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Twenty-eight abstracts of these research studies in the area of reading conducted between 1957 and 1967 at Cardinal Stritch College, Milwaukee, Wisconsin, are presented. The studies include research at both the elementary and secondary levels involving methods, materials, reading skills, attitudes, and total programs. Research: studies on perceptual-motor development, teacher training, and retarded children are also included. A subject index is provided. (RT)

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# ABSTRACTS OF RESEARCH

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THE CARDINAL STRITCH COLLEGE  
MILWAUKEE, WISCONSIN

**RESEARCH  
ABSTRACTS**

**The Cardinal Stritch College  
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## FOREWORD

This volume went to press while the new Reading Laboratory Graduate Facility was under construction at The Cardinal Stritch College. Both the publication of Research Abstracts and the new building testify to our commitment to educational research. The abstracts published thus far record the contributions of master's candidates over the past ten years; the building will provide classroom, laboratory, reference, and conference facilities for present and future graduate students.

Theses summarized in Research Abstracts are available from The Cardinal Stritch College Library through inter-library loan service. Titles are also listed in Master's Theses in Education, Research Publication of Iowa State Teachers College, Cedar Falls, Iowa.

Sister Marie Colette, O.S.F., Ph.D.  
Editor

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## **A SURVEY OF READING STUDY SKILLS STRESSED BY SEVENTH AND EIGHTH GRADE TEACHERS IN THE CONTENT SUBJECTS**

Sister Mary Joesetta Boeing, S.C.

**PROBLEM.** This study was undertaken in order to ascertain the reading study skills that seventh and eighth grade teachers stress in teaching the content area subjects. The findings of research in this area indicate that most secondary teachers are not adequately prepared to teach the reading study skills and apply them in the content subjects.

**PROCEDURE.** The recommendations of authorities concerning the reading study skills were analyzed in order to ascertain their relevance to the responsibilities of the content area and the mastery of subject matter. A questionnaire consisting of general information, use of materials, reading background of students, and the reading study skills, was sent to two hundred twenty-one teachers in seventy-four selected schools. Seventy-eight per cent of the questionnaires were returned. The responses were tallied, converted into percentages and summarized in tables for the purpose of analysis and interpretation.

**FINDINGS.** Over half of the respondents had only one course in reading and 24% had no courses. Only 16% had methods courses in content subjects that included the study skills. The majority of teachers reported the use of some type of study skills material but most of the materials did not pertain to the application of skills in the content areas. Sixteen per cent of the respondents reported the use of a professional book on reading. A majority of the teachers indicated their awareness of the subject teacher's responsibility for teaching the study skills. Ample stress was given to word recognition skills such as structural analysis and phonetic skills but the context clues and dictionary aids were

understressed. The general comprehension skills were given adequate emphasis but the critical reading skills were neglected. Although the teachers seemed to be aware of pupil need for functional skills, significant emphasis in teaching and practice was not reported.

**SUMMARY AND CONCLUSIONS.** The educators selected for this survey disclosed greater utilization of the study skills than was anticipated by the writer. The data revealed a lack of adequate teacher training in the area of reading study skills. Since the teachers indicated awareness of their responsibility for teaching the study skills in the content subjects, adequate reading courses and in-service training programs seem imperative. The data also indicated that the assistance of a reading specialist is needed at this level for the improvement of reading and the mastery of content in the subject areas.

## THE EFFECTIVENESS OF A PLANNED ORAL-LANGUAGE ORIENTATED READINESS PROGRAM IN DEVELOPING READING READINESS FOR CHILDREN IN A CULTURALLY DEPRIVED AREA

Sister Cor Marie Cielocha, S.S.N.D.

**PROBLEM.** The purpose of this experiment was to study the effectiveness of an oral-language orientated readiness program in developing reading readiness skills of children in a culturally deprived area, in comparison with a basal reader readiness program. Specifically, the writer sought answers to these questions:

1. Will the oral-language orientated readiness program increase the listening and speaking vocabulary of the culturally deprived child?
2. Do those who have difficulty in auditory and visual discrimination benefit from the oral-language orientated readiness program?
3. Is there a noticeable change in the length and structure of the oral sentences used by these children after having had the enriched readiness program?

**PROCEDURE.** The experiment was carried out with two groups, each consisting of 18 children from culturally deprived areas. All subjects participating in the study attended St. Michael's School, Chicago. The groups were equated on the basis of mental age, chronological age, intelligence quotient, Reading Readiness scores and language scores. The tests used were: The Otis Quick Scoring Mental Ability Test, administered to small groups; The Peabody Picture Vocabulary Test, Form A, administered individually; The Steinbach Test of Reading Readiness; and two language tests of the Monroe Reading Aptitude Test.

The material employed for teaching the experimental group was A Child's Way of Learning, an oral-language orientated readiness program compiled and written by the Language Committee of the Center for Urban Education of the Archdiocese of Chicago. The basic aim of this program is to provide experiences that are needed to prepare the child for the readiness program of the school system. The oral-language orientated readiness program provides for the development of auditory skills, oral language development, tactile skills, visual discrimination and motor coordination skills.

