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CONTENTS

and the second s	PAGE
"Forelights" to Philadelphia	201
PAPERS	
I. BIOLOGICAL AND MEDICAL SCIENCES (Genetics, Biochemistry, Psysiology, Physical Anthropology, Neurology, and Neuropathology))
The Genetic Aspects of Primary Eunuchoidism. Franz J. Kallmann, William A. Schonfeld, and S. Eugene Barrera	203
A Tuberculosis Survey in an Institution	237
II. PSYCHOLOGY AND PSYCHIATRY	
Selection of Naval Personnel with Special Reference to Mental Deficiency	245
Responses of Negro and White Morons to the Rorschach Test	253
Animistic Attitudes in the Reasoning of Two Clinical Types of Mentally Subnormal Children Heinz Werner and Doris Carrison	258
Academic Achievement of Differentiated Groups at the Moron Level R. Melcher Patterson and Charlotte Philleo	261
The Pathognomonic Significance of Psychometric Patterns J. E. Wallace Wallin and Catharine L. Hultsch	269
Hysterical Manifestations in Mental Defectives Frederick C. Thorne III. Social Sciences	278
(Education and Training, Sociology, Social Service, Social Anthropology, Eugenics	
and Administration)	
A New Approach in Educational Methods for Brain-Crippled Deficient Children Laura E. Lehtinen and Alfred A. Strauss	283
Some Concrete Contributions to Occupational Education in the Academic Classroom	288
Functions of Academic Work in the Homemaking Situation	292
Motion Picture Studies of Children with Multiple Handicaps Dorothy G. Harrison	296
Services of the Specialist in Guidance and Placement of the Mentally Retarded	299
REVIEWS AND ABSTRACTS	
Biological and Medical Sciences. Psychology and Psychiatry. Social Sciences	302 304 310
REPORTS	
Committee on Research Committee on Education and Training Committee on Membership Committee on Standards and Policies News Notes	312 313 315 315 318

Social Sciences

A NEW APPROACH IN EDUCATIONAL METHODS FOR BRAIN-CRIPPLED DEFICIENT CHILDREN *

By Laura E. Lehtinen, M.A., and Alfred A. Strauss, M.D.

Northville, Michigan

RECENT research has contributed much to change the concept of mental deficiency (Kanner).3 With the exception of very specific clinical types such as mongolism, cretinism, etc., the term "mental deficiency" formerly signified a homogenous group of individuals characterized by mental retardation measured in terms of I.Q. gold's classification into primary and secondary amentia is an outstanding example of this earlier concept. Within the group of secondary amentia braininjury was mentioned as an external factor; it was assumed, however, that this type of mental deficiency appeared commonly with defects of the neuromotor system. (Doll,1 Tredgold8). Strauss 4 called attention to the braininjured mental defective without gross motor disturbances. Strauss and Werner have presented before this Association a number of papers demonstrating that this exogenous type of mental deficiency differs in fundamental aspects -behavior, perception, concept formation-from the endogenous type of feeble-mindedness,7,9,10,11

For many years Strauss 5 has emphasized that this particular mental organization of the brain-injured mentally defective child (the brain-crippled deficient child) must be taken into consideration if efficient educational methods for these children are to be developed. He has demonstrated that his methods have proved successful in individual cases.

In January, 1941 the Wayne County Training School opened an experimental class where these methods for brain-crippled children are applied in a group setting. The present paper will describe the setting and some of the material and methods used in academic training.

Strauss and Kephart ⁶ presented data before this association in 1938 demonstrating that the exogenous children exposed to a training program designed for the endogenous children do not respond to educational stimulation. If we assume that the lowering of the I.Q. as opposed to a rise in I.Q., indicates a lack of response to training, the investigation showed that the endogenous children as a group tend to increase in I.Q. during their residence in the Training School whereas the exogenous children tend to decrease in I.Q.

Why does the brain-crippled child not respond to the classical special education program? Through every phase of the education of the mentally deficient child, emphasis by educators is

Medical Superintendent.

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placed upon the normal rather than the pathological aspects of his mental organization. Abilities and capacities of mentally deficient children are conceived of with reference to the position these children occupy (in terms of I.Q.) on a continuous curve of intelligence or capacity to learn. From this follows naturally the generalization that the mentally deficient child learns in the same manner as the normal child of the same mental age, only more slowly; that he learns the same amount and the same kind of subject matter as a normal child of the same mental age, only more slowly. In accordance, therefore, with the generally acknowledged similarities between the mentally deficient child and the normal child, the psychological and pedagogical principles underlying their education are the same. Hollingworth writes that "feebleminded children differ from ordinary children only in amount of ability not in the kind of abilities which they possess. No mysterious or unique matter or method is necessarily required in the task of training them. They can learn the same things that other children learn up to the limits of their capacity." 2

If we consider the fundamental differences in the mental make-up of the endogenous and the exogenous child, a difference for which we have ample material of clinical observations and psychological experiments, we need not wonder why the exogenous child does not profit from the routine educational stimulation. Who would think of training a physically crippled child in his defects—may he be spastic or athetotic or ataxic—by offering him dancing lessons or gymnastics intended for the training of the normal child. The deficiencies of the exogenous child, the brain-crippled deficient child, are manifold. There are general disturbances, like hyperactivity, distractibility, hypervigilance, forced responsiveness to stimuli, pathological perseveration, and many specific defects in reading, arithmetic, writing and speech. With reference to education three conclusions have to be drawn.

