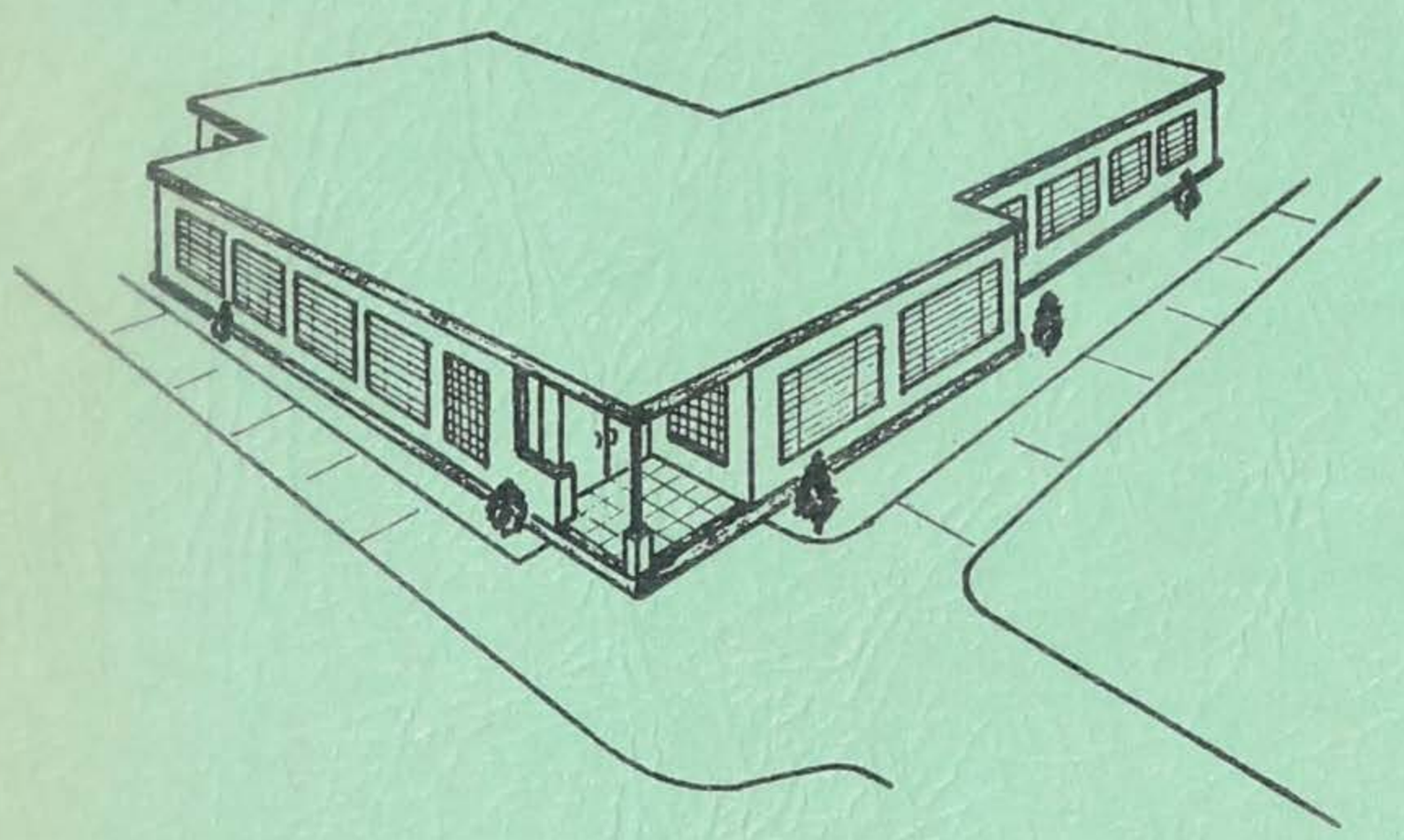
PROGRAM PLANNING



for

Educable Mentally Retarded Children

Division of Special Education
Department of Public Instruction
State of Iowa

State of Iowa
1959

PROGRAM PLANNING
FOR
EDUCABLE MENTALLY RETARDED CHILDREN

A Guide

For Organization and Curriculum

Department of Public Instruction
Division of Curriculum
and
Division of Special Education

Published by
The State of Iowa
Des Moines

State of Iowa

Department of Public Instruction

J. C. Wright, Superintendent

Des Moines 19

State Board of Public Instruction

G. W. HUNT, Guttenberg (President)
ROY A. SWEET, Story City (Vice-President)
LESTER C. ARY, Cherokee
JOHN A. HANNA, Webster City
STERLING B. MARTIN, Melrose
HARRY M. REED, Waterloo
MRS. PAUL SCOTT, Farragut
MRS. MARTIN VAN OOSTERHOUT, Member-at-large, Orange City
ROBERT D. WELLS, Davenport

Department of Public Instruction
Administration

J. C. WRIGHT, Superintendent of Public Instruction and Executive Officer of State Board of Public Instruction
ARTHUR CARPENTER, Assistant Superintendent, Instruction
PAUL F. JOHNSTON, Assistant Superintendent, Administration

Division of Special Education

DREXEL D. LANGE, State Director
Dale S. Bingham, Speech and Hearing Consultant
Richard E. Fischer, Physical Handicap and Visual Consultant
Mrs. Barbara L. Gibson, Hearing Consultant
C. M. Higbee, Psychological Consultant
Theodore R. Whiting, Psychological Consultant

Central Planning Committee

ARTHUR CARPENTER, Co-Chairman
Assistant Superintendent, Instruction
State Department of Public Instruction

MRS. MARY WARDLOW, Recorder
Special Class Teacher
Jefferson Elementary School
Fort Madison, Iowa

WALTER HIGBEE
Regional Public School Psychologist
Southeast Iowa

MRS. BILLIEJEAN MORROW
Special Class Teacher
Adams School, Des Moines

DR. LLOYD SMITH
Assistant Professor of Education
Department of Education
State University of Iowa
Iowa City, Iowa

C. M. HIGBEE, Co-Chairman
Psychological Consultant
Division of Special Education
State Department of Public Instruction

MRS. KATHRYN GUNIER BOUGHTON
Special Education Supervisor
Keokuk and Mahaska Counties

VERNON KRUSE
Superintendent of Schools
Marshall County

DALE NEBEL
Principal, Hoover Elementary School
Mason City, Iowa

HARRY STOVER
Special Education Supervisor
Buchanan, Delaware, Jones and Linn Counties

Production Committee

C. M. HIGBEE, Consultant
Psychological Consultant
Division of Special Education
State Department of Public Instruction

MRS. KATHRYN BOUGHTON, Co-Chairman
Special Education Supervisor
Keokuk and Mahaska Counties

RICHARD BROOKS
Public School Psychologist
Buchanan, Delaware, Jones and Linn Counties

MRS. BILLIEJEAN MORROW
Special Class Teacher
Adams School, Des Moines

WALTER HIGBEE, Co-Chairman
Regional Public School Psychologist
Southeast Iowa

JAMES KEE
Special Education Supervisor
Ames and Nevada

PAUL VANCE
Special Education Supervisor
Scott County (outside Davenport)

VERNON VANCE, Recorder
Special Education Supervisor
Lee County

Cover and Illustrations
by

GUS U. SILZER
Regional Public School Psychologist
Northwest Iowa

C. M. HIGBEE
Psychological Consultant
Division of Special Education
State Department of Public Instruction

FOREWORD

The proper education and training of all the children has become more and more the function and responsibility of the public schools.

An important segment of the school population is composed of those who are mentally retarded. Problems presented in planning for such children seem to appear in a greater amount than their number would suggest. The solution of these problems may also result in a disproportionate amount of satisfaction since added to the knowledge of an important challenge well met can be the additional thrill of helping along in an essential way ones who are less fortunate.

This handbook has been prepared in an attempt to help public school personnel in Iowa come to grips with this problem and to anticipate and better meet some elements of the problem.

There is no question but that members of the committees who spent many hours in study, in collecting materials, and in writing will be the ones to gain most from this endeavor. It is their desire that the overview presented, the philosophies followed, the suggestions made, and the examples given will, however, prove beneficial to you who will use it.

ARTHUR CARPENTER
Assistant Superintendent of Public Instruction,
State Department of Public Instruction.

TABLE OF CONTENTS

Chapter I

THE PROBLEMS OF EDUCATING THE MENTALLY RETARDED

The fundamental aim of education is that children should learn to live wisely and well in the environment in which they find themselves. It is the responsibility of our schools to provide an educational program that enables each child to attain this aim. Thus, the individuality of each child must be recognized and consideration given to his capacity and rate of learning. Adherence to this philosophy is a dramatic challenge for all schools to integrate within their structure, programs meeting the needs of the mentally retarded.

The Need to Educate

Educators generally accept, at least in theory, the principle that mentally retarded children can develop to their fullest potential only through enrollment in special classes taught by specially-prepared teachers. Within the framework of the special class, consideration is given and provisions are made for the intellectual limitations of each child.

A special class program for the retarded child must provide:

1. The means of meeting daily life situations and preparation for the future in a functional and practical manner.
2. An opportunity for individual success which could not be acquired by him in a regular class.
3. An opportunity to receive sound and realistic guidance to help him make an appropriate vocational choice.
4. An opportunity for feelings of acceptance in a peer group.

In addition to the benefits for the retarded child cited above, the grouping of retarded children into special classes enhances the total educational program in the following ways:

1. It relieves the regular class teacher of responsibility for modifying her program to meet the needs of a child working at a vastly different academic level.
2. It provides for a more homogeneous grouping within the regular classroom.
3. More teacher time is available for the average and superior children within the regular classroom.

It is economically more advantageous for society to educate the mentally retarded child in a special class than to provide for him in an institution.

The effectiveness of a special class program is largely dependent upon the curriculum used and the manner in which it is presented. In the past a modification of the curriculum and the teaching procedures used in the regular class was generally adopted by the teacher of the special class. Teaching methods and curriculum content applied in this manner have often proved inadequate.

No one person or committee of persons, however well informed, can superimpose a curriculum upon the teacher that will relieve her of any spontaneity and originality. However, enough is known about the characteristics and learning abilities of the mentally retarded child to establish definite guide lines from which a teacher may work. It is the purpose of this publication to provide such a guide.

Historical Background

From early times to the present the mentally retarded have been misunderstood. In ancient times they were suspected of being possessed with evil spirits; they were feared, ridiculed, persecuted and sometimes revered. Clearly, many of the fools and court jesters written about in the medieval ages were persons affected with some degree of mental retardation. Even in our modern American culture, the mentally retarded are the objects of misunderstanding. Many often confuse the mentally deficient with the mentally ill, and some still believe that the retarded are inherently delinquent and criminally prone.

The French physician Itard (1775-1838) is generally regarded as being the first to make an attempt to apply special education methods to the mentally handicapped. Itard had some success in training what was thought to be a "wolf boy", a lad found roaming in a forest in southern France. The boy was most probably a retarded child who had been rejected and turned out by his family.

Itard's pupil, Edward Seguin, a teacher, physician, and early-day psychologist, carried on with some of Itard's methods and established in Paris in 1837 the first school for the training and education of the mentally retarded. Seguin later emigrated to the United States and inspired the

establishment of institutions for the defective in this country.

The last half of the nineteenth century and the first part of the present saw a rapid growth of state-supported residential hospitals and schools for the custodial care, treatment, training and education of the mentally retarded following the establishment of the first such residential institution in Massachusetts in 1848. During this period Iowa established two such schools, one in Glenwood in 1876 and one in Woodward in 1917. Paralleling the establishment of state-supported institutions has been the establishment of private residential schools.

Around the beginning of the present century, public schools for the first time began making special provisions for exceptional children by establishing special classes within the schools. In 1896 the first class for mentally retarded children was opened in the city of Providence, Rhode Island.

In Iowa, as in other states, early attempts at providing special education to handicapped children were often centered around the development of opportunity rooms. The opportunity room had as its purpose the provision of special instruction for pupils who had demonstrated an inability to cope with regular room teaching. Unfortunately, many such rooms were ineffective because a proper selection of handicapped pupils was not made. It was not unusual for an opportunity room teacher to find on her roles pupils in the trainable and educable mentally retarded classification, pupils of average ability who needed remedial instruction, and pupils presenting emotional disturbances.

The passage of special education legislation and the increased employment of well-trained special education personnel by Iowa schools has helped re-define the function of special classes in the Iowa public schools. School administrators now accept the tenet expressed by special educators that special classes will be more functionable if children selected for inclusion are carefully screened to meet the definition of mental retardation.

The effectiveness of special class programs in meeting the needs of mentally retarded children has been demonstrated by their wide acceptance within the public schools of the State. Presently, however, only a small percentage of the mentally retarded are being reached by these programs and the need to expand the service is a continuing challenge to the public schools of Iowa.

Who Are The Retarded And How Are They Found

A. Identifying the Mentally Retarded

1) Educational Definition

Mentally retarded children are those who, because of limited intellectual ability, will learn at a slower rate than average children. Many of these children do not appear different from average children to casual observation. They present to the educator of average children a picture of children having limited inquisitiveness and curiosity especially when dealing with words, ideas, and things. The concrete, the present, the functional, and the practical are most meaningful to them.

Some learning characteristics associated with the mentally retarded are the limitations they exhibit in the following:

Giving sustained attention
Generalizing
Dealing with abstractions
Establishing and maintaining goals
Acting effectively on their own initiative
Communicating effectively
Displaying originality or creativity
Adapting to new social experiences
Exercising manual dexterity
Displaying and maintaining a range of interests

Because of these limitations mentally retarded children need:

Short and varied work assignments
Methods of instruction that emphasize the concrete presentation of material
Short range goals and objectives
Teaching techniques involving meaningful drill and repetition
An abundance of praise, recognition and encouragement
Individual and small group instruction

Educable mentally retarded children are those who range in intelligence between the slow learners and the trainable mentally retarded. Slow-learning children differ from the educable mentally retarded in that, although their learning ability is reduced, the limitation is not sufficient to necessitate special class placement. The trainable mentally retarded are children retarded to such a degree that they are incapable of receiving benefit from traditional academic instruction.

Although the educable mentally retarded differ from the slow learners and trainable mentally retarded in matter of degree, definite intelligence quotient limits have been set for purposes of special class placement only. Slow learners are

usually considered to be those children with intelligence quotients between 80 and 90. The educable mentally retarded are children with intelligence quotients between 50 and 70. Children with I.Q.'s between 70 and 80 are classified as borderline mentally retarded and may be eligible for special class placement. The trainable mentally retarded are children with I.Q.'s between 35 and 50.

2) Incidence

Statistical evidence has shown that children in the trainable and educable mentally retarded range of intelligence compose about 2½ per cent of the school-age population. Most authorities agree that approximately 2 per cent of school-age children are educable mentally retarded and ½ per cent are trainable. These percentages apply to the general school-age population and may vary from community to community.

Using these preceding figures, a community with a school-age population of 600 children may expect to have 15 children who are mentally retarded. Three of these 15 children may be trainable mentally retarded and probably are not enrolled in school. Twelve of the 15 are likely to fit the educable mentally retarded classification. In the absence of special classes, they will be enrolled in regular classes.

The graph that follows shows the ranges and the description of intelligence. The statistical information used conforms generally to that employed by Wechsler in *The Measurement of Adult Intelligence*.[1] The classification system used for placing children in special classes has been taken from the regulations of the Iowa State Division of Special Education. Particular note should be given to the extended portion of the graph which shows the distinction between the educable mentally retarded and the trainable mentally retarded, and between the borderline mentally retarded and the slow learner.

3) Screening Procedures

Prior to the establishment of special classes for the educable mentally retarded, schools are faced with the initial task of identifying those children who are eligible for placement in a special class. A prerequisite for special class assignment is a recommendation by a recognized psychologist after an individual psychological examination. Since individual psychological testing is both expensive and time consuming, it is essential that an effective screening procedure be used to select those children for individual evaluation who will most probably test within the I.Q. limits for special class inclusion.

The screening technique used for selecting children to be referred to the psychologist for individual examination should have the following characteristics:

It should be objective and accurate
It should utilize existing pupil records
It should be easily administered

Schools anticipating the organization of a special class should avail themselves of the services of special education personnel to establish an effective procedure for conducting the screening.

The most effective screening procedure will involve:

1. **Teacher rating:** While this method is the most economical, the limitations lie in its lack of objectivity.

2. **Group testing:** While this method is relatively easily administered and adds to the existing pupil records, its validity tends to be questionable for certain groups of exceptional children.

3. **Individual testing:** While this method is objective and probably the most accurate of the screening methods that might be used, it is too time consuming to be used as a preliminary screening device.

B. Finance

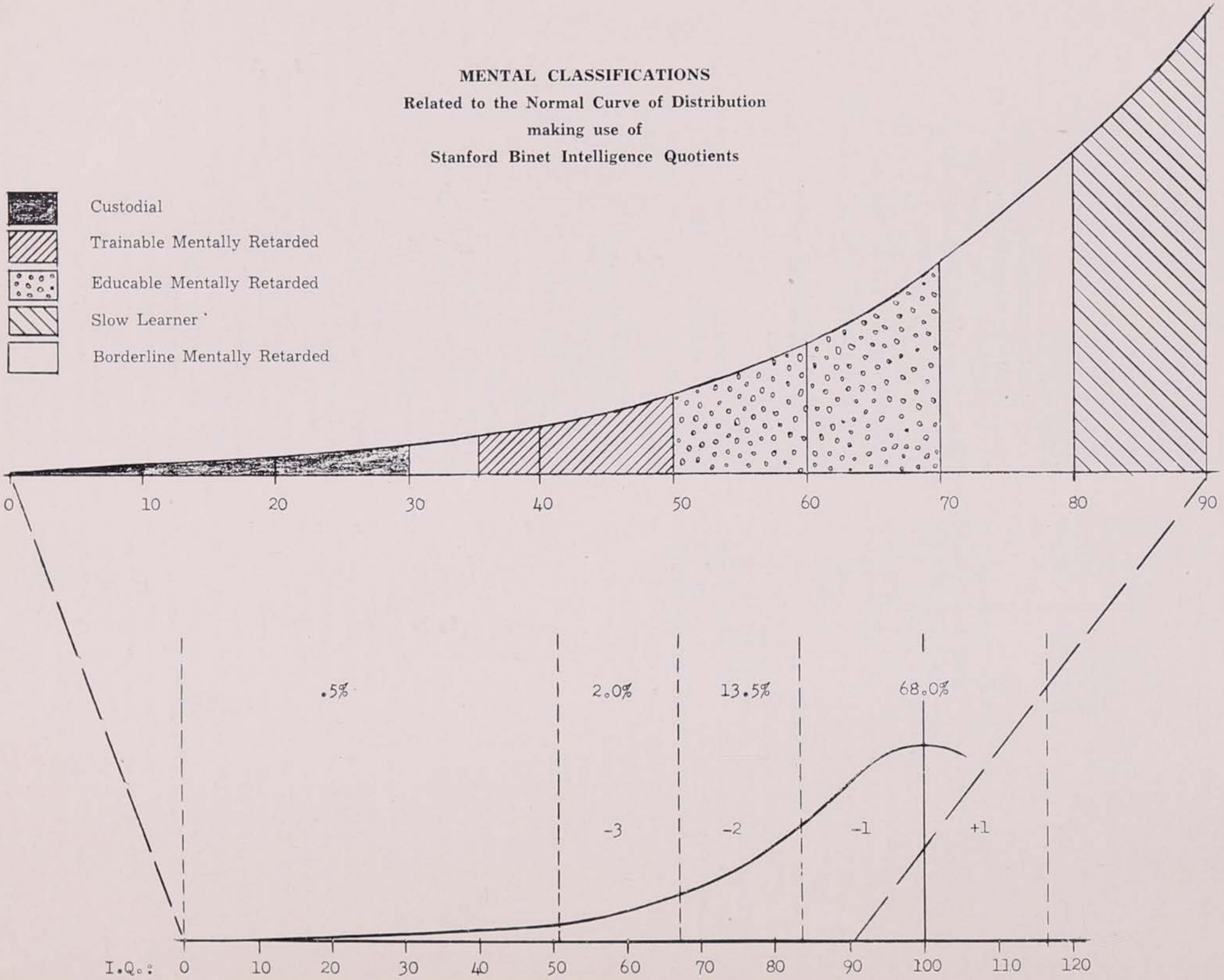
In a special class certain teaching procedures and techniques are used which are not normally used in a regular classroom. This will require the employment of specialized personnel and the purchase of additional equipment and materials that will be utilized by a group of children constituting the minority in any given school system. For this reason and because special classes are small (averaging 15 pupils), they will be more expensive in terms of per pupil costs than regular class programs. Therefore, a system of state aid has been established by the General Assembly of Iowa which assists sponsoring school districts or county boards of education with payment of the excess costs for special class programs.

The financing of special classes then becomes a cooperative venture in which state and individual school systems share the cost and responsibility of educating retarded children.

When organizing a special class, school personnel should budget ample funds each year to carry

[1] David Wechsler, *The Measurement of Adult Intelligence* (Baltimore Maryland: The Williams and Wilkins Company, 1944), p. 227.

MENTAL CLASSIFICATIONS
Related to the Normal Curve of Distribution
making use of
Stanford Binet Intelligence Quotients



the cost of the program. They should also familiarize themselves with the current legislative statutes and Division of Special Education regulations concerning reimbursement in order to anticipate the amount of state aid to be received.

School districts may receive tuition pupils from outlying school districts without effecting their eligibility for excess cost reimbursement from the state.

Special education funds will be available for school districts to help defray expenses incurred in transporting eligible pupils to special classes.

Local and State Special Education Personnel will be available for consultation with school administrators throughout the State concerning financial arrangements for special classes, as well as other aspects of the total special education program.

Chapter II

ESTABLISHMENT OF THE CLASS

In order that careful consideration be given in the planning of special classes for educable mentally retarded children, a thorough understanding of several aspects of the problem should be had. Because of their particular importance, the following pages will give a discussion of (1) some factors of psychological testing of mentally retarded children; (2) certain aspects important in regard to the legality, the location, the grouping of special classes, and the facilities within the actual classroom; (3) the actual placement of children and the interpretation of programs to parents of the children.

Factors Effecting Test Results

A test is a device for sampling capacity and/or knowledge in certain specific areas. No test can be expected to give perfect results since it merely samples areas of ability and achievement rather than measuring the full range of possible knowledge. The results of a test should always be considered as a score and not as a complete measurement of the trait or traits which are being tested.

The results obtained from two different intelligence tests administered to the same individual or from separate administrations of the same test may not yield equal scores. Such differences tend not to be great; however, they indicate the limitations of the uses of isolated test scores.

Some factors which may influence a child's performance in a test situation and which may also be characteristic of his individuality are:

1. The examination setting (amount of noise, temperature variations, interruptions, etc.)
2. Previous test experience
3. Establishment of rapport between the child and the examiner
4. Degree of self-confidence shown by the child
5. Physical condition of the child
6. Emotional stability of the child (desire to do well on the test, unwillingness to talk, crying, etc.)

In a psychological report to the school, these factors, if they are pertinent to understanding the child, will be discussed as they were observed. Therefore, it is of vital importance that the complete psychological report be carefully studied.

Among the results derived from individual intelligence tests are Intelligence Quotients (I.Q.'s) and Mental Ages (M.A.'s). Although the I.Q. is the most frequently requested result on intelligence tests, the M.A. is the most meaningful result in understanding the development of the child. In spite of its value, the M.A. alone is insufficient information for planning a program of instruction for the youngster.

In addition to the information gained from the intelligence test and the discussion of the test, it is essential that as much other pertinent information about the child as possible be considered. Social background information is important because it often provides clues toward understanding motivation for learning, as well as showing the extent and types of experiences the child has had. A medical history is important in determining the effect that certain illnesses or disabilities may have on the child's potential for functioning in a school situation. Information concerning social and medical histories may be obtained from home visits, clinic's and doctor's reports, social welfare records, and conferences with school supervisory or administrative personnel.

Existing pupil records in the school provide a valuable resource of information. This may include cumulative records, narrative teacher reports, or reports on individual pupils, and conferences with the child's previous teachers.

In order to determine the general level at which a youngster is functioning, in each of the subject areas, it is necessary to administer achievement tests before forming an instructional program.

The results of achievement tests are usually reported in terms of grade level. Since the tests are only samplings of achievement in the areas measured, the results should be considered only as an indication of the level at which a youngster can work.

Many of the achievement tests, possibly because of the difference between the standardization group and the general school population, tend to rate the child too high. Since the retarded child needs the feeling of accomplishment which goes with success in achievement, it is well to start them at a somewhat lower level than the test indicates. As a general rule, if the youngster is started at a point up to a half-year below his

measured achievement level, success will be reasonably assured.

In planning the instructional program for the child, the teacher must be careful to consider the differences in the achievement levels in the various areas. Just because a child can read at a given level does not mean he will necessarily be able to do arithmetic at that same level. The program must be organized to take these differences into account.

Not only are the achievement tests important to determine the initial level of instruction, but they should be re-administered periodically to show the results of the instruction and to indicate the need for changes in the program.

* * * * *

Locating and Developing the Learning Center

1. Legal Aspect

Every special class functioning under the public school system of Iowa must be sponsored by a county board of education or a local school district's board of education. The sponsorship of such a class indicates that the financial obligations for the operation of the class will be met and that the legal protections afforded all public school children will be made to these special class children. The class must be taught by a person holding a valid Iowa certificate for the level of instruction being offered.

2. Class size and grouping

The class size should range from twelve to eighteen children. When it is necessary to group children in one class with an age range of seven or eight years between the youngest and oldest, the group should be much smaller than eighteen. When it is possible to group children in one class with an age range of two years, the class can be as large as eighteen. If it is necessary that a wide age range be handled as one class, the children should be grouped as closely as possible within the class for their instruction. Such a grouping within the classroom will need, in many instances, to be made around one or more children.

3. Classroom

The building location for the classroom should be carefully considered and the following important factors taken into account: (1) If possible, a building centrally located for the children attending; (2) a building in which children of a similar age range are attending; (3) a building under the immediate supervision of a school official who is sympathetic to the needs of the mentaliy retarded children; (4) the socio-economic level of the children attending the class should be in accordance with the children already in the building.

The classroom should be equivalent in structure and size to a regular room, within the system designed for a class of twenty-five or thirty children. It should be readily accessible to toilet facilities, playgrounds, and lunchroom.

The room must be well lighted and, if possible, should make use of natural light from north windows. It should be decorated in subdued colors with a floor covering that conceals scuff marks and requires a minimum amount of care.

Each room should have at least two blackboards measuring approximately 3' x 9' on different walls. A one-foot strip of tack board should be over each blackboard and two additinal tack boards supplied. A minimum of one electrical outlet should be on each wall of the room and a clock provided. Shelves and ample facilities should be provided within the room for storage of books, equipment, tools, unfinished handwork, and the display of finished articles.