The control group used the readiness program outlined in the Manual of the Faith and Freedom Series, with the series of worksheets. The enrichment suggestions in the manual were likewise followed.

**FINDINGS.** The following results were obtained in this study:

1. According to initial test results both groups of culturally deprived children were lacking in readiness skills. Auditory and visual skills were markedly lacking.
2. In the final comparison a difference of 7.00 was found between the groups in mental age. The t-value was significant at the .02 level of confidence. The difference favored the experimental group.
3. A difference significant at the .001 level of confidence was found between the means of the control and the experimental groups on the Steinbach Test of Reading Readiness, favoring the experimental group.
4. The t-ratio of 2.73 for the language score of The Monroe Reading Aptitude Test indicated a difference significant at the .02 level of confidence, again favoring the experimental group.
5. A statistically insignificant difference was found between groups in the Peabody Picture Vocabulary post-test.

6. Both the control and experimental groups made significant gains in tests of letter identification, auditory discrimination of letters and word sounds, visual discrimination of word forms, and language ability.

**SUMMARY AND CONCLUSIONS.** The following conclusions may be drawn from the findings of this study.

1. It could be expected that direct teaching of an enriched oral-language orientated readiness program would have marked effect on the language development of the culturally deprived child.

2. Since the direct teaching of the oral-language orientated program showed beneficial effects in readiness and language ability, stress on oral language within the readiness program would be desirable in pre-reading experiences.

## **A STATISTICAL COMPARISON OF THE READING STATUS OF PUPILS IN SELECTED GRADES OF SCHOOLS ON THE CHICAGO ARCHDIO- CESAN READING PROGRAM AND ON OTHER PROGRAMS**

Sister M. Clarette Daleiden, S.C.C.

**PROBLEM.** The primary purpose of this study was to evaluate the effectiveness of the Chicago Archdiocesan Reading Program and other reading programs used in the diocese. In order to do this, grades seven, four, and two in four schools using the Archdiocesan Reading Program and in four schools using general reading programs were chosen to participate in a status study of reading achievement. Suburban schools were selected because of the transient population in the inner city.

Some of the specific questions for which answers were sought included the following:

1. Do the various factors which compose the Archdiocesan Reading Program help achieve better results in reading than are achieved in schools not in the program?

2. Is there a significant difference between the means of the vocabulary scores, paragraph meaning scores and total reading scores in the schools using the program and in those not using it?

3. Is there a significant difference between the means of the vocabulary scores, paragraph meaning scores, and total reading scores of the various ability levels found in the schools using the Archdiocesan Reading Program and in those not using it?

4. If no difference is found, is the Archdiocesan Reading Program beneficial to the schools using it? Would it be worth the expense necessary to introduce it into the remaining schools not on the program?

5. If a significant difference is found in favor of the schools not using the Archdiocesan Reading Program, to what can this be attributed?

**PROCEDURE.** The schools using the Archdiocesan Reading Program and those using general reading programs were equated generally on socio-economic background and parental education. They were further equated on the M.A. and I.Q. results obtained from the Otis Quick-Scoring Mental Ability Test. After this, a comparison was made of the vocabulary meaning scores, paragraph meaning scores and total reading scores on the Stanford Achievement Test. The t-test was applied to determine whether or not there was a significant difference between the means of the seventh, fourth and second grades as a total group and between pupils of upper, middle and lower intelligence levels.

**FINDINGS.** The findings of the study included the following:

1. The seventh grade test included only paragraph meaning. The schools using the Archdiocesan Reading Program showed a mean difference significant at the .05 level of confidence. In this area the Archdiocesan Reading Program seemed to be more effective than the general reading programs.
2. Despite the fact that in the fourth grades the mean M.A. and I.Q. favored the schools with general reading programs, the difference in vocabulary meaning, paragraph meaning, and total reading favored the schools using the Archdiocesan Reading Program. The differences were statistically insignificant.
3. Vocabulary meaning, paragraph meaning and total reading scores of the second grades favored the schools with general reading programs. The difference in paragraph meaning was significant at the .01 level of confidence.
4. Another objective of this study was to determine which, if any, of the three intelligence groups, upper, middle, or lower, benefited most by the Archdiocesan Reading Program. Due to a lack of consistency in results, no general conclusions could be drawn.

In two previous studies of mean gains in schools using the Archdiocesan Reading Program the lower I.Q. groups seemed to benefit most from the program while the superior group seemed to lack challenge and the middle group progressed as usual. No similar findings can be reported here.

**SUMMARY AND CONCLUSIONS.** After having analyzed the data the following conclusions have been obtained from this study.