- (1) The brain-crippled deficient child does not profit from methods derived from the concept that the mentally retarded child is a slow-learning child with normal abilities in lessened degree.
- (2) The brain-crippled deficient child, in addition to materials for the acquisition of special skills, needs training which takes into account his general disturbance.
- (3) The brain-crippled deficient child should be trained in the acquisition of special skills on the basis of his pathological mental organization which is the result partly of general disturbances and partly of specific deficiencies.

To develop such a program the Training School has established an experimental unit which consists of three rooms, one designed for academic teaching and the two others for manual training.

The academic room is a large sized room where twelve children can be comfortably placed, each one seated at a large table by himself. There are no decorations on the wall and the lower halves of the windows are painted translucent. Having eliminated external stimulation as far as possible, the child has less opportunity to become distracted. At the beginning of the school year a plan of

instructions is worked out for each child after an observation period of at least four weeks. The results of previous achievement tests are considered but the results of the observations in the teaching situation give a more accurate picture of the method to be followed and the material to be constructed for each child. The material is constructed as self-tutoring and is changed frequently if interest and motivation decrease. Change is also necessary as long as the child because of his general deficiencies in perception and comprehension is prone to become distracted or to perseverate. Much varied and different material must be available so that distractibility may be overcome and perseveration broken when either occurs. The more knowledge the child acquires, the less apparent become the general disturbances.

There is no group work as it is known in the average school-no class recitations or drills. The child recites individually to the teacher. It therefore happens that each child may have a different lesson from every other child in the class or he may employ a method which is tailor-made for him. range in one class may be from the preprimer level to the fifth grade in certain subjects. The academic training consists of instruction in the tool subjects-reading, arithmetic, writing, and spelling. Enrichment of the child's program is obtained by supplementary work after he has completed the basic training requirements. The child usually stays in the experimental group until he has reached an even achievement level of the third grade. He is then transferred to the general school in the institution.

One viewpoint stressed is that commercially prepared material as far as possible is avoided; the child prepares his own material from material familiar to him in his daily living. For example, he may build simple sentences from familiar words cut from magazines, he may cut out a picture and compose a story about it, or he may illustrate his own work with pictures or numbers found in magazines or newspapers.

In turning now briefly to a discussion of the methods used let us recall that this new approach for the education of brain-crippled children is intended to develop first: methods and material for the improvement of general disturbances, second: methods and material for the remedial training of specific defects, and third: material primarily selftutoring in its use.

The following is given as an example of material used in overcoming a general disturbance like distractibility. Robert is a brain-crippled deficient child, eleven years of age, I.Q. 64. During the years he has been in school he has acquired certain rudiments of knowledge and academic skills. His number concept is elementary, but he can, with considerable skill, arrive at the answers to simple problems in addition by counting silently to himself. Addition problems orally given and orally answered present no difficulty. When Robert was given a lesson in which the answers must be written below problems printed on a page, he failed-not in his ability to arrive at the answer, or in his ability to form the written number, but in his ability to put the answer on the page in the place provided for it. One could find the answer at the bottom of the page, in

the margin or under a different prob-The difficulty confronting the teacher was how Robert could learn to write the answer where it belonged. Discussion with his former teacher revealed that in spite of many attempts she had never been able to get him to answer written arithmetic problems in an understandable way. To tell him where his answer should be placed was of no use. He was given then a device which consisted of two cardboards 8' x 10' between which the arithmetic page was placed. In the upper cardboard was a small opening which exposed one printed line at a time. Over the opening in the cardboard was a slide with a window, permitting one problem after another to be exposed. By moving the slide from one side to the other and the page inside from the top to the bottom all the problems could be seen alone one after another. Robert worked his next arithmetic lesson using this device and produced naturally a perfect paper with the answers all in their proper places. On the following day he was given a page of similar examples to be worked without the aid of the device. On this day his paper was as correct as it had been on the previous day with the aid of the device. From then on there was no regression to the earlier behavior. A similar device is used when there is distractibility in reading.

Space does not permit further explanation of many more of these devices or those for overcoming perseveration. A description of the training methods used in overcoming perseveration may be found in a paper discussed last year by Strauss and Werner.⁷

The material in general is very concrete and distinctive for the step which it illustrates. Color cues are widely used. One example of their use is in writing. Although writing paper in which the relative heights of the letters are provided for with lines of varying width is used, this is sometimes not enough for a child with a severe handicap in the perception of spatial relationship. He may need to have the lines marked with a colored crayon as a cue to force attention to the differences of space. Having learned to discriminate in this way, the color cue is then removed but the lines are still drawn heavily in black ink. Finally this cue is taken away and the child uses the paper as it is.

As an example of specific deficiency we present the following case. Gerald is a thirteen year old boy with an I.Q. of 45. He could count orally to 10, could match a group of blocks with other blocks, but was unable to recognize the written number. That is, he suffered from a number blindness. We observed that he confused the numbers because of some similarities inherent in parts of the written numbers. example, the upper part of the number two-the half circle-is similar to the upper part of the number three; the lower part of the number three is similar to the lower part of the number five, the vertical line in the number four is similar to the number one and so on. The boy was given small cards on which the similar parts of the numbers which brought about his confusion were drawn in varying colors. After he had studied these cards and copied them, he was able to recognize the numbers if drawn in black; he learned

to copy them and to make them correctly himself. He could then advance to solving written number work. The learning of arithmetic in this case was halted, not by a deficient memory, or lack of number understanding, but by a disturbance of form perception in written numbers.

