DEVISING AND INITIATING A PROGRAM WITH ADOLESCENT MENTALLY RETARDED

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Charles Alfred Nipple
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Committee on thesis:

Kenneth N. Orr

Cha. A. Jamison

Ruthford B. Porter, Chairman

Representative of English Department

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CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

For many years teachers and administrators have realized the need for a curriculum which could be used with mentally retarded children. The standard practice has been to simply give these children the same treatment as normal children. From an economic and disciplinary viewpoint this has proven unsuccessful, but few experiments have been published of curricula which were made primarily for the mentally retarded.

I. THE PROBLEM

Statement of the problem. It was the purpose of this study (1) to investigate the previously published research; (2) to organize a class; (3) to try the program; (4) to evaluate the program; and (5) to revise the program to meet the needs of the mentally retarded children.

II. DEFINITIONS OF TERMS USED

Mentally retarded. Children with Intelligence Quotient ranges of fifty to sixty (morons) and those from sixty to seventy-five (borderline) are mentally retarded. Such persons may reach the fourth or fifth grade and may be trained in many semi-skilled occupations, but they
require a great deal of supervision. To be mentally retarded means that a child is over age for his grade. Retardation is peculiarly related to school.

Capacity level. The capacity level can be described as the highest level of readability of material which the learner can comprehend when the material is read to him.

Expected achievement level. This is the highest level that the child might be expected to achieve with his mental ability, physical status, and his social well-being.

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2 Ibid., p. 236.


CHAPTER II

REVIEW OF RESEARCH

The first special class for subnormals was organized in Providence in 1896.\(^5\) Since this class many classes have been organized in other cities. In 1940 approximately twenty-five per cent of mentally retarded children were being cared for in special classes.\(^6\) Between two and five per cent of the school population are mentally retarded. Three types of training for educating the mentally retarded have been tried. The types are a special class, a modified special class, and an individual program.\(^7\) The special class is a method of providing a better type of education for the mentally retarded child although its costs are slightly higher than that of the regular class.\(^8\)

The mentally retarded needs harmonious living with contemporaries, realistic and first-hand experiments in knowing and using environment, and a gradual introduction to work.\(^9\) The basic philosophy of the class is one of

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\(^6\) Loutitt, *op. cit.*, p. 213.

\(^7\) C. S. Berry, "Helping the Mentally Retarded Child," *Nations Schools*, XIII (May, 1934), 27.

\(^8\) *Ibid.*, 32.

\(^9\) F. N. Beaman, "The Intangibles of Special Education," *Journal Exceptional Children*, IX (May, 1943), 233.
contribution rather than participation. Certain retardates must have sheltered industry as well as education. In 1931 the White House Conference enunciated a five-fold program of occupational education. The program included occupational information, vocational guidance, vocational training, vocational placement, and social placement. 10

Mentally retardeds are notoriously weak in work habits, very poor in ability and willingness to follow exact directions, frequently uncooperative, and often lacking in a concept of loyalty. 11

The teaching of the mentally retarded depends upon the alteration of behavior by experience. Creating a desire to learn, alteration of behavior that is desired, experiencing, the understanding of the experience, development of general concepts, evaluation, and exploring suggested new activities are factors which make learning effective. 12

The principles on which education of the mentally retarded should be based must place emphasis on the child


12 M. A. Wight, "Teaching the Older Slow Learner," Journal Exceptional Children, XII (November, 1945), 44.
as a growing individual; on the level and rate of his mental development; on his physical and social level of maturity; on the nature of his learning processes; and on the conditions of his environment. The program should evolve around experience units of work.\textsuperscript{13} Such units have also been described by Walcott,\textsuperscript{14} Sumption,\textsuperscript{15} and Inskeep.\textsuperscript{16}

The mentally retarded should be taught everything he is capable of learning that will function in life.\textsuperscript{17} The school life must be planned to include experiences that stimulate and possess the means of satisfying worth-while present needs and that stimulate progress toward the ultimate and significant goals of education. The program should promote health, practical application of the tool subjects, better home membership, better community living, better use of leisure time, and better working habits and attitudes.\textsuperscript{18}

\begin{itemize}
\item \textsuperscript{14} F. G. Walcott, "New Methods and Objectives in Teaching Dull Normal Pupils to Read," \textit{School Review}, XLIV (May, 1926), 350.
\item \textsuperscript{15} M. R. Sumption, "Goals in Education of the Mentally Retarded," \textit{Journal Exceptional Children}, XIII (November, 1946), 42.
\item \textsuperscript{16} A. Inskeep, \textit{Teaching Dull and Retarded Children} (Chicago: Macmillan, 1926), p. 30.
\item \textsuperscript{17} \textit{Ibid.}, p. 13.
\item \textsuperscript{18} Ingram, \textit{op. cit.}, p. 78.
\end{itemize}
Inskeep used health, social living, getting and holding a job, thrift, and efficient use of leisure time as objectives.\textsuperscript{19} Some provision for tasks on a level suitable for each individual should be made. The group should develop confidence and security and have opportunities for participation in the care of property.\textsuperscript{20} The qualities of the teacher of the class should be considered quite carefully and among other characteristics should be sympathy and understanding.\textsuperscript{21}

The organizational and administrative pattern of the special class should be enough like the regular school that it can function as a participating unit of the school. Success of the class depends on pupil assignment. The class must offer a worth-while curriculum. Responsibilities for the class must be shared by the teachers of the school.\textsuperscript{22} The class must be accepted by the community. Everyone should be aware of the objectives and aims of the special class.

