

## SOME PROBLEMS AND METHODS IN THE EDUCATION OF MENTALLY RETARDED CHILDREN

BY THORLEIF G. HEGGE, PH.D.\*

IN MAY 1946 I made a list of the Fellows of the American Association on Mental Deficiency and of other leaders in the field who are on the rolls of the Association. From the list thus compiled 39 names were selected at random. The following question was sent to each of these 39 authorities: "What problem pertaining to the education of the mentally retarded or higher grade defective is uppermost in your mind?" I received a total of 27 answers, some short, some quite detailed, all instructive. I take this occasion to express my appreciation. I also hope that my treatment of the returns will be of sufficient interest to repay my correspondents for their effort.

It will be impossible to discuss the replies in their original form. It is necessary to attempt some degree of organization. Although I have tried to cover every answer, and every detail of every answer, many are submerged in statements of a more general nature. It is then my purpose to present to you your own thoughts, in abbreviated or generalized form where necessary, and

with some elaboration where indicated. I should not deny, however, that the presentation is colored by my own convictions. For this reason, and because no correspondent has expressed an opinion on all the points made by the other correspondents, it is evident that I cannot claim to have recorded a consensus of opinion on any of the problems discussed. On the other hand, there are no deep cleavages apparent in the returns as far as they go. They seem to supplement one another. When fitted together, they form a fairly complete and meaningful picture of the foremost problems of the day.

Evidently we are not satisfied with what we have. We rarely give our pupils all of the manual and other concrete experiences from which they can profit. We are still too dependent on the materials, methods, standards and facilities provided for the education of the normal. We find it difficult to teach a complete, sequential and well balanced course designed to meet the needs of our children. As a consequence we are often unable to hold their interest. We are not even certain that we know what is pertinent. A great deal of research, work on materials, and a revision of the curriculum are necessary to provide the answers that we require.

\* From the Wayne County Training School at Northville, Michigan; Robert H. Haskell, M.D., Medical Superintendent; Thorleif G. Hegge, Ph.D., Director of Research and Education. Presented at the 70th Annual Meeting of the American Association on Mental Deficiency, October, 1946.

It should, nevertheless, be possible to obtain substantial agreement at this time on the main requirements of a teaching program. We need to include the areas that will increase the pupils' chances of social survival, promote their usefulness to the family and the community, and stimulate the harmonious growth of the total personality. We seek a maximum capitalization of capacities for these objectives. We wish to obtain in the end the highest degree of self direction possible.

The academic program presents very important problems. Academic subjects are favored by tradition and a great deal of time is expended on them with meagre results. I think it is implied in our formulation of objectives that academic knowledge and skills are in the main useless unless applicable to the real life problems of these pupils or essential to their growth. We need an exhaustive review and evaluation of the academic knowledge and skills needed on the jobs and in the situations to which the mentally retarded will usually have to adjust. A general classification of the degree of education in terms of grades will not suffice. The analysis should be specific as to content and facility in use. With such knowledge at our disposal we should make a strenuous effort to meet these requirements.

Such problems as that of budgets and the disposition and handling of money, to take an example, probably deserve a stronger emphasis than is commonly awarded them at present. On the other hand, one may doubt the value of extensive drill in arithmetic skills once the fundamental concepts and applica-

tions have been established. The value of extensive practice for reading skills, beyond those skills essential to a serviceable reading ability, is also open to question. In both subject individual children showing unusual promise might be given special opportunities.

Much essential content, which should be assimilated at least in part through reading, could be presented in relatively simple form if materials were available. With such materials we could effectively teach a great deal of vocabulary which is essential to these pupils but not commonly included in the elementary reading sequences.

According to our statement of main objectives, activities can, if necessary, be justified solely on the grounds that they are important to the harmonious growth of the personality. A requirement to be especially emphasized is the need for a variety of choices beyond a prescribed curriculum. Without permitting escape from responsibilities, we must encourage the pursuit of individual interests and the development of special abilities. Many an otherwise irrelevant activity becomes pertinent if it is the legitimate expression of a quest for enjoyment, experience or achievement. This is a matter of guidance rather than of educational pressure.

In this connection let us remind ourselves that there is opportunity and need throughout to encourage a problem-solving attitude in the children. This pertains both to subject matter and to situations of social significance. As to the latter, it is essential to provide for rich social experience in addition to the teacher-pupil relationship.

We should never forget that we are

teaching at relatively low levels, the children being mentally inferior, and the subject matter and method simple and concrete. Under these conditions, stimulation of intellectual and social growth becomes particularly important if we are to develop capacity for self direction. In short, we cannot be satisfied with skills, memorizing, practice of acceptable behavior, smoothly operating classrooms and activities. Guidance must be offered the children in discovering for themselves how a problem is to be solved, how knowledge may be applied, how things function, why things must be done thus and so. This is no doubt elementary educational philosophy, yet I fear that we often forget it in our eagerness to see the children progress through the sequences of subject matter. Such progress is important. How progress is made is even more important.

We know very little about differential techniques for the teaching of children who appear similar in capacity for response, yet may learn by different processes of which we ought to be cognizant. We know more about how to teach grossly deviating sub-groups within our area as well as grossly deviating individuals.

In addition to research on these problems we need individual programming based on careful appraisal of the individual child. Our programs should include such features as clinical remedial reading and arithmetic, corrective speech and corrective methods in certain cases of brain injury. We should make special provision for those who are found to be ineducable in reading. These pupils can often learn to recog-

nize a great many useful words and stock phrases and they will profit from various other simple and essential units of instruction. Correspondingly, the range of manual capacities and mechanical comprehension includes at the lower end pupils whose progress through a regular shop course is very limited. At least a part of the answer may be found in craft work. Some of the elements entering into shop training, simple work assignments and similar responsibilities may likewise be utilized.

In referring to these extreme ranges of low ability I do not have particular reference to the imbecile. Nor am I thinking strictly in terms of I.Q. or M.A. These measurements remain eminently useful for purposes of gross classification but do not mirror the many capacities, deficiencies, and emotional inhibitions and weaknesses with which we often have to deal.

Turning our attention from cases of extreme disability to those who have marked capacities, especially in the manual area, we find that placement in vocational and trade schools may be advantageous in many instances. Adequate specialized support should, however, be given in areas of weakness and the pupil's problem should be carefully interpreted. In general, placement of the mentally retarded pupil with normal pupils of his age is desirable where he can participate with optimal benefit and is assured of his full share of opportunity. A routine program along this line is, however, fraught with danger. And the problem of getting more and better special education is of greater concern to us than the problem of maintaining or obtaining a place for

our children in the activities of normal children.

I shall discuss for a moment the question of shop training for the run-of-mine mentally retarded boy. One might hold that if manual skills are at all required on the job that he will get, these skills must and will be taught by the employer. Hence, a fairly extensive shop course cannot be justified from the standpoint of occupational preparation.