DISCUSSION

We have attempted to acquaint you with a new method for the academic training of the brain-crippled deficient child. For many years these methods have proved successful in individual cases; their application to larger groups is now in process. Space does not permit presentation of more than a few illustrative features. We may, therefore, add a remark concerning the methodology. To one not familiar with it, the method may appear to consist of a series of devices, i.e., materialaids or crutches. Although it is true that mechanical aids are widely employed, especially in the retraining of general disturbances and on the lower achievement levels, these aids form a plan of successive steps which are followed until the brain-crippled child reaches a level where he is able to profit from the routine educational procedure. The devices are so constructed that they either illustrate an analytical principle or express a step in the process by some visuo-motor activity. Insofar as it is applicable, the method for normal children is the basis of the program. It is analyzed and supplemented and reshaped to meet the educational demands of the brain-crippled child and his particular mental organization. If it is possible to develop methods for the retraining of conceptual disturbances, as we hope in the future, then braincrippled children beyond the beginning school grades will find a more adequate academic program.

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SOME CONCRETE CONTRIBUTIONS TO OCCUPATIONAL EDUCATION IN THE ACADEMIC CLASSROOM

BY MARCELLA E. DOUGLAS, M.A.

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AMERICAN educational planning has always been based upon present need and practicality, all of its aims being in terms of direct utility to the individual, to society, or to both.

Because of the great industrial activity in the Detroit area, it is not surprising that Detroit teachers were among the first to think in terms of occupational education for mentally retarded children. In 1940 a committee compiled a list of occupations in which mentally retarded boys and girls had either found work or which might be considered suitable for young people of limited mental endowment. This survey contained pertinent information about these jobs, such as working hours, associates, wages, requirements and the like, and was intended to be the basis from which teachers might develop projects and activity units for their classrooms.

We, at the Wayne County Training School, also, have been mindful of this practical problem; therefore, vocational training has always been one of the most essential aspects of the educational program. We are desirous of making available to higher grade mentally deficient boys and girls, nearing employment age, actual training in a variety of occupations and trades and in presenting essential informational material.

The term occupational education is not synonymous with vocational train-

ing. Both vocational training and occupational education play vital roles in preparing a boy or girl for remunerative employment, but they utilize different means and different methods. Vocational training deals more specifically with the technical or practical training in occupational centers where the "tricks-of-the-trade" and the rudiments of the job can best be learned by observation and actual participation. On the other hand, occupational education deals with the common elements in the obtaining, maintaining and advancing in a job.

Earning one's livelihood with its satisfactions and opportunities is one of the most powerful forces influencing adequacy of adjustment. Obviously, then, any aid the school program can give the children for enhancing their vocational opportunity, certainly deserves the careful attention of educators interested in this field.

As children approach their midadolescent years, they look forward to "jobs," because to them it is a silent testimony that they are assuming adult stature. Unfortunately, at this stage, they see only the attractive and advantageous features of a job. What they lack is an understanding of the adjustments necessary in self-support. The responsibilities and the less appealing aspects seem to be obscure to the young worker. Appreciation of the full benefits and the responsibilities of becoming a gainfully employed worker can be made clear to them only through preparation, training, and actual experience.

We might consider the aims and purposes of occupational education to be the appreciation of the manifold aspects of acquiring and holding a job. These objectives may be accomplished by:

- 1. Presenting those materials emphasizing wage earning as a privilege which demands certain responsibilities (such as careful, steady performance). We must strive to have the boy or girl accept and be conscious of the individual's importance in a job and to take pride in doing his part to the best of his ability.
- Pointing out that there is a bond between employer and employee with rights and privileges for each; that the obligations in any job are usually well founded and are not based upon personal whims.
- Bringing in those items which stress financial management and independence, such as personal expenditures, savings, insurance, money to be sent home, and community charities, etc.

The development and utilization of occupational education in the classroom have several, almost obscure benefits:

- r. Since the child must apply his academic skills to practical problems, general interest and motivation are naturally increased. We found that this functions as a double-edged sword; that is, it enables the child to gain vocational information and at the same time strengthens his basic academic skills.
- Generalized learning results from pursuance of this subject, namely, the various ways in which one would apply

for a job and study of the type of information which references might be asked to give, with the implication that one actually writes one's own recommendation by deeds.

It is the writer's opinion that the actual study of certain prescribed occupations is in itself relatively unimportant, but rather that the emphasis should be placed upon those aspects which are common to several or all occupations. Therefore, it does not matter particularly which occupation may be chosen for intensive consideration. Generally speaking, those occupations in which the majority of the children with whom we deal have shown interest would prove to be the most profitable for study. Interest, of course, is not sufficient. The jobs must be available and the duties involved not too intricate.

Although greatest value comes from actual experience, it is not possible to present all materials in this fashion. Much can be gained vicariously through reading of the experiences of others, by relating personal experiences, and by discussing their meaning to arrive at an appreciation of requirements, of social values, and of relationships.