1. On the basis of this study no conclusive generalization can be made regarding the overall superiority of the Archdiocesan Reading Program over general programs except to say that the limited results of this study appear to show the superiority of the Archdiocesan Reading program over other programs.
2. There was a significant difference in favor of the seventh grades using the Archdiocesan Reading Program.
3. The fourth grade results favored the Archdiocesan Reading Program. Differences between the pupils' mean achievement were statistically insignificant, however.
4. The second grades showed a significant difference in paragraph meaning and total reading in favor of schools using general reading programs.
5. As far as the ability groups as a whole were concerned, no overall conclusion can be drawn.
6. In the seventh grade the results of pupils in the lower I.Q. group definitely favored the Archdiocesan Reading Program.
7. The middle group in the fourth grades using the Archdiocesan Reading Program seemed to have benefited most by the program in all three test areas. The upper group benefited also, mainly in paragraph meaning.
8. The second grades using the general reading programs seemed uniformly superior to those using the Archdiocesan Reading Program.

## **AN EXPERIMENTAL STUDY OF THE EFFECTIVENESS OF TEACHING VOCABULARY THROUGH DIRECT MEANS AND CONTEXT CLUES**

Sister Ellyn Dowd, C.S.J.

**PROBLEM.** The problem of this investigation was to study the effectiveness of teaching vocabulary through direct means as compared to teaching vocabulary through context clues. Specific objectives were to clarify the following points:

1. How does an intensified program of arriving at meanings through context clues compare with the direct method in vocabulary growth?
2. How does emphasis on context clues compare to the direct method of vocabulary development as a means of improving reading comprehension?
3. Does either method of vocabulary development benefit lower achievers more than good readers?

**PROCEDURE.** The 128 sixth-grade participants were students in a large midwestern parochial school. Two teachers, each assigned one experimental group and one control group, introduced as the experimental factor an intensive training program in recognition of context clues. The groups were equated on the basis of intelligence quotients, mental ages, vocabulary and comprehension scores on standardized tests.

The experimental group was instructed to utilize the following context-clue method: (1) hearing meaningful use of unfamiliar words by the teacher in introducing a selection, (2) reading silently and meeting these words in the contextual setting, (3) studying the selection to find clues to the meanings

of the unfamiliar words, and (4) checking the dictionary or glossary to verify meanings. Varied techniques to clinch this skill were emphasized throughout the study. At the same time, the control group was given equivalent reading time and vocabulary development with direct teaching by discussion and dictionary reference emphasized.

**FINDINGS.** Upon completion of the six-month study, final tests were administered. Analysis of the data led to the following results:

1. The *t*-ratios indicate that there was no significant difference between the means on final tests administered to the experimental and control groups.
2. Within each group there were gains significant at the .001 level of confidence in vocabulary and comprehension as tested by the Iowa Tests of Basic Skills and the Inglis Test of English Vocabulary.
3. The sub-group designated the upper 27% by rank on the initial Iowa Vocabulary Test achieved comprehension gains significant at the .001 confidence level. The experimental group was favored on the Inglis Test, with the mean difference significant at the .01 level.
4. The lower 27% of each group achieved greater gains than did the upper group in all areas. The experimental group was favored both in Inglis Vocabulary and in Iowa Comprehension.

**SUMMARY AND CONCLUSIONS.** The following conclusions seem justified as a result of this study:

1. Both methods of vocabulary development were successful. This conclusion was supported by highly significant gains in vocabulary for both the experimental and the control groups.
2. Comprehension growth, exceeding vocabulary improvement, may indicate the advantages of an intensive vocabulary program.

3. The fact that higher achievers did not increase vocabulary to a significant degree may be due to their achieving according to ability level at the initial testing time.

4. The lower achievers apparently benefited greatly from methods of instruction. The conclusion that the context-clue method enabled the experimental group to search out meaning may be justified by the fact that statistical comparison favored the experimental group in Iowa Comprehension and Inglis Vocabulary.

5. The upper and lower 27% of the experimental group, instructed in the context-clue method, were favored in the Inglis Test. This fact was not apparent in the total group comparison.

## **AN EXPERIMENTAL STUDY OF THE EFFECTIVENESS OF RE-ENFORCING DEVELOPMENTAL LESSONS IN READING WITH TAPE RECORDINGS**

Sister Mary Noel Franchville, O.S.B.

**PROBLEM.** This experiment was designed to evaluate the relative effectiveness of re-enforcing classes in reading and phonics by means of tape-recorded lessons and enrichment activities for first grade pupils. Specific objectives of the study were:

1. To compare the achievement of first grade pupils who were taught by teacher-prepared tape lessons used to re-enforce regular classes, with the achievement of pupils in a class where regular developmental lessons and accompanying workbooks were used, as outlined in the Faith and Freedom Basic Readers.

2. To determine the effectiveness of tape teaching in enabling slow learners to reach their grade level.

3. To determine whether the results obtained through the use of tapes for re-enforcing learning justify the time, effort, and expense involved in the program.

4. To discover other peripheral values in the use of the tape recorder.

**PROCEDURE.** Pupils enrolled in two parochial schools in Evansville, Indiana participated in the experiment which extended from September, 1962 to May, 1963. From the 190 pupils enrolled in these two schools, 70 were selected for the experimental and control groups—35 in each group—on the basis of mental age and intelligence quotients as determined by the SRA Primary Mental Abilities Test and reading scores as obtained on the Metropolitan Readiness Test, