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Abstracts and classification of graduate studies.

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SCHOOL OF EDUCATION
Thesis
ABSTRACTS AND CLASSIFICATION OF GRADUATE STUDIES,
SUBMITTED AT BOSTON UNIVERSITY,
ON THE SLOW LEARNING CHILD
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CHAPTER I
INTRODUCTION

During the past five years, research in the field of education has greatly increased in volume and subject matter. In the studies made on the slow learning child in the classroom, some very good research has been done during this period of time.

Throughout the nation, in other universities and colleges, as well as Boston University, qualified graduate students have devoted unlimited time and energy in their efforts to uncover newer and better methods to foster greater learning and achievement with slow learning children.

To facilitate these studies a previous study of all research literature was made at Boston University covering all the research through 1953. These studies have provided a handy reference for educators interested in the welfare of the slow learning child.

It is the intention of this study to list all studies and research done in the years 1954 to 1959, concerned with children classified as "slow learners". Previous studies may be located in Hemenway, Robert Eugene, et al., Abstracts and Classification of Graduate Studies, Submitted at Boston University, on the Slow Learning Child, Unpublished thesis, Boston University School of Education, 1954.
I. STATEMENT OF THE PROBLEM

The purpose of this service paper is to list a comprehensive study of all graduate research completed at Boston University during the years 1954 through 1959 in the form of abstracts of theses and doctoral dissertations in the area of the slow learning child.

II. PURPOSE AND JUSTIFICATION

With the need to equip the slow learner with a basic training and education so that he is socially acceptable and financially independent, it is of paramount importance that any research to increase the learning, the adjustment, and the guidance of a slow learning child should be made available to all educators. Therefore, it is the aim of this paper, to bring information to all Boston University students concerned with the latest research which has been done in the past five years with children classified as slow learners. This study can be used also as a reference for other groups who are working outside of Boston University with the problems of slow learning children. Furthermore, it can be used as a guide to the content and limitation of completed papers, and this paper should also eliminate needless and time consuming research.

To others seeking suggestions for further research, the paper serves as a basic reference tool for the years 1954-1959. The extremely valuable research and studies,
undertaken at Boston University, during this period of time, have been appraised to highlight, in a compendious manner, all the salient features concerning the slow learning child.

III. SCOPE

This paper encompasses 32 studies in the area of the slow learning child prepared and presented during the years 1954-1959.

For the purposes of this study and the continuation of the Hemenway, et al., thesis, the slow child includes the "mentally retarded," the "mentally defective," the "mentally handicapped," the "atypical," the "slow learner," or any other term that is used to classify or to identify the educationally or mentally retarded child. This description also takes into consideration the placement of a slow learner in the group situation, may that placement be in the regular classroom, the special classroom, the remedial classroom, the helping classroom, or any other learning situation in which the slow learner is placed.

IV. PROCEDURE

Continuing along the lines suggested in the Hemenway, et al., thesis, the study has been arranged into four categories as follows:

1. Investigation of completed graduate studies.
2. Abstraction and evaluation of the studies.
3. Classification of the graduate studies.
4. Recommendations for further research.

Firstly, a complete investigation of the card catalogue, the theses and service paper catalogue was undertaken in the Boston University School of Education Library. Special attention was given to graduate studies that contained any factual information relating to the slow learning child. These studies were taken out individually by the writers, and then discussed in committee concerning their suitability for inclusion in the study.

Secondly, having been approved by the committee, the studies, the service papers and theses were then abstracted and evaluated as suggested in an outline form suggested by Dr. Helen Blair Sullivan.

Thirdly, the problem and the classification followed the structure of Hemenway, et al., thesis.

Fourthly, in keeping with the previous study, efforts were made to follow the lines of suggestions in the improvement of the preparation and the final construction of service papers and theses. The writers have drawn upon their own personal experiences in working with slow learning children as well as making a complete surveillance of all current articles, periodicals, journals, magazines and texts concerning future needed areas for research and investigation.
CHAPTER II
CLASSIFIED BIBLIOGRAPHY

The classifications which have been developed for the studies included in this paper are designed to identify and clarify each study as it pertains to the overall field of the slow learning child. These classifications are the following:

1. Curriculum Materials
2. Handbooks ---- Guides
3. Evaluation --- Measurement
4. Surveys -- Studies -- Analyses
5. Teacher Training Needs -- Facilities
6. Parental Problems

Each related graduate study, abstracted in this paper, is listed alphabetically to facilitate location and evaluation of each study.

I. Curriculum Materials


II Handbooks --- Guides


III Evaluation -- Measurement


IV Surveys -- Studies -- Analyses


V Teacher Training Needs -- Facilities


VI Parental Problems

CHAPTER III
ABSTRACTS

The abstract of each service paper and thesis, included in this paper, follow the classification which has been selected for each group of related papers. Following an original outline suggested by Doctor Helen Blair Sullivan, Professor of Education at Boston University, the abstracts were developed to include the salient points in easy readable extracts of the originals. This procedure followed by all of the writers to ensure uniformity and continuity is listed as follows. The topical steps are uniformly included in each abstract and are presented as guides to clarify and summarize the content of each research paper.

1. Information identifying the study.
2. The problem of the study.
3. Scope and limitations of the study.
4. Procedure for the study.
5. Conclusions by the author of the study.
6. Recommendations by the author for further research.

I. Curriculum Materials

Problem. To develop a workbook of building number concepts one to ten for the slow learning children.

Justification of the study. Few studies made concerning arithmetical concepts and abilities of mentally retarded in the classroom. Lack of this type of practice material promoted preparation of this workbook.

Scope of the Problem. Exercises prepared according to slow learners particular needs.

1. Importance of more individualized instruction to slow learner.

2. Preparation of games, finger plays, rhymes, stories, songs, worksheets; simple, interesting, and well graded.

3. Plenty of repetition to develop self-confidence and success.

4. Progress at slower rate than average or superior, but nevertheless, progress, so necessary to human nature.

Limitations of the Study. Exercises tried out on only writer's room of thirty-one pupils in sub-primary of small city. One year previous training in informal arithmetic in kindergarten. No intelligence test given previously, writer did not know I.Q.'s.
Conclusions. To teach arithmetic to slow learners, not essentially different from teaching arithmetic to other children.

1. A generous amount of time must be allowed for an arithmetical readiness program; purpose to develop a rich fund of informal experience with functional numbers.

2. Necessary for essential background for more formal systematic instruction later on.

3. Richness of experience with a few essential processes and concepts is to be preferred to a "smattering of ignorance" about many things.

4. Numerous and varied games, songs, rhymes, fingerplays and worksheets prepared by writer to accomplish this teaching of arithmetic to the slow learning child very well done. All exercises gave systematic training in the recognition of meaning and counting from one to ten.

5. Idea of monotony well handled, need for quick changes in use of materials according to individual class needs, stressed by the writer.

Suggestions for further Research.
1. Administer Intelligence Tests to the group before trying out these exercises.
2. Try these exercises out in many more subprimary classrooms.
3. Conduct a study of the number concepts found in children's literature in the subprimary.


Problem. How to develop personality and adequacy in the social world by means of concrete experiences in art and art activities.

Scope and Limitations of Study.
1. Limited to educable retarded children with I.Q.'s between 50 and 79.
2. To suggest procedures for teaching art and art activities to mentally retarded children.
3. To suggest units of work to integrate art and art activities with all subjects in the special class curriculum.

Procedure. The following steps are recommended:
1. From simple activities to more complex.
2. Begin with coloring, cutting, tracing, and pasting.
3. Creation of designs, first for free expression, then for use.
4. Block printing, stenceling and other advanced work.
5. Handcrafts involving more skill such as weaving, leathercraft, paper mache, knitting, etc.
6. Use these activities in units of work based on common interest and experience such as the home, the school, national holidays, plants and nature study.

Major Findings and Conclusions. There are no findings since this is a planned program not one that was in fact used, observed or tried.

Criticisms and Suggestions for Further Study.

1. Evaluate the units of work in many school systems.
2. Make a study of two groups. One using an integrated curriculum program and the other using art and handwork only during art period. Review results for social progress in group relations.
3. A survey to evaluate improvement in written work due to better hand dexterity developed through art.
4. Compare art activities at the beginning of the year and again at the end to evaluate growth in cutting, tracing and design.

5. A follow-up study of leisure time activities to see if there is any carry over from the classroom.


Problem. To determine the response of learning handicapped pupils to specific experiences in art and handwork, and to determine the parallel or divergent preferences of teachers and such pupils.

Scope and limitations of study.

1. Number of pupils taking part in the survey: 322.

2. Number of teachers: 160.

All teachers and pupils were from one public school system.

The pupils were from ungraded or special classes.

The teachers were from both special and regular classrooms.

The survey was conducted in a low economic area in Providence, Rhode Island.
Procedure. Interest inventory sheets were prepared for circulation. These sheets listed various activities such as drawing, constructing, modeling, carving, craftwork, etc. Each item could be marked as follows: liked or disliked with indications for (1) much (2) a little (3) a lot (4) not-at-all. The sheets were analyzed and the scores tabulated. The interest preferences are given by age, sex and grade. Both major and minor interests are tabulated for both teachers and pupils.

Major findings and conclusions.

1. The major interests of the boys were drawing and constructing.
2. The major interests of the girls were drawing and crafts.
3. The major interests of the teachers were crafts and drawing.
4. Interests seem to be fairly well correlated in teacher-pupil activities.

Criticisms and suggestions for further study.

1. The value of art and handwork in promoting good group relations could be investigated.
2. The study of a larger area with a more varied environmental factor could be done for comparison.
3. This study could be used as a basis for developing an art and handwork outline for special classes.

4. Research might be done to determine the value, if any, of the handwork in later job experience.

5. It would be interesting to know if there was any gain in hand dexterity or muscle control because of these activities.