The first requisite in preparing material or developing a unit of work is an analysis of the job itself. We should know what the minimum academic essentials are and help the student to acquire this knowledge. This would include the names of tools, materials, equipment, and operations employed; the arithmetical fundamentals necessary—spelling, writing and well chosen collateral reading materials. After having listed the essential subject matter to-

be included, the next step is to arrange these in some sort of sequence.

There are several factors which will influence the method to be used:

- The age and achievement level of the pupils will determine how thoroughly or abstractly the material can be presented. If the reading ability is high, articles in trade journals, library books, magazine accounts, commercial advertising and like material may be introduced. On the other hand, if the reading level is low, one will need to confine class efforts to basic essentials of the simplest type.
- Circumstances in each area will dictate whether it is more advisable to devote the total time to a comprehensive analysis of one occupation or to consider several to bring out similarities and differences.
- 3. The requirements unique to each occupational field will determine what items should be stressed. In the transportation category emphasis should be placed upon legal requirements—licenses, traffic rules, road signs, etc.; in occupations requiring food handling cleanliness and strict adherence to health requirements should be stressed; in assembly processes emphasis is placed on steady, speedy production; in service jobs the two essential requirements are grooming and courtesy.

Let us turn now to a brief description of an occupational unit based upon the duties of a bus boy. This unit was developed long before it was listed as a non-essential occupation. The material it covers might easily apply to any of the service occupations for they embrace the same objectives.

1. Appreciation of equipment. This is shown by the manner in which ma-

terials are stored, cared for and inventoried. Help is frequently held responsible for equipment by being asked to replace damaged or lost articles.

2. Remembering faces and names. Most establishments, hotels, clubs or private homes wish to have their guests or patrons recognized and called by name. Training in this association and memorization of names is very essential for advancement in the service field.

Let us consider in more detail what procedures and materials were actually used:

- The instruction sheet explaining what a job of this kind entails; namely, inventory, memorization of names and essential vocabulary.
- Pantry Charts. These were made for silver, glass, china and linen cupboards. On the shelves were drawn the various labeled articles, such as toureen, goblet, service plates, place mats, etc.
- Cards with pictures of people on one side and names on the other were used for memorization.
- Essential vocabulary was given on flash cards and in a reference booklet.
 The latter pictured the objects and presented terms in context.
- 5. To tie up with Art Expression as well as to point out the value of distinctive names and symbols representing them, the decorating of service plates was introduced. The names of several establishments were listed. Each boy made his choice, created his own design and decorated a paper plate in the medium he preferred.

This unit was prepared for the class, but there is no reason why it could not be developed as a class project. Visits to service centers for the purpose of

AMERICAN JOURNAL OF MENTAL DEFICIENCY

making observations regarding requirements would seem to be the most logical manner to launch such a class initiated project. Listing such observations, drawing up a list of items or questions raised would lead to further investigation and preparation of the material itself. Some teachers may prefer this method, but it is not necessary that all teaching be done in this way.

A variety of these experiences should be considered, gleaning from each those important factors which are peculiar to each field.

It has been our experience that occupational education fits into the school program most advantageously when the class has some proficiency in the academic tool subjects. It then acts as a stimulus for the further use of these tools because of the interest value of the material. On the other hand, young people with very limited academic achievement should receive help in practical matters pertaining to employment which would not ordinarily come in vocational training, particularly various types of applications.

It should be reiterated that the primary purpose of occupational education, in the opinion of the writer, does not mean training in or the dispensing of information about specific occupations. Rather, it is the bringing about of an awareness regarding the intangible obligations and circumstances which every wage earner faces. To this end stories regarding the experiences of four classmates were written and have been used with great success. The vocabulary is not difficult and the content is written in simple but typical informal boy style. The boys' experiences cover the transportation field, for Joe finally got a job in a garage; food handling, for Harry worked in a hamburger house; and a service job, for Dan, a neat, ambitious, colored boy, is the personification of alert, smiling porters.

The object is not to instruct or to give information regarding these jobs, but to tell of the experiences the boys had as they applied for jobs; of the obstacles they encountered and how they met them; how they got to know the men for whom they worked and how they advanced.

The stories are designed for oral or silent reading and for general class discussion. There is a guide sheet for the teacher which will help her to vitalize the discussion. If one can judge from the response of the boys' remarks regarding the experiences of these classmates, we would feel that there was considerable understanding and appreciation of the things which lie ahead in the matter of jobs.

A sequel "And Then Came the War" brings us to the present day.

We feel that through such units, materials and class discussions, which present those intangible, but immensely important aspects of employment, we have laid the foundation for increased appreciation of vocational responsibilities.

FUNCTIONS OF ACADEMIC WORK IN THE HOMEMAKING SITUATION

By VERNICE L. GOINGS

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EVERY mentally deficient child should be developed to the extent of his capacity. No one should be pushed aside as an individual without hope of progress. His aptitudes, however low-functioning, should be fostered and carefully guided. Naturally, his most valuable acquisition would be an adequate ability for successful everyday living and the ability to maintain himself in security in the scheme of his own economic sphere. The trainees of today will be the adults of the post-war periods and will surely share in the benefits or sufferings as the case may be. On this assumption, the responsibilities of special teachers grow greater month by month.