Classrooms for primary age children should have a lavatory and drinking fountain within the room and adjoining toilet facilities or in the immediate vicinity. A cloak room or lockers should be readily available and a rest area provided.

Classrooms for elementary age children of special classes should have the facilities listed for the primary room with the exceptions of the adjoining toilets, and the rest area which should be used as an activity area.

Classrooms for Junior High children of special classes should make provisions for homemaking and shop work of a modified type. The activity area should be equipped with a kitchen-type sink and there should be a gas outlet or 220 volt electrical outlet for cooking facilities.

The furniture selected will depend upon the age level of the children. Individual desks of the tables top variety with separate chairs should be provided for each child, and care should be taken to match the size of each child and the desks. Two tables and six extra chairs should be provided for reading and work space.

The teacher's desk and chair should conform in styling to the furniture selected for the children and should include a locked drawer. A separate locked filing cabinet should be included.

A radio-phonograph, piano, auto-harp or some kind of musical instrument should be furnished.

The activity room should provide homemaking equipment such as a refrigerator, iron and ironing board, cooking unit, sewing machines, etc.; woodworking bench, power saw, etc., should be provided for the shopwork. A suggested list of instructional supplies and materials needed for the various age levels can be found in the appendix.

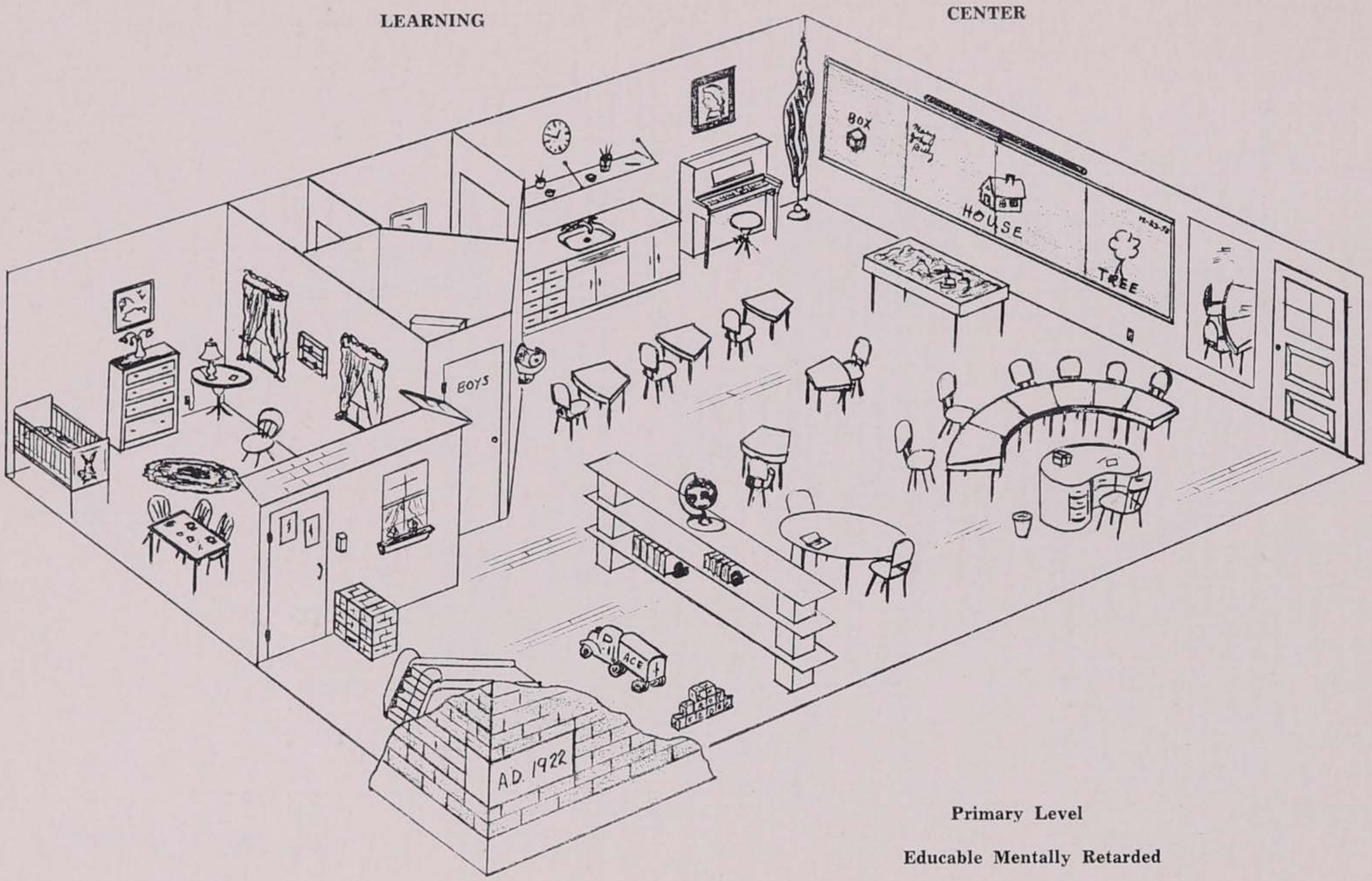
DIAGRAM OF LEARNING CENTER

Total Floor Space 26′ x 30′ 780 sq. feet

This learning center, designed for elementary level educable mentally retarded children, has been adapted from a conventional classroom in an elementary school building. Its location, the sunny atmosphere, and the presence of a water closet were considered in its selection.

Note the following items:

1. A work counter including a two-burner hot plate
2. Ample storage space and filing cabinets
3. Furniture which can be used in individual instruction as well as unit work



Primary Level

Educable Mentally Retarded

DIAGRAM OF LEARNING CENTER FOR A PRIMARY LEVEL OF EDUCABLE MENTALLY RETARDED CHILDREN

Total Floor Space 38′ x 29′ 1102 sq. feet

This center has been adapted from space in an older school building. It has been designed to care for approximately 15 educable mentally retarded children with careful attention to their needs.

Note the following items:

LARGER AREA

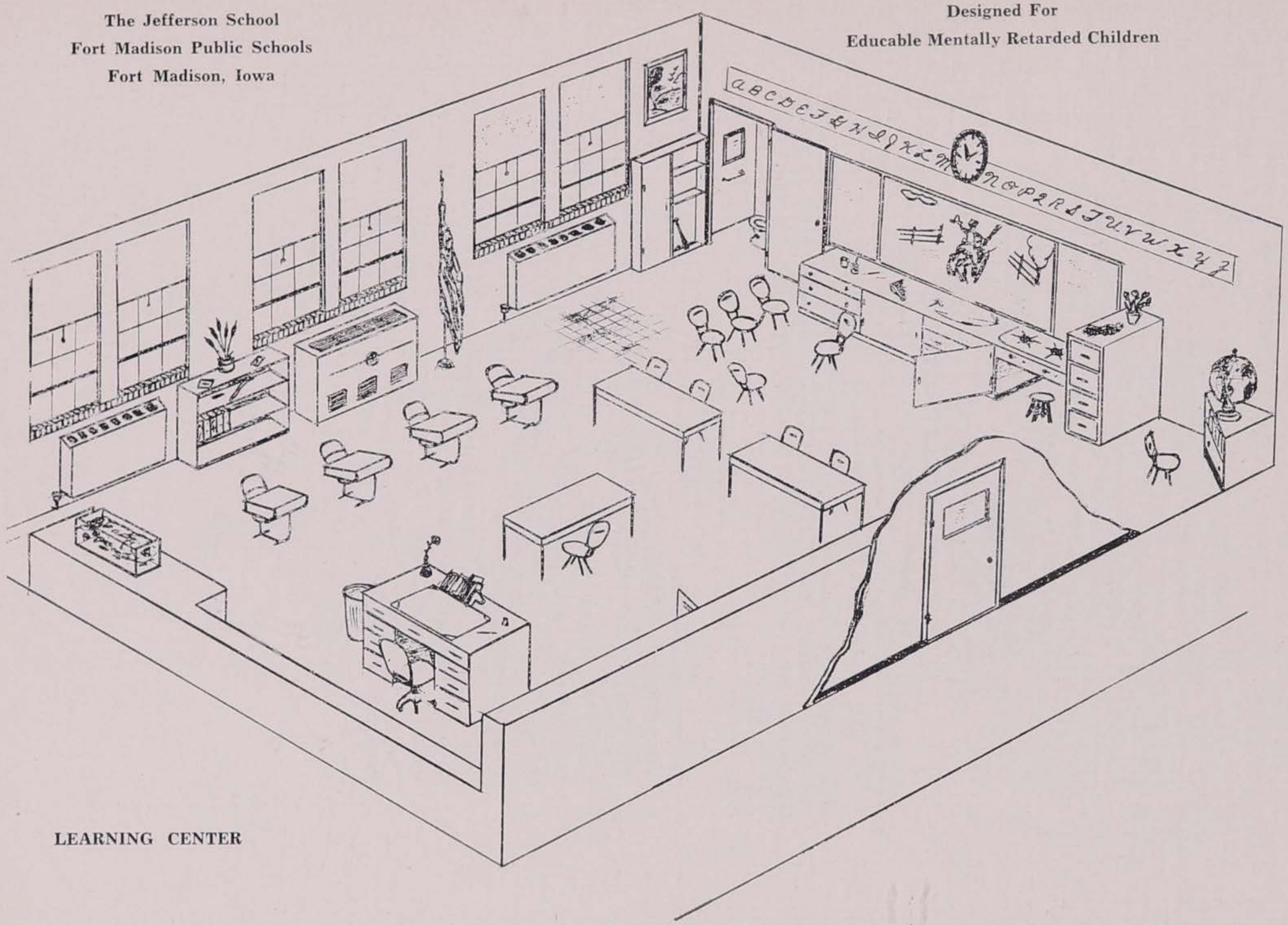
1. Work counter with running water and sink
2. Ample blackboard space
3. A full-length mirror
4. Furniture easily adapted to either individual work or unit work
5. Easily removed book cases used as a room divider
6. Separate toilet facilities for boys and girls and a drinking fountain inside the room

SMALLER AREA

1. Generous allotment of space for directed play activities
2. Realistic play house and furniture easily removable

The Jefferson School
Fort Madison Public Schools
Fort Madison, Iowa

Designed For
Educable Mentally Retarded Children



LEARNING CENTER

DIAGRAM OF LEARNING CENTER

Larger Room	**27′ x 29′**	**783 sq. feet**
Smaller Room	**11′ x 29′**	**319 sq. feet**
Total Floor Space	**38′ x 29′**	**1102 sq. feet**

This center, which is planned to care for approximately 15 children meets the unique needs of mentally retarded children in many ways. Space is provided for them to carry on a full program under the close supervision of their teacher.

Note the following items:

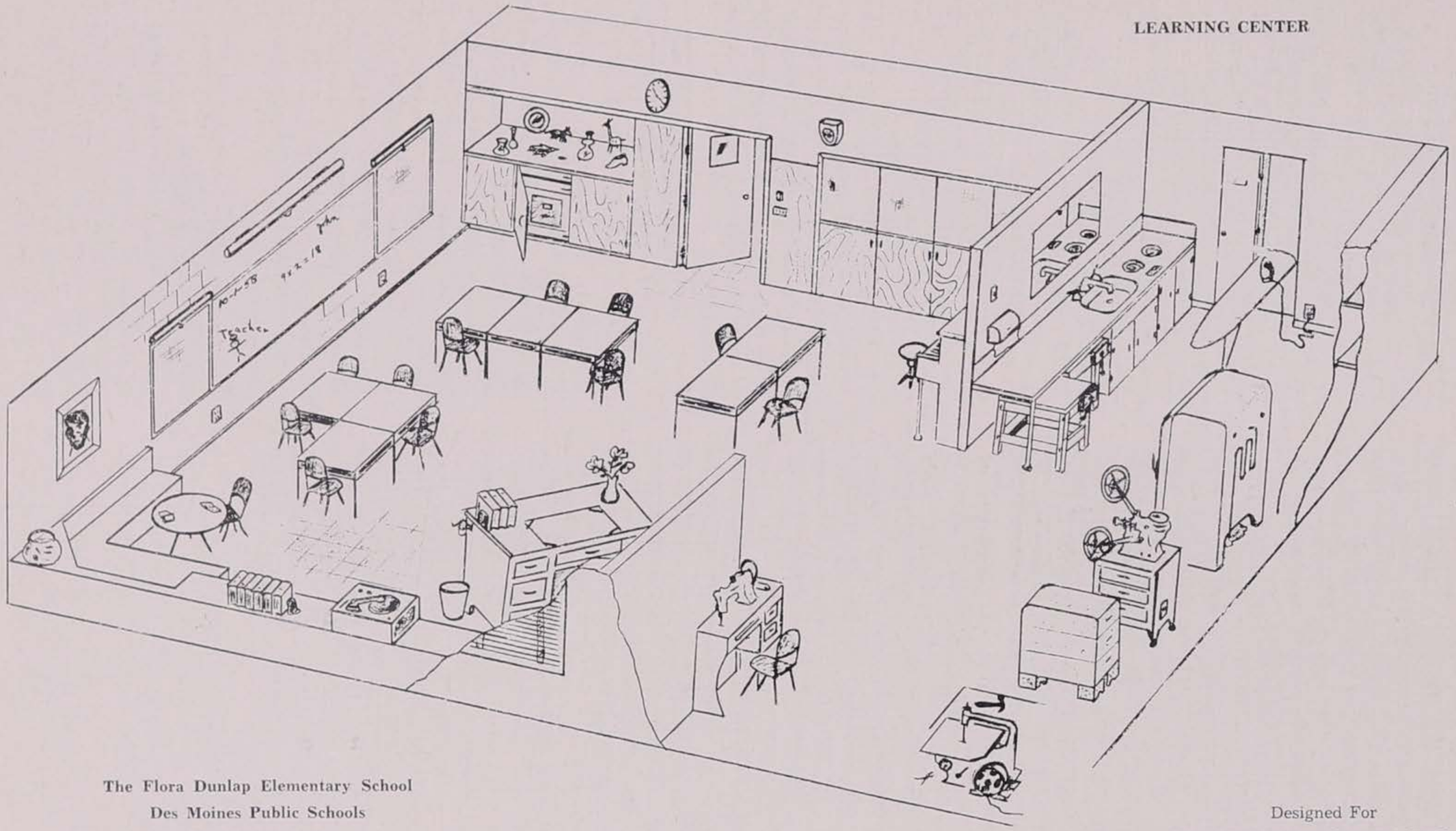
LARGER AREA

1. Informal reading corner
2. Map cases and projection screen
3. Generous amount of tack board at the ends of blackboard and on front of locker doors
4. Display corner with examples of ceramics
5. Filing cabinet under display case. Upper portion of cabinet is large drawer for maps and charts
6. Furniture which lends itself to informal grouping for small group instruction and unit work

SMALLER AREA

1. Cabinet with sink and hot plate
2. Ironing board mounted in wall
3. Back wall is storage cabinet
4. Projector on movable table
5. Ceramic kiln
6. Jig saw
7. Sewing Machine

LEARNING CENTER



The Flora Dunlap Elementary School
Des Moines Public Schools
Des Moines, Iowa

Designed For
Educable Mentally Retarded Children

Placing the Child

After the retarded children within a school system have been identified by the recommended procedure, the assignment of children to the special class becomes the responsibility of the person in charge of the special education program. Ideally this responsibility will be delegated to the local supervisor of special education. Where intermediate units or local school districts have not been able to employ special education supervisors, then the superintendent of the school where the class is located (or a person designated by him) must assume the responsibility for special class placement.

In considering eligible pupils for special class assignment, the supervisor will be guided by several factors including chronological age, social development or competency, potential for economic self-sufficiency, educability, physical characteristics, degree of self-help and communication skill, self-discipline, teachers' statements, and the child's attitude toward special class placement. If these factors are utilized, it is evident that eligibility for special class placement is not determined entirely by an intelligence test score.

In assigning a child to a special class, the supervisor must call upon the advice and counsel of persons acquainted with all aspects of the child's development. For this reason, supervisors have found it effective to hold a "case conference" on each child before his assignment to the special class.

When organizing a special class, it should be kept in mind that an important determinant of the success of a child's adjustment within the class is the parents' attitude toward his initial placement. For this reason, considerable care must be taken in interpreting to the parents the nature of their child's limitations and abilities, and explaining the value of a special class program to his educational development.

In conferring with parents about their retarded youngster, the following points should guide the presentation:

1. If possible always see **both** parents.
2. The parents should be informed as soon as possible that their child will progress at a slower rate than other youngsters around him.
3. Since there are adverse connotations associated with such expressions as "retarded", "moron", or "feebleminded", and since the parents usually are not too familiar with psychological terms, it is extremely important for the choice of language to be both meaningful and acceptable to the parents.
4. Defensiveness in the parents should be avoided by eliminating the need to justify the child's slowness and by showing them that the school is genuinely interested in the child and in helping them understand their youngster's needs.
5. The parents should be allowed to see that that responsibility for the youngster's well-being is still theirs and that the services available are for the purpose of giving information and suggestions which are designed to make it easier for the youngster to make satisfactory adjustments.
6. The counselor should be familiar with all the available resources for help with this type of problem.

The principle objective in parent's contacts is to promote parent acceptance of their child for what he is. This, in turn, should develop into concern for all retarded children. Such interest as this is one of the strongest factors enabling any educational system to provide for these youngsters.

Limitations of the Educable Mentally Retarded Child

In a previous section of this guide, attention was given to the limiting factors commonly associated with the educable mentally retarded. The section which follows presents a brief discussion of each of these limiting characteristics and their significance in the learning situation. Obviously, the limitations will exhibit themselves in varying degree depending upon the severity of the handicap. The teacher will need to give careful consideration to the limiting factors as they bear upon the instructional relationship with the individual child.

A discussion of the limiting characteristics follows:

Limited Ability for Adapting to New Social Experiences

Lack of easy readiness to adapt to new social experiences is not necessarily an exclusive limitation of mentally retarded children. As all children vary in the many general developmental characteristics, so it is also true that marked differences exist in their personal and social responses.

Mentally retarded children may possess less adaptability for readily adjusting to new situations, but it must be remembered that many intellectually normal children are below average in this respect.

While limited environmental conditions may have some negative effect on the development of social adaptability, the greater barrier to this development is inherent in the condition of mental retardation, itself. Moreover, limited ability for adapting to new social experiences is relative to the severity of the retardation. Obviously a mentally retarded child with a chronological age of seven does not possess the faculties for social response equal to an intellectually normal child of the same age. For his mental age, the mentally retarded child will likely respond in a satisfactory manner to the social stimuli around him. Thus, the retarded child will appear to adjust less readily, but only in relationship to his life age.

The mentally retarded child will need a stimulating environment, rich in structured social contact and social activity. Emphasis should be placed on the development of common social amenities systematically organized in relation to his developing social capacities. Acquisition of social graces should not be left to chance. Planning and supervision implies the use of actual examples and situations and will thereby enhance their value and hasten the social growth of the child.

Limited Ability for Exercising Manual Dexterity

Viewpoints have been expressed by educators and lay people alike that mentally retarded children have ample compensation in that they can at least work with their hands. While it may be true that a few such children manage an acceptable degree of manual skill, the larger percentage are quite handicapped in the area of motor dexterity. This seems to be a concomitant of mental retardation.

The above limitation usually stems from general developmental inadequacies and, in some cases, is a result of brain injury. In most instances, the mentally retarded child is less well developed physically compared to children his life age; and he has much less overall agility and coordination.

The major handicap in the school situation is in his poor control of the small muscles. The arm, hand, and particularly the fingers are difficult for the child to manage in the handling of small objects. Obviously this condition will postpone fine finger and hand work for a considerable period of time. The child will need to work with large objects initially and as he acquires experience, smaller objects can be introduced.

The classroom teacher will note at once that a retarded child will be adversely affected in many ways. The use of pencils, crayons, scissors, brushes, and even blocks and puzzles will be handled awkwardly. The child will grow in muscular control, but his progress will be laborious.

Another deficiency sometimes confused with poor coordination emerges in the form of distorted perception. Again, this may be due to developmental circumstances; but, in many cases, the perceptual deficiency is a resultant of brain injury. The small child experiences difficulty with puzzles, not only the handling routine but also the assembly of the parts. His ability to "size-up" objects for form, shape, and detail is under-developed. The mentally retarded child is slow to visualize relationships; and he is equally weak to perceive pattern formations, which will reflect itself in design work in art later on. During the years, for craft activities the child will experience similar difficulty when engaged in "putting-together" tasks with wood, leather, tin, and other materials.

Manual dexterity will improve with age and experience. The activities provided must correspond with the mental capacity of the child. The curricular content, when related to the capacity of the child, should be rich in equipment and extensive in opportunity for physical and muscular development.

Limited Ability to Act Effectively on His Own Initiative

The word "initiative" implies originality and resourcefulness in an endeavor requiring self-reliance. All children vary markedly in their ability to initiate and carry through a project or activity in an academic or social situation. Mentally retarded children will vary in their response to suggestions, directions, and requests; but, as a group, they will readily respond to assignments if these principles are observed:

First, the directions and requests must be clearly stated in specific language and repeated when necessary.

Second, the person handling the children must be willing to permit them to solve problems *at their level of functioning.*

Third, the classroom teacher must organize the daily program and individual assignments around the *children's interests and experiences.*

Fourth, the daiiy routine must be kept simple, yet well organized so that the children will learn the acceptable procedures.

Fifth, instruction should be individualized to the maximum extent thus affording the child an opportunity to "go ahead" after personal attention.

Sixth, the teacher must provide continuous supervision and an attitude of willing helpfulness during the work assignments and group activities.

The above are some of the pertinent principles basic to the development of initiative on a day-to-day regimen. Given an enriched and stimulating classroom environment, and one which recognizes the level of functioning, mentally retarded children will respond with a high degree of cooperation and industry. As in many other characteristics, initiative, too, must be assessed in relation to the ability of the child.

Limited Ability for Displaying and Maintaining a Range of Interests

A characteristic commonly associated with the mentally retarded is a limited range of interests. To the casual observer this limitation, like many others, may appear quite marked in its implication; but closer assessment discloses the fallacy of this position. Once again, the limitation must be gauged by the developmental characteristics of the child and by the relationships of the displayed interests to his intellectual capacity and cultural experiences.

Intellectual limitation and restricted outside experiences will heighten the barrier to the development of a broad range of interests. Interests may be shallow and erratic, but this does not preclude the use of a wide variety of materials and equipment in the classroom. On the contrary, the room should be adequately stocked so that maximum stimulation is afforded. Moreover, the curriculum content should abound in a variety of offerings related to the child's level of comprehension and needs.

The classroom teacher is obligated to create opportunities for interest development through in-school and outside school activities. The teacher should remember that *interests* are learned and that success in an activity contributes vitally to interest development. Music, art, physical education, woodworking, leather-work, weaving, simple mechanics, story-telling, and many other activities have a definite place in interest development.

Limited Ability to Communicate Effectively

The ability to communicate effectively depends on intellectual development, cultural and social experiences, and formal educational processes. Moreover, communication growth develops through exposure to materials and "tools" which lend encouragement to listening, picture and talking activity. Many children will enter school with very limited pre-conditioning experiences for adequate communication. Other children may have had a more privileged environment which provided opportunities for singing songs, listening to and telling stories, cutting out pictures, using crayons, and playing with a variety of toys.

In addition to the above consideration, the classroom teacher will discover some children with the further involvement of brain injury. This condition presents additional aggravation to communication growth in both oral expression and writing mechanics.

A factor sometimes overlooked in the communication process is the abstract connotation inherent in our language. Mentally retarded children may not possess the capacity for fully comprehending and interpreting a precept conveyed in a dictum such as, "You must be honest." Similarly, this limited ability to comprehend may attend in all exhortations regarding moral relations and obligations. Obviously, the retarded must be taught industry, loyalty, honesty, truthfulness, sincerity, fairness, honor, and respect in their personal relations. They must be helped to distinguish between the right behavior and the wrong behavior.

The classroom teacher is obligated to consider many conditions and factors when she makes an assessment of individual and group communication response. Mentally retarded children present a clear challenge in the area of language development, but they will make steady progress under stimulating teaching. The instruction must be distinctly concrete, factual, and practical. Anecdotes, stories, and audio-visual aids related to specific occurrences in both the school and the community will enhance communication skill. Examples must be used extensively.

Activities can be specifically designed to provide speech experiences. Among the common activities are conversations, dramatizations, listening to and telling stories, relating the events of the day, describing pictures, planning parties, taking trips, and joining in various game and play activities. Birthday parties, holiday recognitions,

lunchroom assignments, and many other procedures are widely used.

Writing activities should emphasize the general purposes for which this will be needed later on. Attention should be given to legibility, writing signatures, filling in forms, making out mail orders and checks, writing simple letters, and, finally, learning to write job applications.

Many other conditions and factors necessarily apply to limitations in communicating, but the general suggestions made can be used by the teacher for developing others unique to the circumstances in her class.

Limited Ability to Give Sustained Attention

A characteristic commonly associated with the mentally retarded is their reduced ability to give sustained attention or interest to a given task. Often they are referred to as being "easily distracted" or as having a "short attention span." Few studies of mental retardation fail to give mention to this characteristic. On the other hand, few studies have attempted to elaborate on it other than to imply that because of this characteristic it is best to plan short work or study periods for the retarded child. When reference is made to the retarded child as having a short attention or concentration span, it means that his ability to maintain interest in work assignments will be more limited than that of the average child of the same age. This characteristic becomes less evident and may tend to disappear completely if the tasks presented are geared to the child's ability and interest level. His span of attention is more likely to be commensurate to that of the average child whose chronological age is near his own mental age.

Some mentally retarded children who are brain-injured may occasionally display behavior that appears to be opposite from the behavior discussed in the paragraph above. Instead of a short attention span, they often give sustained interest and effort to a given task or a segment of the task for an unusually long period of time. This tendency in brain-injured children is referred to as perseveration. The problem prevalent with perseveration is the purposeless end to which the child's energy is directed. Seldom is this period of concentration directed toward constructive learning. It may mean he is merely repeating over and over a simple task which has lost its association to the learning situation once completed.

Limited Ability to Generalize

To generalize means to derive or induce from particulars—usually an unlimited series or number of particulars. Thought processes involving generalizations or the drawing of conclusions present unusual difficulties for the mentally retarded child. The problem involved here appears to be two-fold. First, the child of limited intellectual ability is able to retain fewer facts or background experiences than is the average child; and, secondly, he is less able to comprehend the relationships which exist between those facts and experiences which he is able to retain. Because of these limitations, teaching methods that stress a great deal of the associative processes of learning, which are beneficial in teaching the rapid learner, usually result in considerable confusion and frustration for the retarded child.

This does not imply that the retarded child is entirely incapable of generalizing but means that he possesses this ability to a lesser degree than do most other children his own age. He may know all the necessary facts and may have acquired the necessary skills to solve a given problem, but often he cannot transfer this learning to a similar problem presented in a different context. Similarly, in a history lesson it is difficult to teach these children that you may be able to predict future happenings by studying the causes of past historical events.

