TO PREVENT OR AMELIORATE LEARNING AND BEHAVIOR PROBLEMS IN SCHOOL CHILDREN, A PILOT DEMONSTRATION PROJECT WAS IMPLEMENTED IN A LOWER MIDDLE CLASS, MULTI-ETHNIC ELEMENTARY SCHOOL IN BROOKLYN, NEW YORK BY THE MAIMONIDES MEDICAL CENTER. PRACTICABILITY OF PROGRAM REPLICATION WAS AN IMPORTANT CRITERION. AN INSERVICE MENTAL HEALTH EDUCATION PROGRAM WAS ESTABLISHED FOR THE FACULTY UNDER THE GUIDANCE OF A CLINIC PSYCHOLOGIST. THE PROGRAM WAS TEACHER-CHILD ORIENTED AND DEALT WITH DEVELOPMENTAL PROBLEMS, FAMILY STRESS, AND GROUP DIAGNOSTIC TECHNIQUES. TO TEST SPECIAL TECHNIQUES FOR EARLY INTERVENTION, EIGHT CHILDREN IDENTIFIED AS NON-READERS PARTICIPATED IN A DEMONSTRATION STUDY. TO REMEDIATE THEIR PROBLEMS, THE POLLACK INTERSENSORY READING METHOD, PROGRAMS OF PERCEPTUAL TRAINING, AND BEHAVIOR MODIFICATION PROCEDURES THROUGH CLASSROOM CONDITIONING WERE USED. PARENTS WERE CONSULTED WEEKLY. THE METHOD SEEMS SUCCESSFUL AND MAY SERVE TO PREVENT OR MINIMIZE EDUCATIONAL DISABILITY AND SCHOOL BEHAVIORAL DIFFICULTY. THIS PAPER WAS PRESENTED TO THE AMERICAN ORTHOPSYCHIATRIC ASSOCIATION, MARCH 21, 1967. (PS)
In 1961, Maimonides Hospital, a 580 bed voluntary general hospital, initiated a program designed to provide comprehensive psychiatric services to the community. By the summer of 1967, this program will have resulted in the establishment of one of the country's first Comprehensive Community Mental Health Centers. From the beginning, child psychiatry services were included among the major clinical divisions but remained small and essentially "clinic-centered until 1964. At that time, we began to expand and diversify, and shortly afterwards, a Division of Educational Services was established under the direction of an educational psychologist. In delineating the two major functions of this division, we sought to keep in mind our role as a Community Mental Health Center. The first of these was to develop diagnostic, educational and therapeutic services within the framework of our clinical program. The second was to implement programs of consultation, mental health education and rehabilitation as well as direct diagnostic and treatment services in the educational institutions of the community which we serve.

Concerned with the prevention of psychopathology and the promotion of mental health, the Child Psychiatry Division of the Department of Psychiatry of Maimonides Medical Center considers that
one primary area of preventive work should be the school as that social agency which intimately deals with the cognitive and emotional patterning of children for a significant period in their development. We have, therefore, been working with the school system to develop a comprehensive program which would prevent or ameliorate learning and behavioral problems in school children.

A many-faceted program addressing itself to these twin areas of maladaptation was implemented as a pilot demonstration project in a public school, a lower-middle class, multi-ethnic elementary school in the Bay Ridge area of Brooklyn. In considering the nature of such a program, our thinking was guided essentially by two principles. First, our own role as a Community Mental Health Agency, should be to act as a catalyst in introducing innovations designed to prevent or minimize learning and behavior difficulties in the school population. If these innovations were to prove successful, our role would then be to train school personnel to implement the program on an ongoing basis. Secondly, we held as a criterion in setting up each aspect of the program, the practicability of its being replicated with available personnel in all schools of the areas served by our agency.

Basically, both learning and behavior difficulties were seen as developing processes requiring intervention at every stage i.e., prevention, early identification, differential diagnosis, treatment and rehabilitation. It is within the context of these categories
that the pilot demonstration project is discussed.

I. MENTAL HEALTH EDUCATION

The education of teachers in mental health principles as they relate to the classroom was considered central to the prevention of learning and emotional difficulties, as well as to the encouragement of corrective emotional experiences which would tend to ameliorate and attenuate existing difficulties.

A course of 16 informal discussions was set up under the guidance of a clinic psychologist whose background included extensive school experience. The course involved the entire faculty divided into small groups, with weekly meetings arranged to include about four or five teachers at each session. This flexibly structured program enabled each teacher to participate in such discussions four times during the school semester, and its informality encouraged free and uninhibited interaction.