The following is a sketch of some of our attempts to integrate pertinent academic training, attitudes and knowledge with the activities in a cooking room and in the adjoining, completely equipped apartment.

Academic work in any situation can be made burdensome or a thrilling game depending on its presentation and the culminating victories, rewards and personal aggrandizements. With beginners in cooking and homemaking, largely those of pre-adolescence, the interest may be centered and led out from the inherent love to "play house," their desires to know what things cost and their marvelous imitative abilities. It goes without emphasis, that one cannot shop, prepare food successfully or replenish home furnishings without being able to read or figure costs; yet, a large percent of the people shift along aimlessly without regard for the family budget. The infantile individual tends to acquire only that which is desired, not that which is most needed.

Here is the challenge to present activities centering around the tasks of everyday living and a study of the needs of the low-salaried worker. Full page newspaper advertisements of grocery specials furnish material with large enough print to be interesting. Each girl may be given a list of purchases. She must read her list and determine the department in which tofind it. Prices by pound, dozen, peck, etc. must be figured, totals added and change accounted for. Sales tax and rationing rules should not be overlooked. Naturally, lists equal to the comprehension of the group and of suitable difficulty should be selected. Much classroom discussion should precede every shopping lesson. Such questions as: "Why did we buy canned tomatoes instead of the hot-house variety?" and "Why choose the pot-roast instead of the steak?" and many others present themselves if the group is alert and enthusiasm is aroused. Aside from

its domestic value, such assignments tend to increase reading consciousness, challenge their reading ability, strengthen their appreciation of present economic problems and place the whole procedure on a level with daily living. Even guessing what meals could be prepared from the market basket proves interesting and of much more value than a mere guessing game. Changes in current prices from week to week may be designated on graphs or charts within the comprehension of the group.

Flash cards and signs furnish the best medium of transfer from the reading book to the recipe book and considerable pleasure is experienced in suddenly finding a word which has recently been acquired in the home room reading unit. Nor can cards be overlooked in advanced groups, since one of the fifteen-year olds recently said upon noticing the sign "Supply Cupboard" over its door, "I am glad you put that up there; I've always had trouble spelling cupboard." Concentrated drills are apt to leave the slower child floundering helplessly and giving up his struggle to compete, so homogeneous groups must be formed to study words, make sentences, handle and use supplies and utensils and otherwise become familiar with the objects and tasks which the words represent. Such words as "sanitation" "cleanliness" may be a bit difficult for the lower mental ages but the needs, methods and performance must be demonstrated and instilled into a lasting mental attitude. Otherwise, the motor habits may tend to function only in the situation in which they are acquired. One would be wise to reserve judgment upon their value, since the transfer of such habits to home, cottage, job or even tomorrow is not necessarily predictable. Therefore, presentation of the words are not sufficient and practice of the task is not enough. The words must become alive in the activities surrounding them and the habits must become integrated with the words and with a consciousness of reasons and purpose. While ability to read and spell the words involved enriches and helps fixate the understanding and increases efficiency, too much care and emphasis cannot be placed on proper pronunciation. With faulty enunciation, group slang and fads along with careless listening habits, many words become something else and the trend of thought is sidetracked. One class, after making popovers told their sewing teacher, "We made potholders and ate them." Others distort words like "spaghetti," "pan-cakes," etc. and call every utensil a "what-you-call-it."

The special vocabulary in elementary cooking and home-making units numbers about two hundred words, sixty of which are action words, the remaining, everyday foods and furnishings. Pictures representing each word may be pasted on the back of flashcards to further impress the meanings and associations.

Cleanliness cannot be over emphasized since many have lived in unsanitary homes and areas most of their lives and are still content to enjoy themselves in the same atmosphere. Here again, very simple rules must be presented, such as "Learn to see dirt and remove it." They must be aroused to

the fact that it is useless labor and a waste of materials to wash a perfectly clean dish, table or floor. Yet, the average subnormal girl will dump everything into her dishpan without inspection, or scrub a floor just on general principles. Scrubbing is a well developed skill in an institution, but discrimination for the proper time and place for its use is another problem. It saves thinking to just do it, so reasoning and judgment are passed over. The girl must be made to realize that no one would consider having her waxed floors scrubbed, nor every dish in the cupboard washed every day. Laxity and carelessness must be guarded against in this lesson, and constant inspection by group monitors must be carried on. Human interest dramatization and stories are valuable wherein some duty is neglected or a procedure incorrectly enacted, giving the group a chance to criticize and correct. Most children will grasp the right procedure by witnessing the wrong and offering criticism. Perhaps because they are so often criticized themselves, they enjoy the reversal of the situation even more than does the normal child.

Comprehension of directions are of greatest importance, both oral and written, since "the bottom drawer" is usually found by starting at the top and working down; "the second shelf" is found by guessing or asking, "Is this it?" Thinking and acting at the same time is one of the stumbling blocks of the subnormal child, so games giving points according to the time taken to find certain objects in stated places aid in training alertness and accuracy.