Limited Ability to Deal With Abstractions

Closely related to the limited ability to generalize as a characteristic of the menally retarded is their limited ability to deal successfully with abstractions. For this reason, concrete experiences and practical firsthand illustrations are essential as teaching techniques for these children. They learn most readily by manipulating materials, by listening, and by observation. A classroom for the mentally retarded child should contain many more concrete teaching devices than a regular classroom. A resourceful and imaginative teacher can make many of these devices and some of them she must make because they may not be available for purchase.

The vocabulary used by the teacher, either written or spoken, must be within the child's level of understanding; and sentence structure should be simple. Facts presented should be limited to those essential to the problem at hand and the order of presentation must be sequential and simplified. Realistic and meaningful drill and repetition presented in varied situations with the extensive use

of visual materials and duplicate copy work have proved to be most successful with these children. Meaningful discussions of history or science are important while theoretical presentations are of little value.

Limited Ability to Establish and Maintain Goals

It is generally accepted that the mentally retarded child has greater difficulty establishing and maintaining realistic goals and objectives than does the average child. Because of his limitations in setting up his own standards of work and study and his limited ability to do effective self-evaluation, it is necessary to provide him with short-term units of study and rather specific work assignments. Units which require weeks or months of work and study before over-all objectives can be realized may result in little more than day-to-day busy work for the retarded child. A unit of short duration allows him to realize his goal before the steps leading to this goal have lost their meaning or have been forgotten. Frequent review is essential as is close supervision and careful guidance from one learning situation to another as a unit progresses toward conclusion.

At the secondary level, the retarded child needs careful guidance and counsel regarding his academic capabilities and his vocational possibilities when his schooling has terminated. It is imperative that the child's aspirations do not exceed his potential in either as it can only lead to confusion and frustration. In some cases, the parents may have unrealistic aspirations for their child and could benefit from counseling by someone familiar with the problem in general and their child's problem in particular.

In high school, and sometimes in junior high school, the retarded child, for the first time, has the opportunity to select one or several of the courses he will carry. This may be true even where special classes are available since these children often attend the special class for only a part of each day and are allowed to enroll in electives to fill out the remainder of each day. In such cases, it is essential that they be guided into courses in which at least a part of the work will be within their ability and will allow them a degree of success and satisfaction.

Limited Ability to Display Originality and Creativity

Limited originality and creativeness is nearly always mentioned as a characteristic of retarded children. This seems to hold true whether reference is being made to the arts and crafts, music, written composition, spontaneous dramatization or story telling. A prerequisite to the development of a unique idea requires a background of experiences and probably is the result of generalizations and projections from this background experience. When left on their own resources in activities requiring originality, mentally retarded children will likely produce compositions with limited content and substance. Suggestions, guidance, and supervision from the teacher is vital to the growth and development of originality and will enhance the child's ability to better evaluate his productions.

Some children, normal as well as mentally retarded, come to school lacking in the background or "readiness" experiences necessary for originality and creativeness. This is often true of children who have been reared in sub-cultural home environments. In such cases, the teacher is challenged to provide these children with learning situations which will help to build the necessary store of background experiences for creative writing, story telling, dramatization, and artwork. Early special class placement often provides the retarded child with the opportunity to benefit from an extended readiness period which might not be available to him in the regular classroom.

Chapter III

CURRICULUM AND CURRICULAR GUIDES

The curriculum and guide that follows has been written with certain considerations in view.

First, as with any curriculum guide, it is not all inclusive nor does it eliminate the need for ingenuity on the part of the teacher in planning his day-to-day instructional activities.

Second, the curriculum has been written with the accepted goals for all children in mind: self-realization, satisfactory human relationship, economic efficiency, and civic responsibility.

Third, the general objectives of education are the same for all children; however, the curriculum content and the methods of its presentation for the educable mentally retarded, if the goals are to be reached effectively and with a minimum of wasted effort, differs somewhat from the accepted techniques and content used with the average child. The suggested curriculum for these children deviates from that for the average children in that it emphasizes a slower presentation of material, simplifies the basic skills, and requires a utilization of all the senses to reinforce the learning of ideas and materials presented. It also takes into consideration that these children tend to be time bound in the present; therefore, information and ideas need to be presented in a meaningful manner to meet more successfully their persisting life situations. This concept is illustrated by the summary curriculum charts that follow.

The educable mentally retarded child acquires a limited amount of incidental learning and, as has been pointed out, has poor ability in the areas of generalizations and transfer of learning. Because these are essential to the process of learning, it becomes necessary for the teacher to structure situations which provide the mentally retarded child with opportunities to develop these abilities and to acquire the learning which, for most children, is incidental.

The following curriculum guide is to be used by the teacher in selecting meaningful and functional material to be presented to his class. This must be done by giving consideration to meeting the needs of the class in a manner feasible at the local level.

Persisting Life Situations

The concept of "persisting life situations" can best be stated as the problems resulting from the life-long interaction between the learner and his environment. By giving consideration to the learner and to the problems he is likely to encounter in the society in which he lives, the school can more adequately meet his needs. Thus, the child is given assistance and gains confidence to cope with the situations he encounters in daily living. For example, to some, making a phone call becomes a frustrating and an overwhelming experience. This can be simplified by a structured classroom lesson in telephone techniques.

This concept applies in the following schematic presentation.

The Experience Unit

Introduction

The teacher beginning her work with an educable mentally retarded class usually finds that certain parts of the educational program for the pupils are already organized when she arrives upon the scene. For example, questions relating to entrance requirements for pupils have been settled by an announced policy. The machinery for the administration of the policy has been set in motion. Space has been allotted, equipment purchased, and perhaps even general objectives for the program have been determined as outlined in previous sections. What remains to be done is to organize desirable learning tasks (or experiences) to the best advantage of the learner. This is perhaps the most difficult single organizational task confronting the teacher.

Planning the Structure of Instruction

How can the teacher of the educable class fit together the assorted recommendations for a program for educable pupils into a sensible arrangement exhibiting scope and sequence of work? There are a number of alternatives. A teacher could plan a series of isolated lessons, each calculated to teach a certain concept or group of concepts. There are indeed times when a specific lesson will need to be taught without much regard for what is being done during the rest of the school day. A complete discussion of the utilization of specific lessons in the skills areas appears in a later portion of this bulletin. On the whole, however, single, isolated lessons, however well planned by the teacher, cannot hope to be equal to the task of providing learning situations which

ECONOMIC EFFICIENCY THROUGH ACADEMIC TRAINING

High School Approx. C.A. 14-18	Occupational Education and beginning of work experience program. Continuation of academic training geared to future life roles.
Junior High Approx. C.A. 12-14	A further refinement and enrichment of basic skills. Expansion into other life situations pertinent to present and future occupational needs.
Intermediate Approx. C.A. 9-12	A vertical-horizontal enlargement of basic skills and inclusion of additional areas listed under persisting life situations.
Primary Approx. C.A. 6- 9	Intensive and extensive development of readiness activities as a foundation for basic skills. Introduction of any subject areas included under persisting life situations for which pupils show readiness.

MEETING PERSISTING

LIFE SITUATIONS

COMMUNICATION
- Listening Skills
- Oral Vocabulary
- Reading Vocabulary
- Writing Vocabulary

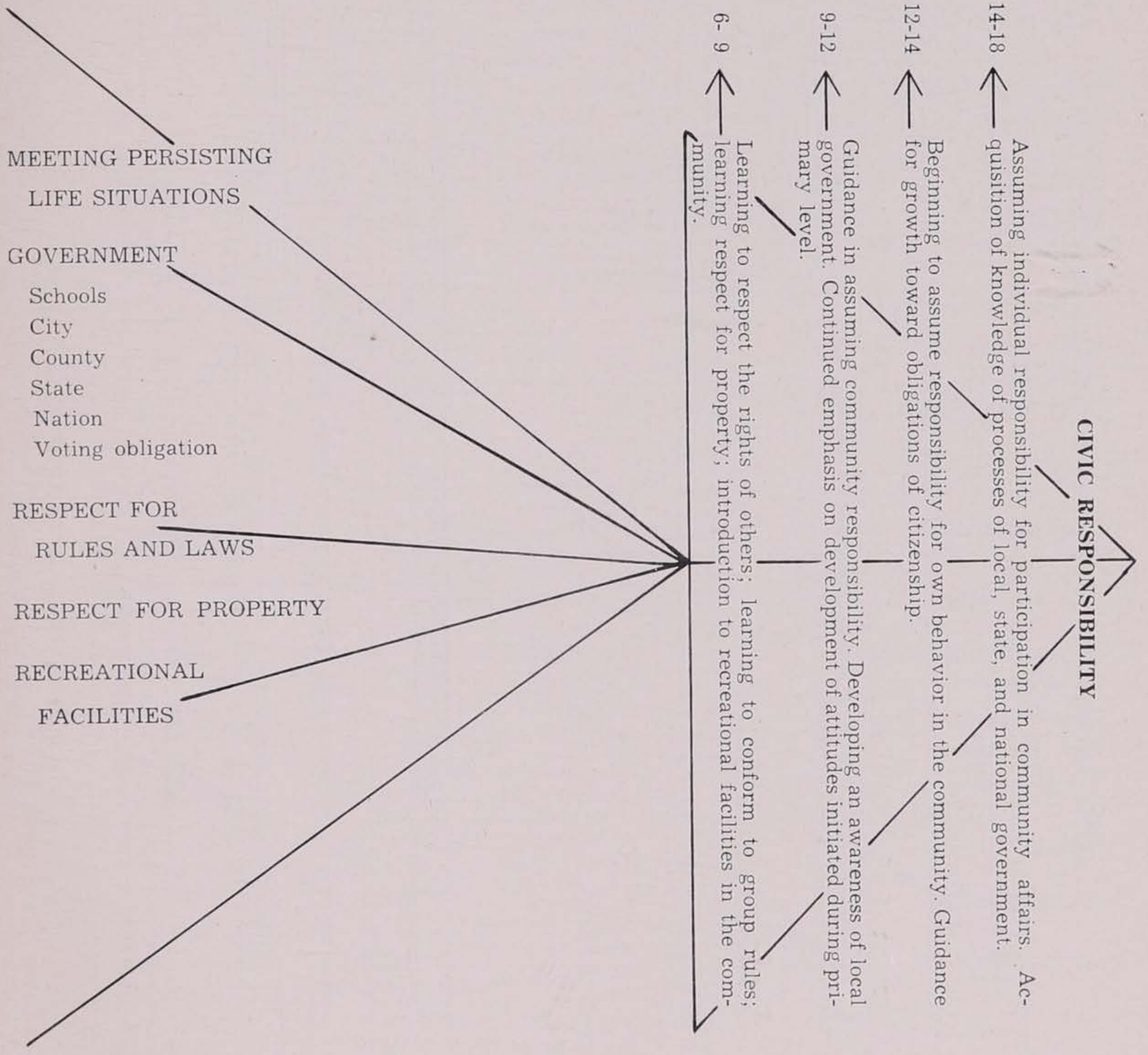
SOCIAL STUDIES
- Historical Background
- Cultural Background
- Geographical Background
- Knowledge of Community
- Family Relationships

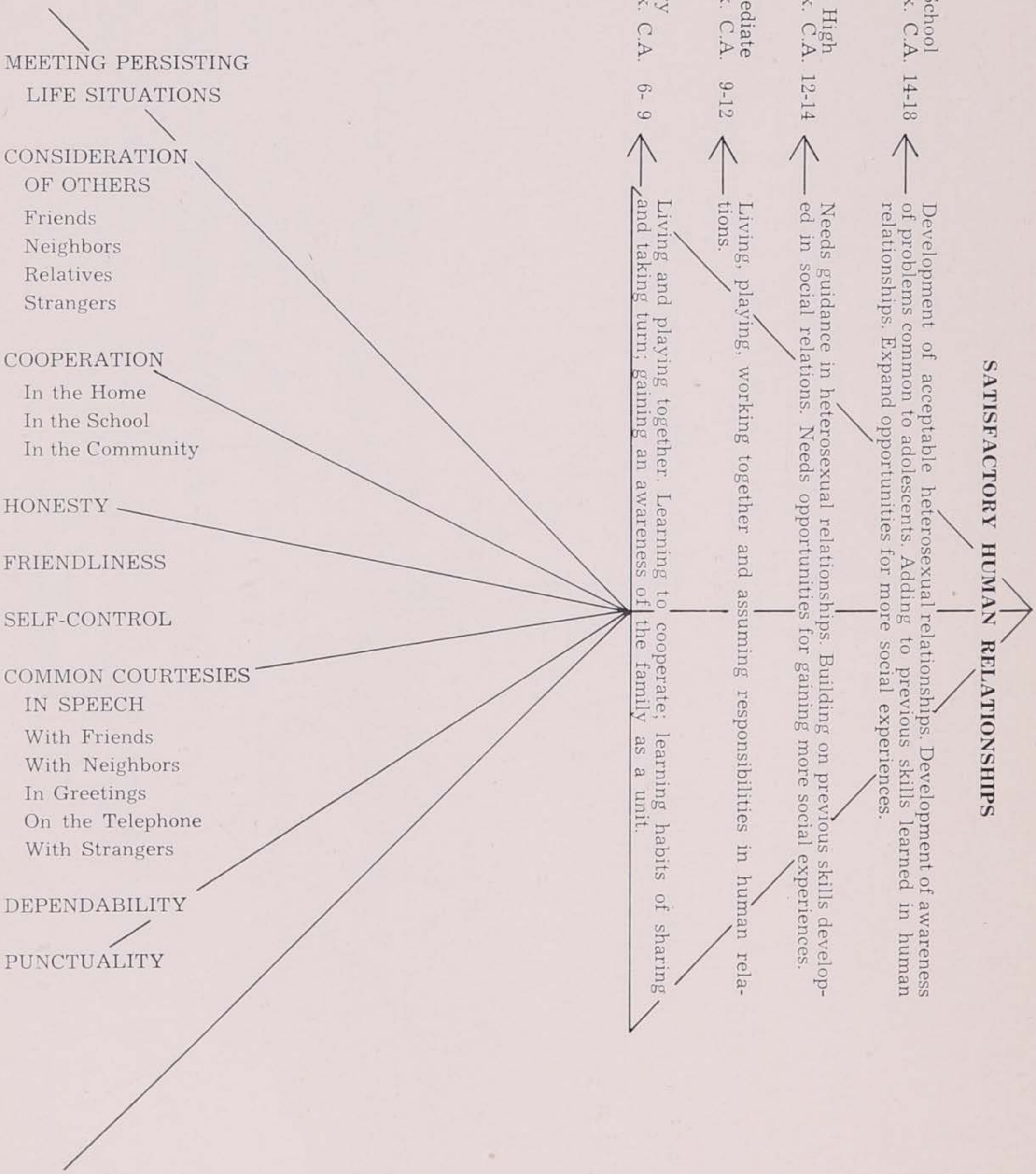
OCCUPATIONAL PREPARATION
- Attitude toward work
- Job Information
- Job Placement

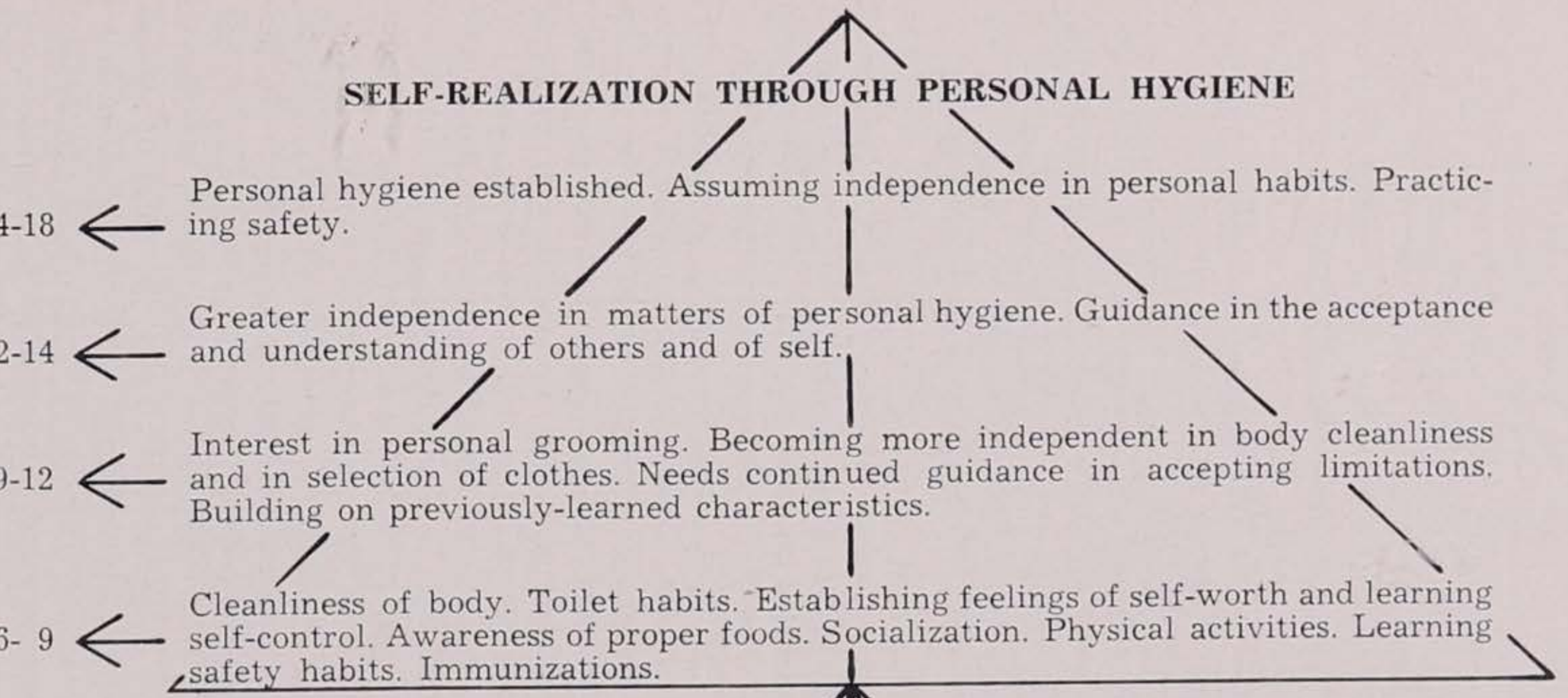
EVERYDAY SCIENCE
- Foods
- Plants and Animals
- Machines
- Clothing and Shelter
- Earth and Universe

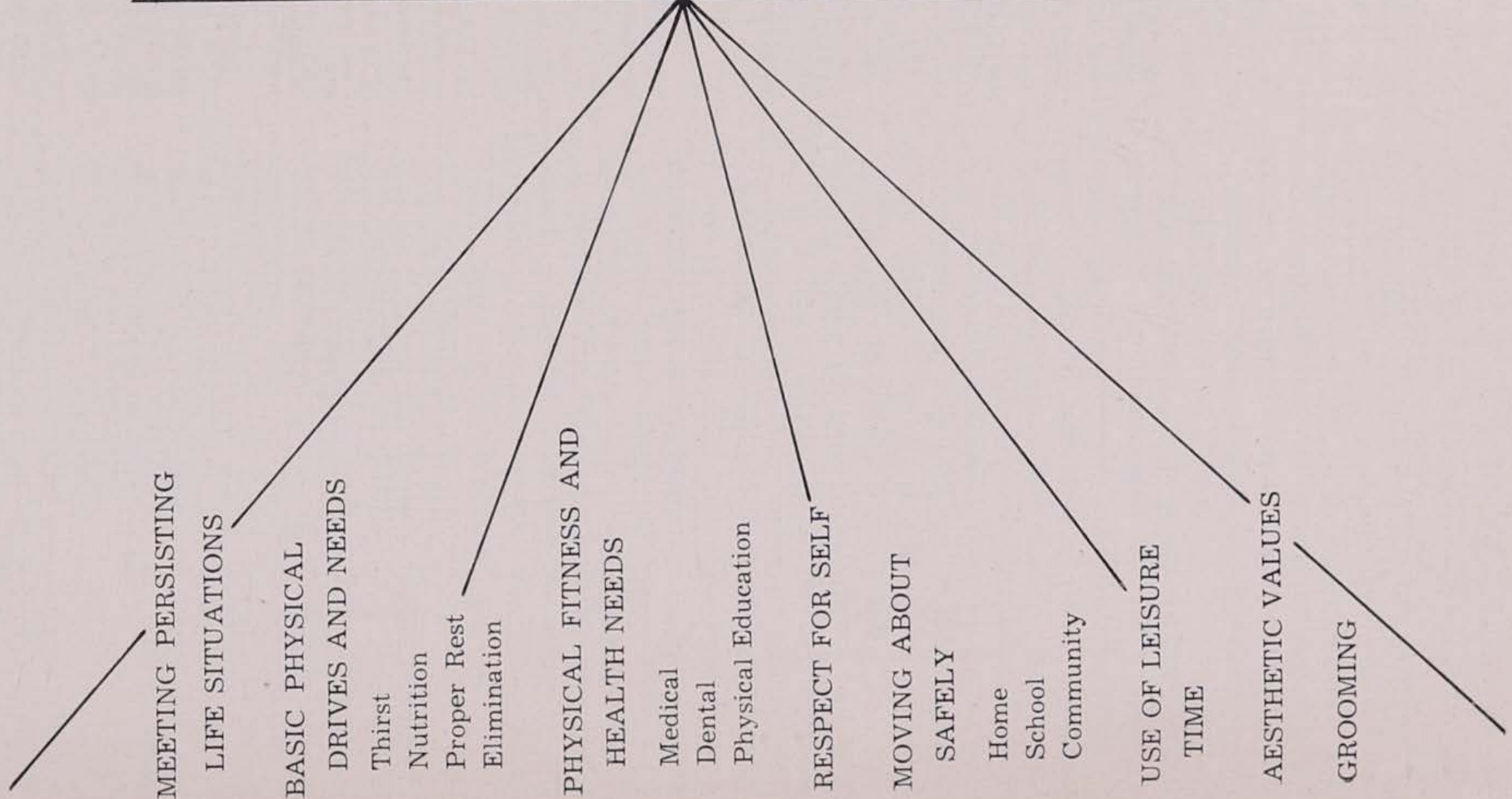
NUMBERS
- Concept of Time
  - The Clock
  - The Calendar
- Concept of Numbers
  - Addition
  - Subtraction
  - Multiplication
  - Division
  - Measures
  - Quantitative Terms

MEDIA OF EXCHANGE
- Money
- Banks
- Checking Accounts
- Personal Budgeting
- Home Budgeting


CIVIC RESPONSIBILITY
High School Approx. C.A. 14-18
Assuming individual responsibility for participation in community affairs. Acquisition of knowledge of processes of local, state, and national government.
Junior High Approx. C.A. 12-14
Beginning to assume responsibility for own behavior in the community. Guidance for growth toward obligations of citizenship.
Intermediate Approx. C.A. 9-12
Guidance in assuming community responsibility. Developing an awareness of local government. Continued emphasis on development of attitudes initiated during primary level.
Primary Approx. C.A. 6- 9
Learning to respect the rights of others; learning to conform to group rules; learning respect for property; introduction to recreational facilities in the community.
MEETING PERSISTING LIFE SITUATIONS
GOVERNMENT
Schools
City
County
State
Nation
Voting obligation
RESPECT FOR RULES AND LAWS
RESPECT FOR PROPERTY
RECREATIONAL FACILITIES


MEETING PERSISTING LIFE SITUATIONS
CONSIDERATION OF OTHERS
Friends
Neighbors
Relatives
Strangers
COOPERATION
In the Home
In the School
In the Community
HONESTY
FRIENDLINESS
SELF-CONTROL
COMMON COURTESIES
IN SPEECH
With Friends
With Neighbors
In Greetings
On the Telephone
With Strangers
DEPENDABILITY
PUNCTUALITY
SATISFACTORY HUMAN RELATIONSHIPS
High School Approx. C.A. 14-18
Development of acceptable heterosexual relationships. Development of awareness of problems common to adolescents. Adding to previous skills learned in human relationships. Expand opportunities for more social experiences.
Junior High Approx. C.A. 12-14
Needs guidance in heterosexual relationships. Building on previous skills developed in social relations. Needs opportunities for gaining more social experiences.
Intermediate Approx. C.A. 9-12
Living, playing, working together and assuming responsibilities in human relations.
Primary Approx. C.A. 6- 9
Living and playing together. Learning to cooperate; learning habits of sharing and taking turn; gaining an awareness of the family as a unit.


SELF-REALIZATION THROUGH PERSONAL HYGIENE
High School Approx. C.A. 14-18
Personal hygiene established. Assuming independence in personal habits. Practicing safety.
Junior High Approx. C.A. 12-14
Greater independence in matters of personal hygiene. Guidance in the acceptance and understanding of others and of self.
Intermediate Approx. C.A. 9-12
Interest in personal grooming. Becoming more independent in body cleanliness and in selection of clothes. Needs continued guidance in accepting limitations. Building on previously-learned characteristics.
Primary Approx. C.A. 6- 9
Cleanliness of body. Toilet habits. Establishing feelings of self-worth and learning self-control. Awareness of proper foods. Socialization. Physical activities. Learning safety habits. Immunizations.


MEETING PERSISTING LIFE SITUATIONS
BASIC PHYSICAL DRIVES AND NEEDS
Thirst
Nutrition
Proper Rest
Elimination
PHYSICAL FITNESS AND HEALTH NEEDS
Medical
Dental
Physical Education
RESPECT FOR SELF
MOVING ABOUT SAFELY
Home
School
Community
USE OF LEISURE TIME
AESTHETIC VALUES
GROOMING

foster abilities of planning and carrying out plans, or which develop firm understandings of the basic ideas we wish pupils of this type to gain. Isolated lessons simply do not provide enough related experiences in any one area to do the job.

What is needed for both the younger and older groups of educable mentally retarded pupils is a unit organization in which related ideas are studied, and in which there is opportunity for application of what has been studied. Most schools of today do teach by the unit plan; even so, these units leave something to be desired as units of study for educable mentally retarded pupils. The typical unit used in normal classrooms is a *resource* unit, a compilation of motivational techniques, objectives, understandings, activities, and ideas for evaluation. The major difficulty involved in trying to use this same sort of unit with educable mentally retarded pupils arises from the fact that reading is usually the basic means of acquiring the information noted in a resource unit. Pupils in an educable mentally retarded class cannot do the amount and kind of reading necessary in a resource unit, yet they are in need of understandings similar to those included in such a unit. The object is to inject more activity of a non-reading type into the units of study for educable classes. This is done through the use of what is commonly designated as an *experience* unit.