This argument does, however, not dispose of the issue. Industry, as well as other occupations, presents an abundance of simple operations involving machines and tools. These operations can be learned and performed without difficulty by a large proportion of our pupils. Yet these boys often fail at such jobs. Why? They are insecure, unable to cope with emergencies, easily confused and discouraged. They sometimes lose face because they are unable to camouflage abysmal ignorance. They are handicapped by not knowing tools, machines, materials and terminology. They do not possess the required work habits, stability and social adaptability. Their situation is much more difficult than that of the average pupil who likewise has to learn the job.

Is this a hopeless problem? It is not hopeless from an educational standpoint. Many mentally retarded boys, who had their experience of failure, have succeeded in the end. But this is a wasteful process and the losses may be presumed to be greater than necessary.

We must offer a background of experience with basic tools, machines, operations, materials and responsibilities

in order to facilitate adaptation to a variety of job situations. This program must be slowly paced and provide broad experience for those who can learn to do many things. It should provide an opportunity for those who can learn to do only a few things to discover what they can do, develop these skills and gain satisfaction and confidence. Let us not forget the overall objective of growth in evaluating such a program. There comes a time in the development of the mentally retarded boy when few activities can match the appeal of the shop with its machines and man-sized jobs. We must develop self-reliance in emergencies by providing suitable experiences. We must teach the essentials of shop information and establish work habits that meet the required standards. From all of this exploratory and preparatory experience there results a greater stability. The job situation is not totally unfamiliar but related to situations which have already been met successfully. The job may even be simple as compared with some of the work which the boy has already learned to do. Last but not least: he knows his strong and weak points and so do we. We can advise him accordingly.

It seems probable that the development of adequate courses in special education for the mentally retarded will show fully the desirability of extending these courses to an age range now commonly out of school. We must cover a large amount of subject matter and teach a large array of skills. We must allow for slow learning and slow growth. Learning capacities often continue to increase after the age of six-

teen. We must make use of these new capacities. Outlook and interests mature. New material can be presented successfully, many old items can be reviewed with benefit. For these older children the program should insofar as possible be a part-time one, allowing for job experience and earnings.

The need for extending educational opportunities to older children becomes even more apparent when we consider the adolescent personality rather than the learner of skills and subject matter. What do we find? The adolescent, who, in addition to the handicaps of adolescence, must also carry the handicaps of mental retardation and often severe handicaps of environment and early background as well, is not and cannot be an educational product already finished. He is actually in a new and crucial stage of development where society's earlier investment is threatened. Habits and attitudes, carefully nourished and developed over the years, may easily be lost. This child needs the support of an educational program even more than does the average high school boy or girl. The normal boy or girl may be more valuable to society, but this is not the main point, as we all know. The risk to society is one main consideration. The rights of the individual to a full measure of self realization is another consideration which will weigh heavily with many.

Education as provided in schools will, however, not suffice. Without doubt, this education must be supplemented by guidance if costly failures are to be prevented. The pupils and their

families must be taught to accept such guidance. Some progress has been made along these lines. We require the sympathetic and expert services of specially trained personnel, working with other existing agencies. This appears to be a special field, requiring the development of organized directions and information. All of the mentally retarded and higher grade defective should come within the scope of this program. It should include their registration and periodic centrally organized surveys, beginning at an early age. The success of the program would be greatly dependent upon the cooperation of the individuals concerned. My returns have not indicated what legal provisions would be desirable and feasible.

Education and guidance must be supplemented by other programs. For those who cannot compete on jobs, yet do not require institutionalization, a separate community program has been proposed by a committee headed by Mr. Richard Hungerford. Institutions need to differentiate further between custodial programs and programs of rehabilitation. There is likewise need for protection against the influx of defective delinquents whose presence in the average institution interfere with the execution of enlightened policies.

Our reasoning throughout has proceeded from the standpoint of what would be desirable rather than from the standpoint of what is practical in a specific situation. A great deal of public support is needed. The problem of research, the task of creating plans, instruments and materials, and of evaluating results, are of considerable mag-

nitude. Any one who has looked into the problem even casually can testify that this work cannot be carried out effectively by isolated individuals or in spare time. We evidently also require new space, equipment and additional trained personnel. Professional workers in fields that intersect ours must be educated to better understanding. This job of education must be done not only in colleges and universities but also in the field. Salaries and working conditions must be attractive.

We must give earnest consideration to methods of getting action and financial and moral support. Progress may be retarded by ignorance in high places and by a divergence of interests and outlook among the various authorities concerned. Many civic groups should take a greater interest in our problems.

It is necessary to have integrated planning and to include in the planning bodies representatives of employers, labor and other powerful segments of the community. By taking responsibility these groups will develop a better understanding. Provisions for the mentally retarded and higher grade defective, leading to a more adequate program of rehabilitation and social control, are the responsibility of the community itself, seeking better protection and a higher level of civilization. The problem is the public's problem. It will not be solved until the public and its representatives are thoroughly aware, not only of the menace, but also of the possibilities of salvage. These possibilities are greater than was commonly assumed even a few short years ago.

# THE CURRICULUM OF A PROLONGED PRE-ACADEMIC PROGRAM \*

BY RUTH MELCHER PATTERSON, PH.D.

SINCE the establishment of the Prolonged Pre-academic Program, eight and one half years ago, we have published a number of articles in regard to the theory, the general organization and the results achieved in this experimental unit. There have also been reports on specific research projects, but we have not as yet given a detailed description of our curriculum. One reason is that our curriculum has been and is still the subject of experimental study and change, so that what we say today may be out of date next year. There are, nevertheless, basic procedures and materials which we use and these we will now present in as much detail as our time allows.

The Pre-academic Program has the same relation to the rest of the Training School as the school has to the community, namely: to prepare these mentally retarded children for successful adjustment in their work and social relations. It is our duty to lay the foundation stones and we hold ourselves correspondingly important.

Two principles shape our endeavor. The first is deferment of academic

drill until a mental age approaching eight is reached. The second is teaching through activities designed to further achievement in areas we have designated as our pre-academic ABC. We want these children, when they are transferred to Central School and to another living situation, to:

- A. attack a new task with a positive, problem-solving attitude;
- B. be able to succeed in required tasks through their command of basic skills;
- C. conform to acceptable personal and social habits which will enable them to adjust in their social group.

The Prolonged Pre-academic Program is a school and living unit for 50 boys under 12 years of life age and 8 years of mental age, housed in "Cottage 9" (the Cub Cottage), staffed by two teachers, a director and six cottage workers including a recreation leader. The whole organization of the unit is active in achieving all of its objectives, although some are emphasized more in one situation than in another. Teaching skills in handling school materials, for example, is a function of the school hours, while teaching acceptable habits in washing and dressing is a cottage function, but even here there is no sharp line and considerable

\* From the Wayne County Training School, Northville, Michigan. Robert H. Haskell, M.D., Medical Superintendent; Thorleif G. Hegge, Ph.D., Director of Research and Education. Presented in the Section on "Educational Programs in Residential Schools," 70th Annual Meeting of the American Association on Mental Deficiency, Montreal, Canada, October 2-5, 1946.

overlapping. By taking up each topic and describing what we do to teach and develop a child in this field, we may show the integration of the unit in each phase of the program.

A. Attack a new task with a positive, problem-solving attitude.

This objective becomes a real challenge when a child appears who suffers from extreme anxiety, insecurity and retreat from difficulty. We have had a number of them. They are likely

academic unit is met in the Supervisor's Office by the psychologist in charge of the Pre-academic Program and escorted to the cottage. On the way over, the playground and pet rabbits are pointed out. When he comes into the cottage, he is received pleasantly but casually and no demands whatever are made upon him. The cottage supervisor gives him her entire attention for the short period during which he is being showered and his

TABLE I  
PRE-ACADEMIC UNIT—SEPTEMBER 1, 1946—SCHOOL GROUPS  
Cottage 9—50 Children \*

		Prolonged Pre-academic Program (41 children—School in cottage)		
		Group 1	Group 2	Group 3
	Number	15	14	12
C.A.	Range:	7.9 to 11.7	8.7 to 10.9	7.4 to 11.2
	Median:	10.6	10.1	9.4
M.A.	Range:	6.4 to 7.8	5.6 to 6.7	4.7 to 5.8
	Median:	7.3	6.4	5.1
I.Q.	Range:	55.0 to 88.0	54.0 to 73.0	42.0 to 69.0
	Median:	68.0	63.0	54.5

\* Nine children were attending Central School.

to be sensitive and less rugged than the average in constitution, so that they have not been able to respond to teasing or failure with active aggression. They are apt to be thoroughly convinced that most things are too hard for them and are likely to become upset by the slightest frustration. They may indulge in temper tantrums or simply withdraw and refuse to interest themselves in anything.

The treatment begins with the child's reception. Children are usually brought to the Training School by an employee, their goodbyes having been said in Detroit. A candidate for the pre-

belongings recorded. Then he is guided into the cottage routines.

Nearly all the boys in the cottage have jobs and it is considered a privilege. One's name is up on the prominent job chart and one is a busy and important person. There are cottage jobs of all degrees of difficulty from emptying waste baskets to being a "serving boy" which entails the social responsibility of serving the gravy and second helpings. There are also "upstairs jobs," the most important of which is "clothesroom boy," requiring the ability to read the names of all the boys in the cottage. Our little newcomer is



not asked to do anything except to follow along with the group where he has a chance to see what the other boys are doing and to see how happy they seem to be in their chores.

The morning after the day of his arrival, the "new boy" joins a school group. The constitution of the groups

are not likely to be much upset because they have become accustomed to taking in their stride "new boys who haven't learned how we do things."

During the morning, he will be for an hour each with the activity teacher and the language habits teacher and for an hour out-of-doors with the recreation

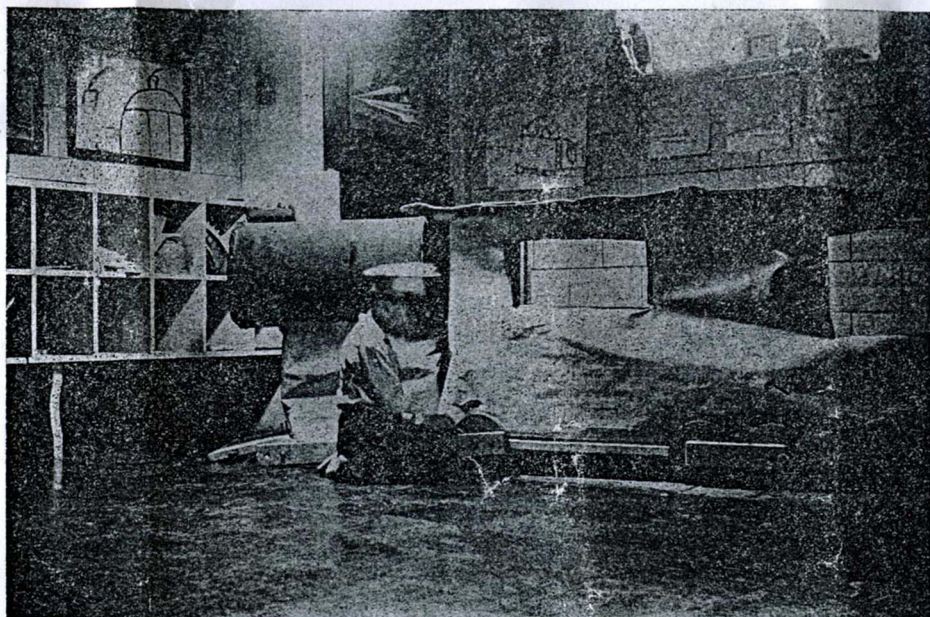


FIGURE 1

Use of materials in the activity room.

is shown in Table 1. He has been tentatively classified into one of the three groups according to his ability level assumed from the information which we have concerning him. Just as in the cottage, he is welcomed casually by the teacher, offered material, but required to do nothing except to refrain from disturbing the group. Even if he does choose to behave in a noisy or disturbing manner, the other children

leader. In the afternoon, depending upon his size and age and ability, he will either sleep for two hours (Group 3) or have another period with each of the two teachers (Groups 1 and 2). In both classrooms he will see the other children using many different kinds of materials which may be classified as follows:

1. Materials for free creative expression, such as blocks, paints, crayons,

clay and other malleable materials, cardboard and construction paper and a large assortment of incidental and transient materials.

2. Construction materials for craft work requiring more specific skills, such as simple weaving, bead work, metal cutting and punching.

6. Puzzles, graded in difficulty.

7. Books, a very wide assortment.

Much of this material is easily accessible to the children and arranged for their convenience. No barrier is placed between the child and free experimentation with them. Materials which require supervision or specific instruc-

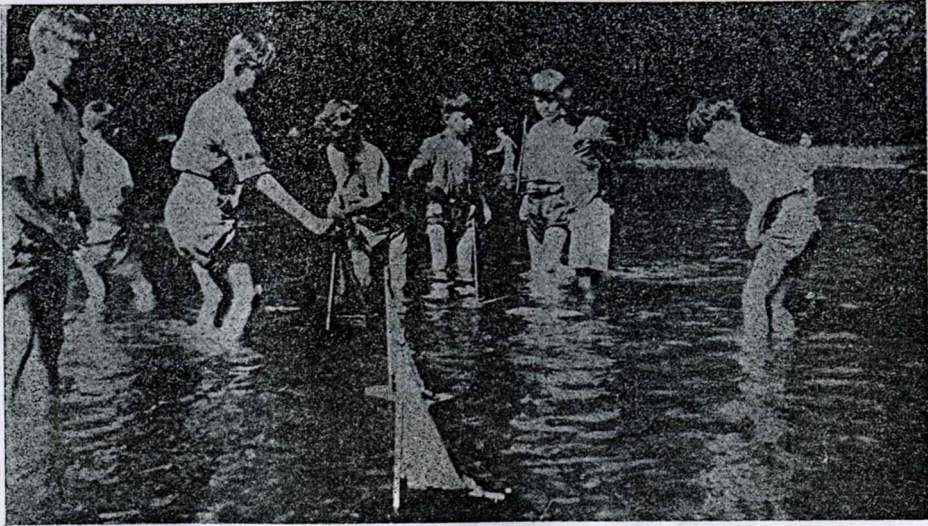


FIGURE 2

Recreational use of boats made in school.

3. Commercial material of the educational seatwork variety, adapted to the needs of these children. This requires a specific performance, such as color, form or word matching.

4. Material of the seatwork type prepared by the teacher specifically for this group to teach some skill, such as letter, word or phrase discrimination, number recognition, writing one's own name.

5. Table games, educational in character, both in the performance required and in the social interaction.

tion in use are offered by the teacher as she sees the need for them.

In addition to work with materials, the new child joins his group for music, stories and conversation. Unless he is especially deficient in musical ability, he may first begin to participate in singing and rhythms. He can join a group in singing a familiar song without calling very much attention to himself, and few boys can resist a chance to beat a drum.

Unless he is an unusually withdrawn child, he will soon begin to participate

in the conversations, too, because the children will be telling about experiences which he has shared with them in the recreation periods. For an hour during the morning and also after school in the afternoon, he will be out-of-doors under the guidance of a leader who chooses from a wide range of possible activities. There are two playgrounds on the campus, well equipped with slides, swings and see-saws; there is our own equipment for baseball and dodgeball, our sandpile and jungle gym and sleds and skates and kites in season; there are all the games and stunts which the leader knows how to teach; there are all the woods and fields, the farm and barns and orchards and all the institution services, such as the power plant and the store and the mill-room, to be visited. There is a trip book which helps the leader to know what to look for. The conversation periods deal with things the child knows about from first hand experience, and he is helped to organize and remember those experiences through verbalizing them.

For a while the newcomer will be given the opportunity to orient himself and to choose an occupation for himself. In most cases the materials are different from those with which he has experienced failure. He is attracted to experiment and is soon so absorbed in his work that no further difficulty is present.

If the child continues to refuse to join in the group work, the reason is usually to be found in one of two conditions. Either he is really incapable when compared with others in the

group, or else he is one of the brighter children who has developed a deeper defense attitude in regard to his shortcomings. The problem then becomes one of method in diagnosing the child's particular difficulties and in inducing him to attempt selected tasks. The findings of the medical and psychological departments are sought and the specific area of the difficulty is bounded through our checking chart, which has been described in previous publications. The school curriculum has been described in greater detail by Miss Bluma Beryl Weiner.

In the cottage also, if the child does not finally ask for a job, the cottage supervisor begins by asking him occasionally to help with small things. Once he has experienced a measure of success and praise in an activity which has value in his eyes, a change in attitude sets in.

To summarize: the whole unit is organized with the aim of creating a situation in which children who have been unsuccessful in the community will now experience success. The withdrawn child is not the only one who is failing to attack his problems constructively. The hyper-active, aggressive child is only using another scheme of avoidance. He is likely to attempt many tasks and to abandon them as soon as he meets difficulty. In our experience, all children with normal behavior potentiality yield to the atmosphere in time. Not that they all become good sports with sunny dispositions. Those who come with exaggerated personality problems may require a year or more of careful guid-

ance before they can face the possibility of defeat and attempt what seems to them a difficult task. But the four extreme cases whom I have in mind learned to respond to the suggestion, in this environment at least, to attempt a task without withdrawing and to accept some inescapable barrier in their paths without bursting into tears and screams and retreating in rout from the situation.

B. Be able to succeed in tasks required of them through their command of basic skills.

This objective with respect to the school work is achieved through the teacher's skill in presentation of the materials listed, devising new materials as needed, and management of group language experiences.

There are many skills besides those learned in the schoolroom which contribute to a child's adjustment. Skills in sports, in serving a meal and clearing the table, in making beds and sweeping floors are all basic to successful institution living and are certainly not without value in any group.

These skills are taught by the cottage staff. Sweeping, dusting, scrubbing a floor, making beds, carrying dishes on a tray, pouring liquid from a pitcher, setting a table are all activities in which they receive training. In the pre-academic unit there are girls receiving vocational training who assist with the house cleaning, so that the sanitation and appearance of the cottage does not depend entirely upon the children's work and it is not necessary to put undue pressure upon them. When they go into the next older cottage, how-

ever, their work must measure up to institution standards and the child who is proficient and industrious will reap rewards in general approval and privileges. His status with his new group will also depend upon his skill in games and sports and his knowledge of the environment. These are the areas in which the recreation worker strives to develop him.

C. Conform to acceptable personal and social habits which will enable them to adjust in their social group.

Training in habits of personal cleanliness and neatness, in table manners and in an average observance of polite forms, such as "please," "thank-you," and "excuse me," rests heavily upon the cottage staff but is shared by the teachers who have more opportunity for individual instruction.

Training in a group of 45 to 50 children can be accomplished only through routines. To teach through routines requires that they be handled the same way, day after day. Since our cottage staff works on an 8-hour shift and different people handle the routines at different times of the day, we have crystalized these routines into a syllabus at the risk of becoming inflexible. This has the advantage, however, of helping the children to realize that "this is the way to do this," not "Mrs. . . . makes us do it this way." For every movement of the children throughout the day, there is a way of doing. The most important routines are those for rising and retiring, for the lavatory and bathing, for the table setting and serving and for the cloakroom. Concrete requirements characterize all the routines.

Training in social habits is shared equally by school and cottage workers and there can be no set rules for behavior, since there is no end to the variety of behaviors which must often be evaluated in terms of the child's ability and the group's feeling. To meet the need for dealing with problems of social behavior in a way in which the children feel some share and personal responsibility, we devised the technique of the "Good Helpers Chart."

Biber, Murphy, Woodcock and Black,\* in their book "Child Life in School," say: "Voting is a strikingly important pattern with these children and one feels that through all this hand-raising and hand-lowering, through all this gesturing of for-and-against, something of vital importance is in the process of active construction, namely, each child's need and desire to belong within a group of children, to strengthen the feelings of belonging and being together . . . voting is a primitive form of establishing togetherness."

We have felt this to be true in our voting each Monday for the "Good Helpers Chart." We have formulated nine general attributes which characterize a Good Helper. These are displayed always in the cottage and discussed from time to time. Near by is the so-called chart itself, which has five rows of ten hooks each and a metal edged cardboard disc for each child's name. The discs can be moved up and down on the hooks.

Each Monday at "voting," each child's name is called. The supervisors keep a book, in which outstanding behavior, good or bad, is reported, and this is read. Any child who has a grievance stands up and states it. The teachers also report. All reports must be specific statements of facts. When the reports are in, the decision as to whether or not the child has been a Good Helper must be made. Where there is any question, the decision rests with the children whose raised hands are carefully counted. Boys' name discs go up or down on the chart according to their record. The procedure is taken very seriously by staff and children. Top row boys have certain privileges, while boys whose names are turned down are the ones left out of any treat which cannot be given to everyone. Boys' parents see the chart when they come to visit. A longitudinal record is also kept as a group competition. A group which has the most Good Helpers over a period of time is given a party.

We feel that this system has been very important in bringing about changes in attitude. The child hears his behavior discussed in objective terms and learns to know what the other members of the group think of it. If he feels disheartened because he thinks the others do not like him, he learns that there are certain specific things which he must do or not do to change that attitude. It is surprising to find how much self control can be achieved by children whose behavior has seemed to the adults to be almost of the impulsive type. The group also establishes

\* Barbara Biber, Lois B. Murphy, Louise P. Woodcock, and Irma S. Black. *Child Life in School*. New York: E. P. Dutton and Company, Inc., 1942, p. 139.

a sense of "togetherness" by expressing together judgments on specific behavior.

*Summary:* In the Prolonged Pre-academic Program we have tried to establish a unit in which education is not confined to school hours but is actively shared by each member of the staff throughout the child's day. Our

main objectives are to develop in these young boys attitudes and skills which will prepare them to adjust in school and social group. These objectives are pursued by instruction through activities, routines and group techniques in which teachers, cottage workers and recreation leaders participate.

# THE SCHOOL CURRICULUM OF THE PROLONGED PRE-ACADEMIC PROGRAM AT THE WAYNE COUNTY TRAINING SCHOOL \*

BY BLUMA BERYL WEINER, M.A.

THE purpose of the school curriculum of the Prolonged Pre-academic Program is to contribute to a well-rounded pattern designed to stimulate child growth. This includes the preparation of mentally retarded boys, ranging in age from seven to twelve years chronological age, for rapid progress in academic work when it is introduced. The program calls for delaying formal academic instruction until a mental age approaching eight years has been reached, and replacing such work with preparatory activities more suited to the present abilities and needs of the children, who are divided into three mental age groups approximating 5, 6, and 7 years.

The curriculum of the pre-academic unit is essentially an activity curriculum. The term "activity" is used here in a double sense. It designates those co-operative group projects motivated by seasonal and special interests, and it also refers to the specific skills that must be mastered to enable the children to participate with pleasure and profit in

the more comprehensive enterprises. The pre-academic curriculum is discussed here in terms of specific skills.

There are two schoolrooms. One is the language habits room; the other, the activities room. Language, literature, number, music, and rhythm are the special areas of the language habits room. Through imitation and brief, precise, verbal instructions the children acquire the conventions of acceptable classroom conduct. They listen to others and in turn take part in the group discussion. They learn to talk to the group through telling about a picture, describing a pet or a toy, telling about week-end experiences or special events, and re-telling a story that has been read to the group. They memorize short poems in which the content is related to some familiar observation or experience or the words and meter have a marked appeal. The children learn to recognize their own names, a limited number of color words and number symbols, and a brief sight vocabulary. These are introduced through games and exercises and reinforced by the use of teacher-prepared work sheets and assignments of the seat-work type. The children learn to write their own names. They have opportunities for using chalk at the blackboard and for handling pencil and paper.

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A weekly experience chart is a regular part of the language work with the two older groups. The boys are eager to contribute to its production by reporting interesting items about current happenings in cottage and school. This affords opportunity for practice in

spects can participate here and gain release and self-confidence.

The boys in each group have an opportunity to play in their own rhythm band. The songs they learn include selections appropriate for their church services, for the general assem-

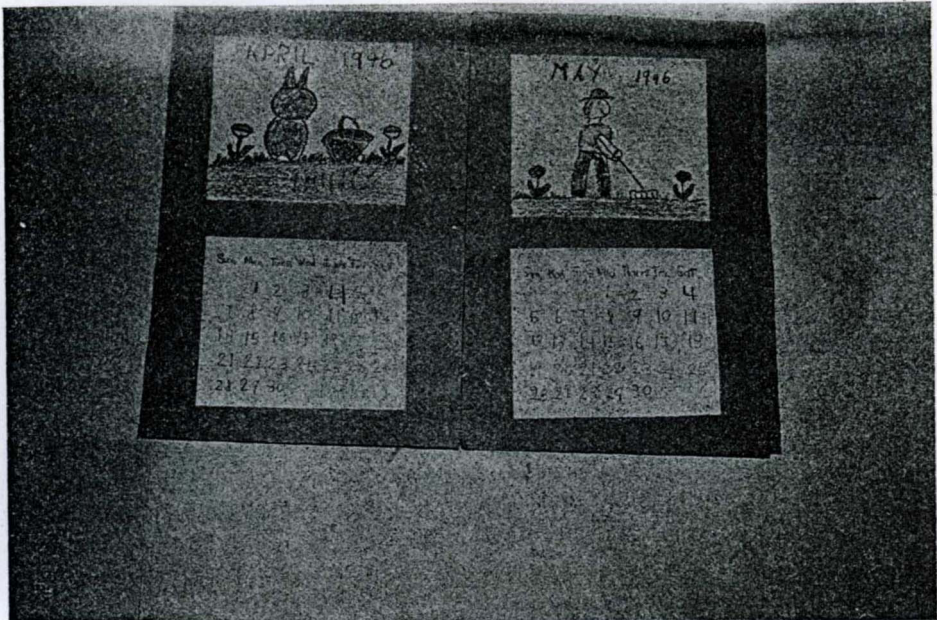


FIGURE 1

Part of a time perception project in the language habits classroom.

translating their experiences into verbal terms and communicating them in organized and correct language.

Skill in singing and rhythmic expression is developed by giving careful attention to the needs of each child and then providing suitable activities for meeting them. Accurate auditory perception is encouraged through listening, tone-matching, clapping, tapping with sticks, and moving about to marked rhythms. Some children incapable in other re-

blies in the central school and for the various seasons and holidays.

The work of the language habits room culminates in group dramatizations, in programs of individual and group contributions of poems and songs, and in the preparation of charts, notebooks of individual work sheets, and illustrated booklets.

The special contribution of the activities room lies in the opportunities it provides for creating and constructing



in tangible, permanent form and for the expression and utilization of the children's preferences in group and individual enterprises. The children learn to manage a variety of tools and materials. Through manipulation and experimentation they come to realize some of the properties of the various

practice cutting on sheets of newspaper and gradually attain skill in cutting to a line. Some of the youngest children learn to paste, to fold lightweight paper, to do simple puzzles, to sand wood, and to use hammer, nails, and small cross-cut saws under close teacher supervision. They learn to use the



FIGURE 2

Products of all ages in the activities room.

media they acquire certain skills which are necessary for more satisfying achievements in both classrooms. The youngest and least able children learn to use plasticine and finger paint. They learn to color with crayons, to outline a picture, and to color a specified area. They learn to draw around a thick cardboard pattern that is thumb-tacked to a small board, and eventually they learn to hold the pattern down with one hand while they follow it with the other. They paint at the easel. They

spatter gun and the stick-printing set. They have access to the block and toy shelves and they construct buildings and wheel toys and use them enthusiastically in free play. The children are given much freedom of choice and movement but they can and do learn simple safety and efficiency measures. The activities mentioned are representative of those which are engaged in by the youngest children. There are many others.

