is overbalanced and monopolized by one speaker (when the teacher “lectures”) the effect is that the attention of the child is lost and his spontaneous speech is diminished.

An even more effective reward is for the child to know that his message has reached its destination. There are many obstacles to comprehension of the retarded child’s speech: indistinct or unintelligible articulation, incomplete sentences, words unrelated grammatically, inarticulate vocalization. Even when the child pronounces clearly, his fund of words is too poor to permit full expression of intention. The teacher must know each child, his modes of expression, his conceptual range. Only then is the teacher in a position to appreciate each attempt and grasp the meaning behind it; only then can he reproduce to the child what the latter intended to say in a form comprehensible to both.

Almost all the excerpts from conversation in this chapter illustrate the above principles. (Interchanges with Ernie are particularly informative).

For the child to feel that, despite poor verbal performance, his intention has been understood is greater reward than praise; it is the most effective form of encouragement to a child for the massive effort he must take to speak intelligibly.

But more is involved. How can situations be created in which opportunity is afforded for the child to “have something to say”? The foregoing conversations show that the richest and most developed utterances are those produced when the children were really activated and mobilized by the events that serve as topics — trips they have taken, celebrations at the Center, novel activities, holiday occurrences, and the like.

But the richest situation, affording the best topics, is that in which personal success and achievement are mentioned. If we were to keep a record of all the spontaneous trials at communicating, both verbal and non-verbal, there is no doubt that the vast majority should concern the children’s own accomplishments. The all-important word “I (me)”, in particular, crops out most frequently in the context of “I did that”.

To sum up, in every effort to encourage the child to talk, we should use three basic teaching techniques: (1) to reward every utterance
with attention and comprehension; (2) to provide rich experiences as topical material; (3) to create opportunities for experiencing success. But it is important to remember that to exert pressure merely for the child to speak when he has nothing to say and no need to communicate, is rarely effective and can disincline the child from trying to use the medium of language.

**Difficulties in pronunciation and grammatical errors**

Almost all severely retarded children have problems in articulating. We have used various teaching tactics to improve articulation, depending on the degree of conceptual development and readiness for verbal communication. Corrective work can be done with those children for whom speech has become the chief means of communication and in whom the speaking habit is already well-grounded. But we have to make sure that the child understands the purpose of the articulatory exercises, and actively cooperates. Correction of articulation should however be restricted to the times set aside for this purpose. For the rest of the day we should allow the children to speak incorrectly or limit intervention to correct one sound at a time: that on which the child is currently practicing. However, this is to be done only when the child grasps the goal of the exercise. Constant correction of articulatory faults interrupts the train of thought, inhibits the spontaneity of speech and may in effect discourage the child from making use of speech.

The pronunciation of children who have just begun to speak or who speak unwillingly and with effort should not be corrected. The very effort to speak is for them sufficiently difficult; to set up additional problems by requiring better articulation can totally inhibit the development of active speech. We can only correct sounds in those words which are well mastered conceptually and often repeated; even so, we should exert great care to avoid setting the child against speaking.

Generally speaking, our pupils are not at a level that enables them to benefit from corrective procedures. That is why in the above records of conversations there is not a single instance of interference with the pupil's speech by correcting it.
This does not in any way mean that we have to give up striving to correct the articulation of children of this category. But we can achieve this best by indirect methods:
a. by improving the general motor and manipulation skills; articulatory organs are, after all, a part of the motor apparatus and the general raising of the efficiency of this apparatus as a whole may also have an effect on improving the working of the articulatory organs;
b. in cases where incorrect breathing is the main source of difficulty, by generally raising the child’s physical and emotional state; the weak, unhappy, anxious child has as a rule a stifled and colorless voice; he may even begin to stutter as well, even when he has not displayed speech disturbances previously; conversely, at times of heightened physical and psychological good feeling, in joyous moments, the breathing is deepened, the voice gains resonance and the consonants are articulated more clearly.

What has been said applies as well to grammatical errors in children’s speech. Severely retarded children are most often incapable of attaining a developmental level that enables them to construct well-formed sentences; so we allow them to express themselves as best they can. More advanced children who use sentences can be corrected at times, provided we do so with proper care to avoid disturbing the child’s train of thought.

In conclusion, we recall the general principle guiding us in our work on the development of speech in the severely retarded. We must create the conditions necessary for the child to feel that he is secure and understood; for him to know that the teacher is interested in him and his well-being; for him to have something to talk about and someone to talk to; and finally, for him to be in a generally good physical and emotional condition. A cheerful and active child is the one who is most willing to communicate verbally.

We should also recall one more extremely important, though intangible, factor: the emotional involvement of the teacher, who understands that every newly mastered meaningful word is evidence that the child has enriched his world. There can be no doubt that children speak more, better, and with greater willingness, when they feel that in this way they are bringing true pleasure to the teacher with whom they share a bond of affection.
Color plates

I Liza’s mosaic composition: before and after two years of emotional rehabilitation.

II Finger-painting by Ted, reflecting his extreme impulsivity.

III Finger-painting by Tom.

IV Finger-paintings and “Portraits of the group” by Alice (above) and Jerry (below).

V A tree by Alice — a harmonious composition.

VI Finger-painting by Johnnie — a dynamic composition.

VII Finger-painting by Harry — lack of compositional axis.

VIII “Portrait of the group” and mosaic composition by Dick, both illustrating his preoccupation with the body scheme.

IX “Portrait of the group” by Harry.

X “Portrait of the group” by Johnnie.

XI “Portrait of the group” by Liza.

XII Two decorative posters: teamwork by Group II pupils.

XIII “Mother”: a collective work for “Mother’s Day”.

XIV Two cut-out montages by Group II pupils.
plate I
plate XIV
Corrections

p. 30 l. 12: for nos-musical read non-musical
p. 41 l. 18: for -portrait 1. read -portrait.

p. 57 l. 1: for life o read life of
p. 93 l. 2: for Photos 9 and 14 read Photos 9 and 13
p. 93 l. 6: for Photo 13 read Photo 14

p. 170 l. 10: for Reacher read Teacher
p. 193 l. 11 up: for corrected read corrected