Why An Experience Unit

The foundation of the experience unit approach lies in the aims of education held for the educable mentally retarded. In reality, the problem of educational objectives for the educable class is perhaps not quite as complex as the problem of formulating objectives for a more general population. After all, the abilities of the educable mentally retarded pupil are demonstrably more restricted; and we can be content with fewer accomplishments on his part. If it can once be decided what are the desired attributes of education for normal pupils, surely the matter of choosing those which apply to a less able portion of that pupil population should not be insurmountable. This point of view is well expressed by Ingram when she notes:

> " . . . In other words, the mentally retarded person cannot achieve so many and so varied adjustments, he cannot contribute to or participate in life so fully, he cannot live at so high a level as the normal; but, according to his measure, he can achieve the adjustments within his reach, he can contribute his share to the accomplishments of the tasks of life, and he can enjoy life at his own level of interest and accomplishment . . . He will only be a follower. Insofar as he is a well-adjusted, self-respecting, cooperative member of the home and community, contributing as much as he is able toward his self-support, he is doing his share. The objectives for this group, therefore, will not cover the whole scope of those set up for all children, but they will take into account the conditions specific to this group . . ."

The real question is, of course: "Just which objectives take into account the conditions specific to the group?" There is no easy answer for this question. The proper adjustments of objectives for the education of educable mentally retarded pupils comes only through experience in working with them individually and in groups. So far, the documentation of such experience has proved insufficient for the task of building any standard set of precise educational goals. Broad outlines for objectives have been constructed by many educators, however. Informative discussions of suitable goals may be found in the writings of Kirk[2], Martens[3], and Delp[4], as well as Ingram.

Characteristics of an Experience Unit

Briefly, the experience unit work for educable classes is designed to enable the pupils to gain the important concepts and skills that function in their daily lives in school and that will function when they have completed their program of schooling. The experience unit is thus content-centered: it deals with substantial concepts concerning the areas of social studies and science. While the orientation of such instruction may not be as academic as that found in operation with normal classes, the function of transmitting ideas of universal importance is still present.

Perhaps the most effective means of describing the composition and function of the experience unit for educable mentally retarded classes is to contrast it with the resource unit widely used in elementary schools at present. The chief differences between present resource units and experience units would be that the experience units:

1. May involve more direct activity in the way of field trips, first-hand study, and construction activities.

   Example: Most teaching of the use of money in normal classes is done verbally and through the use of written problems. Instead of just talking about money and

[1] Christine Ingram, *Education of the Slow-Learning Child* (New York City: Ronald Press, 1953), p. 61.

[2] S. A. Kirk, *Educating the Retarded Child* (Chicago, Illinois: Houghton Mifflin Company, 1951), pp. 115-31.

[3] Elsie H. Martens, *Curriculum Adjustments for the Mentally Retarded*, Bulletin 1950, No. 2, Government Printing Office, pp. 9-18.

[4] H. A. Delp, "Goals for the Mentally Retarded", *American Journal of Mental Deficiency*, LV (April, 1951), pp. 472-78.

using written problems for developing ideas concerning kinds of coins, bills, making change, etc., with an intermediate or junior high educable class, you will actually spend a considerable amount of time working directly with the coins and bills.

2. May be broader in scope than the traditional resource unit.

   Example: Instead of a science unit entitled, "How Plants Grow" for a junior or senior high school educable class, the unit might be changed to "How We Make Our Home Attractive," a *part* of which would be concerned with the care of lawns, trees, shrubs, and other common plants. With a normal group at this level, there would probably be included a small number of experiments in addition to reading and other audio-visual aids. With the educable class, there would be consideration of making the interior of the home attractive, as well as the exterior. Direct experiences would be prominent in the unit. There would be much less emphasis placed upon the biology of plants with the educable class, and much more emphasis upon the utilization and care of plants serving as attractive accompaniments of the home.

3. May have desired goals different from the goals expected in a normal class.

   Example: When studying farming in a usual intermediate grade class, what we desire is the accumulation of certain concepts about farming: how farms differ in size and function in different sections of the United States, how farming methods are adapted to the type of farm land available, why certain crops are predominate in certain areas, how crops are processed and ultimately reach the consumer, etc.—fairly academic matters, but important enough for all people to know. With a junior or senior high school group of educable mentally retarded pupils (boys), our goal may be an entirely different one. Instead of attempting to draw broad generalizations about the role of agriculture in our economy, we would concentrate upon a *functional knowledge* of what goes into farming—what the jobs are, why they are done in a certain way, how the farmer can sell his goods to best advantage—all this being done with an eye toward the possibility of adult employment on farms for some of the class members.

In all, the experience unit holds great promise as an organizational device for use in the education of educable mentally retarded pupils. The ideas involved are not new by any means, but they do need amplification.

It has previously been noted that experience units for educable mentally retarded classes usually center around topics which may be considered to be social studies or science. The following lists present examples of areas within each general field to be given consideration at some point in the system of classes for educable mentally retarded pupils.

Social Studies	**Science**
1. The family and home	1. Plant life
2. People and services within the local community	2. Animal life
3. Food production, processing, and distribution	3. Health
4. Transportation and travel	4. Safety
5. Clothing production and care	5. Weather
6. Housing	6. Fuels
7. Simple history and government	
8. Recreational facilities	

It is to be understood that the items in the foregoing lists do not necessarily represent individual experience units, but are areas to be explored through one or more such units. Neither is the list intended to be exhaustive; it only makes some suggestions to serve as a beginning point for thinking about the important areas that need attention in the curriculum planning for the educable mentally retarded.

Planning and Teaching an Experience Unit

An experience unit of work for the educable mentally retarded class tends to be more flexible in its organization than units used for regular classes: the work contains more of the day-to-day type of planning than for a regular class; there are considerably more changes in plans than are to be expected with a resource unit; and, to a certain extent, the sequence of jobs in preparing an experience unit is altered from the sequence of steps in building a resource unit for a regular class. The following steps for the teacher to use in planning an experience unit may serve as a general guide for planning:

1. Select a unit of experience that would appear to be of importance in the lives of people in general, as well as to pupils in the educable class.
2. List the educational resources of the community which might aid the study. Note specifically how each might be used.
3. List the major understandings that pupils should have when the unit of work is completed.
4. Plan how evaluation may be made of how well the pupils have grasped each of the major understandings. (Note: Most of the evaluation will be on the basis of teacher observations of one kind or another rather than by paper-and-pencil tests.)
5. Plan the original motivation for the unit and sketch roughly the sequence of activities to be used during the unit. Try to point to the places where the skills work done in separate periods can be fitted into the unit work. Included in this step would also be annotations regarding the accumulation of materials and teaching aids which are to be used.
6. Teach the unit, noting for future use particular success and/or points where changes are to be desired if the unit is to be used with another group at a later date.

The principles of unit construction and presentation which have been discussed in the preceeding pages are illustrated by the sample units which follow. All have been prepared and used by teachers in special classes throughout the State. Other teachers are encouraged to adapt the suggestions to fit their own groups of pupils.

SAMPLE EXPERIENCE UNITS

Unit I—Grooming

An example of a unit using grooming as a central point presented at the primary level.

* * * *

Unit II—Safety

A unit on safety presented at the elementary level.

* * * *

Unit III—Weather

A unit on weather presented at the level of junior high aged children.

* * * *

Unit IV—Applying for a Job

A unit on job application based at the senior high level.

Unit V—Learning to Live as a Good Neighbor

A unit used with the broad title of learning to live as a good neighbor designed in such a way that it could be used for any age level.

A Primary Unit

GROOMING

I. Overview

The development of good grooming habits should be a major objective of any special class for the educable mentally retarded. While it is important for all children to develop desirable habits of cleanliness and personal appearance, it is essential that these habits be specifically taught to the educable mentally retarded. This is an area where the retarded child can succeed equally as well as the non-retarded providing he receives adequate training both in the home and at school.

Although many children develop habits of neat personal appearance and cleanliness at home from the example set by their parents and other members of the family, this is not true for every child. The sub-standard home conditions in which some children live provide them with little opportunity to develop understandings as to why good grooming is essential or to practice good grooming.

II. Objectives

A. To learn the proper care of the skin, hair, teeth and nails.

B. To learn the proper care of their clothing.

C. To learn how to make simple repairs on their clothing.

D. To learn good habits of posture.

E. To enlist the cooperation of the home in making good grooming a continual process.

F. To develop an understanding of why good grooming is essential.

III. Equipment and Materials Needed:

A. Full-length mirror
B. Combs (individual)
C. Tooth brushes (individual)
D. Tooth paste
E. Shampoo
F. Soap
G. Clothes brush
H. Wash cloths
I. Towels
J. Nail file and clippers
K. Bobby pins
L. Needle and thread
M. Variety of buttons
N. Shoe polishing kit
O. Related posters

IV. Procedure:

A. Demonstrations by teacher of proper way to brush teeth, comb hair, polish shoes, etc.

B. Display posters on groomings.

C. Grooming inspection each morning.

D. Show films and filmstrips on groming.

E. Field trips to barber shop and beauty shop.

F. Class visit by nurse to discuss need for good habits of health.

G. Correlation with Reading and Language Activities

1. Picture reading
2. Flash cards of new words discovered in unit.
3. Experience charts based on grooming activities.
4. Label equipment and material used in unit.
5. Read stories related to grooming and let them summarize or discuss these stories.
6. Have students bring pictures from magazines related to the unit.
7. Have students dictate sentences describing a picture.
8. Let students write stories related to grooming (*by dictation*).
9. Write letters requesting information or posters on grooming (*by dictation*).
10. Write letters to resource persons in the community inviting them to talk to the class.
11. Write thank you letters to business firms visited or to resource persons who contributed to the unit.
12. Write letters to parents regarding grooming needs before coming to school each day.

H. Correlation with Spelling Activities

1. Keep a list of new words in unit.
2. Learn correct pronunciation of new words.
3. Learn to spell certain of the new words.
4. Learn the meanings of the new words.

I. Correlation with Number Concepts

1. Learning order of daily grooming activities.
2. Learning quantitative concepts, e.g., large-small, near-far, long-short, etc.
3. Provide opportunities for rote counting.

J. Correlation with Art Activities

1. Make posters demonstrating good grooming.
2. Decorate a "Good Grooming" bulletin board.
3. Design and construct a large chart to serve as a check list for the daily grooming inspection.
4. Make either individual or a class scrapbook on grooming.
5. Develop an exhibit of the supplies and materials needed by an individual to maintain good grooming.

K. Correlate with Music Activities

1. "The Barber", p. 76, *The First Grade Book* (New York: Ginn & Co., 1949).
2. "The Cobbler", p. 56, *Our First Music* (C. C. Birchard & Co., 1951).
3. "The Barber Shop", p. 57, *Our First Music* (C. C. Birchard & Co., 1951).

V. Evaluation:

Does each child brush his teeth regularly? Does each child begin the day with his hair combed? Does each child remember to bring a clean handkerchief to class each day and use it when necessary? Does each child polish his shoes when necessary? Has there been a general improvement in the classes' posture? Is the home actively participating and helping to keep their child well groomed? Are the children conscious of the grooming of others?

BIBLIOGRAPHY FOR THE UNIT ON GROOMING

From Head to Toe. (Chicago, Illinois: John C. Winston Company, 1954), pp. 10, 11, 18, 19, 116-20.

Health and Happy Days. (Chicago, Illinois: Ginn and Company,, 1954), p. 122.

Health In Work and Play. (Chicago, Illinois: Ginn and Company, 1954), pp. 6-27, 68, 134-36.

Health and Safety For You. (Chicago, Illinois: Ginn and Company, 1954), pp. 64-88, 94-100.

How We Grow. (Chicago, Illinois: John C. Winston Company, 1954), pp. 33-41, 43-55.

My First Health Book. (Cleveland, Ohio: Laidlaw Brothers, 1951), pp. 5, 10, 13, 15, 17, 19, 32, 34, 40, 76, 90.

My Second Health Book. (Cleveland, Ohio: Laidlaw Brothers, 1951), pp. 15-17, 29-31, 89, 91, 94, 104, 105.

Side By Side. (Chicago, Illinois: John C. Winston Company, 1954), pp. 6-16, 103-09, 146-47, 150, 151.

(FILMSTRIPS)

Young America, 1952:
Grooming for Girls
Your Clothing
Your Face
Your Hair
Your Hands and Feet

(FILMS—16mm)

1. Encyclopedia Britannica Films:
Care of the Feet
Care of the Skin
Care of the Teeth
Care of the Hair and Nails
2. Library Films (1952):
Be Clean and Healthy
3. Coronet Films (1951):
How Billy Keeps Clean

An Intermediate Unit

SAFETY

I. Overview:

Through the development of this unit, children will be able to evaluate more effectively the way they conduct themselves for their own safety as well as others. It is essential that they learn to play in safe places, to cross the street correctly, to ride a bicycle safely, and to conduct themselves properly on the school bus. Respect for safety helpers must also be learned.

II. Objectives:

1. To learn the need for safety rules and their practice
2. To learn respect for safety helpers
3. To learn safety rules
4. To become familiar with words used in signs (stop, go, danger, etc.)
5. To provide opportunity for self-expression
6. To develop auditory skills
7. To develop fine arts skills
8. To motivate a desire to read and "find out"

III. Contents:

A. Safety at home
   1. With electricity
   2. With fire
   3. At play
      a. A safe place
      b. Safe playthings
      c. Care of toys (putting them away)

B. Safety at school
   1. On the playground
      a. The slide
      b. The giant stride
      c. The seesaw
      d. The swing
      e. The ball field
      f. The windows
   2. In the building
      a. In the halls
      b. Fire drills

C. Safety in the swimming pool
   1. Observance of signs
   2. Obeying rules
   3. Respect of helpers

D. Safety in travel
   1. The family car
   2. The train
   3. The school bus
   4. The bicycle
   5. Walking

E. Safety helpers
   1. The fireman
   2. The policeman
   3. The patrol boy
   4. The doctor

IV. Materials needed:

A. Reading material
   1. Text books (ranging from first through fourth grades)
   2. Newspaper and magazine clippings and pictures
   3. Library books

B. Films and filmstrips
   1. To gain information concerning safety helpers
   2. Observe proper conduct of others

C. Lined charts
   1. To list playground rules
   2. To list bicycle rules
   3. For writing stories

D. Magazines to cut up for pictures

E. Clay for models

F. Kindercity (To construct a model city)

G. Large sheets of paper, crayolas, paints, to make safety illustrations

H. Newspapers to get accounts of accidents for bulletin boards

V. Procedure

A. Suggested ways to motivate students
   1. Show safety filmstrips to arouse interest
   2. Show 16 mm films concerning safety
   3. Visit fire and police stations
   4. Invite such speakers as firemen, policemen, highway patrolmen, and playground supervisors to talk on their particular area of safety
   5. Build a model "town" to use in illustrating safety procedures
   6. Allow students to make original safety posters and slogans

B. Suggested Reading Activities
   1. Use guided reading where the students must read to find the answers to questions. They read silently first; then orally.
   2. "Picture read" as you look at film strips or single pictures, as well as with those illustrations that appear in the reading materials.
   3. After reading a paragraph aloud, ask the student to tell you in his own words what it said.
   4. Help students to understand that reading is "talk written down."
   5. Make flash cards of all of the new words the students will use in this unit. Place

them on a table face side up and ask students to bring you a certain card.

6. Make up riddles and have the students take turns guessing the correct answers.
7. Students summarize stories that the teacher reads to them. The children dictate sentences to the teacher as she writes them down on a large chart at the front of the room where all of the students can see it.
8. Students copy the story as the teacher writes it on the large chart. This is to be kept and used for choral reading later on.
9. Make flash cards of the new words that appear on the chart and ask students to match them by placing the card under the word.
10. Have students frame words and phrases with their hands.
11. Make sentence strips that fit into a pocket chart. Have students put them in sequential order.
12. Keep an abundance of correlated supplementary reading materials on the library table. It should be at least one year below their present reading level.
13. Make a list of all the new words. Use a felt pen and make a chart of these words to put on the bulletin board. The writing should be large enough for all of the students to read from their seats.
14. Make labels to put under drawings on the bulletin board; this helps to visualize new words.
15. Have the students bring pictures from magazines, catalogs, calendars, etc., to make a scrapbook. Encourage them to label pictures or to write a sentence about them.
16. Ask students to look for pictures to put in a picture file. These may also be used in the opaque projector or arranged on the bulletin board.
17. Students like to unscramble sentences. The teacher writes the sentences on the board with the words out of sequence. The students copy the sentences putting the words in correct order.
18. Discuss library rules — write them on a chart for reference.
19. Make posters illustrating how to care for books.
20. Take the students on a tour of the city library.
21. Ask for volunteers to demonstrate ways in which to care for books. They might show how to keep one's place in a book, how to put books on shelves, how to open a book, how to turn pages, and the proper way to hold a book while reading.
22. Encourage children to bring their favorite books to school. The teacher may read them to the class, or the student might want to read them orally.

C. Suggested spelling activities:

1. Have children keep a running list of all of the words used with this unit. File them in a small box in alphabetical order. These will be handy in writing experience stories.
2. Write the new words in simple sentences.
3. Make worksheets for matching words.
4. Learn to spell some new words. (This will depend on each child's level of intelligence.)
5. Learn the meanings of the words through context.
6. Listen to the beginning and ending sounds.
7. Form plurals by adding **s.**
8. Put words in alphabetical order.
9. Identify new words by means of a riddle.
10. Identify a missing word from a sentence.
11. Form the written words correctly.
12. Pronounce the words correctly.
13. Identify words by means of rhyme.
14. Find little words in big words.
15. Write simple sentences from dictation.
16. Build a word by adding the suffixes **ing,** and **ed.**
17. Focus attention on a silent letter.
18. Focus attention on vowels.
19. Focus attention on consonant blends.
20. Use the following method in attacking new words in spelling:
    a. Look at the word. Say it to yourself.
    b. Look at the word. Pronounce it. Say the letters.
    c. Close your eyes. See the word. Try to see the word as you say the letters.
    d. Open your eyes and look at the word to see if you spelled it correctly.
    e. Repeat these four steps over and again until you have learned the word.
    f. Now try to write the word. Compare the word that you have written with that in the book to see if you have spelled it correctly. If you have made any mistakes, go through the first four steps

again until you are sure that you have learned the word.[1]

D. Suggested language activities:

1. Students draw a picture story of their field trip to visit the fire station or police station. Write a sentence describing each picture. Check to see if it is in sequential order.
2. Students summarize stories read to them by their teacher.
3. Students dictate an experience story to their teacher. They copy the story as it is being written on the board. They check their work for spelling, punctuation, capitalization, and neatness.
4. Students write for free literature and pamphlets. They may either fill out coupons or write brief letters. The teacher needs to guide them in doing this; she will also need to supply the addresses.
5. Write a letter to thank any outside speaker who appeared before the class.
6. Students summarize orally what they have learned while working on this unit. Express ideas in complete sentences, speak slowly, clearly, and distinctly. Use new words gained through experience, observation, reading and listening to others.
7. Students select poems to read orally.
8. Use the telephone to demonstrate how to carry on a conversation properly.
9. Locate information in a picture dictionary.
10. Practice following directions.
11. Have oral discussions of television and radio programs.
12. Allow students to tell about a good movie they have seen.
13. Make recording of discussions on tape recorder.
14. Allow students to introduce a speaker to the class. Thank him when he is finished.
15. Write thank you letters.
16. Write invitations.

E. Suggested arithmetic activities:

1. Numbering safety rules.
2. Keeping track of the number of people killed in accidents as listed in the newspapers.
3. Use measuring in making signs and models.
4. Use graphs for measuring number of accidents in an area.
5. Compute losses by individuals in case all objects in the classroom were destroyed by fire.
6. Discuss number of persons killed in major fires. How does this compare with the enrollment in the building?

F. Suggested art activities:

1. Make a mural using either tempera or crayon. Select two of your better art students to fill in the background.
2. Using scrap pieces of yarn, string, or embroidery floss, students can do creative embroidery on burlap, monks cloth, or heavy paper.
3. Colorful wall hangings can be made by using crayon and white cloth. They should be pressed with a hot iron when finished.
4. Make a scrap book of drawings illustrating safety procedures. The teacher draws the picture on large sheets of white paper and the students draw the same picture on a smaller sheet of paper at their own desk. These may be saved and used in the opaque projector. The children are very pleased to see their drawings projected on the screen.
5. Make a safety picture using crayon on large sheets of white paper. Using a brush and light blue tempera paint, go over the entire picture. The wax crayon will show through. These may be attractively mounted on heavy white paper.
6. Mobiles can be made of wire coat hangers. They can be bent into many interesting shapes and can be left black or painted any color you desire.
7. Using clay, plaster of Paris, model cars, people, and houses, build a model city to illustrate safety practices.
8. Using the strip film projector, project a picture on a large white sheet of white paper. Sketch it in with soft lead pencil. Chalk may be used to color it, and then spray it with some type of fixative so that it can be stored without smearing the chalk.

V. Evaluation:

An evaluation of this unit should be made in terms of the objectives. The children should have a decided awareness of proper safety practices and a knowledge of people engaged in helping keep the community safe.

BIBLIOGRAPHY FOR THE UNIT ON SAFETY

Jackson, Kathryn. *Cars.* (New York: Simon and Schuster, 1956).

[1] Ernest Horn, *The Art of Spelling*, Childcraft Volume 14 (Chicago, Illinois: Field Enterprises, Inc., 1954), p. 192.

Norling, Jo, and Norling, Ernest. *Pogo's Truck Ride.* (New York: Henry Holt and Company, 1954).
———. *Donald Duck Prize Driver.* (New York: Simon and Schuster, 1956).

(HEALTH STORIES)

———. *Come Along* 2[1]. (Chicago, Illinois: Houghton Mifflin Company, 1949), pp. 136-49.
———. *Five in the Family.* (Chicago, Illinois: Scott, Foresman, and Company, 1954), pp. 158-62, 175-78.
———. *Growing Your Way.* (New York: Ginn and Company, 1954), pp. 224-29, 230-33, 234-38, 236-40.
———. *Exploring Science Book 1.* (New York: Allyn and Bacon, Inc., 1955), pp. 16-7, 48-9, 64-7, 120-1, 126-7.
———.*Exploring Science Book II.* (New York: Allyn and Bacon, Inc., 1955), pp. 56-7, 100-1, 118-9.
———. *Exploring Science Book III.* (New York: Allyn and Bacon, Inc., 1955), pp. 51-3.
———. *Exploring Science Book IV.* (New York: Allyn and Bacon, Inc., 1955), pp. 65-80, 120-1.
———. *Health and Happy Days.* (Chicago, Illinois: Ginn and Company, 1954), pp. 18-20, 32-34, 35-37.
———. *Health In Work and Play.* (New York: Ginn and Company, 1954), pp. 30-34, 35, 47, 55, 48-53.
———. *Health and Safety For You.* (New York: Ginn and Company), pp. 142-45, 146-48, 149-52, 156-58, 162-65, 167-70, 171-74.
———. *In New Places* 2[1]. New York: Silver Burdett Company, 1945), pp. 140-45.

(MUSIC)

The American Singer Book I. (New York: American Book Company, 1950), p. 17, 18, 19, 22, 25.
The American Singer Book II. (New York: American Book Company, 1954), p. 20, 45.
The American Singer Book III. (New York: American Book Company, 1954), p. 164.
The First Grade Book. (New York: Ginn and Company, 1949), p. 183.

(POETRY)

Time For Poetry. (Chicago, Illinois: Scott, Foresman, and Company, 1952), p. 11, 12.

A Junior High Unit

WEATHER

I. Overview:

The purposes of this unit are (1) to present science experiences conducive to understanding the natural and physical elements which govern weather; (2) to develop scientific attitudes and methods; and (3) to develop concepts regarding the influence of weather upon man and his environment.

II. Objectives:

A. To learn the kinds of elements which make weather.
B. To learn that a change of the elements will change the weather.
C. To learn that weather is a condition of the atmosphere during a short period of time, while climate is the average weather over a long period of time.
D. To learn to expect changes in weather and make preparation for such—protect crops, regulate transportation, plan our daily activities.
E. To learn a year is divided into four seasons—fall, winter, spring, and summer—each of which has its own kind of weather.
F. To learn that plants and animals prepare for changing seasons.
G. To learn that we change our ways of living because of weather and seasonal changes.
H. To learn how to read a thermometer.
I. To realize that air has pressure.
J. To understand precipitation and its changes.
K. To appreciate weather bureau and weatherman forecasters.
L. To realize how man and his way of life depends upon the weather.
M. To understand why the weather changes.
N. To discover that water evaporates into the air from many places.
O. To conclude that heat and wind help water evaporate.

III. Materials and Equipment:

A. Ample bulletin board space
B. Chart paper for writing up the results of experiments.
C. Books, magazines, and pamphlets for the children's use.
D. An assortment of pictures from magazines showing different phases of the weather.
E. Equipment for experiments:
1. one hot plate
2. tea kettle
3. ice cubes or crushed ice
4. a pan or a basin
5. a gallon can with a tightly-fitting lid
6. drinking straws
7. drinking glass
8. glass quart milk bottle
9. hard boiled egg
10. balloon
11. suit box
12. measuring cup
13. measuring spoons
14. indoor thermometer
15. outdoor thermometer
16. as many different types of thermometers as you can find—oven, candy, meat, clinical
17. drawings of 3 thermometers with varying temperatures

18. weather maps and forecasts from local newspapers
19. supply of old magazines that can be cut up by the children
20. newsprint paper available so that those who want can keep a scrapbook of their weather findings
21. poems for listening and sharing time

IV. Procedure:

A. Bulletin board already prepared with various weather pictures.

B. Discussion with the group:
1. What kinds of weather do we have? What makes up weather?
2. What is rain, ice, sleet, hail, snow? What is dew, frost, fog, clouds? What makes them?
3. What is the effect of the sun upon us?
4. How can we prove that air is all around us?
5. What causes wind?
6. How can we keep a record of the weather?
7. How do we use the thermometer?
8. What are some of the ways weather is forecast?
9. What kinds of weather do we have in different seasons?
10. How are people, plants, and animals affected by weather and change of season?
11. What is the difference between weather and climate?

C. Have books to be used by the children available on the reading table.

D. Observe the daily weather and take a temperature reading. Keep a record of the weather and the temperature. Talk about the types of clouds that are observed.

E. Begin experiments—the first can be with the thermometer.
1. Put same amount of water in two containers. Heat one and leave the other at room temperature. Compare the results. (Write the results of each experiment on chart paper for your record.)

F. Use classroom thermometer (teacher-made) to learn how to read a thermometer.

G. On bulletin board put three drawings of thermometers with varying temperatures of 20, 55, and 90 degrees. Children look in magazines to find pictures to match the thermometer temperature. Discuss.

H. Continue experiments with the thermometer.
1. Put water in two bowls. Put a thermometer in each. Add ice to one. Watch the red line. Record results.
2. Show different types of thermometers: oven, candy, meat, and clinical.

I. To show water is in the air, do these experiments:
1. Cool water in a large pan by adding ice cubes and note that moisture forms on the outside of the pan.
2. Hold a cold plate above boiling water to find droplets of moisture which appear on the underside of the plate (simple illustration of the rain cycle).
3. Put some hot water in a pan. Put it on the stove. Hold a cold pan over the water. Water will drip from the bottom and sides of the pan that is held over the hot water because when air is cooled, some of the water in it comes out. (Use for further understanding of the above #2.)
4. Fill a gallon can with water and cracked ice; add rock salt until moisture forms on the outside of the can; continue to add salt until frost forms. (Explain "dew" and "frost" at this point as water vapor in the air "close to the ground".)
5. Use four dishes of different shapes, varying from shallow to deep. Place one-fourth cup of water in each dish. Watch to see from which dish the water evaporates first. For variation, one dish may be covered.
6. Put ice cubes in a tin cup. Watch to see what happens on the outside of the cup. Does the cup leak?
7. Put two wet spots of similar size on the blackboard. Fan one and let the other dry by itself.
8. If a large size acquarium is in the room, children can see that water has to be added every so often? Do the fish drink the water?

K. To show that air is all around us, there are these experiments:
1. Take a full glass of water. Lay a piece of cardboard over it. Hold the cardboard firmly to the glass. Invert it over a basin.
2. Get a hot plate, a gallon can with a tight lid, and a little water. Put several tablespoons of water into the can and heat until the water boils vigorously and a **cloud** appears around the opening. Place the lid on the can tightly. Set the can in a cool place. Watch to see what happens.
3. Take two sheets of paper of like size. Hold

them above the head and let them drop to the floor. Watch them as they glide down. Take one of the same sheets of paper and crumple it. Hold the crumpled piece above the head as before in one hand with the flat sheet in the other. Drop them both at the same time. Compare the time it took for the two to drop.

4. With some drinking straws show that air is inside the straw. Cover one end of the straw with your finger. Immerse into the glass of water.
5. With the drinking straws, immerse one into the water. Before lifting from the water cover one end of the straw with your finger.
6. Take a piece of cardboard. Hold it in your hand and swing it around. Now swing it, holding it straight up.
7. Hold an empty glass, with the open part of the glass downward, in a pan of water. Slowly tip the glass. Little bubbles of air escape and water replaces it.
8. Fold a piece of paper 4" x 4" three times in the same direction. Light the lower end and drop into an empty quart glass milk bottle. Quickly place a peeled hard boiled egg over the mouth of the bottle. The egg will dance up and down and then pop into the bottle.
9. Fill the milk bottle with the egg in it with water. Invert it, hold the egg up with your finger and rinse out the burned paper. Lean your head back until your face is horizontal, press the bottle mouth air-tight over your own mouth and puff hard into the bottle. Lift the bottle and the egg will pop out. Be ready to catch it.
10. Blow up a balloon. Immerse it into a pan of water. See the bubbles the air makes as you let the air out of the balloon while it is still in the water.
11. Use a large paper box, such as a suit box. In one end of the box cut a half-inch hole. Squeeze the sides of the box. Hold paper streamers, or feathers or just your hand in front of the hole as the box is squeezed.

L. Other activities to do:

1. Put the thermometer in different places in the room—near the source of heat, away from the heat, pour cold water over it, pour warm water over it, and place it outside.
2. Carry some smoking material around the room such as incense or the like. The class can see the direction of the air currents in the room. Open a window and see what difference that makes.
3. From a piece of thin wood, make a weather vane. Saw out an arrow. Put it on an end of a stick with a small nail so that it may swing or move freely with the breeze. Take it out where the wind may strike or blow it. The arrow points in the direction from which the wind is blowing.
4. With a coat hanger that has been extended into a long piece of wire, tie a small paper bag on each end of the wire with string. Light a candle and hold it under one of the bags to heat the air in the bag. Decide which is heavier—warm air or cold air.
5. Fill a glass brim full of water. Drop objects into the glass such as coins, nails, clips, thumbtacks, and the like until the water will bulge over the top of the glass, but still will not run over.
6. Into a glass of water drop in some sugar granules. Stir. Taste. Do the same with salt and/or flour. Set aside and let evaporate.

M. Reserve time for oral reports and individual experiments.

N. Make a weather mural showing different kinds of weather.

O. Discuss how weather has an effect on how people dress, the type of home in which they live, the work that they do, and the food they eat.

1. Keep a record of what happens during a storm.
2. Make a simple weather clock.
3. Keep a record of daily weather observations.
4. Draw pictures of the kind of day.
5. Keep a monthly record of rainy days and sunny days.
6. Learn how to read a thermometer indoors and outdoors.
7. Observe dew on the grass or frost on the windowpanes.
8. Look for frozen ice outside.
9. Fold paper and cut six-pointed snowflakes.
10. Discuss how the sun and moon affect the weather.
11. Watch for rainbows.
12. Note that rainbows are made by the sun shining through drops of water in the air.
13. Compare this with the prism.

14. Analyze weather records to see what kind of weather has predominated during a season.

Number Activities

1. These concepts can be discussed and illustrated:
   near and far (distance)
   fast and slow (speed)
   many and few (number)
2. While making a mural, they will have to make decisions regarding "big" and "little" to get the proper perspective.
3. Make a chart of thermometer readings (thermometer outside classroom window). The children will understand the meaning of "higher" and "lower" and their relation to warmer and colder temperatures. Many may count by tens.
4. Each child can make a calendar for each month and keep a weather record for each day. At the close of the month—count the number of sunny days, number of stormy days; then find the difference.
5. Reading thermometer.

Reading Activities

1. Use stories about weather to gain information.
2. Use flash cards of new words pertaining to weather.
3. Write individual weather stories.

Spelling Activities

1. Make a list of all new words used in a weather unit.
2. Arrange the new words in alphabetical order.
3. Write short weather stories using the new words.

V. Evaluation

A. To understand that weather greatly affects our lives.

B. To know that each one must adapt his way to the daily weather pattern.

C. To appreciate the fact that every phase of the weather cycle has its purpose.

VI. Visual Aids

A. **Films**

Weather
Wat Makes Rain
Winds and Their Causes
Air All Around Us
Thunder and Lightning
Autumn Leaves
What Makes Day and Night
Winter in the Country
Weatherman of the Sea
The Weather Station
How Animals Live in Winter
Night and Day; The Seasons
Seasons of the Year
Why Do We Have Day and Night
Winter Is An Adventure

B. **Filmstrips**

Autumn and Winter
In The Winter
What Will the Weather Be?
Winter Comes to the Country
Winter Is Here
The Seasons

VIII. Weather Poems

	Author
Ice	Dorothy Aldis
First Snow	Marie Louise Allen
First Snow	Ivy D. Eastwick
Snow	Dorothy Aldis
Snow	Alice Wilkins
Snow in the City	Rachel Field
Falling Snow	Unknown
Little Wind	Kate Greenaway
Windy Wash Day	Dorothy Aldis
The Wind	Christina G. Rosetti
White Sheep	Unknown
Rain	Robert Louis Stevenson
Who Likes the Rain?	Clara Doty Bates
Spring Rain	Marchette Chute
The Reason	Dorothy Aldis
The Umbrella Brigade	Laura E. Richards
It Is Raining	Lucy Sprague Mitchell
Fog	Carl Sandburg
Little Jack Frost	Unknown
March Wind	Helen Wing
The March Wind	Unknown
Brooms	Dorothy Aldis
Clouds	Helen Wing
Frost	Ethel Romig Fuller
Jack Frost	Unknown
Jack Frost	Unknown
Jack Frost	Helen Bayley Davis
Morning Clouds	Neilie Burget Miller
Nature's Wash Day	Marguerite Gode
Rain in April	Eleanor Hammond
Rainbows	Dixie Willson
Song of the Snowflakes	Annette Wynne
Mirrors	Mary M. Green
Who Has Seen the Wind?	Christina G. Rossetti
Weather	Hilda Conkling
A Kite	Unknown
The Rainbow	Walter de la Mare

VIII. Records

Frosty the Snowman
What Makes the Weather?
Where Does the Sun Go at Night
Jingle Bells
Sleigh Ride
Winter Wonderland

BIBLIOGRAPHY FOR THE UNIT ON WEATHER

Baker, Arthur O., Maddux, Grace C., and Warrin, Helen B. *Around the Corner.* (Chicago, Illinois: Rand McNally and Company).

Bechdolt, Jack. *Oliver Becomes A Weatherman.* (Chicago, Illinois: Follett Library Book Company).

Craig, Gerald S., and Daniel Etheleen. *Science Around You.* Chicago, Illinois: Ginn and Company).
Dowling, Thomas I., Freeman, Kenneth, Lacy, Nan, and Tippett, James S. *Seeing Why.* (Chicago, Illinois: John C. Winston Company).
Fraiser, George Willar, and Others. *Seeing New Things.* (Syracuse, New York: L. W. Singer Company).
Fraiser, George Willar, and Others. *Winter Comes and Goes.* (Syracuse, New York: L. W. Singer Company).
Friskey, Margaret. *True Book of Air Around Us.* (Chicago, Illinois: Children's Press).
Gaer, Joseph. *Everybody's Weather.* (Philadelphia, Pennsylvania: J. B. Lippencott Company, 1944).
Goldberg, ———. *Wait for the Rain.* (E. M. Hale Company).
Mabie, Peter. *The Little Duck Who Loved the Rain.* (Chicago, Ilinois: Follett Library Book Company).
Melrose, Mary. *Raindrops and Muddy Rivers.* (Chicago, Illinois: Follett Library Book Company).
Parker, ———. *Air About Us.* (Evanston, Illinois: Row Peterson and Company).
Parker, ———. *Clouds, Rain, and Snow.* (Evanston, Illinois: Row Peterson and Company).
Parker, ———. *Thermometer, Heat and Cold.* (Evanston, Illinois: Row Peterson and Company).
Parker, ———. *Water Appears and Disappears.* (Evanston, Illinois: Row Peterson and Company).
Podendorf, Illa. *True Book of Science Experiments.* (Chicago, Illinois: Children's Press).
Podendorf, Illa. *True Book of More Science Experiments.* (Chicago, Illinois: Children's Press).
Schneider, Herman. *Everyday Weather and How It Works.* (New York: McGraw Hill Book Company, Inc., 1951).
Schneider, Herman, and Schneider, Nina. *Science for Here and Now.* (D. C. Heath Company).
Smith, Victor C.. *Science Workbooks, Grades 1, 2, 3.* (Austin, Texas: The Steck Company).
Tannehill, ———. *All About Weather.* (Chicago, Illinois: Follett Library Book Company).
Ware, Kay L. *Things Around You.* (Austin, Texas: The Steck Company).
Wyler, ———. *First Book of Weather.* (Chicago, Illinois: Follett Library Book Company).
Wyler, ———. *First Book of Science Experiments.* (Chicago Illinois: Follett Library Book Company).
Zim, Herbert S. *Lightning and Thunder.* (Chicago, Illinois: Follett Library Book Company).
Zim, Herbert S., and Burnett. ———. *Weather.* (Chicago, Illinois, Follett Library Book Company).
Zolotow, ———. *The Storm Book.* (E. M. Hale Company).

(TEACHER'S REFERENCES)

Arbuthnot, May Hill. *Time for Poetry.* (Chicago, Illinois: Scott, Foresman, and Company).
Blough, Glenn O., and Campbell, Marjorie H. *Making and Using Classroom Science Materials in the Elementary School.* (New York: Dryden Press, 1955).
Blough, Glenn O., and Huggett, Albert J. *Elementary School Science and How to Teach It.* (New York: Dryden Press, 1956).
Hubbard and Babbitt. *The Golden Flute.* (New York City: The John Day Publishing Company).
Lynde, Carleton J. *Science Experiments With Home Equipment.* (Scranton, Pennsylvania: International Textbook Company, 1937).

A Senior High Unit

APPLYING FOR A JOB

I. Overview:

It is very important that educable mentally retarded teenagers receive guidance in selecting jobs within the range of their capabilities. The need for teaching skills in job application procedures becomes obvious when we consider the limited number of jobs that the educable mentally retarded individual is qualified to hold; plus the fact that he may be competing for any given job with one or more persons of superior intellect and ability.

II. Objectives:

A. To develop a reading and writing vocabulary necessary to make job applications.

B. To develop an awareness of appropriate dress and grooming for making job applications.

C. To develop adequate job interview skills.

D. To develop the ability to make realistic job appraisal.

III. Materials and Equipment Needed:

A. Application forms from local industries
B. Forms for health insurance
C. Time cards
D. Blank checks
E. Grooming Aids—printed articles
F. Maps of the city
G. Tape recorder (record a demonstration interview)
H. Demonstration telephones
I. Printed materials from State and Federal Employment Agency
J. Films and filmstrips
K. Pamphlets and tests dealing with occupations and telling the skills each occupation requires
L. Classified ads from local newspapers

IV. Procedure:

A. Introduce the unit through the use of vocational guidance books.

B. Discuss job opportunities.

1. Discuss local job opportunities as to realistic opportunity for these children, taking into consideration wages versus expenses incurred on the job.
2. Discuss job opportunities away from home in the same realistic manner as stated above.

C. Write descriptive articles on a realistic basis for mentally retarded children's capabilities.

1. Suggested jobs to write about:
   a. Theater
      1. Ushers
      2. Candy vendor
   b. Foods
      1. Bus boy
      2. Dishwasher
      3. Food preparer
      4. Waitress
   c. Bakery helper
   d. Messenger boy
   e. Janitor
   f. Hospital
      1. Nurse's aide
      2. Food handler
      3. Laundry helper
   g. Industrial
      1. Assembly line worker
      2. Sweeper
      3. Chip hauler
   h. Grocery store
      1. Stock boy
      2. Sacker
      2. Carry out boy
   i. Feed store
      1. Stock boy
      2. Handy man
   j. Landscape worker
   k. Farm worker
   l. Laundry worker
   m. Trailer camp attendant
   n. Stone mason helper
   o. Baby sitter

D. Discuss qualifications employers expect in an employee: (use films to introduce)
   1. Need for ability to read application form
      a. Sample application forms from local firms and businesses
      b. Pupils practice filling in application forms for various jobs
      c. Teacher preparing sample application forms for specific jobs
      d. Pupils filling in sample application forms
      e. Prepare list of spelling and reading words made up from the application forms
   2. Need for rules of how to look for a job and how to apply for it:
      a. Use socio-drama
         1. Teacher plays role of employer while the pupils practice applying for a job. The remainder of the class votes for the one who would get the job.
         2. Teacher plays role of how to apply for job correctly and how to apply incorrectly. The pupils try to point out incorrect portrayal.
         3. Pupils demonstrate correct and incorrect ways of applying for jobs. Class attempts to point out incorrect portrayals.
         4. Teacher plays role of employer who must turn down the applicant for a job. Pupils demonstrate correct and incorrect ways of handling this situation.
      b. Use tape recorder to record a demonstration interview; play back and discuss.
      c. Read "help wanted" ads to discover the various methods of making the initial contact (e.g., telephone, call in person, written applications, etc.).
         1. Use socio-drama to practice phone applications.
         2. Have students compose an application letter in class; then have each student compose a personal letter of application.
         3. Have the students practice finding want ads in the paper.
         4. Have class discussions about jobs found in paper in view of the student's limitations and the requirements of the job.
      d. Help pupils recognize their capabilities and limitations.
         1. Have students make a self-inventory.
            a. List things I can do
            b. List things I cannot do
            c. List part-time jobs I have held in the past
      e. Have pupils make a job survey of their community.
         1. Invite representative from State Employment Agency to talk to the class.
         2. List business firms that might need officer helpers, stock boys, janitors, etc.
         3. List cafes and restaurants that might need waitresses, dishwashers, carhops, busboys, etc.
         4. List firms and restaurants that might have jobs suitable for students.
      f. Discuss appropriate dress and grooming for job application.
         1. Have students make a checklist of

appropriate dress for girls and for boys when applying for jobs as opposed to dress on the job.

2. Have students make a checklist of good grooming (clean fingernails, clean body, etc.).

g. To give students security, discuss the first day at work.

1. Getting ready to go
   a. Proper dress
   b. Time for work
      1. What time do I have to get up in the morning to be at work on time?
      2. What time do I have to be at work?
      3. Set the alarm in order to be prompt.
      4. Allow time to dress, wash, eat, prepare lunch, etc.
2. Location and direction
   a. Practice locating addresses on map.
   b. Practice locating firms in the telephone directory.
3. Transportation
   a. How do I get to work?
      1. walk
      2. bus
      3. street car
      4. own car
      5. ride in car pool
      6. train
   b. What must I know?
      1. Schedule of bus or street car
      2. Location of bus stop
      3. Proper change for bus fare
      4. Behavior on bus
      5. How to make bus stop
   c. If I get lost, what shall I do?
      1. Look for a policeman
      2. Ask bus driver or street car motorman for directions
   d. What do I do about lunch and a coffee break?
      1. Carry lunch
         a. What do I want to take?
            1. Bulk and price
            2. Convenience of packing
         b. Cost
            1. Right kinds of food
            2. Enough to eat
            3. Adequate daily budget
   c. Lunch schedule
      1. When do I go to lunch?
      2. How long is my lunch time?
2. Buy lunch
   a. Where do I go?
      1. Plant cafeteria
      2. Drug store
      3. Restaurant
   b. What must I know?
      1. Difference in the above eating places
      2. Reading a menu
      3. What to do with my dirty dishes
      4. Where and how to pay my check

E. There should be time given to teaching the students the reading and writing of all the words necessary to carry on all the preceding activities. This practice needs to be done in the form of interesting drill, e.g., making sample menus and giving a party whereby the menus can be used in ordering, etc.

F. There should be time given to establishing all arithmetic facts necessary to carry on all the preceding activities. Practice in dealing with money needs the actual handling of real money to effect a transfer.

V. Evaluation:

Has each student learned to write the correct personal information that might be requested by an employer? Has each student developed a reading and writing vocabulary necessary for making a job application? Has each student learned how to initiate and carry on a job application and/or interview?

BIBLIOGRAPHY FOR THE UNIT APPLYING FOR A JOB

Allee, Veva Elwell. *The Frozen Foods Plant.* (Melmont Publishers).

Allee, Veva Elwell. *From Sugar Beets to Beet Sugar.* (Melmont Publishers).

Burket, Gail Brook. *Manners, Please.* (Chicago, Illinois: Beckley Cardy).

Carson, E. O., and Daly, Flora. *Teen Agers Prepare for Work.* (Castro Valley, California).

Cass, Angelica. *Your Family and Your Job.* (Noble and Noble Publisher, Inc.).

Dean, Lucille Dennhardt. *At the Laundry, At the Dry Cleaners.* (Melmont Publishers).

Huntington, Harriet. *At the Service Station.* (Melmont Publishers).

I Want To Be Books. (Chicago, Illinois: Children's Press).

Into Your Teens. (Chicago, Illinois: Scott, Foresman, and Company).
Life Adjustment Series. (Chicago, Illinois: Science Research Association).
Rochester Occupational Reading Series. (Syracuse University Press).
Sanders, Ruby Wilson. *Behind the Scenes in A Super Market.* (Melmont Publishers).
Stephenson and Millet. *As Others Like You, Etiquette for Young People.* (McNight Publishing Company).

(FILMS)

Act Your Age—Coronet Films
Mind Your Manners—Coronet Films
Audio-Visual Materials—Bureau of Audio-Visual Instruction
Extension Division
State University of Iowa
Iowa City, Iowa

A Unit Adaptable for Any Level

LEARNING TO LIVE AS A GOOD NEIGHBOR

I. Overview:

After a study of the family, the school, and the related centers of early child interest, the boys and girls are now ready to extend their experience into the larger environment—the community. Since all social development proceeds from dependence on others to self-dependence, and from self-concern only to concern for others, the process should emphasize the assumption of responsibility gradually.

By helping the children gain insights into ways in which people work, play, and live together, wholesome development will be promoted which will contribute to the children's understanding of human relationships. Through such experiences, they will begin to understand the interdependence in community living and to assume responsibility for good citizenship in a democratic society.

II. Objectives:

A. To enlarge the children's environment so they recognize the interdependence of people in all walks of life in the community.
B. To help children realize that by being careful citizens in the schools and at home they are cooperating with the community helpers.
C. To stimulate a degree of curiosity and interest which will tend to lead into some new lines of activity, develop a sense of values, and an appreciation for democratic living.
D. To develop some initiative in setting up and attacking problems as independently as can be expected of children at this level of mental development.

III. Materials and Equipment

A. Reference books and magazines
B. Newspapers
C. Bulletin board
D. Filmstrips and slides
E. Moving pictures
F. Filmstrip and slide projector
G. Moving picture projector
H. Pictures
I. Posters
J. Charts
K. Maps
L. Art supplies
paint
crayons
brushes
construction paper
pencils
M. Telephone

IV. Procedure:

This unit may be broken down into four areas of interest for study and activity: Workers—Who Keep Us Safe and Well; Workers—Who Produce Our Basic Needs; Workers—Who Help Us Communicate and Travel; Workers — Who Help Us Play. It is a unit that may be appropriately taught at each of the age levels by adding problems and resultant learning activities commensurate to the interest and ability level of the class to those suggested in this outline.

A. Workers—Who Keep Us Safe and Well

1. **Problem:**
What neighbors help to keep us safe and well (firemen)*

(Art)** a. **Experiences for Learning**
1. Make a chart: fire departments which help to keep us safe and well.
(Art & Spelling) 2. Bulletin board: pictures of firemen at work; caption.
(Language) 3. Show film: "The Fireman," and "Fire Prevention," "Our Community Workers, The Firemen".

*These activities were directed toward an understanding of the work of a fireman. Other workers who keep us safe and well, i.e.: the doctor, policeman, nurse, etc., could be studied.

**To the left of each of the activities within the various experiences for learning are the subject matter areas that may be correlated with the activity.

(Reading)
4. Read: *The Big Book of the Fireman* and show pictures.

(Art, Spelling, Arithmetic)
5. Magazines and newspapers brought in by the children to be used in class scrapbook.

(Language, Spelling)
6. Develop a vocabulary list.
7. Trip to fire station
   Preparation: Questions to find answers
   Rules of conduct
   Follow up and an evaluation

(Lang., Arith., Read.)
8. Discussions: The fire drill and how it can be improved.

(Language, Reading)
9. Check list: fire hazards found in homes and schools.

(Reading, Spelling, Lang.)
10. Practice in learning to use the telephone directory in reporting a fire or accident and in becoming acquainted with the alarm system.

b. **Culminating Activities**

1. Invite parents
   a. Dramatize stories about fire and fire equipment.
   b. Sing songs about firemen.
   c. Read reports and stories.
2. Exhibit
   a. Booklets
   b. Murals
   c. Posters
3. Demonstrate a fire drill

2. **Evaluation:**
The child now realizes and appreciates the work done by the community helpers who protect his health and safety; habits and attitudes have been developed which create an awareness of the relationship of his responsibility towards health and safety workers. He has now developed a desire to participate as a member of a democratic community, which offers him protection in health and safety.

B. Workers—Who Produce Our Basic Needs

1. **Problem:**
Why do we need shelter***

a. **Experiences for learning**

(Lang., Arith.)
1. Discuss basic needs
   (Personal needs—protection, eating, sleeping, and working)

(Lang., Reading, Arith.)
2. Discuss need of shelter (people, animal, machinery).

(Lang., Arith.)
3. List the reasons for their differences in homes, climatic conditions, suitability of materials, availability of materials, building skill.

(Read., Spell., Lang.)
4. Read: *The Story Book of Homes*
5. Movie: Showing a house in various stages of development.

2. **Problem:**
What are our homes like today

a. **Experiences for learning**

(Lang., Spell.)
1. Bring in pictures of your own home; discuss the types and differences. Organize and label the pictures according to types.
2. Write for samples of various materials used in constructing a home and discuss—:
   Lumber—Forest
   Stone—Quarries
   Brick—Clay
   Stucco—Factory

***Also included in this area could be problems and activities pertaining to food and clothing.

Concrete—Plant
Glass—Plant
Steel—Mill
Aluminum—Mill

(Language) 3. Show the following motion pictures:
"Building a Home"
"Brick and Stone Mason"
"Shelter"
"Plumbing"
"Painting and Decorating"

(Lang., Read., Spell.) 4. Discuss the kinds of work done by each worker:
Carpenter
Electrician
Plumber
Painter
Brick Layer

(Spell., Language) 5. Children make a list of standards for keeping homes neat and protecting furnishings.

3. **Problem:**
What makes a house a home

a. **Experiences in learning**

(Language) 1. Discuss the kind of living that goes on in the home and each member's responsibility in it. (duties, courtesy, respect for others, cheerfulness, cleanliness)

(Language) 2. Discuss the child's contribution to the appearance of the home and yard.

3. Bring pictures of well-kept yards and gardens.

(Spelling) 4. First duties and ways of being courteous.

(Art) 5. Make crafts for use in home.

b. **Culminating activities**

1. Exhibit dolls' dress in different materials representing workers with their tools or products. Indicate some of the learning by showing examples of projects and activities connected with that worker. Invite parents to the exhibit. Serve food prepared by the children.
2. Make a mural depicting all workers studied. Behind them draw products, tools or activities which will explain their work.
3. Have children develop a program using songs, poems, choral readings, and reports with children appropriately dressed to interpret work of the community helpers.

4. **Evaluation:**

Through the study of basic needs, the children grow in understanding and appreciation of the difference between real basic needs and the concepts of needs which grow out of their different social environments.

They have learned to respect many kinds of people and their work through an understanding of the interdependence of people in the different walks of life.

They have grown in understanding of the need of responsibility on the part of each individual in order to acquire democratic behavior and enjoy real freedom.

C. Workers—Who Help Us Communicate and Travel

1. **Problem:**
How is communication making us better neighbors

a. **Experiences for learning**

(Language)
1. Take a trip to a community center to discover how they serve us and help us become neighbors: the telephone office, the post office, a radio station, a T. V. station, a newspaper office.

(Reading, Language)
2. Read and discuss stories from the following:
MacGregor, Ellen, *Tommy and the Telephone*, Albert Whitman & Co., Chicago, 1947.
Susan's Neighbors, Hanna, pp. 60-61.
Here Comes the Postman, Park, pp. 59-63.

(Art, Arithmetic)
3. Construct a miniature communication center in order to help children clarify their concept of this service.