The older children continue to use

the same materials and techniques and in addition they learn to do other things. They use needle and thread for sewing cards and for making toys of cloth and oilcloth. They use coping saws for cutting heavy cardboard and soft wood. They learn to handle clay, to model it, to mold it, and to clean up

the boys in the older groups capable of acquiring many simple arts and crafts skills. Partial success is recognized and assistance is given when necessary, but the work is not done for the child. In the activities room the oldest boys also complete a series of selected and adapted exercises with commercial ma-

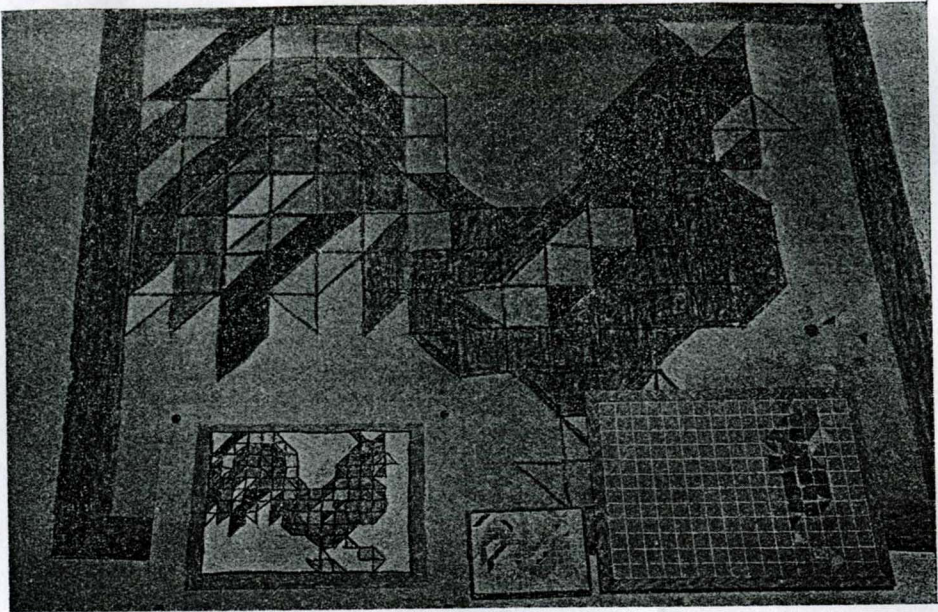


FIGURE 3

Various uses of a small pattern for parquetry papers.

after it. They learn how to use papier-mâché mixtures. The boys in the highest division learn to use enamel paints and shellac and they learn how to care for their brushes. They learn to cut soft metal under teacher supervision and they learn how to apply a design to it with hammer and nail. These boys use the seed bead looms and they follow patterns for making articles of both seed and tile beads. We have found

materials that call for concentrated attention in visual matching, reproduction of block designs, and following cues in building pictures with parquetry papers.

It may be seen from this brief account that the total pre-academic school curriculum offers such a variety of opportunities that most of the children can readily accommodate themselves to the new way of living. However, sometimes children do experience difficulty

of such a nature that we need to give unusually careful and sustained attention to the details of their problems. The approach to such a situation requires the pooling of information obtained from each member of the staff and from the case histories. We try to find out not only where the child is having trouble but where and with whom he is experiencing successful adjustment. We try to discover what is hard for him to accept and what he seems to enjoy. Equipped with this information we feel better able to attack the particular school problem at issue.

New children are received into the school department in a friendly, cordial manner. The enrollment of a new child is recorded in the weekly newspaper that is displayed prominently in the language habits classroom. The newcomer attends class with his group and is assigned to a table with other boys. If at first he refuses to participate, he is allowed to watch the other children. He is not reprimanded or penalized for this behavior. Neither is he completely ignored. The teacher comments that "He is a new boy but he will soon learn to do the things we do." By a friendly smile, a pleasant tone of voice, and an appreciation of the child's difficulty the adult manages to convey to the new boy her feeling that he is a member of the group. This attitude is quickly caught by the other children and the newcomer is accepted by them as a matter of course. They are usually eager to invite the new boy to play games and to share equipment with them, and a child rarely holds out against genuine

hospitality. The adults assume each period that the new boy is now ready to work with the group and they do not refer to his previous refusals.

If the records indicate that the child is immature and not very capable, the teachers find simple things for him to do. The younger children are assigned to Group III and attend school only during the morning session. They receive training in music and rhythm in the language habits classroom. The rest of their school program is carried on in the activities room where observation is made and recorded in regard to the levels of attainment they have reached in various abilities and skills, and materials are selected or devised to meet their present needs. The older, more able children are assigned to Group II. Newcomers are not immediately assigned to Group I, which is the highest division.

In the case of the older children the same problem exists, namely, to find something with which they can begin. In the language habits classroom where there are many opportunities for verbal participation and responses to music and rhythm, participation is largely a question of time. In the activities room the new child is permitted to look around and examine the materials. He is shown where to find pencils, crayons, paper, and various toys, games, and blocks. He has daily opportunities to play freely with the equipment, and to draw, trace, color, play with plastecine, or do puzzles. Once he has chosen something to do, the teacher tries to use this preference to establish contact between the new child and the others in the group. The boy who draws or

traces animal figures may be asked to color them, cut them out, and make a poster for the room. The child who forms a mound of plastecine and brings it to the teacher for inspection and approval is not asked, "What is it?" but is told, "Tell us about it," and the production is saved and displayed. We have in the activities room a collection of jig-saw puzzles ranging from very simple ones of thick fiberboard to more difficult ones cut from thin cardboard. After he has been enrolled a few days the new boy's name is entered on the "puzzle chart" which is a sheet of cross section paper with the names of the children in a column at the left and the titles of the puzzles in a row across the top. As soon as a boy completes a puzzle, a check is placed in the proper space after his name. We have found that all of the older children and even some of the younger boys accept this material and enjoy it and are pleased when each achievement is recorded. There are enough puzzles—85 of them at present—so that the finished record assumes substantial and satisfying proportions. The request has come from the children that we get enough to bring our collection up to 100, a goal which seems to signify to these little boys a rather special accomplishment.