Problem. To present the many types of musical activities and experiences which could prove valuable to educable mentally retarded children.

Scope and limitations of study.

Limited to educable mentally retarded children who have I.Q.'s between 50 and 79.

Covering the following kinds of activities and experiences: listening, singing, responding rhythmically, creating, and playing on an instrument.
Procedure. The research material lists the values of musical activities and experiences as:

1. Activity in participation
2. Creative music as a means of expression
3. Music as therapy in speech difficulties
4. Listening for instruction and pleasure

There are many specific activities listed with illustrations. The correlation of music with other subjects is covered. The holidays and special days in relation to musical themes are given special attention.

Major findings and conclusions.

1. The author believes that by providing pleasurable experiences in music in the classroom the teacher will help to develop a love for good musical activities which will be used in the home and the community.

2. Children enjoy music and the special class children are entitled to all the joy and pleasure that they find in music.

3. They may learn to play an instrument and find pleasure for themselves and give pleasure to others through musical ability.

4. They should learn good audience behavior through musical activities.
Criticisms and suggestions for further study.

1. Evaluate musical activities for enjoyment by mental ages.
2. Evaluate singing in aiding speech and group participation.
3. Make a card file of records suitable for special classes.
4. Study the music being taught as part of the special class curriculum in different cities.
5. Learn how supervisors plan a program.
6. Plan a program using folk songs and patriotic songs.


Problem. The purpose of this study was to evaluate, revise and supplement the exercises in the Series of Graded Exercises for Use with the Durrell Analysis of Reading Difficulty by Patricia S. Adams, et al., Service Paper; Boston University, 1952.

Justification of the study.

1. The exercises had not been tested to determine their functional value.
2. The distribution of exercises seemed to need adjustment to provide a balanced series of exercises.

3. In the judgment of experienced teachers, some of the exercises needed revision for clarification.

4. For maximum usefulness, there was a necessity for indicating the level of difficulty and the level of interest of each exercise.

Scope and limitation of study. This study was limited to exercises for the improvement of reading readiness and reading skills in the primary grades. The exercises were tried out with 20 clinic cases, 41 remedial cases, and 170 slow learners from regular classrooms. The exercises were administered and evaluated by 12 clinicians, 2 remedial teachers, and 24 classroom teachers.

Procedure. In evaluating the exercises, it was planned to try them on the following population:

1. Children in the Boston University Educational Clinic receiving remedial instruction, known to be seriously retarded in reading.

2. Children in remedial reading classes in the public schools, known to be retarded in reading.
3. Children who are slow learners in the regular classroom.

The 20 clinic cases included a cross-section of population from towns within a 40 mile radius of Boston. This group consisted of 17 boys and 3 girls.

The 41 remedial cases were from the residential town of Dighton, Massachusetts, and the industrial city of Waltham, Massachusetts. These groups comprised 32 boys and 9 girls.

The slow learners used in the study were from regular classrooms in the communities of Dighton and Waltham, and the residential town of Franklin, Massachusetts. Of the 170 children participating in the experiment, 119 were boys and 51 were girls.

The total number of teachers assisting in administering and evaluating the exercises was 38. There were 12 clinicians, 2 remedial teachers, and 24 classroom teachers.

The primary level exercises of the Adams study were duplicated and distributed for try-out on clinic cases, remedial cases, and slow learning children in the regular classroom in grades I, II, and III. Teachers were asked to evaluate the exercises for quality, level of difficulty, and interest levels, and to make any other
pertinent comments.
The check list of difficulties of the Durrell Analysis of Reading Difficulty was used as a basis for devising a code. This code was planned for facility in identifying the areas of reading under which the exercises were tabulated. Utilizing this code, a frequency count of the primary level exercises of the Adams study was taken to establish the number of exercises in each area.
The returned exercises were tabulated according to teachers' ratings. On the basis of the teachers' ratings and comments, some of the exercises were retained in their original form, some were revised, and some were omitted. The revisions were returned to the teachers who had done the original try-outs and were re-evaluated. A final tabulation was made to determine the various uses for each exercise and the areas in which more exercises were needed. Additional exercises were built. Those which were tried out are included in the body of the thesis. Those which were not tried out are in the appendix.
The exercises were cross-coded to show all the uses for each exercise. For a compact organization of the study, several related areas were grouped under one heading.

Major finding and conclusions. The purpose of this study was to evaluate, revise and supplement the Primary level exercises of the Adams study. Three groups of teachers - clinicians, remedial teachers, and classroom teachers - participated in the evaluation.

As a result of the evaluation, many of the exercises were revised to provide clarity of directions, variety of material, and a wider range of interest and difficulty.

Subsequent tabulation revealed a number of areas with few or no exercises. To strengthen these areas, new exercises were written. The new exercises which were evaluated have been included in the appendix. The tabulation also revealed that many exercises could serve several purposes. The results of this study would seem to indicate that the present exercises will be found useful to reading clinicians, teachers of remedial reading, and teachers with slow learners in the regular classroom. Their range of level and
variety of use should render them helpful in providing for individual needs in both the remedial and classroom situation.

Suggestions for further study.

1. A study to evaluate, revise, and supplement the intermediate exercises of the Adams Thesis.

2. A study to try out and evaluate the new exercises that have not been evaluated in the clinic, the remedial class, and the regular classroom.

3. A study to try out all the Primary and Intermediate exercises on a larger and more representative population to establish their value.

4. A study which would have for its purpose the construction of a set of exercises similar to these, including all of the Primary Reading Vocabulary.

Problem. The purpose of this study is to prepare stories and exercises which will be suited to the interests and needs of children ranging in ages of seven to twelve years inclusive and are reading at the first grade level.

Justification. The writers have drawn upon their related experiences in the classroom and a review of literature. This research has shown that the older child, who is reading at the first grade level, cannot readily achieve success in reading if he is given the same material to read as would interest the average first grader who is chronologically six years old.

Reading done on children's interests has shown that the so-called normal child and the child with low intelligence quotient are interested in reading the same types of subject matter. "......ten-year-old slow learners are interested in and allergic to much the same kinds of things as are ten-year-olds of average ability...."

Scope and limitations of the study.

1. The age levels dealt with the range from seven through twelve.

2. There are seventy-four original stories and twelve adapted stories.
3. Exercises follow each story and are constructed so that the basic skills of reading to be acquired in the kindergarten are covered during the first year. The skills covered are those used in the Boston University Educational Clinic. These skills are of a broad nature and are developed by means of the specific objectives which are listed before and carried out by the exercises which follow each story.

4. The first three lists of the Primary Word List by Durrell and Sullivan are covered in the stories and the exercises.

5. Words necessary for the context and high interest of the story that were not listed in the Durrell-Sullivan list were taken from the Gates List.

6. Proper nouns and enrichment words not found in either of the above two word lists were included to insure high interest and the ability to follow directions.

Procedure. Throughout the workbook certain definite procedures are followed in order to maintain a controlled vocabulary.

1. When a word has been presented, used, and
repeated five times, that word can be picked up and used freely by the groups in their stories and exercises.

2. All of the new words introduced and covered are repeated five times by means of the stories and the exercises.

3. New words are introduced in the stories and reviewed in the exercises.

4. Following each story is a page containing a record of the first grade words used. The record includes the number of times a word is used and whether they are new or old words. Reference is made to the list a word is taken from and new words are starred.

The workbook is divided into four sections covering first grade abilities of reading.

1. The first section is for children aged seven and covers the teaching of thirty-eight direction words, letter names and sounds, and auditory discrimination.

2. The second section is for children aged seven and eight covering the Durrell-Sullivan Primary Word List I.

3. The third section is for children eight and nine and covers the Durrell-Sullivan Primary Word Lists I. and II.
4. The fourth section is for children between the ages of ten and twelve inclusive and covers List III of the Durrell-Sullivan Primary List.

Major findings and conclusions. The study has made no attempt to evaluate the stories and the exercises. The chief purpose being the preparation of stories and exercises to meet the interests and needs of children ranging in years from seven to twelve inclusive and are reading on the first grade level.

Criticisms and suggestions for further study.

1. Evaluation of these stories and exercises in the regular classrooms, the reading clinics and in remedial situations by a pilot study.
2. Further studies for other age interests and reading abilities.
3. A study to determine the sex differences in achievement of ready with these stories and exercises.

Problem. To develop a workbook of auditory readiness material for slow learning children in Sub-Primary.

Scope. Lessons and exercises were planned for oral presentation to supplement reading readiness workbooks supplied by the school.

Procedure.
1. Examination of school workbooks.
2. Planning of exercises to supplement workbooks in the area of auditory readiness so children can identify sounds and recognize likeness and difference in sounds.
3. Provision for a. listening exercises
   b. rhymes
   c. informal comparisons of sounds.

Major findings and conclusions.
1. Slow learning sub-primary children need plenty of simple and interesting material at their own level of readiness because they learn slower and need more practice on each new step.
2. Auditory readiness must be developed.
3. Individual differences must be provided for.
4. Each child should have a feeling of success and security within himself.
Suggestions for further research. Use this workbook in the classroom and test its validity and/or worth.


Problem. The purpose of this study was to evaluate, revise, and supplement the intermediate exercises in the Series of Graded Exercises for Use with the Durrell Analysis of Reading Difficulty by Patricia S. Adams, et al., Service Paper, Boston University, 1952.

Justification of the study.

1. The exercises had not been tested for practical use.

2. The levels of difficulty and interest had not been determined within the three intermediate grades.

3. The directions for some exercises needed to be clarified.

4. Within the five areas of reading and study skills, the exercises needed adjusting and supplementing to provide a balanced and more completed series.
Scope and limitation of study. This study was limited to exercises for the improvement of reading and study skills in the intermediate grades. The exercises were tried out on 564 children, of whom 86 were slow learners in regular classes, 66 were in remedial reading classes, 10 were in special classes, and the remaining 402 were average or better than average students in regular classes. These children were from 16 communities. The exercises were administered and evaluated by 9 clinicians, 3 remedial reading teachers, 1 special class teacher, and 20 regular classroom teachers. Each exercise was tested on at least 50 children and at 2 or 3 grade levels.