(Language)
4. Discussion of how our letters reach their destination: Duties of the postman
The post office workers who help us
The old versus the new

(Language)
5. The use of audio visual materials to see our community helpers in action.
Films: *Mailman*
Filmstrips: *The Postal Story*
Transportation and Communication
Railroads and Our Mail

2. **Problem:**
How is travel helping us to become better neighbors

a. **Experiences for learning**

(Arith., Read.)
(Lang., Spell.)
(Arithmetic)
1. Plan an imaginary trip by one or more of the means of travel.
2. Decide how we shall travel on our imaginary trip by discussing the following:
trains are safe
boats are slower
airplanes are faster
train travel is inexpensive
our decision depends also on where we go

(Lang., Art, Arith., Read., Spell.)
3. Dramatization: "Our Trip"
arrange chairs as a train
number the seats for reservations
make tickets
have a dinner
conductor—call stations
practice safety rules

(Lang., Arith., Spell., Read.)
4. Discussion of the following:
comparing the old methods of travel and the new
walking: how did Indians travel?
carrying and dragging: are these methods still used?
use of animals: what help did people get from animals?
wagons and carts
early automobiles: how fast did they go?

b. **Culminating activities**

1. Excursions to the community and travel centers such as:
a. airport

b. train and bus depot
c. telephone office
d. post office

2. Make clay reproduction of:
a. airport
b. neighborhood
c. methods of travel

3. **Evaluation:**
Having completed the study of this area of interest, the children should have become familiar with the work of the community helpers who assist us in communication and travel. They should have developed an appreciation of these workers and themselves.

D. Workers—Who Help Us Play

1. **Problem:**
What are the values derived from recreational facilities

a. **Experiences in learning**

(Lang., Spell., Read.)
1. Discussion: the fun of working and playing together as citizens. How physical health can be improved through facilities provided for us. Develop appreciation through comparison of facilities today and long ago.

(Art, Spell.)
2. Bulletin Board: safety pictures with safety captions. Right way—wrong way

(Arith., Art, Spell.)
3. Make a map of neighborhood indicating safe area of play.

(Lang., Spell., Read.)
4. Written expression: Make a newspaper about playground and park safety. Write letters to the caretaker of a park visited. Experience charts composed after a visit to a park.

2. **Problem:**
What responsibilities should we share in enjoying, improving, and maintaining the parks

a. **Experiences in learning**

(Lang., Spell., Read.)
1. Discussion: we should be sure to notify park authorities of any damage to parks. We should learn to share (tables, drinking fountains, playground facilities). We should wear clothing to fit the occasions.

(Art, Spell., Arith.)
2. Bulletin Boards: Display pictures of parks. Pictures from newspapers and magazines showing how our parks are maintained and improved.

(Language)
3. Share experiences: Tell how to play games. Pictures showing how children have already enjoyed parks.

(Lang., Spell., Read.)
4. Written expression: Write letter to caretaker asking how we can share responsibilities of the park. Write letters to other grades asking them to help in keeping parks clean and beautiful. Write story of our trip to the park.

b. **Culminating activities**
1. Display scrapbooks of stories written about park and playground. Letters written to caretaker of park.
2. Take a trip to a recreational center.

3. **Evaluation:**
These activities should have contributed to the child's awareness of all the recreational resources available in their communities. He should have a deeper understanding of healthful living both from the physical standpoint and from the standpoint of better citizenship.

BIBLIOGRAPHY FOR THE UNIT LEARNING TO LIVE AS A GOOD NEIGHBOR

(For Workers Who Keep Us Safe–Firemen)

Johnson, Eleanor M. *Unit Study Book.* "Firemen"–Pamphlet #103. (Columbus, Ohio: American Educational Press, Inc., 1934).

Pryor, William Clayton. *The Fire Engine Book.* (Chicago, Illinois: Harcourt Brace and Company, 1935).

Zaffo, George. *The Big Book of Real Fire Engines.* (New York: Grossett and Dunlap, 1950).

(For Workers Who Produce Our Basic Needs–Shelter)

Bailey, Bernadine. *Homes of Long Ago.* (Chicago, Illinois: Follett Library Book Company, 1937).

Bailey, Bernadine. *Homes of Today.* (Chicago, Illinois: Follett Library Book Company, 1937).

Hale, Helen. *Let's Make A Home.* (Chicago, Illinois: World Book Company, 1938).

Pease, Josephine. *The Story of Houses.* (Nelson Company, 1938).

Petersham, Maud. *The Story of Houses.* (Chicago, Illinois: Grossett and Dunlap, 1937).

General Reference:

Lilienthal, Sophie. *Sails, Wheels and Wings.* (New York: Grossett and Dunlap, 1937).

Specific References:

Hurst, Earl Oliver. *Wonder Book of Boats.* (New York: Wonder Books, Inc., 1953).

Johnson, Eleanor M. *Airplanes.* (Columbus, Ohio: Charles E. Merrill Company, 1939).

Weir, R. C. *The Wonderful Train Ride.* (Chicago, Illinois: Rand McNally and Company, 1947).

(For Workers Who Help Us Play)

Cutright, Prudence. *Living Together In Town And Country.* (Chicago, Illinois: Macmillan Company, 1944).

Hader, Berta. *Little Town.* (Chicago, Illinois: Macmillan Company, 1941).

Hanna, Paul. *Susan's Neighbors.* (Chicago, Illinois: Scott, Foresman, and Company, 1937).

Zatotaw, Charloth. *The Park Book.* (Harper and Company, 1944).

Chapter IV

SKILLS AREAS IN THE CURRICULUM

Intended purposes and procedures for carrying out the experience unit work have been explained in some detail in the foregoing sections. The experience unit is fundamentally content-centered: it attempts to treat substantial ideas of practical importance in the lives of the pupils. It requires the largest single time allotment in the schedule of the educable mentally retarded class.

Understandably, the experience unit cannot, at the same time, carry the entire responsibility of an established curriculum plan for the class. Many important skills do not fit naturally into the experience unit plan; yet, skills need attention. It would seem unwise either to entrust the development of important skills to chance consideration as they happen to fit into the experience units being taught or to force the integration of such skills into units which cannot properly accommodate them without some possible ill effect. Thus it would appear necessary that the teacher consider the skills as work apart from experience unit work upon frequent occasion, and that a definite classroom program in skills development be considered vital by the teacher. It is the purpose of this section to direct attention to areas which may be contributed to by work in the experience unit, but which contain skills which need systematic development through work apart from the experience unit.

Because of obvious space and time limitations, this section does not presume to offer a complete program that will fit each and every classroom. It does attempt to advance some guides that the teacher may use in applying the ideas of systematic skills development and in expanding her own classroom program.

Language Arts Skills

The basic importance of the language arts skills in a curriculum for the educable mentally retarded cannot be discounted. The impression that society gains of a mentally retarded person is conveyed primarily through his physical appearance and his ability to communicate directly with persons. Such communication involves not only ability to speak in an understandable manner; but, also, the ability to comprehend simple written language; and, in most cases, the ability to transmit simple ideas through writing. Clearly, the simple skills of speaking, listening, reading, spelling, and handwriting are involved as necessary achievement before the educable mentally retarded person can hope to be accepted in society as a contributing member.

Reading

Any program for teaching reading is necessarily a systematic program, for practice is a key element in learning to read. Many repetitions of a word are necessary before the word becomes a part of the educable mentally retarded pupil's sight vocabulary. However much the experience unit may contribute toward building reading ability, it cannot exercise the kind of control of vocabulary and repetition of words needed for steady growth of sight vocabulary. Experience reading[1] during the experience unit makes great contributions toward reading growth in terms of providing meaningful background experiences for reading and in establishing favorable attitudes toward the worth of the reading process in the pupil's mind. However, much basic vocabulary and many word attack skills must be furnished in a directed reading program. A few guides for the development of such a program follow:

1. It is customary to think of reading performance in levels. Any particular reading level will not be reached by a mentally retarded pupil until he has reached the approximate mental age corresponding to that reading level. Thus, the program of beginning reading (M.A. 6-0 to 6-6) will not usually be started for a group of educable mentally retarded pupils until they are approximately nine or ten years old chronologically. The reading work previous to this will be a readiness program. It becomes clear, also, that because of delayed development, systematic reading instruction must be carried on with mentally retarded pupils as long as they remain in school.

2. The question of suitable materials for reading instruction is the largest single problem in the area of reading that the teacher has to solve. Materials must not appear childish to the pupil, yet they must be simple enough so that he may find success in using them. The teacher is advised to survey carefully available commercial reading

[1] See L. A. Lamoreaux and D. M. Lee, *Learning to Read Through Experience* (New York: Appleton-Century, 1943), for an insightful presentation of procedures and values of experience reading.

materials at the readiness and beginning reading levels. Small publishing companies, particularly, publish material that is adaptable for use in educable mnetally retarded classes. Older pupils may use with success carefully-selected basic readers intended for younger normal classes, or certain books intended for use with remedial reading cases (see bibliography, pp ——).

3. It seems unlikely that a distinct methodology for the teaching of reading to educable mentally retarded pupils exists. Nevertheless, certain modifications of a normal basic reading program appear to be necessary. For example, the type of reading utilized no doubt is designed for greater practical application to persistent life situations than is true in most formal reading programs. Various adaptations needed in reading instruction for the educable mentally retarded are pointed out in a concise manner in Kirk's *Teaching of Reading to Slow-Learning Children* (Chicago, Illinois: Houghton Mifflin Co., 1940).

4. Every teacher of an educable class is urged to use the services of the local reading consultant wherever such a service is available. Only through a carefully-conceived program of diagnostic and achievement testing, followed by appropriate instruction, can true remedial cases in the class be brought to light and given assistance. Reading consultants, too, will be a valuable source for suggestions concerning appropriate materials, general problems of grouping for reading instruction within the educable class, and individualized approaches for especially difficult cases.

5. When evaluating the progress of educable mentally retarded pupils in reading, the teacher is cautioned to remember that the area of reading is a persistently difficult one for such pupils. The ability partakes of abstract thinking to a large degree. Reading progress will be slow in comparison to some other curriculum areas. It is not unrealistic to pose a fourth or fifth grade reading ability as the maximum ultimate achievement for most educable mentally retarded pupils in special classes. Expectations for pupils of elementary school age must be conceived by the teacher accordingly. If the program of reading instruction has been aimed at satisfying practical needs and encouraging an interest in reading, as well as providing the basic skills of reading, a fourth or fifth grade level of competency should be sufficient to meet the reading tasks demanded of the pupils in their adult lives.

Reading Program

Primary — C.A. 6-9

A. Reading Readiness*
   1. Development of rich experimental background. Excursions, simple experiments, dramatics, listening to teacher read, records, movies, film strips, practical experiences in living in the classroom—duties, parties.
   2. Learning to listen
   3. Learning to speak
   4. Some aids for the development of thinking skills
      Memory training: following directions, reproduction of patterns made by teacher on peg board, etc., playing games involving memory process; Making generalizations: activities which require classifying and matching objects or pictures (put together things that are sweet, or put together things that are toys), activities which require seeing differences; Developing sequence of ideas: series of 2 to 4 pictures illustrating a story, health charts showing order of events of a child's day, sequence of personal experiences; Developing the ability to draw conclusions: short riddles, guessing endings to stories, giving opposite meanings (tall-short), detecting simple absurdities either in pictures or stories.
   5. Visual Training
      Workbooks which teach child how to recognize differences, likes first in objects, externally and internally, and progressing on to symbols.
   6. Auditory Training
      Begin with gross sounds and continue towards relating sounds to words, e.g., rhyming words, words that begin alike, and words that end alike.
   7. Incidental labeling of objects within the classroom, e.g., clock, door.

B. Experience Charts

C. Introduction of a basic series in order to develop a functional vocabulary pre-primers.
   1. Develop a basic sight vocabulary by use of supplementary worksheets which utilize—vision, auditory—motor.
   2. Primers, grade books and bridge books.

* Continue readiness activities until the teacher feels the child is ready to go further.

Intermediate C.A. 9-12	Junior High C.A. 12-14	High School C. A. 14-18
Steps B and C may be necessary at this level	Step D may be necessary at this level.	Continue developmental reading where feasible.
D. Reading 1st to 3rd grade material with understanding 1. Intensive word analysis and word attack skills	E. Reading 2nd to 4th grade material with understanding. F. Further use of newspapers, menus, directions, in-	Reading should now be used mainly as a tool to gain information, re: social security, job placement, road maps, advertisements, newspapers, and to provide

should be taught.	crease basic sight vocab-	recreational read-
2. Utilize newspapers, magazines for reading activities and other supplementary materials.	ulary to include needed words for daily living.	ing. Homemaking units, vocational units and work study or job placement programs can be utilized to emphasize the need for reading.

Handwriting

Procedures for teaching handwriting to educable mentally retarded children would seem to be very similar to procedures used with pupils of normal intelligence. As with normal pupils, the bulk of handwriting instruction is carried on in the functional setting of unit work—making copies of experience reading stories, writing short statements of important ideas, writing letters requesting information or thanking someone for assistance, and the like. These will be the most important activities through which handwriting is taught to the educable mentally retarded class.

Practice in the skills of handwriting is most useful when it grows out of deficiencies shown in handwriting as used in the experience unit work. Legibility rather than speed is the criterion by which a teacher may judge pupil achievement in this area. Frequent monotonous practice aimed at the acquisition of speed has no place in the instructional program of handwriting for these pupils. Added speed of handwriting is an advantage only when legibility does not suffer as a result. Following are a few guides the teacher might keep in mind in planning practice in handwriting.

1. Educable mentally retarded pupils have a need to be acquainted with both manuscript and cursive handwriting styles. Of the two, manuscript is probably more easily mastered and is required in more crucial situations in adult life. However, the cursive style is used in personal letters by most adults and in a variety of other situations as well, so there is a need for the educable mentally retarded pupil to know how to read the style, if not write it. A wise principle to follow might be to concentrate effort on acquiring skill in the manuscript style until the pupil is of approximately junior high age, when the importance of the cursive style in personal letter writing becomes more obvious to the pupil.
2. Correct letter forms should be displayed in the room at all times. Frequent reference made to them during practice sessions will help in establishing their use as guides by the pupils.
3. The correct procedure for the formation of individual letters (and later, connective strokes in the cursive style) is a suitable focal point for class and individual instruction. Handwriting instruction, to be effective, must be specific and direct.
4. Pupils can be encouraged to recognize illegibilities in their own handwriting. Although the abilities of comparison and analysis are not as keen with these individuals as with pupils of normal intelligence, they can be taught to spot errors in their product. Practice time can then be spent to good advantage by having the individuals spend their practice session working to correct their own errors.
5. Because spelling and reading difficulties are apparent in educable classes, practice exercises in handwriting are most advantageously done as copying from simple material prepared by the teacher for such purposes. This material may be based upon general class difficulties as the teacher has observed them. Individual periods are best kept short for purposes of holding pupil interest.

Spelling

There is little debate concerning what should be the ultimate goal in spelling for educable mentally retarded pupils: they should know how to spell correctly the important words they will use in their own adult writing. Ample evidence also exists concerning which words of the English language are used most often by adults in writing. The item of frequency of use by adults is one determiner of words which make up all of the basic word lists for modern spelling textbooks. For older educable mentally retarded pupils, it seems reasonable that time devoted to spelling be aimed at building a reservoir of these commonly-used important words. Learning how to spell key words from experience units may help in carrying on the work of the unit, but it hardly constitutes a sound systematic approach to knowing how to spell a large number of words that are valuable because of the frequency of their use in everyday writing.

Once the alphabet letters are learned and the concept of what spelling is has been established, the teacher might very well use one of the modern spelling textbook series as a source for word selection. In many cases, weekly lists will have

to be shortened in order to adapt them for use. The question of difficulty may arise in the teacher's mind concerning words in the list. An invaluable reference in this respect is *The New Iowa Spelling Scale* (State University of Iowa, Bureau of Educational Research and Service, Iowa City, 1954). By reference to the *Scale*, the teacher may see the average difficulty of a word for normal graded classes and use this in adjusting the word list to fit the capabilities of her educable class. The Durrell Word List (Boston University Educational Clinic) will be of use, also.

Special methods for teaching spelling to mentally retarded or slow-learning pupils have been explored rather extensively in the last twenty-five years. The best-known single approach is that advocated by Fernald[2], which makes use of several types of imagery. As Fernald suggests, the study-test approach, even though more time-consuming, is generally recognized as a better approach than the test-study approach for the educable mentally retarded. Because of meager vocabulary development of the educable pupils, extra time spent in introducing the words in the word lists and in carrying out exercises to establish their meaning would seem to be time well spent. With this in mind, it is likely that the time allotment for spelling in the weekly schedule for the older educable classes may exceed that for normal classes of a corresponding mental age.

Arithmetic

Instruction in arithmetic for the educable mentally retarded pupil must be aimed at providing work with the most basic tools of working and thinking with numbers. If, by the time of leaving school, the pupil has grasped the fundamental processes, can apply them to actual problem situations, and has some working knowledge of social procedures in money matters, the school has fulfilled its function.

Because of the intrinsic difficulty of mathematics, work for the educable mentally retarded pupil will be given noticeably later in the school life than of the normal pupils. The youngest group (C.A. 7-9) will not have the experiences of the usual second or third grade groups; instead, its work will be in the nature of a readiness program involving rote and rational counting, manipulation of concrete materials (matching groups, selecting the correct number of objects, etc.), learning to write number names, learning to read numbers, and other activities normally found in kindergarten and first grade.

There is even more cause for trying to make arithmetic experiences meaningful for the educable mentally retarded than for normal pupils. One cannot assume that the retarded pupil will develop his own shortcuts for computation or that practice alone will be insurance against forgetting. The retarded pupil must be taught arithmetic methodically (this does not mean in an uninteresting manner). He needs frequent review and maintenance exercises; material will have to be re-introduced almost every year; even with the oldest pupils, instruction will refer to specific experiences and situations. Thus, what are termed "problems" in arithmetic probably have wider use with the educable mentally retarded than with normal pupils.

It can be seen that the experience units as taught in special classes will offer many opportunities for application of mathematical ideas. With younger groups, the topic of counting, enumeration, work with calendar concepts, telling time, and the like fit naturally into the class activities of the unit. Later, topics of figuring costs, distances, amounts, and similar exercises may also grow out of, and contribute to, experience unit work. As regards the systematic development of arithmetic skills, these situations must be regarded as occasional excellent teaching opportunities and nothing more. They give a chance to show that arithmetic has an immediate application to real life; to raise interest in the subject because it is useful; and to apply (and practice) the abilities considered appropriate for the group. On the other hand, the opportunities within the experience units are clearly not sufficient as a foundation program in arithmetic. As in the case of reading, diagnostic and achievement tests will assist the teacher greatly in determining the ability and progress of her class in arithmetic. The systematic program of presentation and practice of the important skills can then be planned by the teacher. The most realistic approach to materials is probably one of using teacher-prepared worksheets for practice. Commercial materials again provide the best source for ideas concerning the kinds of practice exercises to use with the class or with groups within the class. It should be noted that any practice for mastery of a process properly occurs only after a considerable period of work with concrete and semi-concrete materials aimed at establishing an understanding of the meaning

[2] G. M. Fernald, *Remedial Techniques in Basic School Subjects* (New York: McGraw-Hill, 1943).

of the process. This is equally true of such topics as money and measures as it is of addition and subtraction. The amount of time that needs to be spent in such readiness and introductory work will seem tedious to the beginning teacher of an educable class: as she gains further experience with such classes, the worth of spending considerable time in such a fashion will become obvious.

One final note concerning arithmetic instruction needs to be made. With normal classes, there is considerable doubt of the educational advantage gained through extensive arithmetic projects. The case for arithmetic projects appears much stronger with educable classes. Setting up a store in the classroom may have many values for an intermediate educable class learning to make change with money. A long period of work spent in measuring actual distances within the classroom and on the school grounds may really be quite efficient instructional effort for an older educable class. Making scrapbooks of pictures and prices of items obtained in hardware, furniture, or variety stores may give pupils realistic concepts concerning current prices. While not experience units in themselves, these projects partake of more first-hand experiences than are possible when working through class discussion and practice work strictly within the confines of the classroom. A limited number of well-planned projects each year in educable classes would seem to offer much stimulation toward gaining functional ideas of an arithmetical nature.

Arithmetic Program

PRIMARY
C.A. — 6-9

1. Readiness for numbers
2. Rote memory of own age
3. Rote memory of own address, telephone number
4. Counting to 20 in functional manner
5. Quantitative Word Concept—big-little
   long-short
   large-small
   high-low
   more-less
   tall-short
6. Recognizing and writing numbers (1-10)
7. Addition-subtraction (1-3, incl.)
8. Time concept—day-night
   morning-afternoon-evening
9. Beginning concept of ordinals—first-second-third
10. Addition-subtraction through combinations of 10
11. Concept of ½
12. Concept of time—Calendar-month-date
    clock-hour-½ hour
13. Money recognition — penny-nickel-dime-quarter-fifty cents
14. Simple story—problems—oral and written
15. Rote memory of own birthdate

INTERMEDIATE
C.A.—9-12

Parts 1 through 15 may need to be carried on for some of this level.

16. Addition—100 add combinations
    single column addition, no bridging
    single column with bridging (crossing the decade)
    two and three digit numbers no carrying; bridging in the last column
    zero difficulties
    carrying in right column only
    carrying in second column
17. Subtraction—100 subtraction combinations
    two and three place numbers with no borrowing
    zeros and borrowing
    bridging
18. Measuring—miles-yards-feet-inch
    gallons-quarts-pints
    ton-pound-ounce
    the dozen concept
19. Concept of time — calendar - seasons - names of months-days of week
    clock-minutes to and minutes after
20. Ordinals—first-second-third, etc., through 10th
21. Money—know value of 1c, 5c, 10c, 25c, 50c, $1.00
    functional recognition of dollar and cent signs
22. Concept of ½, ¼, ⅓
23. Multiplication—counting by 2's, 5's, 10's
24. Multiplication and division facts of 3's and 4's

JUNIOR HIGH
C.A. — 12-14

15 through 24 may need to be carried on for some at this level. Should be related very specifically to everyday living situations.

25. Multiplication and division facts by 5, 6, 7, 8, 9
    Multiplication of 2 place numbers with and without carrying; of dollars and cents by whole number and 2 place numbers
26. Division—of one place into 2, 3 place dividends
    of two place divisor into 3 place dividend
    of money
27. Fractions—Concept of 1/6, 1/8, 1/10
    Finding fractional part of a group
    ½ of 4
    ⅓ of 6
    ¼ of 8
    etc.
    Adding and subtracting like fractions:

    ½ ⅓
    −½ ⅔

28. Concept of—Checks
    Money orders
    Ordering blanks

HIGH SCHOOL
C.A. — 14-18

Numbers now, in the main, become very functional as related to a work placement program.

29. Money (Relate to areas)—Banking
Budgeting
Payment plan
Interest
Wages (hour, day, month, year)
Purchase of goods and services
30. Multiplication of dollars and cents
Introduction of decimals
Placement of decimal
(Do not use examples which require prefixing a zero **except** in multiplication of cents by a whole number, e.g., .04 x 2 = .08)
31. Division of decimals (dollars and cents only).
Placement of decimal point in quotient
(1) Division of dollars and cents by a whole number
(2) Whenever divisor is decimal, change it to a whole number and make corresponding change in dividend.
32. Tools of Measurement—Thermometer
Ruler
Yardstick
Scales
Speedometer

The Practical Arts

Activities of art education find more application in unit work than do activities from many other instructional areas. Drawing pictures to illustrate phases of the unit is a common procedure, as are such projects as mural-making and the making of summaries of studies through a series of pictures.

There is validity in the statement that art work as characteristically employed in units has not always pertained to the art needs of adults. The keynote of the total planning effort for educable classes—practical application—is easily exemplified in the area of art. The planning for instruction in the area should center around the type of art activities which will transfer to adult life. An art program which is preponderantly coloring and painting obviously fails to provide much of enduring value to educable mentally retarded pupils. It goes practically without saying that there are certain fundamental motor skills developed through drawing and painting. However, there is a distinct limit to the value of such activities, particularly for older educable classes.

There is considerable opinion to the effect that a practical arts program is called for in the case of special classes for the mentally retarded. The distinction between a practical arts emphasis and the usual approach as practiced in elementary schools is that the practical arts program relies heavily upon skills needed in the home situation. It also may be true that the practical arts program is pre-vocational to a certain extent. The skills being stressed include items which can be used directly in the home and those that form the foundation for vocational skills. These few guides may serve as a framework for the teacher's thinking about the art program for educable classes.

1. Experiences with many materials and many types of creative art work belong in the art program for educable classes. The imaginative teacher will discover that many scrap materials can be turned to profit in the classroom. Creative art activities similar to those used in normal classes do not seem to be out of place in the educable classroom.

2. The practical arts program which is advocated in this bulletin is considered to include much more than the traditional manual training program once in vogue in the state. Essentially, the scope of the study is an elementary consideration of many processes used by people in producing, modifying, and utilizing useful products. Included in the study at some point would be consideration of such processes as food preparation; clothing construction and care; utilization of materials of construction such as wood, leather, and clay; and the use of tools and machines.

3. As in the case of arithmetic, the educational project may well be a convenient way to organize instruction in the practical arts program. Shorter in length and devoted to a more specific topic than the experience unit, the project does give opportunity to experience in a first-hand manner the various processes mentioned above. As an example, a project of making ice cream for a party might be cited. The basic consideration in such a project would be finding out about the process of making ice cream, but several practical arts skills would be involved: (1) Finding raw materials to use in the process; (2) Discussing the simple scientific concepts that explain how the raw materials are changed; (3) Measuring the correct proportions of raw materials and following production procedures necessary to achieve the finished product; (4) Working in the prescribed way to bring about the change in the raw material; (5) Appreciating the worth of the finished product.

Upon occasion, such practical arts projects may fit directly into experience unit work, or may, in fact, be of such proportions as to be considered as whole experience units in themselves ("How We Obtain and Care for our Clothing," for example); more often, the projects can be self-

contained small units of instruction centered around particular skills and habits.

4. There appears to be no valid reason for giving girls different major experiences than boys in the practical arts program until they have reached the junior high school special class. The skills, habits, and concepts involved in practically all of the projects which properly belong in the area of the practical arts are universally needed.

5. Neither does there appear to be valid reason for having a special laboratory or shop for the work in the practical arts program until the pupils are of junior high school age. Providing that the classroom is of sufficient size and properly equipped, there are many advantages in having the regular teacher handle the practical arts teaching in her own classroom setting. Later, in junior and senior high school, when more equipment is needed (homemaking and shop equipment, especially), the special purpose classroom has a distinct advantage.

6. As a concluding point, it should be said that interest in school and in attending the educable class can, and is, made higher through the use of the active methods of learning employed in the practical arts program. Such a program of instruction is based upon direct work with concrete materials in such a way that individuals may be assisted with any unique problems as well as helped in gaining broad understanding of the practical matters they will be facing in a few years.

Music

The attainment of an adult standard of musical performance is an unrealistic goal for achievement at the end of formal schooling for the educable mentally retarded pupil. The performance level of educable pupils lags behind normal pupils' performance throughout the school years; particularly noticeable is the lack of ability to interpret music on the part of the educable pupil. Despite these shortcomings, a positive approach toward teaching the skills of music can be taken in the classroom and definite progress made in the area.

An appreciation and enjoyment of music is the prime goal of music instruction in the educable class. Performance ability is only a secondary consideration. As a matter of fact, ability to perform is not a necessary element in the enjoyment of music. Neither is it necessary that a person analyze **why** he enjoys a certain selection of music before it can be said that he does enjoy it—a generalized feeling of satisfaction is all that is necessary for something to be enjoyable. With this point of view in mind, these points may be of assistance to the teacher in planning for instruction to further growth in the area of music.