There are other ways of inducing both individual and group participation that have proved appealing to children who presented special problems. It is not so much a question of special technique as a matter of applying certain principles. We avoid coercion; we

watch for signs of interest and preference that may be cultivated and extended; and we devise and introduce additional activities whenever it seems necessary. The use of simple but effective craft techniques such as spatter craft, scribble patterns, and wood stippling demonstrates to the child that lovely things can be made that are not too hard to do.

Evidence of accomplishment such as displaying work, using it in more elaborate group productions, or recording completed puzzles on the puzzle chart serves as reassurance to the child that he is able to do things which have importance and value to others. New and more difficult skills are introduced gradually and carefully. Attention is paid to special friendships or antagonisms between children so that conflicts may be avoided and good working teams or partnerships established. The chances are in favor of the child's eventually coming to accept the group and himself as a part of it. Among the other children and the adults with whom he comes into frequent contact it is reasonable to expect that he will in time make some responses and advances that we can encourage and utilize. Thus it may be seen that through participation in the pre-academic school curriculum, the children attain skills which not only prepare them for future academic progress but also furnish them with resources that contribute to satisfying social contacts and consequent general adjustment.

# A PLAN FOR THE ACADEMIC EDUCATION OF MENTALLY RETARDED CHILDREN

## *A Functional Course for the Lower Ability Group\**

BY HELEN W. TRAILL AND MARCELLA E. DOUGLAS

### I

THE Wayne County Training School is committed to the training of intellectually limited individuals for their return to the community; their stay is relatively short, and the average chronological age remains almost constant at the fourteen year level, due to a continual turn-over.

In this total population is a group who have abilities at the lower levels or who for other reasons have poor educational prognosis.

A. This group has a low educational ceiling, which when reached would be of little practical value in meeting the demands of post-parole experiences.

B. The ordinary program, over a period of time, may raise academic achievement a few points but the development of concepts and the mastery of material of a more practical nature has more meaning and lasting value.

C. This group would be out of place in the regular classes of the Training School and at a disadvantage. Their low academic level would frequently

necessitate enrollment in a class of younger children, but who have relatively comparable grade levels. Whatever gains were made would be below the 3.0 grade and this would not be sufficient power to allow independent use of ordinary verbal material.

D. These individuals in a regular class require time and attention which necessitate change and teaching time taken from other members who are able to profit more from developmental and sequence presentation of the tool subjects. In short, by the inclusion of this group in regular classes of the Training School, members would be fairly homogeneous in academic placement but with wide variations in potentiality. The result of such grouping would not be positive, as those of lesser promise would show only slight gain; they would prove a drain on the class teaching efficiency, and more important, they would forfeit help along lines which would be of more value to them.

### II. COMPOSITION OF THE GROUP

To meet this situation, these individuals were formed into a class with chronological ages ranging between 11-6 and 14-6 years; intelligence quotients ranging between 40 and 66 points; the mean I.Q. being 52. The

\* From the Wayne County Training School, Robert H. Haskell, M.D., Medical Superintendent; Thorleif G. Hegge, Ph.D., Director of Research and Education. Part of a presentation, "The Wayne County Training School Program," given in the section on "Educational Programs in Residential Schools," 70th Annual Meeting, American Association on Mental Deficiency, Montreal, Canada, October 2-5, 1946.

corresponding mental ages range between 5-6 and 8-6 years, the mean being 6-10 years. Of primary importance is the relationship established between the teacher and the class. The setting of a constructive attitude and "readiness" is the enthusiastic and vital influence of the leader. Aside from these personal qualities to inspire, many small and seemingly unimportant devices are used in the development of esprit de corps from the choosing of the class name to the slogan: "Learn one new thing every day." These and all other techniques are to create the feeling of success and accomplishment which is effective in the objective sought.

### III. BASIS OF THE COURSE

Throughout the present discussion it should be kept in mind that the functional program is devised as a substitute for the usual academic classes and thus represents but a part of the total educational program of these children.

With the ceiling for formal academic learning low and impractical for daily use, the task was to replace this with something more appropriate to the learning capacities of the group. The first course of functional material which was devised consisted of 46 arithmetic units, 23 vocabulary units and 17 functional units which applied to daily social experiences. It was used with little modification for two years. This guide proved valuable and meaningful and furnished a basis for later elaboration. With use and experience it was apparent that a revision was desirable. This revision had special reference to additional material and general re-

organization. Complete, except for printing, the course in its present form covers the following topics:

Measurements	Communication
Our Flag	Safety
Our Country	Government
Color	Money
Calendar	Time

This teacher's guide is organized according to the following outline:

#### *Topic*

- A. Activities and Devices used in presenting the subject.
- B. Vocabulary—Words and phrases related to the subjects which should be recognized by sight.
- C. Materials and References—List of stories, games, songs, information and the like to be found in printed sources.
- D. Checks covering the topics. These are divided into units and form the scale for denoting progress.

### IV. ACTIVITIES AND STIMULATION DEVICES

Before the first day of school, the teacher must realize the type of child who is coming into her class and prepare for him. The room must be made as attractive as possible, gay with flowers and pictures, with an array of books (chiefly pre-primer) arranged at hand on the table.

A. A striking chart showing the units in each topic and which at once arrests attention should be in place on the wall with each child's name at the bottom, while on the left hand side are the titles

of the subjects to be learned. In the column to the right of this are the numbers of the questions and vocabulary for each. The vocabulary units consist each of approximately ten words or phrases to be learned by sight. These are presented on flash cards with an explanation of each so that the child understands the meaning of the words or phrase. Credit is given if the child learns to recognize the *situation* such a word means, as for instance, one boy had great difficulty in learning "Exit" but every time he saw the word, he said, "This way out." That certainly summed up the situation and was counted a correct answer. One child who never learned more than a few words, brought more pictures for our "word" scrapbook than any other child. For instance, a picture of cars lined up along the curb means to him "Parallel parking only." Or he shows a marked book, "Defacing," says he. "May I have an eraser?" Thus he has an understanding of the situation. Often children returning from a week end at home tell of signs they've seen, as "elevator, pay bills here, cashier, keep to the right, curve," etc. It makes one realize that we really are doing something for them. When a child has learned a required answer, a dot is pasted on the chart, a different color being used for each term. Thus, we are able to see how he progresses as he becomes more interested and at ease. Credit is not given on the first or even the second correct answer, but only when the subject has become really alive for him. Then the dot goes up. Few units are taught complete at one time, though the scope of the units are

such as to command and hold interest. Our calendar unit, while it is intended primarily to teach how to read and understand a calendar, has within its scope a study of the seasons that permits hikes and book making of leaves and birds and flowers that is most intriguing.

We may start our study of government and in talking of our country and its President, the question arises as to why we each have a chance to help choose him. "Because we're a free country." At last comes the answer. Then follows early history of our establishment as a free country and the choosing of George Washington as its first president and there we are well launched on our history unit. Back we go to what state we live in and as Michigan is a peninsula, we find ourselves on a little geography jaunt.