The objectives of these discussions were to provide for the faculty an educational experience designed to enhance their mental health insights and to enable them to grow in their professional abilities as more effective teachers. The content included problems of child development and family stress as these affect classroom behavior. Teacher-child relationships and the question of "discipline" were examined from a mental health point of view and methods were explored of developing the kind of atmosphere in the classroom in which children might be afforded
the structured freedom necessary for learning and growth. For the lower grades, the course included discussion of early identification and diagnosis of learning problems. Didactic sessions were devoted to description of group diagnostic measures stressing diagnostic teaching and teacher interpretation of the tests as evaluation of readiness.

In the final sessions, the teachers estimated these courses to be very helpful and stimulating but felt that the subject matter was too extensive to be more than nibbled at in the four sessions provided for each group. The problem of mobilizing teacher time during these hours for a more extensive course continues to be a frustrating one.

A second aspect of our school education program involved the entire Child Psychiatry staff at regular faculty meetings which were turned over to members of the staff at Maimonides to discuss such over-all concepts as: the relevance of the Community Mental Health Center to the School; the parent-teacher relationship in a mental health program; the role of the school as a social agency in the pursuit of mental health goals for its children; the importance of modern developmental cognitive theory to the learning process in the classroom, etc. We feel that such discussions should be part of a regular school program during school hours.

II. CONSULTATION PROGRAM

As against the traditional individual case emphasis, our
consultation program in the school was teacher-child oriented. It was felt that the unit of disturbance in the classroom need not necessarily stem from the child's general pattern of behavior but might be stimulated or triggered by the nature of the interactive relationship of teacher and child or child and peers. Not only was a developmental and social history made available to the consultant, but she was invited into the classroom for a period of observation of a pre-discussed case. This type of direct evaluation of interactive relationships helped focus the core of the problem more clearly. This was followed by a private conference of consultant with the teacher in which a thorough-going discussion explored every phase of the problem. Our experience indicated this type of program to be successful only when there was an ongoing accepting attitude on the part of the teachers toward the consultant involved. The consultant has to be identified not in a supervisory role but in a "peer-helping" capacity.

If it became apparent that the child in question had need of more comprehensive diagnosis and possibly psychotherapy, a referral was made to the Child Psychiatry Clinic at Maimonides Hospital. In addition to the full range of usual diagnostic and treatment service, special diagnosis of perceptual and cognitive learning problems was made, followed by a program of remediation where necessary.
Children with learning and behavior problems who, after diagnosis, are considered to be suitable candidates for reading therapy, are entered into this remedial therapy clinic. This program is entirely serviced by a corps of stable volunteer-tutors, present and former teachers who live in the community, and who receive their training and supervision by the Clinic's Director of Educational Services.

The parents of children receiving rehabilitative treatment attended group counselling sessions designed to educate them in child-rearing principles with adequate time for free discussion of children's problems.

III EARLY IDENTIFICATION AND REHABILITATION OF LEARNING AND BEHAVIORAL PROBLEMS

To deal with this problem in the school setting, the Department of Psychiatry set up a pilot demonstration study after a series of collaborative discussions with school personnel. The purpose of the study was to test special techniques for early intervention before the pattern of failure established itself into a full-blown learning and behavior problem. In line with our stated goal, emphasis was placed on the type of techniques which, if successful, might later be incorporated into the average classroom.

Identification of problem was the first step. Eight children, non-readers, held over in the second grade were identified by a battery of perceptual and reading tests, and placed into a special class. It is interesting to note that
- 7 -

4 of these 8 were diagnosed as being primary reading disability cases, having perceptual problems which precluded any reading progress without the intervention of special methods. These disabilities had never before been identified. Had they remained unidentified for any greater length of time, these children of otherwise average intelligence, would probably have joined the growing army of school failures, truants and delinquents. The program included the following:

READING (lower case letters)

In the learning area, reading was considered to be the focal skill requiring attention. Since all of these children, after two years of exposure to traditional reading instruction, had not learned to read, a special intersensory method was employed which had been developed for children with reading problems by Dr. Pollack, Director of Educational Services. This method is based on research such as that of Birch and Lefford (1963) and Birch and Belmont (1965), which point to the conclusion that the development of integrative organization of the senses leads to more effective control of cognitive behavior. In support of these research findings are Stuart's conclusions, arrived at empirically, in which emphasis is placed on the concept that "learning actually involves activating not only the eyes and ears, but also speech, touch and motion in simultaneous and in highly interrelated ways" (1965, p.w.).
The Intersensory Reading Method follows the principle that visual responses become more stabilized when related information is made available through the auditory and kinesthetic approaches integrated with a motor component. The kinesthetic approach is applied in the form of tracing and manuscript writing and spelling, while the motor component consists in the building of words with letter squares devised for the purpose. It is a sequential programmed method which advances the child step by step from the learning of simplest phonemes to more complex phonic elements in regular systematic order. Manuscript writing is taught simultaneously with phonic analysis, drawing upon the same content. The teaching of manuscript is prefaced by perceptual learnings to orient the child to directionality on a horizontal plane. Each letter is broken down into its component parts for children with specific perceptual disabilities in the area of spatial relationships. The vocabulary employed in the text is graded on the basis of phonic difficulty. It employs linguistic spelling patterns as units, thus facilitating visual and auditory discrimination and retention of word-images through structure based on generalization.