Procedure. To evaluate the exercises, it was decided to try them on the following types of intermediate grade children:

1. Children in the Boston University Educational Clinic receiving remedial instruction, known to be seriously retarded in reading.

2. Children in remedial reading classes in the public schools, known to be retarded in reading.

3. Children in special classes, known to be slow learners.
4. Children who are slow learners in the regular classroom.

5. Children who are average or above average learners in the regular classroom.

The 15 clinic cases included a cross section of population from towns within a 35 mile radius of Boston. This group included 3 girls and 12 boys.

The 66 remedial cases were from Salisbury, Newburyport and Boston, Massachusetts. These groups consisted of 21 girls and 45 boys.

The 86 slow learners were from regular classrooms in the communities of Lincoln, Greenwich, Pawtucket, Rhode Island; Dedham, Sherborn, Wayland and Newton, Massachusetts.

The 10 children in the special class were 7 boys and 3 girls from East Greenwich, Rhode Island.

The 403 average or better children were from Wayland, Dedham, Sherborn, and Newton, Massachusetts; East Greenwich, Lincoln and Pawtucket, Rhode Island.

The total number of teachers was 33, assisting in administering and evaluating the exercises. There were 9 clinicians, 1 special class teacher, and 20 classroom teachers.
The intermediate level exercises of the Adams study were duplicated and distributed for evaluation of the five types of children listed. Teachers were asked to evaluate the exercises for quality, level of difficulty, and interest levels, and to make any other pertinent comments. 

A code was devised on the basis of the area of reading to be covered in the intermediate grades using the Adams study. The code was devised to provide facility in locating exercises in specific areas and to insure that each area had been covered. The intermediate exercises were coded and tabulated, revealing many areas where there was a need for exercises. As the exercises were evaluated (poor, good, or superior), they were retained in original form, revised, or taken out entirely, depending on the teachers' ratings and comments on each exercise. Additional exercises were built. Those which were tried out are included in the body of the thesis. Those which were not tried out are in the appendix. All the exercises evaluated were cross-coded to show all of the uses for each exercise.
Major findings and conclusions. The purpose of this study was to evaluate, revise and supplement the intermediate level exercises of the Adams study. Four groups of teachers—classroom teachers, remedial reading teachers, special class teachers, and clinicians—participated in the evaluation. As a result of the evaluation, many of the exercises were revised to provide clarity of directions, variety of material, and a wider range of interest and difficulty. Subsequent tabulation revealed a number of areas with few or no exercises. To strengthen these areas, new exercises were written. The new exercises which were evaluated have been included in the appendix. The tabulation also revealed that many exercises could serve several purposes. The results of this study would seem to indicate that the present exercises will be found useful to reading clinicians, teachers of remedial reading, and teachers with slow learners in the regular classroom. Their range of level and variety of use should render them helpful in providing for individual needs in both the remedial and classroom situation.
Suggestions for further study.

1. A study to try out and evaluate the new exercises that have not been evaluated.

2. A study to try all the Intermediate exercises on a larger and more representative population to establish their value.

3. A similar study including all of the Intermediate Reading Vocabulary exercises.

4. A study of additional practices and techniques to be used in improving comprehension on the intermediate grade level.

5. A study of the types of word recognition errors in the intermediate grades.

6. A study of word analysis ability in the intermediate grades.

7. A study for the construction of additional exercises for clarifying and enriching word meaning in the intermediate grades.

8. A study for the construction of a set of exercises similar to the present study for use with a higher interest level and a low vocabulary level designed for Junior High School students.
Malley, Mary Margaret; O'Hare, Audrey Marie.

"History Stories of Lynn for the Slow Learners of Grades Four, Five, and Six."
Unpublished Ed.M. Thesis
Boston University School of Education, 1959.

Problem. To develop a series of stories about Lynn to give the slow learners of grades four, five and six a better understanding and knowledge of the part Lynn has played in the growth of America.

Scope. Stories cover events in Lynn from the arrival of the first white man to the present time.

Procedure.

1. Decide on the topic - From a suggestion in the thesis of Maryl L. Needham, 1957 citing the need for historical stories of Lynn, Massachusetts.

2. Research to gather information:
   a. Old manuscripts, records, histories of days before Lynn became a city
   b. Search for and read old newspapers especially the Centennial Editions of the Lynn Daily Item
   c. Visit local historical points of interest

3. Collect maps and pictures to incorporate into thesis.
4. Write the stories keeping in mind the hope that they will bring greater appreciation for their city to the slow learners of grades four, five, and six especially and to any others who read them.

Suggestions for further research.

1. Present the stories to the slow learners of grades four, five and six in the Lynn schools and test to see how much the children learned about their city.

2. Write a series of exercises to accompany the stories and present them as a workbook.

3. Write similar stories about communities surrounding Lynn.

II. Handbooks - Guides

Arone, Vincent J., and Rogers, William.


Problem. To review the literature related to the education of mentally ill and emotionally disturbed children, and the pertinent contributions of the same. To list state and private institutions having facilities for their education together with
current practices in grouping and in classroom procedures.

Scope and limitations of study.

1. In reporting the literature the writers chose material intended for the education of either normal or abnormal children if applicable to the problem.

2. The study was concerned only with private and state schools established for full time care and treatment.

3. For the purpose of this study "education" means the imparting of traditional curricular materials, in a classroom setting, by a qualified teacher.

Procedure. A review of literature was made, evaluated, and compiled in order of the dates of publication. A list of the names and of addresses of private schools was obtained from Sargent's Directory and a form letter requesting information was mailed to them. Materials received in answer were analyzed and the information tabulated. A letter of inquiry was sent to the Director of Mental Health in each state, Puerto Rico, and The District of Columbia. A compilation of names, addresses and pertinent information was
made. This information was listed by states in alphabetical order.

Major findings and conclusions.

1. No compilation of pertinent materials has here-to-fore been available.

2. Facilities do exist for educating emotionally disturbed children but these facilities are so inadequate that only by a tremendous increase in the quantity of schools can we educate a major portion of these children.

3. More interest is being taken and more schools are being planned.

4. There is a great need for specially trained personnel in this field.

Criticisms and suggestions for further study.

1. Due to the time element the data was incomplete.

2. A specifically controlled study was recommended to discover differences in learning abilities between normal and disturbed children.

3. A historical study of the theory, practice, and establishment of schools for these children.
4. A study of current classroom practices using questionnaire forms.

5. A pilot study of expected retardation in clinical types of disturbed children.

6. An experiment to attempt to increase reasoning ability, when capacity is present but interfered with by mental disturbance.


Problem. To construct an adequate and simple nontechnical manual of teaching aids to meet the immediate needs for the teaching of speech improvement and speech correction to slow learning children.

Scope and limitations of study.

1. Limited to 18 children in an ungraded class in an elementary school.

2. The I. Q.'s ranged from 44 to 72.

3. The chronological age range was from 6 to 13.

4. Speech defects in the children were as follows: nasality, slow speech due to cerebral palsy, speech peculiar to the mongoloid and general articulatory difficulties.
5. Stuttering, pronounced lisping, speech defects due to cleft palate, and mutism were not included in this study.

6. All the children came from English speaking homes.

7. The wide range in chronological ages and mental ages necessitated much research.

Procedure.

1. Finding exercises that would give drills in correct speech habits and attitudes.

2. Finding stimulating play activities and play materials to accelerate improvement in basic speech habits.

3. Compiling poems, games and exercises to develop specific skills in speech improvement.

4. Adjusting the vocabulary of many of the teaching aids to the mental age and interest level of the children.

5. General instruction on how sounds were produced using a mirror and a voice mechanism chart.

6. Use of short drill periods and various activities such as dramatic play, puppetry, etc.

7. Use of a picture projector, record player and tape recorder.
8. Gathering supplementary material such as jingles, riddles and rhymes for teaching speech.

9. Presenting the carefully selected material to the class and testing in order to achieve the desired results in the most effective manner.

Major findings and conclusions.

1. The writer feels that these teaching aids helped to motivate, stimulate and expedite speech education.

2. Slow learners need highly motivated instructional material based largely on their own experiences.

3. The interpersonal group situation seemed preferable as it did not tend to make the children feel conspicuous or self-conscious.

4. The writer feels that speech should be made part of the education of all the children since the future economic and civil success of a person depends largely upon his ability to express himself.

Criticisms and suggestions for further study.

1. The use of this handbook with a larger number of pupils at the elementary level to determine its value.
2. An evaluation of these same teaching aids for children who have a limited knowledge of the English language.

3. To make a study with two groups of children, with equal language fluency, having one group use all corrective material from basic readers, the other group having, as its sources, any carefully chosen selections from a wide range of children's literature. At the end of the experimental period to try to determine which type furnishes the more effective study-aids.

4. To present these teaching aids at appropriate grade levels and try to determine whether these aids would accelerate speech improvement among normal children.

5. To determine what correlation there is between speech education and reading; if speech education expedites better reading; and what correlation exists between speech defectives and good or poor readers.

6. To ascertain if these aids offer good motivation in elementary reading.

7. To try and determine if the suggestions in this paper can help develop better auditory
discrimination among both normal and slow learners.

8. Investigate the advisability of using phonograph records and tape recordings as a means of helping to improve hearing acuity and for speech motivation.

9. To observe if these aids are effective in correcting inadequate and ineffective patterns of speech that have been acquired by the child.

10. To carry on a further study of the choicest of children's literature for material suitable for use in speech education.