\textsuperscript{19} Inskeep, \textit{op. cit.}, p. 13.


class. Community relationships should be established as early as possible. The special class should contribute both to school and community welfare.\textsuperscript{23}

The difference between regular and special classes is one of emphasis. The special class causes a difficult problem for administration. One of the most difficult problems is the formulation and execution of a statewide program of special education that will meet the needs of all types of exceptional children. Changes in the social order have influenced our interpretation of "equality of opportunity." It is being interpreted in such a way as to give a new meaning to individual differences. We can expect this phrase to continue changing. It has created new problems. Until the administration is straightened out, special education programs may be a question.\textsuperscript{24}

To find out what types of programs were being used in other communities, the investigator wrote to twelve large cities located in different sections of the United States. Nine responses were received. The replies can be summarized as follows:

\textsuperscript{23} M. H. Fouracre, "Improving Relationship Between the Community and the Class for Mentally Retarded," \textit{Journal Exceptional Children}, XII (January, 1946), 108.

\textsuperscript{24} C. S. Berry, "General Problems of Philosophy and Administration in the Education of Exceptional Children," \textit{Review of Educational Research}, XI (June, 1941), 253-60.
St. Louis, Missouri

At present there are forty-five classes in the elementary schools for the mentally retarded. Curriculum varies according to age group. No printed material is available. Teachers are working on the curriculum.25

Cincinnati, Ohio

The course of study prepared for the public schools for special classes is out of print and has been for a number of years.26

New Orleans, Louisiana

The curriculum used in New Orleans was developed at Teachers College, Columbia University, by Dr. Florence Dunlop. This material is being mimeographed.27

Dallas, Texas

The program was started in September, 1950, under a consultant in that field. No material is available.28

New York, New York

The city cares for 11,600 mentally retarded children in 736 classes. Recommendations for entrance is made by the Bureau of Child Guidance. The curriculum follows occupational information, vocational guidance, vocational training, vocational placement, and social placement. Units of

25 Personal Correspondence, letter written by Lucy C. Elliott, Supervisor Special Schools, St. Louis, Mo.
26 Personal Correspondence, letter written by Ruth A. Hargitt, Director Special Education, Cincinnati, O.
27 Personal Correspondence, letter written by Carmelite Janvier, Director Special Studies, New Orleans, La.
28 Personal Correspondence, brochure written by Superintendent of Schools, Dallas, Texas.
work are used. There are no special texts. When the pupil leaves the program, help is given in obtaining a job. Follow-up service is also given. 29

Seattle, Washington

The classes are located in the elementary schools. The Guidance Department refers the pupil after psychological study. The responsibility of discussing the program with the parents is the principal's job. There are primary, intermediate, and pre-vocational classes. When pupils reach eighteen, they are given a certificate of completion. Seattle is experimenting with units selected from the various subject matter areas. The whole faculty helps with the curriculum. 30

Baltimore, Maryland

Educationally, the problem of the mentally handicapped affects about four and one half per cent of the total school enrollment, inclusive of both elementary and high school. Mentally handicapped children are identified for class placement as those who have failed four or more semesters in the regular grade work, are now failing, and who have Intelligence Quotients between .50 and .85. These children are segregated in special classes. Unitype organization means one type of a handicap in a class. A special curriculum of concrete functional content selected from the regular curriculum is taught by special method. There are three types of classes according to the mental level and life age of the children. There are special center, primary opportunity, and intermediate opportunity. Any child has earned trial promotion to the regular grades if his real working level can be raised to within two years of where it ought to be on an age-grade retardation basis. For handicapped children education is

29 Personal Correspondence, letter and brochure written by Rose M. Smith, Assistant Director, New York, N. Y.

30 Personal Correspondence, letter and pamphlet written by Roy T. Howard, Director Special Education, Seattle, Wash.
typically terminated by Chronological Age sixteen and grade six. 31

Minneapolis, Minnesota

The public schools have fifty-two classes for the mentally handicapped students. Thirty-one of these are at the elementary level. There are two divisions at elementary level: primary and intermediate. There are two types of training in junior high schools; one is the academic course with emphasis on industrial arts, and the other is a terminal course in cafeteria work and gardening. At the secondary level the classification used is junior high and related classes for people in the Vocational High School. Students are admitted if their Intelligence Quotients are between fifty and eighty. An enrollment of eighteen is permitted with a homogeneous group, and fifteen with a heterogeneous group. Pupils in terminal classes have a part time work program arranged when sufficient training is reached. When the student is old enough, he is transferred to the Vocational High School where he takes up a trade. After a full year of satisfactory work, he is given a trade certificate from the Vocational School. 32

Chicago, Illinois

Chicago has 272 classes with 4230 pupils. There the curriculum is being revised. Previous publications on the educable mentally handicapped are now out of print. The curriculum is based on the assumption that pupils with adequate help can

31 Personal Correspondence, letter and brochure written by Harry F. Latshaw, Director, Division of Special Education, Baltimore, Md.

32 Personal Correspondence, letter and pamphlet written by E. H. Schimmele, Senior Consultant in Special Education and Rehabilitation, Minneapolis, Minn.
become self-sustaining. Two types of classes are the primary and advanced.33

The programs described by these responses seem to follow to some degree the Indiana requirements for a special class for mentally retarded. The Indiana law states that children are eligible for the class with Intelligence Quotients between fifty and seventy. It allows children with higher or lower Intelligence Quotients to enter the class if approved by the examiner. An individual intelligence test, preferably the Stanford Binet, Form L, must be administered by a State qualified examiner. The teacher of the class must be licensed by the State for work with the mentally retarded. Reimbursement will be given the school system for the class. A pupil may be transferred from the class if he has attained a grade level of not less than one year from the regular work for his chronological age. The curriculum used should follow that of the normal school. Progress is shown by any standardized achievement test.

33 Personal Correspondence, letter written by Frances A. Mullen, Director of Bureau of Mentally Handicapped Children, Chicago, Ill.
CHAPTER III
ORGANIZATION OF A CLASS

During the spring of the school year of 1949-1950, it was decided that a special class for the mentally retarded in junior high school in Goshen, Indiana, would be initiated in the fall of 1950 for the school year 1950-1951. A number of conferences were held with the superintendent, special education supervisor, junior high school principal, and the prospective teacher, each elaborating his particular ideas. The school records were used to screen out pupils that might qualify for the class. The teachers in the school were also asked about prospective students.

**The selection of pupils.** From the school records, teachers' suggestions, and the elementary school principals' recommendations, twenty-two pupils were selected. The pupils' records were traced both in school and family to find out as much about them as possible. A prospective pupil must have had an Intelligence Quotient classification of between fifty and ninety on the group intelligence tests previously given in the schools. Regardless of the Intelligence Quotient, if the pupil had failed more than two years, he could still be included. Also if he appeared as a dull normal in his classes or if socially he had
difficulties, he was chosen. Primarily, the class was
designed to take care of those pupils who are classified
mentally retarded and who would fail the subjects normally
administered.

If approximately fifteen and a maximum of twenty
pupils were in the class, the teacher would be considered
to have a full teaching load. Each of the twenty-two
pupils were given the Stanford Binet, Form L, Test. When
the results of the test were observed, fourteen pupils were
positive members of the class. The Intelligence Quotients
of this group ranged from forty-seven to eighty-five. Five
pupils were placed in the class with Binet Intelligence
Quotients over seventy-five. They were seriously retarded
in school work. This follows a theory that if they stay
a year in the special classes, they might be able to do the
regular work.\textsuperscript{34} Some of the pupils had been in the seventh
grade and some in the eighth. Since the first enrollment
gave fourteen students other pupils could be placed in the
class at a later date without reaching the set maximum.
Later one of the pupils withdrew from school because of age,
and another pupil was placed in the class after the first
six weeks’ grading period. If at any time during the year

\textsuperscript{34} Loutitt, \textit{op. cit.}, p. 215.
a pupil was found who met the admission qualifications and had been overlooked, he could be placed in the class.

The school as a whole is divided into ten sections with an average of thirty pupils per section. Five sections are in the seventh grade and five in the eighth. The pupils were not selected homogeneously except in one section in each grade. The special class pupils were drawn from that particular section. This made those sections smaller, and consequently it was felt that those pupils would receive more help. Therefore, the pupils who were not in the special section but were definitely borderline cases were put in these sections.
CHAPTER IV

TRIAL OF PROGRAM

The special group met in the forenoon. They spent the other half day with their former section.

Class schedule

- School opens: 8:10 A. M.
- Individual help: 8:10 - 8:25 A. M.
- Tardy bell and assembly: 8:30 - 8:40 A. M.
- Social living: 8:40 - 9:25 A. M.
- Arithmetic: 9:30 - 10:15 A. M.
- Spelling and Reading: 10:20 - 11:05 A. M.
- Home room and individual help: 11:10 - 11:50 A. M.
- Noon: 11:50 - 12:55 P. M.
- Manual Training for boys: 1:05 - 1:50 P. M.
- Home Economics for girls: 1:05 - 1:50 P. M.
- Business Arithmetic or Civics-eighth: 1:55 - 2:40 P. M.
- Geography or study-seventh: 1:55 - 2:40 P. M.
- Art or study-seventh: 2:45 - 3:30 P. M.
- Physical Education or study-eighth: 2:45 - 3:30 P. M.
- Art or study-eighth: 3:40 - 4:00 P. M.
- Physical Education or study-seventh: 3:40 - 4:00 P. M.

This schedule was flexible to the extent that the teacher might change his subjects to different hours in the special class.

Disciplinary cases or unsocial behaviors were not accepted in the class unless the Intelligence Quotient range met the standards set.

The evaluation of such a program is difficult and mostly subjective. The Stanford Binet, Form L, and the Vineland Social Maturity Scale were given at the beginning.
and when the class had been in progress seven months. The Stanford Achievement Test and the Durrell Reading Capacity Test were given the second week of the term. Data from tests, administration, teachers, and parents were used as an evaluation of the program.

**Grading system.** When the grading system for this class was discussed, the teacher and principal felt that a grade card should be used as in any other section of school with the exception that on the front of the card the word \textbf{SPECIAL} would be written. The subjects appearing on the card were typed in their proper places. Notation was made on the permanent school record that this work was done in a special class. The grades were not to be considered to mean that the pupil was doing seventh or eighth grade work. In grading, quantity was expected, but quality was graded on the individual's potentialities. Grades of A, B, C, and D were used. The University of Illinois in its special class had used the same method and a method of $\dagger$, $\checkmark$, and $\blacksquare$. The university department felt that letter grades were better.

Teaching methods used followed as closely as possible methods found successful by the experts. The teacher used Dr. Samuel Kirk's \textit{Teaching Reading to the Slow Learner} and H. G. Wheat's \textit{Psychology of Arithmetic}. Since this was a trial program, methods described in college texts, in
college classes, and some methods used in the public schools by experienced teachers were tried.

Audio-visual aids. Audio-visual aids were of prime importance in this curriculum. Many movies were shown. The use of the opaque projector, film strips, charts, diagrams, and bulletin boards was very helpful. In a unit on homes, for example, pictures of different types of homes were cut out of magazines and newspapers and put on the bulletin boards. The teacher made slides of different types of homes. Paintings with many homes were used. The children drew pictures of their homes and these were used in the Home scrapbook.

Occupational education. In a curriculum of this kind occupational education is important. Job openings, job requirements, wages, etc., were discussed in class. The children were taken on trips through the bank, a bakery, a dairy, the court house, the telephone office, the post office, a rubber manufacturing company, and an electric automatic switch company. Each one of these was discussed by the teacher before the excursion was made. A plan was also started by which the teacher acted as a liaison person between the personnel manager and the pupil who might apply for a job there at a later time. Before each of the visits to a factory or one of the above, the teacher made a
preliminary tour and discussed the program and its possibilities to the personnel director. Before trips were made through factories, the pupils were required to bring a letter from home signed by the parent giving permission.

Greater effort was made to get the pupil adjusted in his own school situation in wood-working and homemaking. The teachers of these respective courses were very helpful and co-operative in giving their time and advice. Some of the pupils' spare time was given over to rug-making, chair repairing, weaving, repairing shoes, and repairing furniture in the classroom. Projects which corresponded to units of work were started in home-making and industrial arts classes. Also, clothes were made or contributed for some of the less fortunate in the class by members of the class.

Physical health and safety were discussed a number of times. The children always were ready to discuss a social problem or contribute in any way that they could. Working with these children, the teacher found that not one was selfish or irresponsible if he were guided to see the other person's difficulty.

Reading. Reading for the mentally retarded is a difficult task in most cases. The material given was based on the child's mental age. With a mental age of five and one-half to seven, the student was given an intensive
readiness program with incidental reading. The children began reading stories of their own experience. Then pre-primers and simple books were introduced. With a mental age of seven to eight and one-half, the pupils read between the first and third grade level of material. They began to group words and phrases. Some pupils were able to read newspapers and simple books for enjoyment. Pupils with mental ages between eight and one-half to eleven utilized reading for many activities. They used books from the third to sixth grade level. Some used dictionaries and read for pleasure.35

Arithmetic. Arithmetic in this curriculum was emphasized. An arithmetic vocabulary was developed with terms relating to size, length, money, pints, quarts, etc. The number skills were developed and the application of the skills were then taught. Units of measurement and fractional parts were given special attention and development. The arithmetic task was not difficult, but was geared to each child's level. These children had an extreme lack of auto-criticism in arithmetic as well as in most other subject fields.

The curriculum was based on experience units of work. The ideas behind the units were to make the pupil capable of getting a job, keeping it, living on his social level, getting along with his neighbor, and making the pupil a good citizen. Each of the units gave an opportunity to develop the tool subjects and help with the enrichment of the pupil. Care was exercised by the teacher to keep the pupils following the main idea of the unit. One of the biggest problems with this curriculum is the possibility of doing a number of things which in no way help to achieve the goals of the curriculum.

Some of the units used will be included in this thesis, but the complete list follows:

Learning to Drive an Automobile  The Home
The Grocery Store  The Bakery
Health Education  The Dairy
Safety Education  The Post Office
Finding and Holding a Job  Foods
The Community  Trees

**Safety Education**

I. Aims:

A. Teacher:
1. To establish a safety vocabulary
2. To develop attitudes and skills to produce safety conduct
3. To inculcate a feeling of responsibility for safety of others
4. To make observance of safety rules more vital in the lives of children
5. To encourage the child to practice worth-while safety habits in the home and community

B. Pupil:
1. To observe safety precautions at all times
2. To help others learn and obey safety rules
3. To learn to read and understand traffic signs and lights
4. To make friends with "safety" helpers in the city

II. Activities:
A. Learning and applying safety rules and slogans
B. Collecting and filing statistical reports from newspapers and magazines on safety
C. Class discussions about accidents and how they can be avoided
D. Collecting illustrations and pictures for visualizing rules of safety
E. Planning a bulletin board "Safety Display"
F. Collecting poems and songs
G. Trips on safety observation
H. Posters
I. Booklets
J. Making model safety signs
K. Making small safety devices for the home, etc.

III. Skills:
A. Ability to recognize and read traffic signs and follow directions
B. Ability to distinguish between right and wrong in safety attitudes
C. Ability to relate accidents to own life situations
D. Knowledge of and wholesome attitudes toward safety rules and regulations

IV. Outcomes:
A. Increased vocabulary
B. Knowledge of importance of safety in daily life
C. Reading safety signs and interpreting their meaning
D. Practical application of acquired skills and abilities
E. Informational knowledge of safety practices that can be passed on to others

V. Subject Matter:
A. Safety in the school
   1. In the classroom, hall
   2. On the playground
B. Safety at home
   1. Burns, matches
   2. Falls, broken steps
   3. Poisons
   4. Electric wires
5. Scissors, knives
6. Glass
7. Hot kettles, hot water
8. Hot grease
C. Safety at play
D. Safety in traffic
E. Safety in winter
   1. Coasting, skating
   2. Snowballing
   3. Icy pavements
F. Safety in swimming
G. Safety in the woods

The Home

I. Specific Objectives:
A. The habit of observing things about us more closely
B. A close connection between school life and home life
C. A greater knowledge of interest in, and love for their own community
D. More interest in the children's own home life
E. Greater skill in drawing, sewing, weaving, and construction work
F. A closer connection between academic work and handwork

II. General Objectives:
A. To develop the child's power of observation and his understanding of his immediate environment
B. To show the relationships between the home and the various factors in the community in which he is to live
C. To learn that we cannot live to ourselves but must come in contact with others through trade and other means—that we need others and others need us
D. To develop an interest in home life by means of conversation and stories
E. To lead the child to express himself by means of drawing, sewing, weaving, and construction work
F. To correlate academic work and handwork

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III. Discussion of the following topics:
   A. Kinds of homes:
      1. Bungalow
      2. Duplex or flat
      3. Apartment
      4. Hotel
   B. Materials used for homes:
      1. Lumber
      2. Bricks
      3. Slate
      4. Glass
      5. Tile
      6. Sand and clay
      7. Concrete and cement
      8. Marble
      9. Screen wire
      10. Lime
   C. Kinds of homes depend on
      1. Skill of laborers
      2. Materials available
      3. Climatic conditions
      4. Financial condition of owner
   D. Purpose of a home
      1. Protects from weather
      2. Guards against intruders
      3. Provides privacy
      4. Surrounds us with comfort and beauty
   E. Builders:
      1. Architect
      2. Carpenter
      3. Contractor
      4. Paper hanger
      5. Plasterer
      6. Electrician
      7. Plumber
      8. Painter
      9. Bricklayer
     10. Tinsmith
     11. Gardner
   F. Furniture for
      1. Living room
      2. Dining room
      3. Kitchen
      4. Bath room
      5. Bedroom

IV. Class Reading:
   A. Original stories about
      1. Each worker
      2. Materials
      3. Different types of homes
   B. Book on homes of today
   C. Reading cards
   D. Picture cards
   E. Furniture booklet
   F. Supplementary books
   G. Achievement test
   H. Poems

V. Arithmetic:
   A. Addition, subtraction, multiplication, and division based on unit
B. Arithmetic problem cards
C. Number cards
D. Measuring wood for houses
E. Problems involving the current wages of workmen
F. Problems involving the present day prices of homes and lots
G. Achievement test

VI. Oral Expression:
A. Oral discussion based on the workmen studied
B. Oral explanation of the tools used
C. Telling about the homes we see to and from school
D. Reading original stories to class

VII. Written Expression:
A. Writing stories about the workmen, tools, houses, and materials
B. Writing sentences
C. Doing language cards
D. Use of dictionary
E. Writing invitations to parents for play and tea
F. Achievement test

VIII. Spelling:
A. Words based on unit of study
B. Achievement test

IX. Activities:
A. Pantomines of the different workmen
B. Dramatization
C. Songs
D. Games
E. Play

X. Manual Activities:
A. Use of the mitre box in making the framework of the house. Planning and measuring plywood for walls and floors. Cutting glass for windows.
B. Scatter rugs woven on cardboard looms, also rugs made of spool knitting.
C. Linoleum designed and colored on squared paper
D. Sewing - overstuffed furniture and curtains for living room and bedroom. Draperies for the living room.
E. Pictures painted on glass for the dining and living room.
F. Wooden furniture for the dining room, kitchen, and bath room.
G. Painting planned to harmonize with the furniture and rugs.
H. Drawings and plans made of the house and rooms  
I. Drawings of home carved on wood and painted  
J. Glass slides  
K. Stenciling for book covers  

XI. Art Work:  
A. Pictures of workmen, tools and homes  
B. Designs on squared paper  
C. Painting on glass  
D. Blackboard frieze of homes  
E. Blackboard frieze of tools  
F. Constructing a notebook  
G. Design for notebook cover  

Test  

1. I am a workman  
I do the woodwork in the house  
I work with a hammer and a saw  
I work with wood  

Who am I?  
Painter Carpenter Plumber  

2. I wear a white cap  
I have many brushes  
I make the house colorful  
I carry a pail  

Who am I?  
Bricklayer Plumber Painter  

3. I put in the water pipes  
I work with a wrench  
I put in the sink, toilet, and bathtub  

Who am I?  
Architect Electrician Plumber  

4. Most houses have a living room, a kitchen, a dining room or breakfast room, and some bedrooms. Many houses have attics and basements.  

Houses today have  
one room  
three rooms  
five or more rooms  

We cook in the  
kitchen  
bath room  
dining room
5. In our country today many different styles of houses are built. Many different kinds of building materials are used. Most of our houses are more convenient than were the houses of early America.

The houses today are same different alike

To build houses we use all wood all stone different materials

6. Some houses are big and some are little. We call the small houses, with the rooms on one floor, bungalows. One family likes to live in a small house. A house for two families is called a duplex or a double house.

A small house is for two families one family many families

7. Today most houses have electric lights. Coal and oil furnaces are used instead of stoves. Easy chairs have taken the place of benches. Rugs cover the floors.

Today houses are lighted by candles lights gas

Today houses are heated by furnaces stoves

8. A hammer is used to drive nails. A hammer will pull nails out of wood. A wood mallet is for pounding on chisels. It will not break the chisel handle. An iron hammer will break a chisel handle. A mallet is good for driving stakes.

A hammer is used to drive cars nails pins

A wood mallet is for hammering nails sawing boards pounding on a chisel

9. We all like nice homes. Our walls should be papered or painted. Floors should be varnished. The doors and windows should be made from fine lumber. They also should be painted or varnished. Home should be a pretty place.
Doors should be made of stone fine lumber bricks

We like nice homes dirty homes mud homes

10. It takes money to build a home, but the time is at hand when many more Americans who wish to own their homes may do so. Several ways of financing building exist.

A person may borrow from a bank or a life insurance as the Federal Housing Association or F. H. A.

Fewer Americans More Americans Less Americans own their homes own their homes own their homes

The Government agency that helps is the C. C. C. the F. H. A. the N. Y. A.

Arithmetic Problems:

1. A plumber makes $1.25 for one hour's work. How much does he make for 3 hours' work? Ans.

2. A carpenter makes $1.15 for one hour's work. How much does he make for 2 hours' work? Ans.

3. A painter makes $.90 for one hour's work. How much does he make for 5 hours' work? Ans.

4. A bricklayer makes $1.50 for one hour's work. How much does he make for 7 hours' work? Ans.

5. A laborer makes $.50 for one hour's work. How much does he make for 8 hours' work? Ans.

6. A paperhanger charges $5.00 to paper one room. How much does he charge to paper 3 rooms? Ans.

7. An electrician makes $1.10 for one hour's work. How much does he make for 8 hours' work? Ans.

8. A plasterer makes $.90 for one hour's work. How much does he make for 7 hours' work? Ans.

9. If a carpenter goes to work at 8:00 A. M. and quits at 4:00 P. M., how many hours does he work? Ans.

10. If a painter goes to work at 9:00 A. M. and quits at 5:00 P. M., how many hours does he work? Ans.
11. If a house costs $5,200.00 and a lot costs $400.00, how much do they both cost? Ans.

12. If an architect charges $200.00, a plumber $75.00, and a carpenter $100.00, how much do they all charge together? Ans.

Finding and Holding a Job

I. Objectives:
A. Gain a greater understanding of the dignity of work
B. Shows an appreciation of the need of co-operation among persons
C. Feels a greater desire to want to do work well
D. Shows an increased understanding of the need to follow directions

II. Health and Safety
A. Sees need of good health to hold job
B. Realizes importance of eating proper food to maintain good health
C. Shows an increased understanding of having recreation that is wholesome
D. Realizes the value of safety practices

III. Reading
A. Reads newspapers and books about requirements of certain jobs; also articles about good workers
B. Reads reports made by committees and plans made by group
C. Interprets directions for carrying on search for jobs and for holding them
D. Reads letters received from various persons

IV. Language
A. Discusses plans proposed by others
B. Practices interviewing persons by trying to speak clearly and in well-modulated voice
C. Learns to face an audience and talk to it
D. Writes letters to different persons
E. Writes paragraph for school paper
F. Writes advertisement for "Help Wanted" column in newspaper
G. Learns to fill out application blank
H. Learns to spell words needed in activity
I. Keeps written record of activity
V. Arithmetic
A. Gains practice in fundamental processes; e.g.,
daily, weekly, monthly wages
B. Becomes more familiar with time; e.g., hours on job,
time required going to and from job
C. Has practice in reading clock; e.g., need of punching
time clock, signing in and out at work
D. Gains practice in use of fractions; e.g., hourly wage

VI. Experiences
A. Discussing ways and means of finding a job
B. Making a list of kinds of work the boys and girls
   have done
C. Making list of kinds of work they would like to do
D. Deciding upon plan to be followed; e.g., to make a
   survey of industries offering jobs to boys and girls
   at their respective ages
E. Making a list of industries where jobs might be
   obtained
F. Setting up committees to investigate the fields
designated
G. Writing letters to managers of the different
   industrial plants asking if committees might visit
   them
H. Taking trips to different plants
I. Observing types of work done in them, types of
   workers
J. Evaluating information gained on trip
K. Deciding whether or not they might hold any of the
   jobs in different plants
L. Writing letters of appreciation to plant managers
M. Seeking interviews with managers as to possibility
   of getting a job
N. Giving committee reports, oral and written, regarding
   visits to plants
O. Interviewing other persons about available jobs;
   neighborhood storekeepers, friends, principal, other
   teachers
P. Reading "Help Wanted" advertisements in newspapers
Q. Writing letters answering these advertisements
R. Using telephone in answering these advertisements
S. Making list of places hiring students
T. Making list of qualifications needed to get job and
   hold it
U. Making list of own abilities, aptitudes, and
   experiences
V. Checking one list against another
W. Having discussions of industries that could use boys and girls of their abilities
X. Making list of their shortcomings and deciding on ways of overcoming them
Y. Deciding upon the job for which one is best suited

**Discipline.** Class discipline was good in most cases. The teacher permitted the class to be the judge in all but the extreme cases. The treatment of the child and not the offense was kept in mind. Caution was necessary because generally the punishment meted out by peers was overly severe. The class was well aware of what was expected and knew when infringements occurred. The chief disciplinary technique was relinquishing privileges. The children were made to feel secure in their surroundings.

After the class had been in session for approximately six weeks, the teacher observed that few pupils read the newspapers or were at ease in front of the group. To help overcome these obstacles, it was suggested to the group that current events given each morning would help keep the class up to date on the news. The class voted to have current events. As a result definite progress could be seen in the pupils' reading of newspapers. Composure before the group also improved.
CHAPTER V

EVALUATION OF THE PROGRAM

Pupil A, C.A. 15-2, M.A. 8-10, came from a family of twelve. He had a speech difficulty which showed little improvement with the speech supervisor's help. When the class started, he could read second grade material. His arithmetic was on the third grade level. He knew the multiplication tables to ten. His reading improved to the fourth grade level over the year. His arithmetic improved to the point where he solved approximately ninety per cent of the problems correctly. His spelling also improved. He had a part-time job after school. It was recommended that A stay in the special class for the next school year because he could receive more help and attention, which he needed.

Pupil B, C.A. 16-2, M.A. 13-6, was a reading retarded problem. He had spent a year in a special school for reading. He was a disciplinary problem to the school and his parents. He could do sixth grade arithmetic computations and third grade reading after the school year. He was very slow in his work and very emotional. He was placed in the class with the hope that he would show the most improvement there. His attitudes and discipline improved. Parental impetus kept him in school. He was transferred to the high school for agriculture courses which held his interest.
Pupil C, C.A. 14-9, M.A. 9-4, was a large and friendly girl who caused no disciplinary problems. She had the most trouble with arithmetic. When the class started, she could do only addition, subtraction, and simple multiplication. She later was able to do fifth grade arithmetic fairly well. She read the best of any of the special pupils, but her comprehension was only mediocre. She was transferred to the eighth grade for trial the next year. She will probably quit school when she is sixteen.

Pupil D, C.A. 14-1, M.A. 8-6, missed several days of school because of illness in the home. Her reading was on the fifth grade level. She could do arithmetic problems from the sixth grade book. Reading comprehension remained quite low. This caused difficulty in other course work. She was capable in house work, but had not had many opportunities to do so. It was recommended that she stay in the special class the next year.

Pupil E, C.A. 16-7, M.A. 9-6, did not return to school after he became sixteen. He was immature in every way. His arithmetic and reading improved from the third grade to the fourth grade level of work. He worked well with his hands if he was instructed and supervised. He would have been transferred because of age. He made great advances in his social attitude.
Pupil F, C.A. 14-9, M.A. 7-8, had a difficult time in all school work. Reading was her best subject. She rated on the third grade level in reading and the first grade in arithmetic. She came from the poorest home of any in the class. She was dirty and wore her sister's cast-off clothing. She was accepted by the class, but had difficulty in other social circumstances. When she came to the class, she was a social recluse with little or no ability in any subject except reading. She was recommended to stay in the class for the next school year.

Pupil G, C.A. 15-7, M.A. 11-6, advanced from the first grade to third grade arithmetic. His advancement in reading was two grades. He was quite capable as an automobile painter and quit school for that work. He had nearly reached his expectancy level during the experimental year. He made great advances socially. He was a quiet and secretive boy. He became ready to try his hand at any problem. He was transferred to the high school auto mechanics department.

Pupil H, C.A. 13-10, M.A. 10-10, was definitely retarded in reading comprehension. He was one of the best readers in class, but he could not recall what he had read. He read newspapers and books outside of class and remembered extremely well, but school work seemed more difficult. He made little or no progress in arithmetic. He could do addition, subtraction, multiplication, and simple division
on the fifth grade level. He came from a difficult home situation. He was a disciplinary problem for the city outside the school, and was on probation at the time. He was young to be in the seventh grade. The special class was recommended as a possibility to help bring him up in his studies. The next year he entered the seventh grade on trial.

Pupil I, C.A. 15-6, M.A. 6-4, was one of twins. Her twin brother was Pupil J, and another brother was Pupil K. She made very little progress during the year. Her school subjects all ranked on about the first grade level. She was capable and untiring when working with her hands. She could not be trusted with money. She was very clean and neat. There were thirteen children in the home. The father was a deaf-mute. From the investigator's observation, the mother appeared to be a high-grade moron. Pupil I returned to the special class the next year.

Pupil J, C.A. 15-6, M.A. 6-8, made the most improvement of anyone in the class. When the class started, he was the worse disciplinary problem in the school. He could not read. Addition problems were the only arithmetic problems he could work. He later read on a second grade level and comprehended the material. He could do subtraction and simple multiplication. He could also do the larger multiplication and simple division if he used a multiplication table with the fives and above. He learned the
mechanical processes of arithmetic. He was still a
disciplinary problem at times but much improvement was
shown. Apparently he guessed on the achievement test. He
was recommended for the special class the next year.

Pupil K, C.A. 16-4, M.A. 7-4, showed little improve-
ment over the year. At times it appeared that he was
improving, but later he seemed to regress. He was an
accomplished copy-artist. He was able to copy almost
anything but had no original ideas. His arithmetic and
reading were on about second grade level. His capacity
level for reading seemed too high. Certainly he did not
come close to his expected level. He had a part-time job
and expected to quit school at the end of the school year.
He was never a disciplinary problem.