The unlimited possibilities and the

wealth of materials furnished by nationally advertised products are of tremendous aid in maintaining interest by tying the activity to the outside world, and making the lesson real. Names, use and care of utensils and tools as well as dangers from them stand out boldly in current magazines and newspapers and make an easy stepping stone to new interests. A background of experience springs to the front in, "my mother uses that" or "we had that for lunch" and immediately discussions and evaluations may blossom into an interesting oral language lesson. If Mary can think only in terms of something to eat, then we'll fill her with all available phraseology to build on her interests. Then Ellen is distressed because her doll needs a new dress, and when this theme is used, Ellen finds that housekeeping isn't so bad after all.

Stories of the preservation of vegetables, illustrated lessons on preparation of cereals, manufacture of vegetable fats and even care of equipment are furnished free of charge, often accompanied by samples, and more attractively presented than available textbooks, creating a desire to learn more about the subject of the picture. Oh, for a clever Home Economist to publish a textbook in simple terms and illustrated like the Comic books of current circulation. Next to the manipulation of a given task is a pictured sequence to fix the act in mind. Theoretical or technical instruction is of no value, a waste of time and an excuse for indifference and disinterest on the part of the subnormal pupil. She must do, see, feel and handle every object, food or tool if the learning effort is not to be lost.

Class trips to the storehouse, refrigeration plant and meat lockers furnish interesting, first hand material, both oral and written. During cooking units on Bread and Cereals, inspection of the school bakery gives comparative figures for home and commercial baking studies. Vitamins are as elusive as calories, but printed facts lead to vigorous class discussion since reducing is also a fad among many of the more conscientious members.

SIXTY-EIGHTH ANNUAL CONVENTION AMERICAN ASSOCIATION ON MENTAL DEFICIENCY

Bellevue Stratford Hotel, Philadelphia, Pennsylvania, May 11-15, 1944

honorary member of the American Psycriatric Association, president of the Association of State Civil Service Employees, president of the Civic League of Albany, and official delegate of the United States to the Pan American Neuropsychiatric Conference held at Lima, Peru, in 1939. In 1930, Governor Franklin D. Roosevelt awarded him first prize in a contest for plans for the development of the State Fair grounds.

These and other highlights of Dr. Pollock's varied and productive career were revealed by the speakers at the dinner, and at its close, Dr. MacCurdy, on behalf of the Department staff, presented him with a handsome pocket time-piece as a symbol of their esteem and affection and to tick off many more years of health and happiness that they hoped will be given him in his well-earned retirement.

> PAUL O. KOMORA, Assistant Secretary, New York State Department of Mental Hygiene

A TEN-YEAR PROGRAM FOR THE EXPANSION OF STATE INSTITUTIONS IN MICHIGAN

The Michigan State Hospital Commission in a letter of transmittal to the Honorable Harry F. Kelly, Governor of the State of Michigan, enclosed the outlines of a splendid ten-year program for the expansion of bed capacity to care for the mentally ill, mentally defective, and epileptic in Michigan. Following are excerpts from this report which should be of interest to the readers of the Journal:

"It is a clear, undisputed fact that Michigan has been negligent in providing for the hospitalization of its mentally ill, feeble-minded and epileptic population. This negligence is not of recent origin; it has existed for many years. Michigan's tremendous growth in population during the last three decades, primarily the result of its wide-spread industrial developments, coupled with a sporadic attention to this important function of state government, is the basic cause of the difficulties.

In the years 1927 and 1928, the first carefully worked out and systematically planned program for hospital rehabilitation and expansion was evolved. This plan was acted upon by the 1929 Legislature and approximately \$19,500,000 was appropriated for a four year's expansion program to end in 1933, a portion of which was vetoed by the Governor, which reduced the total appropriation to approximately \$16,700,000 (Act 324 of the Public Acts of 1929).

During the year 1930 some gains were made under this program, particularly at Lapeer and at Ypsilanti (where the first units for the new hospital were constructed). During the year 1931 more gains were made. By this time the state's revenues were dropping rapidly and a halt was called. The 1931 Legislature revised the existing program and prorated it over a ten-year period without changing it otherwise. The 1933 Legislature repealed the appropriation balance and thereby terminated the program. During that period another program was developed of even larger scope than the 1929 undertaking to be financed by a bond issue. The electors refused to approve the proposal, however, which put an end to that attempt.

Following this period little was done toward further expansion of hospital facilities while the needs continued to increased.

The 1937 Legislature enacted a statute (Act 281, Public Acts of 1937) earmarking a certain percentage of the profits from the sale of liquors for a state hospital building fund, although those funds were never so used. The same Legislature did, however, appropriate approximately \$6,500,000 to be expended during the biennium on hospital construction. This appropriation, supplemented with Federal funds through the Public Works Administration, provided an expansion program of about \$12,000,000 during the years 1938 through 1941. This was excellent progress but the state is still lacking in reasonable provisions.

The Hospital Commission realizes that during all these years blame for inattention does not lie at the door-step of the legislative

AMERICAN JOURNAL OF MENTAL DEFICIENCY

bodies. A comprehensive overall picture of the problem has not been brought before them. The commission is sure the Legislature will give serious attention to a feasible and practical program, and is grateful for the opportunity to present a plan.