Problem. To compile a handbook for use of teachers in classes of trainable children presenting ideas for organizing classrooms and suggesting exercises for use in these classes.

Scope and limitations of study.

1. Suggestions presented in this thesis are varied to include ideas for children with varied mental age levels in trainable groups.
2. The purchasable equipment includes items for a primary group, an intermediate group, and a post-adolescent group.

3. In suggesting exercises to be used in trainable classes the writer has included ideas which may only be worked out using paper; this has limited the collection but it is hoped that other teachers may find ideas suggesting themselves from those presented in this paper.

Procedure. The author gives suggestions for classroom setup and supplies to meet the needs of the primary, intermediate and post-adolescent groups. Exercises are presented which use paper as a medium. These exercises are divided into three main categories:

1. Teaching Devices
2. Games
3. Children's Handwork

Major findings and conclusions.

1. The teachers were given a handbook which will be helpful to them in classes for trainable children.

2. Arranging classes divided into 3 groups is a workable idea where there is a sufficient number to warrant such a grouping.
3. Teachers will not need all the equipment listed in this study but they may choose what is best suited to their needs.

Criticisms and suggestions for further study.

1. The study has been limited by the fact that the program for trainables in Providence is only in its third year and for this reason the number of children participating has not been large.

2. Most of the exercises presented in the study have been worked out with trainable children but because of lack of time all of them have not been used.

3. The suggesting of exercises was limited because only those which could be worked out with paper were used.

4. A study might be made using the exercises presented here and revaluing them as to mental age level.

5. A collection of exercises might be made using other materials as a medium.

6. A collection of ideas for music, rhythm, and activity games for trainable children might be useful.
7. Collect a set of stories and adapt them for telling to groups of trainable children of different age levels.

8. A curriculum for trainable children might be worked out by a group compiling ideas from different areas in the field of trainability.

9. A study might be made that will evaluate the activities presented in this study.


Problem. To identify and catalogue the special services available to exceptional children in the Commonwealth of Massachusetts.

Scope and limitation of study. To present in the form of a directory or booklet data collected from 49 institutions in Massachusetts.

Procedure.

1. A list of schools, agencies, and clinics was drawn up from 5 listed sources.

2. A letter of inquiry was sent to these places to obtain data.

3. A plan of analyses was drawn up to separate and tabulate data.
4. Data was interpreted in terms of services.
5. Data was presented in booklet form.

Major findings and conclusions.

1. Children should make excellent progress in overcoming their handicaps on being exposed to the right school or agency and in receiving correct treatment.

2. With the aid of a special adjustive service program every handicapped child should be educated for some participation in the world's work by developing to maximum capacity.

3. Each institution should be utilized to their fullest extent.

4. This directory or booklet should be useful to persons concerned with exceptional children.


Problem. The preparation of a guide for the teacher in her attempt to systematize a sense-training program for deaf-blind children.
Scope and limitations of the study.

1. Very little available information or literature on the subject.

2. No experimental data available.

Procedure.

1. Obtained, through letters, information concerning sense training equipment used in schools for the blind and the deaf-blind.

2. Requested, by letter catalogues of educational toy manufacturers.

3. Visited toy departments of local stores.

4. Observations of sense training classes at Fernald School.

5. Literature on experimental psychology, developmental psychology and child growth utilized and built upon.

6. Basic principles were formed by a review of the sense organs and their functions. The developmental approach which encompasses an orientation of the general to the specific with a graduation and adaption of sensory stimuli was arrived at during the study.

Major findings and conclusions.

1. Sensations give rise to ideas and are converted into knowledge; this is explained by the
following experiences:

a. Perception of dissimilarity of different sensations.
b. Perception of similarity of different sensations.
c. Repetition of these sensations.

2. The deaf-blind are completely isolated from the world if they are not trained to use their remaining senses to the optimum.

3. Development of their ability to make use of their surroundings is of utmost importance - sense modalities arising from auto-education.

4. Manual: Divided into the different sensory areas with a discussion or introduction to each sense giving information warning against errors in methods of presenting materials as established by experiment; a non-technical summary of physiological data; source of supply of necessary materials, description and price of item.

Criticisms and suggestions for further study.

1. No data was given for guiding a teacher in the specific procedures necessary at the various age levels.
2. No experimentation or critical analysis of the concepts were introduced.
3. Further studies on sense training are extremely important in the education of the deaf-blind.


Problem. To compile a source list of materials found in use in classes for the trainable mentally retarded.

Scope. The materials list is composed of only those materials found in use and suggested by the teachers of the classes visited, namely; 9 public day classes in Massachusetts, 1 state institution in Massachusetts, 1 private boarding school in Massachusetts and 2 public day schools in Rhode Island.

Procedure.
1. Make a list of schools to visit.
2. Send letter requesting permission to visit school.
3. Visit school and list materials used in each classroom.
4. Arrange materials collected into groups:
   a. Mental health
   b. Physical health and safety
   c. Motor co-ordination
   d. Power of communication
   e. Sensory training
   f. Pre-primary readiness
   g. General improvement or broadening of horizons

5. Introduce each area with aims materials hope to accomplish.

Major findings and conclusions.

1. 1940 marked the beginning of a change in philosophy towards these children.
2. Most teachers are at a loss to what materials are appropriate and beneficial.
3. Teachers in many of the classes were using the same materials, but in different ways.
4. Most material was for motor co-ordination.
5. Most materials were purchased not made.
6. Teacher with ingenuity was best equipped to help the child in regard to his own case.

Suggestions for further study.

1. Spend time observing the worth of the materials listed.
2. Use more classrooms to consider problem.

3. Get materials which could be made by the teacher or parents.

4. Collect ideas and materials which teachers have devised to fit needs of particular children.


Problem. To prepare for successful parent school relations a handbook; the study has been found necessary because cooperation has not been coming from the home due to insufficient understanding and definite printed information. Parent's Information Handbook to be prepared for King Junior High School, purpose of this thesis.

Scope and limitations of the study. A selective list of items for inclusion in the handbook were assembled for this from three sources.

1. A number of cities comparable to Portland in size were consulted as to what was available in handbooks.

2. Members of the King Junior High were asked to give items.
3. Parents were given check list to indicate item they desired.

Responses from 31 school systems about the Junior High Students Handbook.

Responses from 481 seventh and eighth grade parents.

Responses to lists and interpretation of 223 eighth grade items, to check off 10 items out of 20.

Purpose of items to familiarize students, teachers, parents and community with organization of schools, physical facilities, management, curriculum, special helps given for different categories of child's school success, and extra curriculum opportunities.

Major findings and conclusions.

1. Parent's Handbook not yet in general use at Junior High level.

2. Many administrators who replied regarded it as a potential contribution toward success in Junior High operation.

3. Parents anxious to have accurate written information to cooperate with school

4. Handbooks could be developed for other levels in education.
5. Good for children entering school, kindergarten, and sub-primary, intermediate.

6. Suggestions to introduce material on slow-learner, promotion, and need found for foundations in the skills of learning.

NOTE: It was found that colleges devote a share of their catalogs to this.

Criticisms and suggestions for further study.

1. Due to improved parent appreciation and interpretation and the strong factor it is in good public relations, the need of more handbooks to be assembled and published.

2. Writer recommends: follow child through school with a series of Parent Information Handbooks, prepared for different levels of school system.

III. Evaluation - Measurement


Problem. To discover the variations in language ability of children in mentally retarded classes and specific kinds of strengths and weaknesses among these children.
Scope.

1. 239 children in 17 classes of 2 cities in Metropolitan Boston
2. IQ score range between 50 and 79 (with some exceptions admitted to classes on advice of the superintendent of schools).
3. During the study one primary class was dropped because of lack of ability to score on any language test and 12 children left school so the final total was 209 - 67 primary and 142 intermediate.

Procedure.

1. Review research in mentally retarded in school hearing comprehension; reading; auditory and visual discrimination; spelling; language; and handwriting.
2. Administer battery of tests.
3. Analyze data to find abilities of children in listening, reading, and writing and speaking.

Major findings and conclusions.

1. Listening comprehension was found to be the best language path for learning.
2. Reading ability was lower than you might think for mental age.
3. Growth in spelling was not parallel to growth in mental age.

4. A highly motivated systematic program of language seems best for this group of children.

Suggestions for further research.

1. Compare achievement of language abilities with length of time in special class.

2. Do a similar study with half of children in special classes and others in regular classes.

3. Analyze data using carefully matched pairs.

4. Compare growth of reading ability after hard training in auditory discrimination and visual discrimination and knowledge of letter names.

5. Compare growth of spelling ability after hard training in auditory and visual discrimination.

6. Compare growth in written recall after hard training in word perception and spelling.

West, Mildred Rollo; Battit, Mary; Beer, Bernice Lyness; Lawrence, Thelma Louise; O'Keefe, Dorothy Mary.

"An Evaluation of a Group of Exercises in Reading Readiness and Word Analysis Skills for the Slow
Learning Children in Grade One."
Unpublished Ed.M. Thesis

Problem. To evaluate a workbook of auditory and visual
readiness materials and word analysis skills
developed by Shortill to give the slow learning
child extra opportunity to develop readiness
and reading skills necessary for grade one.

Scope and limitations of study.

1. Study was carried on in ten first grades.
2. 350 children participated.
3. Children were from classrooms in rural,
   suburban and city communities in and around
   Boston.
4. Children were heterogeneous in age, mental
   ability and maturity.
5. Reading ability range was from first grade
   norm to slow learner.
6. Chronological age range was from 5 years
   6 months to 8 years 6 months.
7. Pre-test skills included:
   a. color
   b. auditory discrimination (initial consonants)
   c. rhyming words (endings)
   d. rhyming pictures (endings)
e. visual discrimination (initial consonants)
f. visual discrimination (matching like words)
g. visual discrimination (marking words with the same initial consonants)

8. 16 sets of auditory exercises were used, 8 sets of rhyming exercises and 24 sets of visual discrimination exercises.