1. A balanced program of music instruction for the educable class includes opportunities in (1) vocal music, (2) instrumental music, and (3) listening activities designed especially for purposes of furthering music appreciation.

2. The vocal music program is begun with singing games used in the very youngest educable classes. They are sung in unison and are usually accompanied. After the class has learned a considerable number of these singing games, songs accompanied by a record or by the teacher playing the piano are introduced. An ample selection of quality commercial children's records is currently on the market. Songs about animals, weather, pets, and other commonplace items form the content of these records.

It does not appear necessary, or even desirable, that commercial music textbooks be used with educable classes, even with the older classes in which many familiar adult songs are introduced. Songs are learned by rote, not by note, and reading disabilities preclude the use of the printed words as much assistance in learning the song.

As with normal classes, there are individual educable pupils who need individual assistance in matching tones and sensing the rhythm of music. Because of smaller classes, the special class teacher has greater opportunities to assist individuals within her class than does the teacher of a regular class.

One author[3] has suggested that three types of songs be utilized for older classes. These are:

1. Songs sung for pure enjoyment — these make no particular sense of and by themselves, but are catchy or engaging rhythms or melodies.
2. Songs sung because of class interest—these are, in most cases, currently popular songs.
3. Songs that are correlated with other fields of study.

With the addition of certain patriotic songs and some which are traditional for adult meetings where group singing is done, this listing should give sufficient breadth to the vocal music program.

[3] R. Scheerenberger, "Description of a Music Program at a Residential School for Mentally Handicapped", *American Journal of Mental Deficiency*, LVII (April, 1953), pp. 573-79.

3. The instrumental phase of the total music program is relatively small during the elementary school years of the educable pupil. No doubt work with adult instruments, if such instruction is ever given, will be for only a selected number of pupils of any class, and will not begin before junior high age. What can be done in the younger years is to make provisions for work with a rhythm band or a kazoo band. There are several reports in the literature to the effect that such work can be of value in learning rhythm and in raising the class interest in music in general. The teacher of the educable class may gain information about how to set up such an instrumental group by consulting with an elementary school music teacher or by finding descriptions in a professional book in elementary school music methods.

4. The materials and procedures for use in the listening phase of the music program are devoted to developing powers of enjoying music as it is performed—powers of being a receptive audience to a musical performance. It would seem wise to have periodical lessons centered around music of various moods and types. As in the case of recordings of simple children's songs, there are many commercial records made especially for listening activities at the elementary school level. Many times there are engaging stories to accompany the music. (e.g., "Peter and the Wolf" and "Peer Gynt"). Although such stories are unnecessary for enjoyment from the sophisticated adult's viewpoint, they may have much to contribute in stimulating the educable pupil's imagination. Whenever such stories are available, they should be used.

Even though the main object in listening to music is to enjoy it immediately, there are certain activities to be used after the listening period that have real value. Pupils may give their impressions of the music by discussing any pictures that were created in their minds, by making as a class activity a short story to go with the music, or even drawing a picture of what they saw in their minds during the playing of the selection.

Physical Education

The practical necessity of providing a strong physical education program for the educable mentally retarded is made evident through a consideration of the three main reasons that lie behind most planned programs of physical education. Obviously there is a need to provide activities that will further physical development. In addition, the physical education program often provides activities that persist as hobbies, entertainment, and diversions in adult life—they become profitable amusements for leisure time. In the third place, activities learned in the physical education program also function as interests that are carried from the school to the home life of the pupil. There, such learning may stand the pupil in good stead in the family or in the neighborhood group of children. The area of physical activities is undoubtedly an area in which the educable mentally retarded pupil may compete with normal pupils on a more even basis than in most activities of childhood. To neglect this opportunity for the pupil to gain recognition and to feel satisfaction in his accomplishment is to place a further restriction upon his chance of success in school and in life. The following guides are intended to assist the teacher in planning a program that will take full advantage of the near-normality of the educable mentally retarded pupil's physical abilities.

1. The educable pupil may be expected to participate in many of the games and activities ordinarily engaged in by children of the same chronological age. This is not to say that he will do as well as normal children in such pursuits, or that he will choose these activities if given a free choice. The educable child may well choose to play with children younger than himself and to use the activities of a younger group, but often he does not have a real choice in the matter. Because the educable child must conform to other children's wishes with respect to the choice of activities, the implication that the school has a responsibility to teach him games commonly engaged in by his own age group is clear. Thus, part of the physical education program will be devoted to those activities which are a part of the physical education work of a like age group in a normal classroom.

2. It is suggested that because more time will need to be taken to teach the educable pupils the rules of activities used by normal pupils, the teacher choose a limited number of frequently-used activities and concentrate attention upon them rather than attempting to cover superficially the whole range of activities taught in the normal class program.

3. Singing games seem to be an appropriate beginning point for physical education instruction with younger groups of educable pupils. These have the advantage of developing the

skills of general motor development as well as providing for the acquisition of much basic knowledge such as the number names, names of familiar objects, parts of the body, etc. The teacher may find any number of simple singing games and games of relatively simple structure in the better professional books in elementary school phyical education methods now on the market.

4. Games and activities of simple structure should be continued as long as interest dictates. If simple enough, these games can be engaged in by the pupils in times when it is impossible for the teacher to exert direct supervision during recess on the playground or in free play period.

5. Various types of individual skills practice may be started when pupils reach the age for an intermediate class (C.A. 9-11). Stunts, dual combat activities, and team games of very simple organization are appropriate at this age level. In some cases, such activities might be considered as lead-up games for more organized events; in others, such as relay races and similar team contests, there is a physical fitness motive involved.

6. An important, but often neglected, part of the physical education program for the educable pupil is that phase aimed at indoor activities. Much less active in nature, these activities are intended to give the pupil something of value to do during his free time when outdoor play is not possible. There are many simple card games that may be utilized; also possible would be such traditional sports as jacks, marbles, and in the case of older pupils, even table tennis and various ball-rolling games. The problem of providing skills for popular indoor sports becomes increasingly important as pupils grow older and approach the termination of formal education. Junior and senior high school programs of physical education for the educable possibly should devote a major portion of the available time toward attempting to develop skills that may transfer directly into the types of pursuits chosen by young adults as leisure-time activities. It is possible that an occasional case of real athletic ability may be found in the educable class for older pupils; the purpose of the physical education work, however, is not considered to be one of trying to develop athletic prowess for team sports. Rather, it is aimed in quite another direction — providing skills and knowledge that assist in enjoying physical activities that continue long after formal schooling has ended.

Chapter V

MANAGEMENT OF THE SPECIAL CLASS

Of equal importance with the development of instructional techniques in the course of the program for mentally retarded children is the general atmosphere and the over-all management of the classroom. A classroom atmosphere which is conducive to the greatest rate of learning and the best level of adjustment for all the children is much more easily sensed than it is described.

In order to achieve this kind of class, it is essential that a teacher be employed who is sensitive and sympathetic to the real needs of children. It is essential that she be one whose own life is well in order and that she not bring personal problems with her to the classroom.

Some teachers will find that they are able to maintain a healthy atmosphere conducive to learning in a very informal manner and with very little stress on disciplinary issues; other teachers may find that a somewhat more rigid control of the group is necessary.

The nature of many mentally retarded children and the fact that many of them have been made to feel inferior in their previous school experiences is such that they are likely to react in a withdrawal fashion. They tend to lack spontaneity and their serious behavior manifestations will be in the nature of passivity as frequently as in more noticeable kinds of aggressive acting out behavior.

It will often be the duty of the teacher to help her class overcome its lethargy. She may need to invent ways to stimulate spontaneous thinking and expression on the part of seriously inhibited children. She may find it necessary to work for great periods to elicit even the most simple responses from some of the individual children.

The teacher must be ready to accept the fact that there is one reason the children in her charge are special class placements: they are mentally retarded. In addition to their mental retardation, some of them will have other handicaps. (1) Some may show evidences of neurological impairment with resulting learning and behavior disorders. (2) Some may have minor congenital or acquired physical handicaps. (3) Some children may come from disorganized home situations. (4) Some may come from families in which one or both parents are as mentally retarded as the child. (5) Some may come from families in which other children are quite normal and of average or better learning ability.

* * * *

The Neurologically Impaired Child

There may well be within the class one or more children who give evidence of central nervous system injuries. Children like these are likely to be hyperactive and compulsive to varying degree. Some such children will seemingly become excited in response to stimuli which will scarcely be observed by others. They may respond to noises, visual stimuli, or other physical sensations such as changes in temperature or vibrations in the building when others are unaware of these. They may react violently to tones in the teacher's voice and certainly they will react to the teacher's appearance, manner of dress, choice of jewelry, and other accessories.

Many brain-injured children become excited with little provocation, and their excitement or hyperactivity seems to grow. It has been said of them that this excitability feeds on their own excitement.

In being aware of some of the characteristics of these "brain-injured" children, the teacher may find cues as to the best method of handling them. She will find it best to place them within the room in such a position that they have their back to most of the sources of activity which would engage their visual attention. They should be in a spot as much out of ear shot of hall noise and outdoor traffic as possible.

The teacher should observe good taste in her own dress and may find it necessary to limit the wearing of eye-catching bracelets, necklaces, earrings and even eye glasses to the times she is outside her classroom. Because these children become excited and continue on and on in their behavior, it is well to exert a calming influence as quickly as possible when it is apparent the child is becoming hyperactive. At times this can be accomplished by saying the child's name. In other instances, it may be necessary to stand close to the child or perhaps to hold his hand or in some such fashion give the child the security he derives from physical contact.

In other cases, it may be necessary to remove the child temporarily from the stimulation of the

rest of the class. He may need to spend some time in a secluded corner or enclosure or in a quiet hallway. Such treatment should not be considered punishment or presented to the child as such.

The Child With Physical Handicaps

The group of mentally retarded children in any one classroom will be most likely to have within it a child or children who suffer from a congenital or early acquired physical handicap such as: epilepsy, cerebral palsy, muscular dystrophy, or other disability.

The teacher should become familiar at the earliest possible time with any such physical conditions existing in a child. She should familiarize herself with the course of the handicap, the degree to which it may affect the child in his ability to participate in classroom activities, the degree and manner in which it may affect the learning abilities of the child, and the precautions and actions she should take in the case of the onset of seizures, falls or other such occurrences.

Some of the children in the special class may be receiving medication. In some instances, the teacher may need to be responsible for seeing that the child takes his medication regularly. In all cases, she should be acquainted with possible reactions to over-dosage of drugs which may act as stimulants or depressants to the child's behavior since this may alter the child's classroom behavior to a great extent. This may need to be brought to the attention of the child's parents and, in turn, to the attention of the child's physician.

To witness, for the first time, a child in a grand mal epileptic seizure and to feel the full weight of responsibility for the child can be a very frightening experience. The teacher should be aware that the best course of action in such cases is merely to get the child into a position where he can have space to lie, with protection from injuring himself. There is a remote possibility that a person in grand mal seizure will choke on his tongue and a greater possibility that he will bite his tongue severely. As a simple precaution, it is well to keep on hand a supply of tongue depressors wrapped in adhesive tape to be placed between the afflicted child's jaws if he appears to be chewing his tongue. (The child should be allowed ample time to rest after seizure.)

It is well to remember that, in most cases, the epileptic child is best treated by being allowed to participate in the ordinary routine of work and play in the school program.

Cerebral palsied children should, of course, not be made to walk on highly-waxed floors. Special efforts may be necessary to fashion a method by which they can hold a writing instrument. Special attachments are available to fit on typewriter keyboards to make them usable for children with little control of their arms, hands, and fingers.

Teachers of muscular dystrophied children require a knowledge of some simple but specialized techniques for their handling. Children with rheumatic hearts require careful control of their physical exertion.

The Child From A Disorganized Home and the Familial Retarded Child

Children from disorganized homes or from homes in which one or both parents are also mentally retarded may present special kinds of problems.

In some such instances, the school will be the only stable environmental situation in the child's life. The child who comes to class consistently late and poorly groomed may be completely responsible for rising, preparing his breakfast (if, indeed, he has one), caring for his toilet, dressing and getting to the school.

Other such children may be routinely roused from sleep in the morning by a mother who is either still intoxicated or suffering a hangover, forced through breakfast while harangued by the father and accompanied to the school bus by an exchange of parental invectives.

Children from such homes will require especially understanding guidance if they are to develop feelings of self-worth and acceptable standards of moral conduct or even a presentable physical appearance and a reasonable level of health.

It may be necessary for the teacher to see that such children are bathed and have their hair cut and washed occasionally. It may also be necessary that a means of providing for at least one adequate meal a day for such children be found (enlist the aid of others.)

The Retarded Child of Average Background

The mentally retarded child who comes from an average home and who has normal parents and average or above-average brothers and sisters may also have serious problems arising from his home situation. In all likelihood, the parents will have faced the issue of the child's retardation or he would not be placed within the special class. The parents may, however, feel the youngster's primary problem is one of a lack of academic achievement; and, if overcome, the child will be on the way to normalcy.

Such a child may be over-protected in the home situation or he may be adversely compared to normal brothers and sisters. The teacher will need to give him the normal self-acceptance, the normal challenges, and the normal direction and discipline impossible in the home situation. She may find such a child bewildered by parental expressions of affection one day and open manifestations of rejection the following day. In his case, too, she may find herself the only adult in the child's sphere of influence able to give him the stable consistent kind of acceptance to which he can adjust and establish roots on a relatively permanent basis.

Such children as these may have educational blocks in addition to the mental retardation because of experiences in their background in which undue pressure was exerted by teachers, perhaps in deference to the parents' expressed desires, or because of their own convictions that "the child of such a family could not possibly be mentally retarded." In these instances, it will be necessary for the teacher to help the child to develop an almost completely new mental set in relation to the school situation before he can use his abilities for academic growth.

Most individuals thrive well when their activities are made routine to a certain degree. Mentally retarded children are perhaps in need of, and benefit more from this kind of routine than do normal children; there is no question that they do not require such routinization equally as much as others.

Because of this, some sample daily schedules are given following with the admonition that any daily schedule of classroom activities must be thought of as a suggested guide which the individual teacher will vary from in the degree necessary to best meet the needs of her group of children and pursuit of her own teaching techniques.

8:50— 9:10	Opening Exercises	Prayer, flag salute, reading by teacher
9:10— 9:50	Reading	(3 groups)
9:50—10:10	Numbers	(3 groups)
10:10—10:15	Milk Period	
10:15—10:30	Recess	
10:30—11:30	Instructional Unit	
11:30—12:50	Noon Hour	
12:50— 1:10	Reading by teacher	
1:10— 1:45	Social Studies	
1:45— 2:15	Spelling	(3 groups)
2:15— 2:30	Recess	
2:30— 3:00	Health or Science	
3:00— 3:30	Arts and Crafts Strip films and music Citizenship Club	Mon. & Wed. Tues. & Thurs. Friday

8:45— 9:00	Assemble in classroom after toilet, drinks, etc.	
9:00— 9:10	Opening Exercises	
9:10— 9:45	Social Studies	
9:45— 9:50	Write Today story on board — explain arithmetic and color sheet	
9:50—10:40	Reading groups	
10:40—11:00	Recess—line up in room—go to building together then outside when ready—go into our room when bell rings	
11:00—11:20	Arts and Crafts	
11:20—11:45	Special help for arithmetic and printing, etc.	
11:45—12:45	Lunch—put away all work, say prayer together, pass out milk money, put on wraps, line up in room, go to main building, toilets, leave coats in auditorium, line up in hall, to lunchroom with Miss Schroder's group.	
12:45—12:55	Line up outside, go to main building to toilet, wash hands, get drinks. Go back to room together.	
12:55— 2:00	Instructional Unit	
2:00— 2:45	Music Physical Education	Mon. & Wed. Tues. & Thurs.
2:45— 2:53	City bus leaves at 2:53 and school bus at 2:55. **Do not be late for bus.**	

The time allotments made in the above schedules will necessarily vary according to the age of the children, the routine of the other parts of the school, and the particular academic and social needs the children demonstrate. It will be noted that in each of the preceding schedules an ample amount of time is given to an instructional unit. Such a unit will, in all probability, need to last longer than a similar unit undertaken by a regular class. Academic skills probably can not be acquired satisfactorily through straight unit type instruction; but the time schedule for reading, spelling, arithmetic, etc., should be closely and carefully related with the instructional unit being presented.

* * * *

Report Cards

The question of report cards is one always near the surface in the thinking of teachers and administrators dealing with special classes of retarded children. Report cards should be thought of as one more tool at the disposal of such personnel for the purpose of adding to the effectiveness of the teaching processes by (1) stimulating

each youngster's desire to grow academically; (2) pointing out areas of weakness for teacher redirection of effort; (3) explaining and interpreting to parents the growth, the successes, and the problem areas of their children; and (4) as useful information to follow the child into his next classroom situation.

In order that a report card accomplish the items numerated above, it must be designed with a particular group of children in mind and used in a realistic way to accomplish this purpose.

The report card might well be one adapted from and similar to ones already in use in the school system operating a special class. For both primary and elementary level mentally retarded children, an adaptation of the kind of card frequently used in primary departments is useful since such cards devote space to realistic needs of children such as their study work skills, social skills, adaptability to new situations, etc., without undue emphasis on the reporting of grades for academic subjects. A report indicating the degree of success a child has in reading in a particular series at a specific level is likely to be much more helpful in continuing his reading program than a letter grade listed along side the word "reading". The same could probably be said regarding any subject matter area. When it is apparent that the youngster is working at quite different levels in, for example, social studies and arithmetic, this may serve as notice to the teacher that his program should be studied with the possibility of special emphasis being placed on the weaker areas or, even in some cases, a lesser emphasis on particular areas of instruction.

Parent-Teacher Conferences

The completion of report cards by the teacher should always be done with the child's parents well in mind. When parent-teacher conferences are a part of the reporting pattern, such conferences should be arranged concurrently with the issuance of the first report card and perhaps the next to the last report card of the school year. The conference then can quite naturally follow the pattern set by the report card. If the teacher consistently follows such a pattern, she will find it easy to meet with parents in succeeding conferences since she will have a point of comparison for her own referral, as well as to demonstrate realistically to the parent that the child is growing at a rate which usually will be steady and maintained during his school days.

At conference time, the teacher may find herself asked to predict from the child's academic growth the level he will attain as an adult. Even though in this area the teacher may have strong feelings and considerable information, it is important that she refrain from making a prognosis even though it may be completely correct.

In many cases, a number of factors must be considered; and, in some instances, the special education supervisor, the psychologist, or the family physician may find it necessary to conduct an extensive program for the acceptance of the recommendations of the child's long-term prognosis over a period of weeks, months, or years.

It would seem well for every teacher of mentally retarded children to keep firmly in mind the fact that each child assigned to his care represents an intense and often tragic problem in human understanding and relations.

Chapter VI

PUPIL ADJUSTMENT PROCEDURES

One of the principal objectives of the education of mentally retarded children is to assist them to an adequate personal and social adjustment. This goal does not contemplate rigid application of rules by those in authority, but rather the creation of a home and school atmosphere that will enable retarded children to adjust to existing life situations independently of directed authority. This implies a consciously planned program that will assist the child to grow in his ability to make adjustments with the least amount of tension. Moreover, emphasis must be given to structured methods that will induce behavior satisfying to the individual and acceptable to those with whom he associates.

Many children placed in educable mentally retarded classes may present behavior characteristics indicative of frustrating experiences at home and in the regular classroom. The overt symptoms may emerge in multiple manifestations, or one symptom may become dominant in the total behavior pattern.

Regardless of the description given to the outward behavior, the child is attempting to display signals denoting personal difficulty. The signals may be an expression of general insecurity. They may indicate that a child feels a deep sense of inadequacy; or that he is disturbed in his fumbling efforts to establish social relationships. He may feel hopelessly defeated because of his lack of accomplishment. The adults around him may have set standards of achievement much in excess of his limitations.

This section will give some suggestions for establishing wholesome management techniques in the classroom. The methods suggested are to be construed as examples only. The illustrations presented can be used by the teacher as points of departure for structuring extended activities to accomplish the same goals. It is recognized that many occasions will arise which will call for an immediate interpretation and a swift application of rules. While it is true that immediate attention must be given to minor behavior episodes, major emphasis must be given to adjustment building over the longer period.

The suggestions that follow are intended as guideposts for assisting children to cope with life situations in the future as well as the present.

* * * *

Mental Health in the Classroom

The classroom teacher is confronted with some form of deviate behavior on a daily basis. She offers one of the best sources for the solution of a child's problem. The teacher gives everything from an approving smile and a friendly glance to a staying hand and a restrictive measure when circumstances indicate. The maladjusted child can take hope because a classroom teacher's patience and understanding will accept his quirks and antics one day and comfort his fearful anxieties another day. She will see him through his "rough" moments of hostility, and she will reassure him during periods of depression.

The personality of the classroom teacher and the resourcefulness of her program constitutes, more than anything else, the finest agent for the restoration of wholesome mental health for the maladjusted child.

Basic Needs of All Children

Authorities agree that every person, child, adolescent, or adult has such basic needs as these:

1. Physical well-being.
2. Affection
   It is through a relationship of affection that a child grows in a feeling of self-esteem. An absence of affection creates emotional shallowness and a loss of self-value.
3. Belonging
   The normal development of a child's personality is fostered through a knowledge that he belongs to a group. Rejection gives rise to uneasiness and aggressiveness.
4. Recognition
   The reactions of a person is such that he can function more effectively if he is recognized for his self in the presence of others.
5. Mastery at the child's level.
   A feeling of accomplishment reassures a child that he is personally worthy. This re-enforces his self-importance, and he can be sure that he belongs to the group and is accepted for his contribution.
6. Security
   Physical well-being, affection, a feeling of

belonging, a knowledge of recognition, and a sense of mastery all contribute to security. A child must feel that he is accepted by his teacher and his peer group if he is to feel a sense of security.

When these emotional needs are not satisfied, a child may exhibit deviate behavior and become a disruptive influence in the class.

The Teacher's Role

The attainment of wholesome mental health in the classroom for educable children is dependent on the understanding of the teacher and on the methods which she employs in individual and group management. A sincere desire to teach the retarded and a sympathetic understanding of their needs represent clear prerequisites for teaching these children and establishing wholesome mental health within an educable class.

A few guideposts are suggested at this point for implementing mental health in the classroom:

1. Teach the child as well as the subject-matter.
2. Observe the child for consistency of behavior characteristics.
3. Study the interests of the child.
4. Study the aptitudes of the child.
5. Study the previous records of the child.
6. Study the cumulative card for information regarding physical limitations, health factors, test scores, and previous comments.
7. Keep a continuous record of the child's growth.
8. Study your reactions to the child.
9. After studying the above factors, ask yourself these questions:

   This child is shy and timid. Do my words and actions frighten him?

   This child is a dawdler. Is this a defeatist attitude because of a feeling of failure?

   This child cries easily. Have I been overly demanding?

   These children are inattentive. Am I well organized and are my lessons interesting?

   These children are discipline problems. Am I an easy mark? Am I poorly organized? Have I been inconsistent?

   These children "talk back." Have I been curt with them? Am I sincere and friendly in my personal relationships?

   This child has poor work habits. Do I spend enough time helping him at his desk? Have I made my assignments clear?

Illustrations of Mental Health Practices at Work in Classrooms for the Educable Mentally Retarded

The material which follows presents examples of methods which teachers may use to promote mental health in classroom management. The techniques mentioned here are suggestive only and by no means exhaust the possibilities. Undoubtedly the teacher has used many of these to accomplish the aim of meeting the individual needs of children. The examples presented may serve as suggestions for other ideas. (Special treatment has been given to emotional health in the classroom by Kirk and Johnson, *Educating the Retarded Child*, Chicago: Houghton Mifflin Company, 1951, pp. 323-359. The teacher may wish to refer to that.)

The illustrations are as follows:

Security Giving Methods in the Classroom
Attention Giving Methods in the Classroom
Relationship Establishing Methods in the Classroom
Promoting Mental Health—A Practical Example in a Beginning Primary Class

* * * *

Security Giving Methods in the Classroom

One of the most frequent descriptions of a child in the classroom is that he is insecure. This term is not usually defined when used; but it can generally be taken to mean that for reasons not apparent, the child feels uncomfortable in the classroom or on the playground. This condition occurs with normal children in a regular classroom and commonly emerges as a problem in an educable mentally retarded class.

The classroom teacher, in either situation, will need to employ some techniques which will contribute to the child's feeling of security. Teachers will need to engage in a long-range study of the child's background and of his present environmental status, but immediate attention must be devoted to aiding the child here and now. A teacher of an educable class may find some of the following helpful:

1. While bodily contact is not generally recognized as desirable in the therapeutic situation, the kind of relationship generally present between teachers and school children would not seem to preclude the use of it. For example, the teacher can contribute to a child's general security in the classroom by occasionally placing a hand on his shoulder as she stands beside him while she is addressing or working with the class.

2. A comment on some special strength of the child, either academic or otherwise, will give support in this area. For some children, the teacher may have to search diligently to find this area,

but it need not be confined to the child. A favorable comment with respect to the father's occupation, the family background, the travels of the family may give the child increased stature in the classroom. For example, a rural child in a largely urban group can benefit from the teacher's comment on the fact that rural children frequently are doing things which their classmates have almost no opportunity to do — such things as driving trucks, tractors, and other farm equipment, even if not in productive work. A few judicious comments will contribute vitally to the self-attitudes of an insecure child.

3. Some attention to the child's personal appearance can be security supporting, pulling the hair out of a child's eyes, buttoning his coat or jacket, helping him put on his boots. These are the sorts of things which might be regarded as being a part of the mother's role but which the teacher can use effectively in establishing herself as mother substitute.

4. A special comment or question of interest after a child has been absent can be important in letting a child know that his presence is noticed and his contribution to the group recognized.

5. The play or recess period is a particularly traumatic time for some children because it may mean that they are even more "left out" of things than in the classroom. Therefore, some interest on the part of the teacher in seeing that individual children are included in the group activities can be helpful.

6. Avoiding critical comment can contribute materially to security. Teachers, as well as parents, often forget that children can be motivated by positive as well as negative means. Constant criticism frequently results in a defeatist attitude and negative behavior.

7. The defense of one child against the unfair attack of another child is useful. A physical handicap, for example, can make a child the subject of butts and jibes which literally make his life in the classroom group miserable. The children who jeeringly call one child "fatso" or "lard" or another "limpy" or "pinhead" rarely ever realize the extent of the humiliation which results from this. If the teacher can offer some protection against this sort of behavior, the security of the child thus defended will be increased.

8. Allowing occasional special freedoms in the classroom can many times make a child feel that he has an important place in the group structure. Some children feel free enough in the classroom situation to do this for themselves. Others are too fearful of the authority of the teacher to even move from their seats without permission. Permitting these children to occasionally do things which are not generally permitted of the class can help make them more comfortable with the authority of the teacher.