Pupil L, C.A. 15-10, M.A. 8-0, made improvement in
reading and spelling. His reading level rose from year one
to year two. His arithmetic stayed on grade level three.
He was a disciplinary problem because of his constant
talking. His social adjustment improved. The disciplinary
problems were reduced since the start of the school year.
This boy was interested in mechanics and could do some
simple operations if supervised. He was transferred to the
high school mechanics department.

Pupil M. C.A. 12-11, M.A. 11-4, was very young to come
to the seventh grade. He was a disciplinary case besides
being retarded in his school subjects. He was placed in the special class with the hope that after a period of time he could then pass the seventh grade work. He improved greatly but still caused some problems. He was able to read on the sixth grade level and did all sixth grade arithmetic. He advanced almost two school years during that year. He achieved up to his expected level. He was recommended for trial in the seventh grade the next year.

Pupil N, C.A. 14-10, M.A. 12-0, entered the class to try to improve. His difficulties were slowness and laziness. He could produce much more if some way were found to make him produce. His improvement was very small. He was not a disciplinary problem. His arithmetic was on the fifth grade level, but his reading was only on the fourth grade level. He was recommended to stay in the class the next year. He accomplished more in the special class than in the regular classes.

Coefficient of correlation on tests. The Pearson Product-Moment Coefficient of Correlation was used to correlate the tests. When the results of the Binet tests were correlated, the correlation was found to be +.977. In the case of the Vineland scores, the correlation was +.965. The correlation between the first Binet and the first Vineland Scale was +.908. Positive .973 was the correlation found between the second Binet and second
Vineland. Three of the correlations show evidence of high reliability. The correlation of +.908 certainly showed a marked relationship. Since the number of tests given was limited, positive relationship of the tests could not be proven; but, the correlation shows that the relationship does exist.

With few exceptions, the pupils with the higher Intelligence Quotients made higher scores on the Vineland Scale. The test scores of the pupils appear on page 38 in Table I.

### TABLE I

TEST SCORES OF PUPILS

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<tr>
<th>Pupil</th>
<th>C.A.*</th>
<th>M.A.*</th>
<th>Form L</th>
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<th>Stanford</th>
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Mean 64.08 6325 6408 6657
Median 62.17 6385 6050 6717
Standard deviation 12.56 1579 11675 11865

*At the time of the second test the Chronological and Mental Ages on the revised Stanford Binet were as appears on the table.
CHAPTER VI

I. SUMMARY

The program proved to be an experiment using experience units of work as the basis for the curriculum. The units were chosen to help the pupil become more socially adjusted, to help him live on his social level, to make the pupil a good citizen, and to help him be capable enough to acquire a job and retain that job. Much time was spent on occupational education, health, and safety. Audio-visual aids were used whenever possible. A positive type of discipline with the pupils in charge was practiced. The teacher only interfered when an extreme discipline problem arose.

The Stanford Binet Test, Form L, and the Vineland Social Maturity Scale were given at the beginning of the experiment and repeated when the class had been in session seven months. The Durrell Reading Capacity Test and a Stanford Achievement Test were also administered at the beginning of the program. Observation by administration, parent, and teacher was used in addition to the above as a basis for evaluation.

Only one of the fourteen pupils seemed to make little or no progress. Marked progress was made by many. Some were disciplinary problems, but much of that difficulty was overcome during the course of the school year. Two pupils
were transferred to the seventh grade for trial for the next year. One pupil was transferred to the eighth grade for trial. The pupils who were sixteen years of age or would be before the next school year were transferred to vocational courses in the high school if they did not wish to quit school. For the majority this program terminated their education. Correlations were made comparing the Binet scores, the Vineland scores, and the first and second Binet scores to the corresponding Vineland scores. The lowest correlation was +.908, and the highest correlation was +.977.

II. CONCLUSIONS

Revision of the curriculum to include a full day's work should be planned and executed for the next school year. Many difficulties arose with the program because the pupils were subjected to special education in the forenoon and one regular class in the afternoon. This particular class partially defeated some of the enthusiasm of the group in the special class. The group needed a home room instead of being pushed into a home room with the normal pupils. The pupils met many perplexing and difficult problems in the home room which the curriculum was supposed to overcome. The whole program should be elaborated in the school system. A program or curriculum of this type should be inaugurated in the elementary and high school. The high
school needs such a curriculum, but the elementary school has
the greatest need. The larger high schools should have a
vocational program for their pupils which can be geared to
the mentally retarded if a special program can not be con­
sidered because of lack of funds or personnel. Plans are in
progress to provide closer co-operation between the teacher
for the mentally retarded and the factory personnel manager.
In the next school year an employment form made in the school
will be sent to each factory personnel manager. This
informative item should tell both the administrator and
teacher what the factory expects of the pupil who has been
in the special curriculum.

The investigator found many other problems connected
with this program which should be investigated. Further
studies should be made on many types of curricula which
could be used for the mentally retarded. An experiment
should be made with a program for these children before
they have failed in regular school work. Mentally retarded
children kept in the regular classes where they are re-trained
should be measured by some socio-metric technique. Studies
are needed to show why pupils with the same or relative
Intelligence Quotients do not succeed in arithmetic or
reading to the same grade level. It is the hope that this
study might open avenues of insight to further study.
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