Pursuant to the request of Governor Harry F. Kelly, the Hospital Commission has worked out a ten-year program, and suggests that legislation be enacted now to provide for systematic and definite financing which will allow the orderly accomplishing of same over a ten-year period. Recognizing certain acute needs as most pressing, the Commission has divided its proposals into two parts, one to be authorized, planned in detail, and financed at once so that action may be started as soon as war restrictions are removed from construction industry; and the other to be authorized and planned now but financed through ear-marked funds over a period of the next eight years.

Both the proposal for the immediate future and for the longer period are herewith summarized. Those items enumerated in the immediate program are also included in the total program.

THE IMMEDIATE PROGRAM

	Beds	Cost
New Hospital for Insane	1,500	\$3,000,000
Addition at Coldwater Hospital	1,050	1,575,000
Addition at Caro Hospital	335	502,500
Children's Hospital	75	112,500
Total	2,960	\$5,190,000
THE TOTAL PROGRAM		
Insane	Beds	Cost
Additions to existing units	2,510	\$3,765,000
New Institution	3,500*	7,000,000
Children's Hospital	75*	112,500
Total	6,085	\$10,877,500
Feebleminded		
Additions to existing units	1,400*	\$2,100,000
New Institution	1,600	3,200,000
Estimate for recommended new facilities at		
Lapeer which are not considered as new bed		300,000
capacity in this report		
Total	3,000	\$5,600,000
Epileptic		
Additions to existing units	875*	\$1,312,500
Estimate for Caro Institute for Convulsive Dis-		
orders	75	112,500
.Total	950	\$1,425,000
GRAND TOTAL	10,035	\$17,902,500

^{*} These figures include the items listed in the immediate program.

RECOMMENDATIONS

The Hospital Commission respectfully recommends the following specific action:

That proper steps be taken, beginning immediately, to prepare such architectural plans as seem feasible to facilitate the undertaking of those items in the immediate program enumerated above. Such plans will permit construction to be started as soon as the war emergency is over.

That the Legislature be asked to appropriate the funds required for the immediate program and grant to the Hospital Commission authority to acquire lands for the site

of the new Hospital for Insane.

That the Legislature be asked to enact necessary legislation to provide for the orderly financing and automatic accomplishment of the balance of the total program.

- 4. That an architectural and engineering survey be made of all existing hospitals to prepare a proper evaluation of needs for repairing, remodeling and expanding of service facilities as indicated by the current situation at each institution, as well as the future growth recommended herein.
- 5. That proper arrangements be made to permit the Hospital Commission to deal directly with all architects connected with this program in order that it may have a determinative voice in the development of plans. The Commission has been studying these problems extensively with a view both to economy of operation and the successful treatment of patients. It is quite certain that its guidance over the development of the plans will prove of value.

The Feebleminded

Michigan is now caring for 5,485 feebleminded patients by overcrowding present facilities 25 per cent beyond designed capacity. The County of Wayne cares for about 660 patients at the Wayne County Training School for an overall state total of about 6,150. As of July 1, 1943, there is a known waiting list of 817 cases. Wayne County has the largest number totaling 375; Genesee, 48; Oakland, 43; Saginaw, 25; and Ingham, 24. Eight counties have lists ranging from 10 to 20 in number, 55 counties have less than 10, while 15 counties report none. In addition to this known

waiting list, we are reliably informed by school authorities, public welfare officials, and probate judges that they are aware of an undetermined number of cases for whom no application for commitment has been made because of a certainty that they will not be admitted even if committed. Reports from school authorities in some of the larger cities of the state show that the following number of children have been excluded from school because of serious mental retardation: Flint, 45; Grand Rapids, 25; Saginaw, 20; Kalamazoo, 18; Bay City, 16; Detroit, 300 or more. It should be observed, however, that even in these areas school authorities feel certain that only a portion of such cases have come to their attention. Again in Wayne County resort has been made from time to time to the use of commercial proprietary institutions for this type of patient, three of which are now being used, housing approximately 57 cases.

Dr. R. A. Greene, Superintendent of the W. E. Fernald State School of Massachusetts, a nationally recognized authority, has stated, after many years of experience and observation, that about 2 per cent of the population is mentally below normal and about onetenth of that number requires institutional care. That formula, which is concurred in by other leaders in the field, if applied to Michigan's 1940 population, would indicate the need for a total of about 10,500 beds for the mentally deficient, a shortage of nearly 5,000. Whatever the correct answer may be, present information does indicate that Michigan should plan for about 3,000 additional beds for the next ten years.

The Epileptic

The state facilities for epileptic patients total 1,450 beds, which again represents a high percentage of overcrowding in existing buildings. An acute known waiting list of about 125 cases, some list of unknowns as in the case of the feebleminded, plus comparative information from other states, all point toward the need for expansion.

Although the waiting list in this category is not large by comparison, a portion of it is extremely acute and the cases contained thereon are a very difficult problem in the home and community. Improved methods of diagnosis and new drugs require admission early in the patient's illness rather than years of waiting. Analysis of all information available indicates the need to plan for about 800 more beds in this group.

The Feebleminded

1. Existing hospitals

As in the case of the hospitals for the insane, the hospitals for the mentally deficient have been analyzed as to the amount of space that should be added to bring them to a stage of completion. The following is a summary of those findings.

Coldwater

Present usable bed space	1,018
Proposed additions	
(a) Four 150-bed custodial	
buildings 600	
(b) Nine 50-bed cottages 450	1,050
	_
Proposed maximum size	2,068
The increase at Coldwater is	
another item of the immediate	
program as listed in the intro-	
duction.	