The foregoing represent but a few methods for building security. The intent of these methods is to assist the child to improved adjustment so that, ultimately, he acquires skills and techniques for helping himself in personal and group relationships.

* * * *

Attention Giving Methods in the Classroom

Classroom teachers frequently encounter a child whom they describe as a problem because he desires to gain attention. The reason for the desire to gain attention is not at all clear. The "attention-getting" child might possess a personal inferiority. He may be ignored at home or in the school. He may wish to make sure that he is not "missed" by his peers or his teacher.

Regardless of the reason for the behavior, the classroom teacher will need to use certain structured methods or devices which will give the child some prominence in the room.

1. Using the child's work as an example of how to do something. His work need not be the best overall example of good work, but if even one aspect is a good example of the procedure which the teacher intends the class to follow, it might be commented upon to the class. At the same time, the teacher must be careful not to use work from the same student as a "bad example".

2. Using special assignments can also be a useful technique. When errands are to be run or an opportunity to go outside the classroom appears, too many teachers fail to recognize that these represent real opportunities. That is, instead of choosing the nearest child or the child whose academic work will be least affected, the teacher can satisfy the desire for attention on the part of some children by making sure that they get an opportunity to participate in these activities.

3. If the attention-getting child is capable in a particular subject, permit him to help a child who is less able. This form of attention, together with the responsibility, can help this child to show-off constructively.

4. If a child's **shyness** would not make it too **threatening**, giving these children an opportunity

to explain a procedure or example to the class can be a useful technique.

5. Allowing a student to put on a display of something in which he is interested can frequently be the means of satisfying the need for attention, or similarly, describing something in which he is interested.

The above methods are cited as examples of methods which will permit a child to hold the attention of the group for a short period in a subject in which he has a skill. Opportunities such as these must be given for constructive activities. Otherwise, the child will find disruptive methods of his own choosing.

* * * *

Relationship Establishing Methods in the Classroom

Many children are found in all classrooms who have been unable to develop skills permitting easy adaptation to the class and to participate in the room activities. Frequently these children are overlooked because they present a docile and conforming attitude. Many of these children have real problems even though their behavior is not detrimental to the classroom or upsetting to the teacher. Many educable mentally retarded children show marked signs of shyness in their relationship with other children and with the teacher. Once again, the teacher will need to observe carefully for this characteristic and direct her efforts toward helping these children in their relationships with herself and with other children.

1. Give some expression of warmth to the child in question. This can be a smile, a wink, a gesture, or a statement. Often times educable children have difficulty interpreting actions and words of adults. They are less able to determine whether people really like them or not. Smiles, gestures, and pats on the back or head will give assurance to the child that he is liked.

2. Sitting with the child while helping him with his work may be another way to establish a friendly relationship.

3. Private chats with the child on occasions when he comes in early or stays after school may reassure him.

4. Calling at the home of such a child so that an evening of games can be shared with him will help him overcome his reticence.

With other children:

1. Let one of the timid children show a new pupil around the classroom when he enrolls. Nearness to another child in social interaction is known to reduce shyness.

2. Classroom activities which call for cooperative efforts of pupils offers an excellent opportunity for encouraging social relationships. It should be kept in mind that two **isolates** will establish a relationship more quickly than an isolate and a socially-active pupil. Grouping children by level of skills will enable children to gain in their development of social skills more readily than if the group varies in skills.

3. Helping or encouraging a child to learn a skill or technique which is new to his group will likely be useful. If, for example, a child has an interest in stamps, encouraging reading in this area and telling him where to find materials may develop an interest which will draw others to him. The opportunity he has to show or teach others can give him a vehicle by means of which friendships with other students can be established.

4. Placing such a child in a position of responsibility through which other children have to go in order to accomplish work or recreation can be useful in the same manner. Taking care of recreational materials and supplies and making them available to other children are the kinds of things that will be helpful.

Emphasis is given to examples which are structured and directed by the teacher. By the very nature of her position, she can see that children are thrown together for work and play activities. The teacher can consciously plan work assignments and recreational endeavors so that satisfying relationships will result for the reticent child and unity within the whole group.

* * * *

Promoting Mental Health

A Practical Example in a Beginning Primary Class

The following pages constitute a brief account exemplifying procedures which a classroom teacher can utilize to promote mental health in a beginning primary class.

These examples are divided into the following categories:

I. The Physical Needs
   - A. Elimination
   - B. Clothing
   - C. Shelter
   - D. Illness or Injury
   - E. Activity
   - F. Safety

II. The Emotional Needs
   - A. Affection

B. Security
C. Belonging
D. Recognition
E. Mastery

The question often times is asked, "How do you do it?" "Just how do you provide for security?" "How do you demonstrate the components of emotional health?" That which follows is an attempt to answer these questions.

The Physical

Elimination

1. Regular toileting periods. Also, children may go to the toilet whenever they ask.
2. Children often feel embarrassed or ashamed if they wet their underclothing. The understanding teacher will unobtrusively take such a child from the group and help him change into clean clothing. The child's feelings can be fortified by remarks along these lines:
   "That was too bad. We'll try and not let that happen again. Whenever you feel like you have to go to the toilet, be sure and ask to go. You tell your mother that it was just an accident."
   The above comments will vary with the circumstances, but the tone should remain sympathetic so that tension is reduced.
3. Towels and washcloths should be kept in the room so that a child can be cleaned when necessary.

Clothing

1. Remind the children to wear clothing corresponding to weather conditions.
2. Make sure that each child has his clothing fastened securely before leaving the building during inclement weather.
3. Have children leave jackets and sweaters indoors on warm days.
4. Restrict area of play when playground is wet and muddy.

Shelter

1. Exercise caution regarding drafts. Some children are unable to resist the affects of wind through open windows.

Illness or Injury

1. Carefully observe a child who appears listless or ill. If he seems to be ill, have him lie on the sickbed and contact his parents.
2. Contact parents immediately if a child is injured on the playground and seems to be in need of medical attention.
3. Always apply first aid to wounds so that the physical needs are met. This, also, comforts the child emotionally.

Activity

1. Beginning primary children have a short attention span, and they need lots of physical activity. When the children are tiring of work activity or of schoolroom restriction, the teacher will have them do rhythm activities such as clapping, marching, or skipping to music. Or, she may have the children play a singing game or sing songs.

Safety

1. Insist that children use playground equipment properly.
2. Supervise small children closely so that accidents can be avoided. School rules pertaining to out-of-bounds areas should be carefully enforced because of traffic danger. One class liked the story of a little locomotive who had to stay-on-the-tracks-no-matter-what. They delighted in being cautioned to stay on the playground "no-matter-what."
3. Eliminate the use of sticks or other pointed instruments during all play periods.

Emotional

Affection

1. Attempt to maintain a warm and friendly atmosphere in the classroom.
   a. Greet each child personally in the morning with some suitable remark as:
      "How are you today, Stevie?"
      "We missed you yesterday, Kathleen."
      "Where did you have your haircut, Bobby?"
      "Did your mother give you a Toni, Ann?"
      "What a pretty dress you have, Nancy."
   b. The teacher can show by facial expression and tone of voice that she cares for each child in the room and that he is accepted unconditionally.
2. "Mother" the child when he is hurt in play activities. Pat him gently, put your arms around him, and make some sympathetic remarks regarding the accident incurred. After the child is consoled, return him to the play group.
3. Sometimes the teacher can place an arm around the shoulder of the timid child who is trying to tell her something.

Security

1. The child develops a feeling of security by knowing that his teacher will provide

for his needs as they arise. For example:
a. By helping the child find lost or misplaced wearing apparel or personal possessions.
b. By caring for his wounds when he is hurt.
c. By helping with his toileting problems.
d. By helping with tasks that are too difficult for him to accomplish by himself.

2. Give careful attention to the children during periods of rest. This is particularly important at the beginning of the school year as some of the children feel a bit lonesome or homesick. The circumstances of the rest period do engender some feelings of concern in many children. During this time they need to have some attention so that security can gradually evolve. Some children may be fearful of being left alone in the room if they should fall asleep during the first two or three weeks. The teacher can stress the fact that everyone will stay in the room during the rest period. Careful planning along these lines may re-enforce one or two of the less mature children.
3. During sharing time the teacher can be seated on a low chair or on the floor with the children. The inhibited child may feel the need of the teacher's helping hand. The timid child may be helped to share in this activity when he has the knowledge that his teacher will help him emotionally. The arm-around-the shoulder may be the means to give the timid child security in this situation.

Belonging

1. Sharing time gives each child a feeling of belonging. He relates his experiences or shows articles he has brought from home. This activity adds to his stature and status in the group.
2. After a few weeks of school have passed, the children will begin to follow the example of the teacher and comment similarly:
   "John has new shoes" or "Mary has a new dress today." Such statements emanating from the children give John and Mary a feeling of belonging.
3. When morning attendance is checked, the teacher will make such comments as these:
   "We are glad you are back today, Dick."
   "We missed you yesterday, Charles. Were you sick?"
   "Everyone is here today. It's good to have all of us here today!"
4. The teacher should encourage the practice of having the children bring birthday treats or a treat "just because I wanted to."
5. Bringing articles from home, especially those things that will grow (plant life), will help many children to acquire a feeling of belonging.
6. Sharing responsibilities gives a feeling of belonging.
   a. Room duties such as watering plants, feeding fish, passing milk, etc., contribute to belonging.
   b. Acting as line-leader on a rotation basis.
   c. Choosing a game to play, a song to be sung, the next participant in sharing time, develops belongingness.

Recognition

1. Room helpers can be complimented for their accomplishments within the room.
2. When a child shows improvement in any skill, the teacher can comment on the improvement:
   a. "Dick, show your paper to the children. That is the best you have written your name this year."
   b. "Linda, take your picture to the front of the room so that all the boys and girls can see it. That is the nicest picture you have made."
   c. "Show your worksheet, Dennis. That is very neat, and you have it all done correctly."

   The above comments should be judiciously used to help children gain recognition within the group. All children should be included because the emphasis is on growth and progress, rather than on pre-conceived standards of achievement.
3. The teacher should be careful to call attention to proper attitudes and responses in the group. That is, emphasize the accepted procedure rather than the unacceptable:
   a. "I like the way Pam is doing her work."
   b. "Let's all watch Tommy march. He really looks like a little soldier."
   c. "John had a wonderful forenoon. He didn't talk without permission a single time!"

4. The children can be permitted to take turns showing their work to the rest of the group. A good procedure is for the children and teacher to comment on each child's work.

Mastery

1. Drawing or painting a picture gives a child a feeling of success particularly if the picture is made to illustrate a story, a class excursion or experience, or some phase of a work-play unit.
2. Assembling a new puzzle without assistance contributes to mastery.
3. Learning to write his name provides a fine sense of mastery for the educable child.
4. A sense of mastery comes in the form of the ability to count from one to one-hundred and to write the numbers from one to ten.
5. Following directions for a reading readiness worksheet.
6. The child who learns to participate in relay races, particularly those in which a rubber ball is used, adds a sense of accomplishment.
7. Acquiring the ability to play games with little or no direction from the teacher helps many children feel successful.
8. Playing a part in a dramatization, such as a Christmas play, contributes to a feeling of success.
9. The ability to recognize song titles when the first bar is played gives children a sense of satisfaction.
10. Making a gift for mother or father helps children to feel a keen sense of mastery.
11. Working together toward the construction of a group project, such as a railroad car or school bus, provides children with much satisfaction.

Conclusions

The brief examples given in the preceding topics stressed methods and procedures inherently weighted with social relationship development. This position appears to be defensible in terms of the major goals for educating the mentally retarded. Special attention must be directed toward the building of adequate personal and social adjustment for these children.

The classroom teacher is faced with the problem of organizing the educational program such that total development will coincide with the long range objectives. The child can be assisted to acquire proper attitudes and habits through structured "success and achievement" type activities.

The foregoing discussion has centered attention on these general principles:

a. Structure activities so that children will develop adequate social skills
b. Organize instructional procedures along mental health lines
c. Seek to focus the child's attention on his assets rather than his limitations
d. Permit the children to plan activities within the scope and range of their interests and limitations
e. Use positive suggestions and activities to emphasize acceptable social behavior
f. Attempt to acquire a long-range perspective regarding a child's progress.

GLOSSARY

Terms as They Relate to Educational Programs For Educable Mentally Retarded

Aphasia Inability to express and/or to understand language symbols. It results from a defect in the central nervous system.

Amentia Mental defect.

Attention span The length of time a child can give attention in a learning situation without tiring or seeking alteration.

Basal age The highest age level on some intelligence tests at which the child passes all tests items.

Binet Test (See Stanford-Binet Intelligence Scale)

Borderline mental retardation Retardation in the range between the slow learner and the educable mentally retarded; usually 70-80 I.Q. Some borderline mentally retarded are eligible to attend classes for the educable mentally retarded.

Brain injury An injury to or infection of the brain occuring at, before, or after birth. The injury may or may not cause mental defect.

Ceiling age The lowest age level on an intelligence test at which the child fails all test items.

Cerebral Palsy A neuro-muscular condition caused by injury to the nervous tissues in the crainal cavity. Mental retardation may or may not accompany the resulting dysfunction.

Chronological age (C.A.) A child's life age or calendar age. Often expressed "6-6", meaning six years, six months.

Congenital Present at the time of birth.

Custodial mental retardation Retardation at the idiot or severely deficient level. I.Q. limits—0-25 or 0-30.

Defective A condition of severe permanent mental retardation.

Dementia A condition of insanity; intellectual disorganization; mental illness.

Distractability A behavior characteristic of certain types of brain-injured and other mentally retarded children. The distractable child has difficulty in giving attention to specific tasks because of oversensitivity to extraneious stimuli.

Dull normal A range of intelligence. (See slow learner)

Educable mentally retarded Children retarded in mental ability at the level between the trainable mentally retarded and the borderline mentally retarded. I.Q. limits—55-70.

Educational retardation Academic achievement at a lower level than intellectual capacity or intelligence grade placement.

Endogenous Mental retardation which has not been caused by a brain-injury.

Epilepsy A disturbance of the central nervous system which may result in seizures. The seizures are usually of two types; **Grand mal,** characterized by loss of consciousness and convulsions, and **Petit mal,** characterized by loss of consciousness but not convulsions.

Exceptional child A child who deviates noticeably from the average in mental, social, emotional, or physical characteristics.

Exogenous Mental retardation which has been caused by a brain injury.

Familial mental retardation Retardation that is assumed to run in families and is usually considered to have an hereditary basis.

Feeble-minded A term for the mentally retarded or mentally defective.

Garden variety mental retardation Retardation that is assumed to have an hereditary basis. Retardation without an organic cause. (See Familial mental retardation.)

Handicapped A term sometimes used for the retarded.

Hyperactivity A behavior characteristic of some brain-injured or other mentally retarded children. The hyperactive child has a high energy level and has difficulty in channeling his activity into acceptable patterns.

Idiot One who is severely mentally defective and who usually requires custodial care. I.Q. limits—0-25.

Imbecile One who is severely mentally defective and who may or may not require custodial care. I.Q. limits—25-50.

Intelligence Quotient (I.Q.) An intelligence test score, also the relationship between chronological age and mental age. I.Q. = M.A./C.A. $\times$ 100

Intelligence grade placement The academic grade level at which a child is intellectually capable of achieving in basic skill subjects.

Mental age The level of mental functioning usually determined by an intelligence test; often expressed "6-6", meaining six years, six months.

Mental deficiency A condition of permanent inferior intellect.

Mental retardation Intellectual ability markedly below average. The mentally retarded child is usually defined as scoring below 70 I.Q.

Moron One who is retarded at the educable mentally retarded level. I.Q. limits—50-70 or 55-75.

Opportunity room A classroom within a school system where children of various kinds and degrees of handicaps are placed together for instruction. This type of classroom is in disrepute in the philosophy of modern educators.

Performance ability Intellectual functioning more dependent on coordination and muscular proficiency than on verbal reasoning.

Perseveration A behavior characteristic of some brain-injured and other mentally retarded children. The perseverating child tends to continue at a task or to fixate on a thought or idea long after the thought or task has lost its meaning or purpose.

Prognosis A prediction of future status.

Psychiatrist A medical doctor who has specialized in the diagnosis and treatment of mental illness.

Psychologist One who studies psychology and its application to human behavior.

Psychometrician One trained in administering psychological tests.

Retardation Slowness of development. (See Mental retardation.)

School psychologist A psychologist who has been specially trained in child development and the psychology of education.

Slow learner A child with mental ability below average but not in the mentally retarded range. I.Q. limits—80-90 or 75-90.

Special Class A class usually in a school setting that provides special instruction for children at the trainable or educable mentally retarded levels or for children with other handicaps.

Stanford-Binet Intelligence Scale One of the most commonly used intelligence tests with children. The Stanford-Binet yields mental ages (M.A.'s) and intelligent quotients (I.Q.'s).

Trainable mentally retarded Children retarded at the level below the educable mentally retarded range. I.Q. limits 25-50 or 30-55.

Verbal ability Intellectual functioning dependent on the use of vocabulary, abstract thinking, reasoning, and comprehension.

Wechsler Intelligence Scale for Children (WISC) A commonly used individual intelligence test for children which yields both verbal and performance ratings of intelligence.

SUPPLIES AND MATERIALS FOR THE CLASSROOM

The following listing of materials may be helpful in selecting those items essential in a special class room. The list cannot be inclusive of all materials which will be needed for some classes, and it will include some items not practical in others.

EQUIPMENT FOR ACTIVITY ROOM

Workbench—1

Woodworking Tools

- Claw hammer 1
- 20" hand saw 1
- Tri-square 1
- Hand drill 1
- Bit brace 1
- Clamps 2
- Set of bits 1
- Coping saw 1
- Blades 12
- Wood rasp 1
- Chisel 1
- Block plane 1
- Screw driver 1
- Hot Plate 1
- Typewriter, primary 1

Cooking Utensils

- 4 piece bowl set
- 1 skillet
- 4 piece set sauce pans
- 3 muffin pans
- set of measuring cups
- set of measuring spoons
- salt and pepper shakers
- 15 sets of silverware
- mixing spoon
- sifter
- 2 cutlery knives
- peeler
- egg beater

Acquarium—1

Ironing Board

Iron

Radio-Phonograph

Records

- Primary Rhythms—2 record albums
- Rhythmic Activities—Volume I
- My Playful Scarf
- Friendly Train and Panda Balloons
- Little Indian Drum

PAPER

- Carbon—1 Box—8½ x 11
- Construction—3 packages—12 x 18
- Crepe—5 packages—assorted colors
- Cross Section—2 reams—9 x 12
- Newsprint—1 ream—18 x 24
- Onionskin—1 ream—8½ x 11
- Oaktag—24 sheets—24 x 36
- Manila—1 ream—12 x 18
- Mimeograph—1 ream—8½ x 11
- Chart—1 ream—24 x 28½

SUPPLIES

- Globe—1—12"
- U. S. Wall Map—1—40 x 52
- Pencil Sharpener—1
- Chalk—1 box
- Erasers—6
- U. S. Flag—1—12" x 24"
- U. S. Inset Map Puzzle—1—12 x 19
- Radiant Screen—1—34" x 50"

TEACHER'S WORK SUPPLIES

- Roll of scotch tape
- Flo-Master felt pen
- Stamp pad
- Paper punch
- Stapler
- Box of paper clips
- Thumb tacks
- Rubber bands
- Straight pins
- Rubber stamp set
- Individual folders (100)
- Pencils (½ gross)
- Seating plan card
- Compasses (2)
- Scissors (large in order to use for cloth)

ART SUPPLIES

- Tempera Paint—2 cans each, assorted colors
- 15 water cups
- 15 easel brushes
- Shaw finger paints
- Clay flour—50 lb. bag
- Plastic clay—4 boxes
- Paste—1 qt.
- Scissors—15—5"
- Reed—#3 round 2 lb.
- 15 6" round bases
- Pipe cleaner craft set
- Easel

Textile paint kit
Yarn—4 skeins—red, green, blue and yellow
Farmyard rubber molding set
Alphacolor chalk

READING SUPPLIES AND GAMES

Plymouth chart
Embeco phonetic drill cards
A B C Cards
Picture Word Cards
Phonetic Word Builder

ARITHMETIC SUPPLIES AND GAMES

Counting frames—2
Flashcards (add and subtract)
Counting blocks
Judy clock
"Say-it" (add-sub-mult)
Thermometer 7 x 22—sliding red ribbon
Clock dials (½ doz.) 4 x 4

PERCEPTUAL AND MUSCULAR COORDINATION MATERIALS

Peg board
Pegs
Wooden stringing beads
Sewing cards (5)
Parquetry blocks

HEALTH AND CLEANLINESS

Mirror
3 Bath towels
3 Hand towels
3 Wash cloths
15 Toothbrushes
15 Pocket combs
Toothpaste
Soap (bar)
Paper cups (100)
Shoe polish (black, brown, white)
Broom
Dust pan
Kleenex (3 boxes)
Cot (folding canvas)
Pillow
Pillow slip
Blanket

PLAY EQUIPMENT FOR INDOORS AND OUT

2 bats
2 softballs
1 soccerball
1 rubber utility ball
Jump ropes (20 ft. and 7 ft.)
Checker set
Dominoes
Sifo puzzles (4 to 8 years)
Make Believe
Fire Engine
Happy Cowboy
At the Beach
Ring Toss game
Lincoln Logs

BIBLIOGRAPHY

Baker, Harry J. *Introduction to Exceptional Children.* (New York City: The Macmillan Company, 1953).

Benda, Clemens E. *Developmental Disorders of Mentation and Cerebral Palsies.* (New York City: Grune and Stratton, 1952).

Buck, Pearl S. *The Child Who Never Grew.* (New York City: John Day Publishing Company, 1950).

Capa, Cornell, and Pines, Maya. *Retarded Children Can Be Helped.* (Great Neck, New York: Channel Press, Inc., 1957).

Cruickshank, William M., et. al. *Psychology of Exceptional Children and Youth.* (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1950).

Dolch, Edward W. *Helping Handicapped Children In School.* (Champaign, Illinois: The Garrard Press, 1948).

Doll, Edgar A. *Measurement of Social Competence.* (Indianapolis, Indiana: Educational Publisher, Educational Test Bureau, 1953).

Duncan J. *The Education of the Ordinary Child.* (New York: Ronald Press Company, 1943).

Featherstone, W. B. *Teaching the Slow Learner.* (New York City: Teachers College Columbia University, 1951).

Fernald, Grace M. *Remedial Techniques in Basic School Subjects.* (New York: McGraw Hill Book Company, 1943).

Forty-ninth Yearbook, Part II. *The Education of Exceptional Children.* (Chicago, Illinois: The National Society for the Study of Education, 1950).

Frampton, M. E., and Gall, E. D. *Special Education for the Exceptional.* (Boston, Massachusetts: Porter-Sargent, 1955).

Gessell, Arnold. *The Retarded Child–How to Help Him.* (Bloomington, Illinois: Public School Publishing Company, 1938).

Heck, Arch O. *The Education of Exceptional Children.* (New York City: McGraw-Hill Company, Inc., 1953).

Hollingsworth, Leta S. *The Psychology of Subnormal Children.* (New York: The Macmillan Company, 1920).

Ingram, Christine P. *Education of the Slow-Learning Child.* (New York City: Ronald Press, 1953), Revised, 1954.

Inskeep, Annie D. *Teaching Dull and Retared Children.* (New York: The Macmillan Company, 1926).

Kanner, Leo. *A Miniature Textbook of Feeblemindedness.* (New York: Child Care Publications, 1949).

Kanner, Leo. *Child Psychiatry.* (Springfield, Illinois: Charles C. Thomas, 1950).

Kirk, Samuel. *Teaching Reading to Slow-Learning Children.* (Chicago, Illinois: Houghton Mifflin Company, 1940).

Kirk. Samuel, and Johnson, G. Orville. *Educating the Retarded Child.* (Chicago, Illinois: Houghton Mifflin Company, 1951).

Kirk, Samuel, Karnes, Merle B., and Kirk, Winifred. *You and Your Retarded Child.* (New York: The Macmillan Company, 1955).

Kuegelmass, I. Newton. *The Management of Mental Deficiency.* (New York: Grune and Stratton, 1954).

Levinson, Abraham. *The Mentally Retarded Child.* (New York: The John Day Company, 1952).

Loewy, Herta. *The Retarded Child.* (New York: Philosophical Library, 1951).

Michal-Smith, Harold. *The Mentally Retarded Patient.* (Philadelphia, Pennsylvania: J. B. Lippencott Company, 1956).

Penrose, Lionel S. *The Biology of Mental Defect.* (New York: Grune and Stratton, 1949).

Pollock, Morris P., and Pollock, Miriam. *New Hope for the Retarded; Enriching the Lives of Exceptional Children.* (Boston, Massachusetts: Porter Sargent, 1953).

Sarason, Seymour. *Psychological Problems in Mental Deficiency.* (New York City: Harper and Brothers, 1954).

Strauss, Alfred, and Kephard, Newell C. *Psychopathology and Education of the Brain-Injured Child.* Volume II. (New York: Grune and Stratton, 1947).

Terman, Lewis M., and Merrill, Maude A. *Measuring Intelligence.* (Chicago, Illinois: Houghton Mifflin Company, 1937).

Tredgold, A. F. *Mental Deficiency.* (Baltimore, Maryland: The Williams and Wilkins Company, 1952).

Wallin, J. E. Wallace. *Children With Mental and Physical Handicaps.* (New York: Prentice Hall, Inc., 1949).

Wechsler, David. *The Management of Adult Intelligence.* (Baltimore, Maryland: The Williams and Wilkins Company, 1944).

(JOURNALS)

Journal of Mental Deficiency. American Association on Mental Deficiency, P.O. Box 96, Willimantic, Connecticut.

Exceptional Children. Council for Exceptional Children, 1201 16th Street, N.W., Washington 6, D. C.

Journal of Applied Psychology

Journal of Clinical Psychology

Journal of Genetic Psychology

Journal of Social Psychology

Training School Bulletin

(BULLETINS AND PAMPHLETS)

Curriculum Adjustments for the Mentally Retarded. U. S. Department of Health, Education, and Welfare, Office of Education, Washington 25, D. C.

Forgotten Children. The National Association for Mental Health, 1790 Broadway, New York 19, New York.

Home Training for the Mentally Deficient. Massachusetts Society for Mental Hygiene, 3 Jay Street, Boston 8, Massachusetts.

New Hope for the Retarded Child. Public Affairs Pamphlets, 22 East 38th Street, New York 16, New York.

Suggested Activities for Mentally Retarded Children. California State Department of Education, Sacremento, California.

Teach Me. Mental Health Unit, Division of Public Institutions, Department of Social Security, St. Paul, Minnesota.

The Forward Look–The Severely Retarded Child Goes to School. Federal Security Agency, Office of Education, Washington 25, D. C.