B. It is essential to create an atmosphere in which an opportunity for success is guaranteed. But the whole thing dovetails into an interest and an enthusiasm these children have never known before. When they first come into the class, they appear frustrated, suspicious, rebellious of school, and hating what they cannot understand, fearful of taunts and laughter at their mistakes, and what do they find in this room? A warm welcome in lovely surroundings, their very own names already known and their presence anticipated. The teacher explains that this is a kind of class in which they will learn many things. "And you are going to learn so much your mothers are going to be proud and happy and you will be, too," says she. "All your naughty days are gone because we just

have no time to be bad; we have so much to learn." Courtesy is so interwoven in the fabric of our days that it has seemed impossible to confine it within the limits of a "lesson." From the first cheery "Good morning" and the hearing of each little tale of happenings to the last "Goodbye, see you tomorrow," we try to be kind and helpful. Instead of reprimands for rudeness, a quiet "Was that kind?" or "Did that help anyone?" usually soothes the troubled waters and averts disaster. A courteous request or a "Pardon me" on the part of the teacher brings a like response. Of course there are occasions of severe refractions or "Disturbed" days when some child needs to be removed by a higher authority but, on the whole, we soon become quiet, kind and very happy. We learn quantities of things; we act them out; we sing a suggested song; we listen breathlessly while one tries to "find the answer in his mind." "It's there," says one; "just give him a chance." Gone is the fear of failure and the jeers of comrades. Each is vitally interested in the advancement of another. When a question is asked, one can feel the anticipation thrilling the atmosphere and when correctly answered, the children themselves instituted the gentle clapping that the triumph often deserves. Each child is given his chance to answer a question even though the teacher knows there will be no answer forthcoming. Each is made to feel himself an integral part of the class; none is discredited before his fellows. Comes no answer, the question goes to the next child with no comment other than, "Well, you'll know the next one,

I'm sure." Sometimes a little coaxing and encouragement will really crystallize a half formed thought. We have had several interesting situations. One boy (I.Q. 42) had been eighteen months in the class with never an answer but a shrug of the shoulders. During a calendar lesson, the teacher asked, "John, how many Sundays in this month?" John went to the big calendar and touching each date said, "1, 2, 3, 4, 5." "How do you know they are Sundays?" "They are red," says John and from that day he answered something to every question put to him and was so often right, one realized he'd been taking it in all these silent months. Another little boy (I.Q. 51) sat three months like a scared rabbit and seemed about to jump and run whenever any attention was paid to him. One day a large group of visitors came in during our geography lesson. The teacher said, "We have some young ladies visiting us from a far away country. Who would like to show where they came from?" Our scared little brother with shining eyes went to the map, pointed to the proper spot and said, "Uruguay." The teacher gasped and the children exchanged glances. This was too good a chance to lose. "Now can you show us where you live?" "United States," he said, pointing correctly—and Canada and Mexico and Alaska. And he, too, after such a release, has answered all the questions he could with shining eyes. So often one hears, "I just love school now; oh, it's fun to learn; I'm getting so smart; when I first came into this class, I didn't know anything." They take delight in teaching one another



the days and months, etc., in the cottages and surprising the class. Calendar study is always interesting because each learns his own birthday and has his name not only written on the calendar but put on a birthday chart in the front of the room. This has done more to help them learn their birthdays than any other device tried. Our course in time telling has been very successful. They really learn what it is all about and vie with one another in the proper telling thereof. We have a coo-coo clock with Roman numbers which is our pride and joy.

We also have a course in "Food," guaranteed to make one's mouth water. It is hard to get children to like the foods that are good for them, but our food study has done a great deal to combat this. We get really excited over vitamins and minerals. "Well, I had my Vitamin A today. I ate all my carrots; oh, I'm strong, I had my iron today (no, silly, not nails); I ate my spinach; I ate the pork in my beans; I used to throw it away; I ate my sauerkraut; I made a face but still I ate it; it's cabbage; we had raisins in our cake last night; that's iron, isn't it? I ate my cereal and drank my cocoa this morning; now I can work; I ate my potato skins today (and I and I). Minerals are in them, aren't there?" These are real unsolicited remarks which the teacher hastened to make a note of at the time. We made a wonderful scrapbook with a page each for starches, vitamins, sugar, fats, minerals and proteins which was assembled in this way. All the food pictures that had been accumulating for a long time were laid out on our big table and all

gathered around. "Now we want starchy foods," said the teacher. Each child eagerly sought and found such a one. "Now foods with iron in them" and they found those and so on. This was more nearly the children's project than any other. Each child made a page of his own. This was very edifying. "I've got to have Vitamin C. Where's some fruit? Ooooo, look at your food; you'll never grow strong; you've got too much sugar there." So they chose and discarded and really most used very good judgment. This food project has been gone into at length because it is a subject near and dear to us all and it serves well to illustrate the interest and spontaneity with which they enter into the work of this class.

C. Repetition is basic and necessary. They are never tired of going over and over the course. Each time new lights are brought to bear because of their familiarity with it. It is important that they know well what they learn.

As we go over and over the work, more and more boys win recognition represented by the dots on our beautiful chart and count them proudly. Essential information that must be gained constitutes the units of work, and the basis for recognition is determined not only by the amount of information (though that is indeed vital) but by the interest displayed and the social adjustment in the class. We repeat the course each time as if they had never heard it before and they never seem to tire of this repetition, and because of their familiarity with the subject, they feel more certainty and security.

### V. THE VALUE AND CARRY-OVER IS NOTED

A. In a gain in socially desirable traits such as self-respect and tolerance and dependability. All these attest to the fact that here at last is something that is tangible and vital in the education of boys such as these.

B. In the possession of facts upon which daily experiences are based. Our purpose may be considered achieved when we have supplanted material within the comprehension of this group for that which may be traditional but ineffective. We are again reminded that this group along with all others in the Training School should return to the community, if possible. Their time at the school is a training period. They will carry their intellectual limitations with them into their new situations but it will be bolstered by the possession of information regarding certain common and everyday facts. Such matters as knowing how to tell time, how various communication devices may be employed, what the various seasons represent, and the most fundamental historical facts are the sources and background upon which daily experiences may be based.

C. By display of self-sufficiency be-

cause of a better understanding of topics of general importance. It is recalled that in a public assembly the speaker raised the question on "the largest state in the Union" and turned the query for the name of that state over to the audience. It was felt that the majority could have given the answer, "Texas," but it was the members of this group who became enthused and were eager to supply the information. This feeling of possessing knowledge of such general importance left no room for hesitation or self-consciousness. There was no question of not possessing the right answer. This group had had a great deal of experience in just this sort of thing and the present situation was merely an extension of the classroom.

To be schooled in those matters which may be a part of conversation, daily living and work is to be equipped with the necessities for "belonging" in the society of one's peers, with its attendant feeling of self-sufficiency. To miss this sets one apart as "not up to par" and leads to lessening of one's own appreciation of his potentialities and acceptance by the group. Making use of the knowledge one has is the best gauge of its value.