9. Exercises were from one study and administered over a six week period.

Limitations.

1. Different teachers administered the exercises so there was different motivation.
2. A regular classroom atmosphere prevailed.
3. No preparation for the pre-test was given.
4. A limited vocabulary was used in the exercises (69 words).
5. The IQ scores of the children were unavailable.
6. Absences due to illness were not made up.

Procedure.

1. Get cross-section of children.
2. Give pre-test in January without time limit.
3. Establish order of difficulty from results of pre-test easy to difficult.
4. Give exercises to children; two sets daily over period of six weeks.
5. Administer final test.
6. Compare results of pre-test and final test.

Major findings and conclusions.
1. On all tests there was very little improvement.
2. Gains were as slight as to show no statistical difference.
3. Since the difference was so slight, no conclusion can be drawn as to the efficiency of the exercises.

Suggestions for further research.
1. Do this study in September.
2. Study word confusions between Scott Foresmen and other basal series.
3. Study which series is most valuable for the slow learning child.
4. Develop more exercises on rhyming pictures and words.
5. Develop seat work exercises to help eliminate reversals and to develop other skills than those in this study.

IV. Studies - Analyses
Carney, Beryl-Jane, and Rossley, Beatrice M.

"An Analysis of the Relationship Between the Potential and Achievement Level of 36 Children Segregated for Special Education and 36 Children in Regular Classrooms."
Unpublished Ed.M. Thesis
Boston University School of Education, 1958.

Problem. An attempt to find the correlation between the IQ, EA, and personality and social adjustment of a group of 36 children segregated for special education and 36 children in regular classrooms.

Scope and limitations of study.

Through a process of elimination due to low mental age this study finally resulted in the use of two groups of children, each group being composed of 23 children.

Number of boys from segregated class: 17
Number of boys from regular classes: 17
Number of girls from segregated class: 6
Number of girls from regular classes: 6

Each pair was matched for sex and mental age.
No pair had a difference of more than two mental months.
No children selected from regular classrooms had IQ's exceeding 110.

Procedure. The following tests were administered:
1. Otis Intelligence Test.
2. California Achievement Test.
3. California Test of Personality.
Clinical data was secured on the special class children.
Personal data was secured on each child from school records.
The findings on all tests were recorded and analyzed. For all totals and subtotals the mean, the standard deviation, and the error of the mean was computed.

Major findings and conclusions.

1. The largest number of educational ages for both groups equaled or exceeded mental age expectations.
2. A positive correlation of M. A.'s with E. A.'s was found.
3. The mean score of arithmetic exceeded those on any other test for the segregated group.
4. The mean language score exceeded all other scores for the groups from regular classrooms.
5. Personality adjustment seems to decrease as the chronological age increases.
6. Recognition and treatment of personality disturbances must accompany curricula planning.
7. More physical disabilities were found in the segregated group.
8. Unfavorable home attitudes and/or poor home conditions were frequently noted in the segregated group.

Criticisms and suggestions for further study.
1. A similar study using a larger group might have more validity.
2. The small number of girls may have caused a distortion in the results reported for them.
3. A follow-up of the same pupils to determine whether a longer period of time in a special class will prove beneficial.
4. A study of the effects of parental attitudes upon pupil progress.
5. A study of the effect of socio-economic pressure upon the segregated students.
6. Analysis of the extent to which attitudes in the school environment affect the morale of the student body.
7. The validity of the personality test score is unsubstantiated.
Dickstein, Joan; Dripps, Elaine.


Problem. To analyze by rating scale technique attitudes of youth specialists toward various categories of exceptional children.

1. Do different groups of child workers vary in attitudes?
2. Are certain categories of handicapped more accepted or rejected?
3. Are there likenesses of differences within one specific category?

Scope and limitations of the study.

A. The attitudes of 100 Freshmen, 100 Regular Teachers, 46 in Special Education, 32 Principals, 31 Speech Therapists were analyzed; all had direct contact.

B. Following categories included:
1. Visually Handicapped
2. Mentally Handicapped, Retarded or Slow
3. Emotionally Disturbed
4. Physically Handicapped
5. Hearing Handicapped
6. Gifted and Talented, talents not developed.
7. Speech Disorders
8. Delinquents

C. Following categories of speech handicaps included:
1. Articulation
2. Stuttering
3. Delayed Speech
4. Cleft Palate and Hair-Lip
5. Foreign Dialects
6. Hard of Hearing Disorders and Deaf
7. Cerebral Palsy
8. Voice Disorders

Major findings and conclusions. More rejected of handicapped will receive more productive consideration through knowledge and understanding of professional groups.

Reaction of parents toward their handicapped will become more normal through knowledge.

Necessity of breaking down prejudices.

Gifted and Delinquents most neglected as a whole.

General tendency of outcome of questionnaires was that all workers most preferred to teach categories about which they felt they knew the most.
Cleft palate, cerebral palsy, hearing loss, speech handicapped areas most shunned by teachers.

Criticisms and suggestions for further study.

1. More training for and of specialists and therapists so that they recognize and know more about all handicaps, although handling only one area; a better psychological and psychiatric background. More follow-up of their work.

2. More consideration as to teacher training and placement; as the emotional effect on the child and teacher are deeply concerned.

3. Required courses for regular teachers concerning all the handicapped.


Problem. To provide further validation of the Healy Pictorial Test II by analyzing results obtained from this test when administered to a group of children of special classes for mentally retarded children.
Scope.

1. Study involves 227 children - 117 boys and 110 girls.

2. Children attend special classes for the mentally retarded children in Fall River and Dartmouth, Massachusetts (1950-51).

3. The chronological age spread was from 7 years to 19 years with 73% of the total between 12 years and 16 years.

4. Analysis will be a comparison of the results of the Healy with the Standard Binet general intelligence test - first with the group as a whole, then each sex individually.

5. Analysis also will compare certain parts of the Healy with this group and Healy's own norm population.

Procedure.

1. Establish group.

2. Administer test.

3. Collect data.

4. Analyze and compare data.

Major findings and conclusions.

1. More than 60% of the total group had higher IQ scores on the Healy than the Binet.
2. The group appeared more homogeneous in general intelligence on the Binet and less homogeneous in apperceptive ability on the Healy.

3. The mentally population closely resembles the normal population in % of correct placements on the sub-tests concerned.

4. The mentally retarded performed more successfully on less difficult sub-tests and less successfully on more difficult sub-tests than the normal population.

5. The mentally retarded closely resembles the normal population on relative difficulty of the sub-tests.

6. The two most difficult sub-tests involved finding objects which correspond to a shadow in the picture.

7. Boys performed better in all respects on the Healy than girls.

8. If the Healy is a true measure of apperception, there are some mentally retarded children with very keen apperceptive ability (as shown by 21 high scores) and some with extremely low, minus, in fact, apperceptive ability (8 cases).
Criticisms and suggestions for further study.

Criticisms

1. Most of the studies on the Healy Test were conducted between 1921 and 1932 and much material is inconclusive and unreliable in the light of new techniques and methods.

2. In some studies on the Healy Test there are directly contradictory statements.

3. Because of lack of accurate medians on IQ scores of children below 7 years and over 16 years, those extremes were necessarily eliminated from this study.

4. The author of this study did not collect all data personally so errors in recording and omission of some data necessitated exclusion of some cases from tables thus causing considerable fluctuation in the total number.

Suggestions

1. To confirm the quality of this instrument (Healy Pictorial Test II), which is in doubt by the author;
   a. revise the Healy Test to strengthen its weaknesses
   b. devise a new test based on the Healy Test

2. Test the performance of boys as compared to girls.

Problem. To examine the literature past and present to extract reasonable answers to inquiries, and to evaluate present ideas as to philosophy, goals and procedures in work with the trainable mentally retarded children specifically.

Scope and limitations of the study.

1. Definition of trainable—a current term for children whose intelligence quotients fall between 20 and 50. Other terms applied "absolute", "moderate", "mentally deficient".

2. More than one test, now a battery of test results necessary for determination of placement. Simon-Binet tests should be administered first plus others.

3. Brain-injured pre-psychotic, and emotionally disturbed children; within these limits, included.

4. Complete study of the early history up to now, from Itard and "wild boy of Averyron" 155 years ago to present Hungerford's statement: "It is now believed retarded have potential contribution to make to the world
and its primary function of special education, to help the retarded to realize its potentialities." Other pioneers in this field studied and quoted: Sequin, Montessori, Decroly, Gridley and Fernald.

5. Goals: 1. Physical Health
   2. Mental Health
   3. Power of communication
   4. Motor co-ordination
   5. Sensory training
   6. Leisure time activity
   7. Intellectual development
   8. Pre-primary readiness
   9. Clinical education
  10. Evaluation reports
  11. Parent education

Conclusions and criticisms. Children who progress sufficiently in reading after training, may be transferred to "educable group" if social adjustment good. Within the group, treatment of individual differences important, teaching should be tuned to wide and diverse spans of abilities; desirable to group children according to chronological age, one class to meet in the morning, the other in the afternoon.
Size of class, 6 to 18, model number 10.
Day's work well planned, sufficient length of day, usually 2-1/2 to 3 hours.
Place of school well chosen, should be the best possible, some controversy concerning this, best in elementary school, some communities demand isolation, special class centers good.
Eligibility to class should be based on careful screening, as to history, medical examination, physical tests, neurological examination, speech, hearing, vision, psychologic and psychiatric tests. Exclusions based on detrimental behavior to group, or if own behavior affected diversely by group; physical, mental and emotional maturation, mental illness, chronological age after trial shows unfitness for program.
Parents advised regularly as to progress and failure.
Teachers helpers needed; should not be parents, too emotionally involved.
Teachers required qualifications to teach these classes, recent study in Washington.
Classes not too wide spread, due to restricted scope of the problem, impact on the public mind,
limited resources in rural sections.
Massachusetts a pioneer in 1955, progress good, has been an example.


Problem. To find and gather factual information concerning the occupational, personal and social adjustments of graduates from the first Special Class in Newton High School. To determine the extent to which the program met the needs of the pupils.

Scope and limitations of study.
Number of graduates in case studies: 12
Range of ages: 21 to 25
Range of I.Q.'s on Binet: 65-79
Period of time covered: 3-1/2 years

Procedure. Three group meetings were held to observe social adjustments. Two of these were in a private home, the third was a dinner party in a public place. Vocational adjustments were determined by questionnaires and visits to places of employment.
A home visit was made for objective observation. Other information came from cumulative record cards, test and anecdotal records and health records. The Welfare Department and the Family Service Bureau made records available. Voting registrations and police court records were checked.

From the information collected a case study was made of each person.

**Major findings and conclusions.**

1. Eleven of the twelve were employed full time and were considered self-supporting.

2. Eight had savings accounts and ten had life insurance protection of at least $1000.

3. None had court records.

4. Seven had registered and voted.

5. Only two held jobs that depended on skill. These two were the best paid.

6. Most employers found them slow to learn but willing and dependable after acquiring the necessary knowledge.

7. Most families were relaxed and well adjusted in personal relations.

8. The most help for employment came from courses in sewing, child care, business arithmetic,
driver education and English.

9. For leisure time and social life the most help came from art, sewing, driver education and English.

10. Eleven showed definite carry-over from their school experiences through emotional stability, social maturity and occupational adequacy.

Criticisms and suggestions for further study.

1. Stress should be placed on developing manual dexterity during school years.

2. There should be more specific training and information on how to apply for a job and how to fill out the necessary forms.

3. Emphasis should be placed on personal neatness and on the appropriate dress for working conditions.

4. Hobbies should be started to aid in wise leisure time activities.

5. A follow-up study of later graduates to find out if new courses added to the curriculum have been of value.

6. A follow-up program for guidance and assistance in the first years of work experience.

7. A further follow-up of this group in ten years to find out how much of a carry-over
has persisted in family living habits.

8. A comparative study of the life adjustment of these graduates and a group of their peers who were drop-outs.


Problem. To find out what had happened to fifty boys since leaving special classes in Fitchburg, Massachusetts.

Scope and limitations of study.

1. All of the boys selected for this study had attended special class for at least a year.

2. They had all reached the age of 16 before leaving.

3. The study deals with three areas of investigation: (1) economic (2) social (3) military.

4. Only general trends were recorded.

Procedure. Specific facts were gathered through standardized interviews. The obtained information was analyzed for trends and tendencies and for deviations from them. Information was sought
from official records as well as from personal interviews. Research was conducted to validate answers to specific responses. The records of the school and of local municipal, county and federal agencies were examined. The files of selective service offices were consulted as were those of places of employment and local merchants and utility companies.

Major findings and conclusions.

1. Most of the boys had become absorbed into the normal flow of life.
2. A majority became self-supporting, the heads of households and property owners.
3. Twenty-six served in the armed forces.
4. Most of the unmarried boys lived at home and were contributing to the expenses of the home.
5. More than three quarters of the jobs held were classified as semi-skilled or unskilled.
6. Delinquency findings suggest that a large number are potential delinquents who need special guidance.
7. Vocational guidance is greatly needed for such classes, both as an in-school and post-school service.
Criticisms and suggestions for further study.

1. A study of the social contributions made by the group within a twenty year period.

2. A detailed investigation into the causes of unemployment.

3. A comparative follow-up, using this group and a group of boys who left regular grades at the age of 16.

4. The intelligence and eventual grade placement of the offspring of the group.

5. A follow-up of the same group ten or more years from the date of the present study.


Problem. To evaluate the relative effectiveness of two basic speech rehabilitation procedures, individual and group, with educable institutionalized mentally retarded children.

Experimental Design. Three groups of subjects were equated. First group received individual speech therapy,
Justification. The extent of the need - 60 per cent of mentally retarded children need clinical speech therapy.

Effect of speech on total adjustment - Mentally retarded child experiences essentially the same personal-social needs as do his fellows in the higher intellectual strata, including the needs to belong, to communicate and to engage in self-expression.

Importance for accurate diagnosis - The total evaluation of an individual is affected strongly by his performance in the area of speech.

Implications for work with children of normal intelligence - Research on the efficacy of speech therapy procedure with mentally retarded can contribute also to the knowledge of speech development in a normal population.

Scope and limitations of study.

1. Twenty eight male subjects were obtained from the Myles Standish State School, Taunton, Massachusetts.

2. Three groups were equated on the basis of articulation, index, and mental age.

3. Chronological age and etiology were considered.
4. One group functioned as a control - the other two were experimental groups, one received individual speech therapy and the other one received group speech therapy.

5. At the beginning of the experiment the mean Revised Stanford-Binet I.Q. was 55.9 and the mean mental age 5.5 years.

6. Cases were accepted only in the absence of brain injury, gross physical abnormality and anomalies of the speech and hearing apparatus.

7. All subjects attended the institution, so that education experiences outside therapy were constant.

Procedure. The control group received no therapy. The experimental groups participated in speech therapy sessions of 30 minutes length twice a week for a period of 20 weeks.

Group A received standard individual speech therapy. Group B received standard group speech therapy. A permissive attitude where the children were completely relaxed was maintained. Drill was avoided and speech work was indirect.

The activities included stories, games, dramatic activities and spontaneous conversation.
Major findings and conclusions.

1. Significant difference (.05) was demonstrated between the combined experimental groups and control group.

2. No significant differences in improvement occurred on the following factors; blends score, verbal output, sentence length.

3. Only negligible shifts in proportions of parts of speech occurred.

4. Desirable changes in personality traits occurred.

5. General increase in frustration tolerance was the most notable improvement.

 Criticisms and suggestions for further study.

1. Repeat the experiment with a larger number of subjects.

2. Extension of therapy period would be desirable.

3. Mentally defective children might be classified e.g. institutionalized, non-institutionalized, or on the basis of mental age or social age and the responses of these groups to each therapy type evaluated.

4. A thorough study of other speech problems and the relationships between these
disorders and articulation errors is needed.

5. Same speech gains were noted in both experimental groups, although the therapist devoted 200 hours to the individual therapy group and only 60 hours to the group therapy children (both groups numbered 10 children). This highlights an area rich in potential research.


Problem. To describe the speech and vocalization of ten autistic children during a trial period of speech therapy.

Scope. A report of the speech of ten autistic children enrolled in a residential school receiving speech therapy twice weekly for eight months.

Procedure.

1. Conduct speech therapy on an individual basis.
2. See each child on two consecutive days per week for therapy session.
3. Average each session to one-half hour.
4. Divide investigation into two chronological periods:
   a. general speech stimuli - follow the leader games, records, pictures, etc.
   b. specific speech stimuli - free play with doll house, finger plays, match alphabetical letters, etc.
5. Record, analyze, tabulate speech that occurred and vocalization during each session.

Major findings and conclusions.
1. Some form of verbalization resulted from every child.
2. Autistic children use vowel sounds and plosive consonants first and nouns, verbs, and adjectives in that order as do normal children.
3. Each child responded to different stimuli - there is no one special that all autistic children respond to.
4. The response of one child to a specific stimuli varies with each session of therapy.
5. Speech using more than one of the five senses taught to autistic children resulted in more satisfactory verbalization.
6. Speech of autistic children is much delayed in development.
7. Speech of this group was similar to the group studied by Kanner.

Suggestions for further research.

1. Use a larger population in a similar study.
2. Use a group of autistic children living at home with their families.
3. Use a wider variety of stimuli.
4. Conduct therapy in a restrictive and permissive atmosphere with the same stimuli and compare the results of each.
5. Observe the effect of speech training incorporated in recreational therapeutic setting.
6. Study in greater detail the type of vocalizations:
   a. what vowels, plosives, nasals, fricatives do these children use in speaking.
   b. what emotions their voices betray.
7. Correlate the behavior observed and analyzed during the session by a psychologist with the results obtained from a speech therapist.
10. Compare the speech development of autistic children with deaf children.


Problem. The purpose of the study is to investigate tactual perception in children; limited to four stimulus characteristics: 1. size; 2. weight; 3. texture; 4. form.

Scope and limitations of the problem. Learning occurs through impressions of stimuli from all sense modalities. Under most conditions, several receptor processes are activated simultaneously, an object is not only seen, but heard, touched or smelled at the same time. Most research has had to do with visual and auditory perception. Touch somewhat neglected in research, it is very important to the individual. Touch is used in judging the ripeness of fruit, the sharpness of a knife, the quality of a fabric. Through touch the blind person learns to read. Touch is used as the basis of many neurological tests.
Instruction in tactual and kinesthetic discrimination given in training of feebleminded, shows all children do not achieve in this ability at the same rate.

Past years more attention has been given to the brain injured child not mentally retarded.

Two groups of subjects participated in this study:
1. Normal children
2. Brain Injured Children

All between the ages of five and nine years.

One hundred and sixty normal children tested, equal number of boys and girls, eight-right handed and eight left-handed at each age level. IQ's ranged between 82 and 145 with an average IQ of 108.

Forty-nine brain-injured children were tested; subjects suffered from aneuromotor disability known as cerebral palsy, characterized by hyperactivity, short attention span, poor concentration, variability, impulsiveness and irritability.

Diagnoses of those selected made on the basis of two pediatricians and one neurosurgeon from neurological examinations and electroencephalogram findings.
As in the normal group any brain damaged child who showed severe hearing loss, visual impairment, or mental retardation was excluded. The IQ's of this group ranged from 70 to 132, the average 99.

Subdivided into two groups:
1. The handicapped—children with motor involvement of the hands.
2. The non-handicapped—without motor involvement of the hands.

All were receiving medication, anti-convulsant drugs, the administration of which had shown clinical improvement.

The Brain-injured subjects were obtained at the Emma Pendleton Bradley Home in Riverdale, Rhode Island.

The Normal Group selected from the Public Schools in Providence, Rhode Island.

Procedure. The tactual stimulus measured were size, weight, texture and form.

Size—Round, flat, wooden blocks were used, increasing in size.

Weight—Small glass bottles filled with varying amounts of sand and cotton.
Texture-- Sandpaper of different degrees of roughness, mounted on two inch square wooden blocks.
Form-- Five forms most frequently confused selected out of 25.
Two sets made of wood, subject presented with one shape, required to find one just like it.
Curtained-box-- Test materials hidden from view, by placing objects inside covered by dark curtain.
There were ten judgments with the preferred hand, ten with the non-preferred hand.
Testing session for Normals lasted twenty to thirty minutes, for Brain Injured twenty to forty-five minutes. None were timed, seemed to take longer for younger children and subjects with impairment of hand function.
Praise and encouragement given throughout test to allay any anxiety about failure.

Conclusions and findings. Among the Normal subjects age appeared to be a significant factor in perceiving objects of touch.
Errors decreased between the ages of five and eight, at nine year level increase occurred almost reaching seven year score.
Boys tended to make fewer errors than girls.
On subtests Size and Form fewer errors made by left-handed subjects.
With the exception of Weight, no real differences between the preferred and non-preferred hand; in judgment of weight the preferred hand appeared to be more accurate.
Among the Brain Injured subjects non-handicapped group was superior to the handicapped, in every subtest except Weight, in which no differences found.
With exception of subtest Form no differences between preferred and non-preferred hand. In Form the preferred hand made significantly fewer errors.
In sub-test Weight no difference found between groups.
Unlike the Normal group, age was significant in only one sub-test, Texture.
In comparison of all three groups, the data indicated general superiority in tactual functions for the Normal children.
In subtests Size and Texture, the Normal group was superior to both brain-injured groups.
In the subtest Form the Normal group was better than the Handicapped but at the same level as
the non-handicapped.
No significant differences were found among any of the groups for the subtest Weight.
Reliability coefficients were computed by the Kuder-Richardson Formula 21. Weight appeared to be the least reliable of the subtests.
In the other subtests results of the Brain-Injured sample appeared to be more consistent than results obtained from the Normal sample. The tests were not reliable enough to permit individual prediction.

Syverson, Alice A. "A Study to Determine Which of Five Techniques in Teaching Social Studies Has best Results with the Slow Learning Child and Which with the Fast Learning Child."

Problem. To find among five techniques in teaching social studies which are better suited to the slow learning and which to the fast learning child.
A technique---one of the steps or elements involved in the total process called method.

Scope and limitations of the study.
1. To measure the effectiveness of five techniques of study and presentation on the lower half
of a seventh grade class of 38 pupils, average I. Q. 108; average achievement, grade equivalent 7.6, social study achievement 7.8.

2. On the upper half of the same group.

3. The unit American History.

4. Kendall Dean School, Slatersville, Rhode Island.

5. Unit taught during period of three weeks; for one or two periods a day.

The techniques used:

1. Supervised study and discussion
2. Home study
3. Teacher telling and discussion
4. Individual research and discussion
5. Group research and discussion


Procedure. Pre-test—to see what was already known, unit divided into three sections—First section: children given guide sheet and two supervised study periods, filled in sheets, next period,
discussion.
Second section---pre-test, material assigned for homework to read and reread, noting essential points, discussion in class, post-test administered.
Third section---pre-test, two periods devoted to teacher telling and discussion of all important points not covered in text, post-test.
Other two techniques dealt with study skills.
Pre-tests on knowledge of certain reference books, then instruction on the use of reference books, cooperative study by groups of 4 or 5, post-test to see gains made.
Then pupils asked to evaluate and state preferences as to individual or group study, overall test to get gains; pupils then asked to rate techniques as to ease, difficulty, and interest.
Analysis and findings. All test scores based on scale of one to one hundred. Pre and post tests for whole unit composed of 50 questions, 2 points taken for each wrong answer.
Slow learners, median score on Test I (use of guide sheet) pre-test 40, post-test 70.
Home study technique, median of pre-test 55, post-test 65.
Gain same for both techniques, higher than for other methods.

Fast learners, Test I, 40 on pre-test, 80 on post-test, use of guide sheet.

For third technique (teacher telling) median 30 in pre-test 65 in post-test, gain approximately the same for both techniques, and higher than for any of the others.

These scores indicate slow learning child does just as well without guide sheet because fared just as well doing time study.

Same conclusion for fast learner, even though not as well with homework did well on teacher-telling.

Pupils point of view:

Group research felt best by both groups.

Slow learners felt individual research difficult, fast learners did not rate any technique difficult.

Research stimulated most questioning for both groups, both groups preferred group research, felt learned more from individual research.

Conclusions. Tests showed best results for slow learner group were study guide and home study. Greatest
gain for fast learner were study guide and teacher-telling techniques.
The size of standard error of deviation for both pre and post tests for first technique for fast learner group would indicate a group lacking homogeneity and a measure lacking reliability. The small or standard of deviation for post test for slow learning group would indicate greater homogeneity and a measure of greater reliability.
Above statements seem contradictory since same measure used for both groups.
Results obtained are suggestions of useful techniques; but are not statistically significant. Sampling not large enough to draw definite conclusions on effectiveness of five techniques.

Suggestions for further study.
1. The same experiment could be duplicated to see if the same results were obtained.
2. Other techniques could be compared as the 5 in this study.
3. Same experiment repeated at other grade levels, and other subjects.

Implications for teachers.
1. Group work is preferred by pupils over
individual work.
2. Teacher-telling is not as effective on slow learners as on fast learners.
3. Because pupils like to do a particular kind of work does not necessarily mean that they learn the most from it.

V. Teacher Training


Problem. To present a set of evaluative criteria in all areas of special education for physically handicapped children in a typical public school situation. The criteria aims to present an instrument for measuring administrator, teacher and instructor. This provides a means for superintendents, and school board administrators, teachers, and citizens to decide how adequately the educational goals for these children are being met.

Scope and limitations of the study. Seven areas of special education for physically handicapped child considered:
1. hard of hearing
2. deaf
3. partially sighted
4. blind
5. speech defects
6. crippled
7. home instruction

It is concerned with the child whose handicap can somewhat be compensated for by special technique of teaching and special equipment.

Three categories considered:
1. Classroom experience supplemented by auxiliary special instruction.
2. Child spends greater part of day in special classroom.
3. Receives public education at home; home teacher.

Checklists and evaluations and summaries were used; sent out to administrators, instructors, teachers; each area considered as a unit.

Checklists contained items:
1. Contents and administrative methods in each of seven areas.
2. Qualifications and preparation of teachers past background, present qualifications, and
future potential.

3. Duties and functions of special teachers.

4. Equipment and materials, least uniform of categories due to different types of devices used according to the handicap.

Note: Space left at the bottom for evaluation and comments.

Trial evaluation sent out first in one city:
4 home teachers
3 speech teachers
1 hearing conservationist
1 braille teacher

Each scored own area, omitting his name, asked to evaluate for completeness and authenticity of the instrument.

Questions:
1. Do you find all elements necessary for your program in checklist?
2. Can you suggest any omissions?
3. Any distortions or ambiguities?

Group of jurors selected to comment and evaluate critically.

Letters sent to all states asking for names of administrators in programs of special education.
Checklists mailed to them, asked to do three things:
1. re-edit any statements not clear
2. Delete any not important
3. Add further statements that have not been included

Twenty-five sent out, 60 percent returned answered. Analysis found good in most cases, changes made, list refined.

Major findings and conclusions. Special teachers felt all significant factors necessary included:
Areas all rated high in preparation and qualification.
Areas all rated lower in materials and equipment.

Sample of home instruction evaluation:
1. Periodic samples of home students work are not regularly filed with the administrator.
2. Home teacher and student not always alone during instruction period.
3. Little follow-up by teacher is done statistically on each student for a year after child's return to school.
4. No newspaper composed of home student's contributions published regularly.
5. Only occasionally are home students taken to the library.

6. Home teachers do not regularly visit the classroom teacher to check on home students progress.

7. Field trips seldom planned.

8. Home teachers encourage hobbies and suggest avenues of occupational therapy only to some extent.

9. Home instruction is given in quiet orderly room to some extent.

10. Portable blackboards ceiling projectors, and teacher phone equipment are not available.

Hard of hearing teacher not a competent li-reader.
Speech---All children are surveyed for speech handicaps only to some extent; again, not complete training on part of teacher. Not too professional, dedicated to work, poor grade experience, do not instruct classroom teacher in special helps, how to speak.

Criticisms and suggestions for further study.

1. Study revealed attention to special requirements of physically handicapped is relatively a new field and phase in its development;
few towns completely satisfying needs of all; no single philosophical purpose, no
trained full-time coordinator or administrator
2. Have an ideal but no method.
3. This study suggests a visiting committee to
measure and evaluate every aspect of school's
resources and education program.
4. Better public policy to spend money helping
handicapped to become useful than to be
supporting him when he becomes unhappy in
later life.
5. The inculcation of the concept and realization
that more of these children can be given the
education they need and yet be integrated
into society usefully.
6. Help the individual to help himself to the
limit of his capacity, for this adapted
education now a necessity.

Goldman, William J. "Identification of Teaching Practices
Peculiar to Special Classes of Educable
Retarded Children in Selected Massachu-
setts Schools."
Unpublished Ed.D. Thesis
Boston University School of Education,
1958.