Five months of exposure to the Intersensory Reading Method on a daily basis resulted in a mean gain of 6 months, with a range of from 4 to 12 months on the Metropolitan Reading Test. On the Roswell-Chall Word Analysis Test, there was a qualitative
difference upward in the children's ability to analyze and synthesize sounds and words.

B  GRCSS MOTOR ACTIVITIES

A program of gross motor activities was instituted in which children spent one-half hour per day in the gymnasium at special exercises such as balancing, hopping and skipping, cross-patterned crawling and walking, etc. Such a program of muscular activity to develop neurological organization is predicated on the theories of Kephart (1960), and Getman and Delecato (1966). Kephart believes that the basis of all perception in motor activity and that the efficiency of the higher thought processes can be no better than the basic body awareness in space which a child develops through motor activity and the observation of motor activity. Delecato appears to support this when he indicated that reading difficulties are the result of inadequate or incomplete neurological organization (1966).

It was decided to include such a program in view of the wide agreement that might help the child with poor body awareness toward a higher level of neurological organization considered by many to be relevant to the development of perceptual and cognitive abilities.

C  BEHAVIOR MODIFICATION

In response to their learning difficulties with resulting feelings of low esteem, several of the children had become
painfully withdrawn. One of them could not speak above a whisper. Others had already become aggressive attention seekers. These were all considered to be adjustment reactions.

A system of conditioning techniques was instituted in an attempt to modify various types of maladaptive behavior. These techniques dealt with each individual as part of the group. It involved, first identifying one single maladaptive aspect of each child's behavior (one bad habit); secondly, motivating the child toward self-change in this one symptom, and thirdly, setting up a system of rewards that would act to reinforce his every attempt at behavior change. With each successful reinforcement, the child's confidence in his own powers grew, his self-image improved, and his demonstrated ability to change his own behavior is believed to have stimulated a complex chain of psychodynamic changes in the child toward more adaptive behavior generally. Teacher and principal testimony indicate a high degree of success in this area.

A comprehensive program of this type could not take place without the awareness and active support of the children's parents. Throughout the course of the program's implementation, the parents of the 8 children met on a bi-weekly basis with the teacher and the program psychologist. Their cooperation was enlisted as part of the therapeutic team in the following roles: first, to understand the nature of their children's learning
difficulties and to provide constructive supervision of their homework; second, to develop mental health insights into their own relationships with their children, thus affording them much needed support during an important transitional period, and thirdly, to influence the other members of the family in this direction structuring a therapeutic atmosphere at home.

In practice, the procedure of having parents and teachers communicate on a regular basis around children's problems brought dramatic reactions. A new understanding came to a parent who had been beating her child because he "refused" to read. Another became conscience-stricken at having undermined a child's self-confidence by referring to him as "stupid". A third realized the importance of a good relationship before she could hope to help her child with his homework. The teacher, too, reported to having gained new insights into her children's problems through meeting and talking with their parents. Beneficial Mental Health attitudes were promoted both at home and in school.

IV. RESULTS

The purpose of the pilot demonstration study with 8 children chosen for their learning and behavior problems was not that of a rigidly controlled experiment. It was designed to evaluate the effectiveness empirically of an entire battery of measures to remediate specific learning and behavior problems and hopefully to return the children to the mainstream of
adaptive learning and behavior patterns. The small number of subjects chosen to participate in the study precludes a completely definitive experimental procedure. Hence, a formal evaluation of the pilot study is not indicated.

After a 5 month period, it was apparent to school principal, district guidance coordinator, to teacher, parents and program psychologist that a qualitatively dramatic change had taken place, in all, 8 made gains in reading and 7 behaviorally. The 8th had serious impulse control problems which necessitated more intensive therapy. As the school principal reported to the district superintendent, "They are really blossoming. They are learning to read and have become happy and successful children."

Subsequent developments have supported this estimate, for school administrators in our service community have requested the expansion of the program to neighboring schools. Our two goals in implementing the program, namely, that of acting as a catalyst in essentially self-help projects and of certifying their replicability in any average school, have demonstrated their practicability. They have enabled us to expand the program with further innovations in other schools and to provide for this expansion with a minimum practicable expenditure of skilled professional time. This expanded program has just been started. However, the experience with the program described leads us to undertake it with a feeling of optimism. We hope to be able to report on our work at a later stage of evaluation at some time in the future.
REFERENCES


5. Getman, G.N. and Kane, Elmer R., *The Physiology of Readiness*, Programs to Accelerate School Success, P.O., Box 1004, Minneapolis, Minn. 55440.