Newberry (facilities for mentally deficient only)

Present usable bed space	228
· Toposcu additions	

(a)	Four	SI	m	al	1	0	ol	u	a	g	e	S		si	n	n	i-
	lar	1	o		e	xi	s	ti	n	8	ŗ		5	t	n	1	c-
	ture	S															

(b)	Two	100-	bed	custodial		
	buil	dings		 	200	350

150

385

Proposed maximum size..... 578

Mt. Pleasant

Present usable bed space
This institution is now serv-
ing a very satisfactory purpose.
There is great need for the re-
pair and remodeling of many of
its facilities which must be given
attention. However, the Com-
mission requires further time for
study before sound recommen-
dations can be made for the fu-
ture program at Mt. Pleasant. A
report will be made later.

VOLUME XLVIII, No. 3, JANUARY, 1944

Lapeer

be used to reduce overcrowding

and permit the abandoning of

certain undesirable quarters.

2. New institutions

Again in this category there is need for a new institution to meet the total requirements. It should be located in the western central section of lower Michigan. A desirable size based upon estimates of need for space and economy of function would be about 1,500 to 2,000 beds. The exact size can be determined at the time detailed plans are prepared, but in the beginning a capacity of 1,600 is suggested.

The Epileptic

The additional space required for this type of patient may be added at the Caro State Hospital where many of the service facilities were constructed with such a plan in view. Caro

Present usable space		1,450
Proposed additions		
(a) Five 50-bed buildings	250	
(b) Five 110-bed buildings	550	
(c) T. B. buildings	75	875

Proposed maximum size..... 2,325

A portion of these additions, 375 beds, has been included in the immediate program as listed in the introduction.

It is further recommended in connection with discussion of this group of patients that there be established a new special facility to be known as the Institute for Convulsive Disorders. In the development of the Caro State Hospital, like in the case of most public institutions, emphasis has been placed upon meeting the demand of the public by providing facilities to hospitalize epileptic patients, thereby relieving the community

of the problem. It is time that some more definite attention be given to ways and means of expanding the curative and scientific activities of such institution.

It is suggested that this special unit be established in conjunction with the Caro State Hospital. It is as essential as a cancer institute, an institute for diseases of the blood, an institute for neurology and psychiatry, and many other already established and justified specialty institutes. This institute should be set up in conjunction with Caro because of the tremendous advantage of having at hand over long periods of time hundreds of persons afflicted with convulsive seizures. It should be well-housed, wellequipped for scientific study and treatment, and should be personneled by carefully selected individuals. The quality and its method of serving the public should be such as to preclude the stigma which so popularly characterizes state hospital service.

COST ESTIMATES

It is, of course, obvious that it is impossible to make accurate estimates of the probable cost of such a program as outlined herein without more definite planning of what is involved. However, it is necessary to have some general idea as to the probable cost of such an undertaking or any major portion The only cost measuring stick which seems of value is the general experience of the state in past hospital construction. These past figures indicate that one might estimate the cost of additions to existing institutions at about \$1,500 per patient bed and the cost for a new institution at about \$2,000 per bed. These amounts represent the cost of building the patient quarters and all necessary related structures and facilities for treatment, service, utilities, etc. Such a method has been used in arriving at the dollar estimates contained in this report."

PI LAMBDA THETA AWARDS FOR RESEARCH

Pi Lambda Theta National Association of Women in Education announces two awards for research on Professional Promlems of Women from the fund as the Ella Victoria Dobbs Fellowship.

Awards—Pi Lambda Theta announces two awards of \$400 each, to be granted on or before September 15, 1944, for significant research studies in education.

Qualifications of Candidates—A study may be submitted by any individual whether or not engaged at present in educational work, or by any chapter or group of members of Pi Lambda Theta.

Subject for Research—An unpublished study on any aspect of the professional problems of women may be submitted. No study granted an award shall become the property of Pi Lambda Theta, nor shall Pi Lambda Theta in any way restrict the subsequent publication of a study for which an award is granted, except that Pi Lambda Theta shall have the privilege of inserting an introductory statement in the printed form of any study for which an award is made.

Submission of Study—Three copies of the final report of the completed research study shall be submitted to the Committee on Studies and Awards by August 1, 1944. Information concerning the awards and the form in which the final report shall be prepared will be furnished upon request. All inquiries should be addressed to the chairman of the Committee on Studies and Awards.

Committee on Studies and Awards—May Seagoe, University of California at Los Angeles, Los Angeles, California, chairman; Margaret E. Bennett, Pasadena City Schools, Pasadena, California; Marguerite Hall, University of Michigan, Ann Arbor, Michigan; Katherine L. McLaughlin, University of California at Los Angeles, Los Angeles, California; Helen M. Walker, Teachers College, Columbia University, New York City; Elizabeth Woods, Los Angeles City Schools, Los Angeles, California.

THE JOHNSON SCHOOL

Rehabilitation of the Emotionally Maladjusted
FRANCONIA, NEW HAMPSHIRE

SARAH C. JOHNSON, M.D., Director



Fellow of the American Association on Mental Deficiency Fellow of the American Psychiatric Association

HIRAM L. JOHNSON, M.D., Medical Director