Problem. To identify the teaching practices peculiar to
special classes of educable mentally retarded
children in selected Massachusetts schools.

Scope and limitations of study.

1. The 368 special class teachers in Massachusetts were contacted and a report compiled listing the activities and duties which they used to any degree in their teaching.

2. Number of special classes selected for comparison: 100

3. Number of regular classes selected for comparison: 100

4. Special class children were limited to those whose chronological ages were from six years to twelve years and whose intelligence quotients were between 50 and 79.

5. The regular classes selected ranged from grades one to six.

Procedure.

1. A preliminary questionnaire was sent to every special class teacher in Massachusetts. Fifty teachers were selected to supply specific information on activities and duties most used in their classrooms. The selection of classes was made to include both urban and rural populations. To test the reliability
of the reported activities the writer observed twenty-five classes throughout the state.
The reported practices were screened and organized under four headings:
1. Instructional aims and objectives
2. Instructional methods
3. Materials, aids, and exhibits
4. Administrative routine
The list of activities was presented to a qualified judging group for evaluation.

Major findings and conclusions.

1. In the special classes the curriculum experiences are designed with greater emphasis for individual differences.

2. Special class teachers found greater success in learning by active participation in first hand experiences.

3. Greater emphasis was given to promoting the child's mental, social and physical development of good habits and attitudes for present and future needs.

Criticisms and suggestions for further study.

1. Investigations can be made in other states for the purpose of comparison.
2. A detailed time study could be made for various activities.

3. A study might be made by direct observation of current practices used by special classes and regular grades.

4. A comparison might be made of educable and trainable classes using A Checklist of Teaching Practices.

5. A revision of the checklist can be made by replacing the items that failed to discriminate with other potentially discriminating items.

6. The use of the significant findings might be considered as a basis for correlating good and poor teaching practices in both special and regular grades.


Problem. To determine what each of the eight states of Vermont, Massachusetts, Rhode Island, Maine, Connecticut, New Hampshire, New York and New Jersey was doing for special education of the
educable and trainable mentally retarded. What legislation for teacher training was offered in each state for this work.

Scope and limitations of the study.

1. Written responses were secured from those who responded to questionnaires sent out to residential and day schools of the eight states as to who was enrolled (i.e. educables and trainables) how many, what special teacher training if any was provided.

2. Same type of questionnaire was sent to State Departments of Education concerning data of like nature in public schools of towns and cities in New England States, New York and New Jersey.

Definition of educable: children capable of a moderate degree of proficiency in the basic educational skills with special teaching assistance.

Definition of trainable: Children not expected to achieve useful knowledge of academic skills but who may develop personal and social adjustments whereby they become occupationally useful under sheltered circumstances.
These two groups can be trained in public schools with special assistance from parents and teachers. The smallest percentage of retarded require custodial permanent care. Such institutions most always overcrowded.

Task of teaching made to look difficult due to so much emphasis on expensive handicrafts; not necessary, simple practical crafts which fit the needs of life all that are necessary.

Needed teaching: building mind and body, grooming personality, shaping moral trend of the mind; cost of these low, no more than those needed for regular classes of children.

Important: Problem of the Slow Learner: It is not his slowness of which he is often unaware; but the attitude of people towards him and their demands of him.

Major findings and conclusions.

1. Educable retarded well cared for in states questioned in comparison to trainable retarded.

2. Four states: New York, New Hampshire, Vermont, and Maine had no legislation to cover public education of trainable; indicated plans underway however.
3. Need of cottage plan of housing in institutions.

4. Large numbers of children excluded from public schools awaiting commitment to institutions either private or state sponsored.

5. Although many states have private and state institutions with a fairly heavy enrollment of trainables, only six of the institutions are offering a program for teachers of the trainable.

6. Among the mentally deficient are those who never will be able to manage themselves without gross amount of supervision. These institutional cases often unable to gain admittance to state schools because of overcrowded conditions, should be taken care of in classes designated for them, in charge of a teacher who has the ability and training to handle the children.

Suggestions for further study.

1. In 1955, Boston University School of Education offered at intercession, a workshop for the retarded, that attracted mothers, interested friends, as well as teachers and administrators,
the response was heartening. More such excellent projects should be established by universities and state teacher college training schools.

2. Many of states could be requestioned, to compare what advance has been made in legislation since this study.

3. Research could be broadened to include other states not included in this study.

4. A similar study asking what is included in the curriculum and what kinds of equipment are in use.

5. A study to determine types of testing given in schools for trainables.

6. A study of the vocational guidance offered for trainable retarded.

7. A study to determine at what age many of these trainables are released (if at all) to go out and work at the skilled tasks they learned at school.

8. If and when all eight states in this study introduce and pass legislation for all public schools to provide classes for the trainables, it would be well to compare the growth and
progress of those trainables in public school attendance, such as in Massachusetts, with those in private institutions.

VI. Parental Problems


Problem. To present a study of parents of retarded children and their relation to parents groups to effect greater happiness for the community, through happier parents and children, and better public understanding and insight into the problem of mental retardation.

Scope.

1. The extent of the problem of mental retardation in a community: Portland, Oregon.
2. How the problem affects the community.
3. How the presence of a mentally retarded child in the family affects the parents, neighbors, and brothers and sisters.
4. How the activities of a parent group is an essential part of the whole team of educators and doctors and others who are working toward the goal of greater happiness for the retarded
child.

5. How the activities of the parents group results in positive benefits for all concerned.

6. How family adjustments were brought about as a result of parent group techniques.

Procedure.

(Both authors are parents of a mentally retarded child)

1. Study the parents group by being a member and seeing actual purpose and activity.

2. Evaluate effectiveness of the group.

Major findings and conclusions.

A parent group can:

1. be a force in helping parents accept their problem

2. be psycho-therapeutic

3. help to make others realize they are not alone

4. harness force to seek a better world for all retarded children

5. create better public relations

6. educate parents of mentally retarded children

7. result in constructive ideas and plans through their activities

8. aid in the enrichment of community resources; workshops, teacher-training projects, etc.
9. bring people to realize that families of all classes and groups may be affected by mental retardation

10. be organized in rural as well as urban communities

11. bring about legislation when organized on a state wide level

12. result in improvement of school for mentally retarded children

13. establish that retarded children have "Rights"

14. and did establish that mentally retarded children in Oregon are owed an education by the public schools

15. and has removed the stigma of the term mental retardation

Suggestions for further study.

1. Do a similar study with a larger group.

2. Do a similar study with a different community.

3. Compare the results of different studies with this one.
TABULATION OF ABSTRACTS

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Reading      4
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Handbooks - Guides

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Speech Correction Aids for Slow Learners 1
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Special Teacher Training for Educable Children 1
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Evaluative Criteria for Physically Handicapped 1

Parental Problems

Parental Attitudes Towards Educating Mentally Retarded 1

TOTAL 32
CHAPTER IV
RECOMMENDATIONS FOR FURTHER RESEARCH

Part I. Curriculum Materials

1. Conduct a study of the number concepts found in children's literature in the subprimary.

2. Evaluate the units of work in art activities in many school systems.

3. Make a controlled study one using an integrated curriculum the other using art and handwork only during art period, comparing results for social progress and group relations.

4. A survey to evaluate improvement in written work due to better hand dexterity developed through art.

5. A follow-up study of leisure time activities to see if there has been any carry over from classroom art activities.

6. Compare art activities at the beginning of the year and again at the end to evaluate growth in cutting, tracing and design.

7. A study to see what form of arts or crafts was enjoyed by different age groups.

8. A study could be used as a basis for developing an art and handwork outline for special classes.
9. Evaluate musical activities for enjoyment by mental ages.

10. Evaluate singing in aiding speech and group participation.

11. A study of practices and techniques to be used in improving reading comprehension.

12. A study for the construction of exercises for clarifying and enriching word meaning in the intermediate grades.

13. Write original stories to teach local history to special classes.

Part II Handbooks --- Guides

1. An experiment to attempt to increase reasoning ability, when capacity is present but interfered with by mental disturbances.


3. A specifically controlled study to discover differences in learning abilities between normal and disturbed children.

4. A compilation of sources of free material for use with special class children with a brief description of same.

5. An evaluation of teaching aids for children who have a limited knowledge of the English
language.

6. A controlled study using two groups of children with equal language fluency, having one group use all corrective material from basic readers, the other group having, as its sources, any carefully chosen selections from a wide range of children's literature. At the end try to determine which type furnishes the more effective study aids.

7. A study to determine what correlation there is between speech education and reading and determine the correlation if any between speech defectives and poor readers.

8. To carry on a further study of the choicest of children's literature for material suitable for use in speech education.

9. A curriculum for trainable children might be worked out by a group compiling ideas from different areas in the field of trainability.

10. Further studies on sense training are needed in the education of the deaf-blind.

11. A handbook should be compiled to help parents in their dealings with exceptional children.
Part III Evaluation -- Measurement

1. Make a study of basal readers to determine which ones are more suitable for use in classes for retarded children.

2. Develop seatwork exercises to help eliminate reversals.

Part IV Studies -- Analyses

1. A Study of the effects of parental attitudes upon pupil progress.

2. A study of the effect of socio-economic pressure upon segregated students.

3. A comparative study of the life adjustment of special class graduates and a group of their peers who were drop-outs.

4. A detailed investigation into the causes of unemployment among graduates of special classes.

Part V Teacher Training

1. A study of how a teacher can adapt education to meet the needs of the slow learning child.

2. A study in the comparison of educable and trainable classes using a check list of teaching practices.

3. A study of the vocational guidance offered for retarded children.
4. A survey of what particular schools offer special training for teachers of the slow learner.

Part VI Parental Problems

1. A study of a parents group and its relation to the problem of mental retardation based on local communities.


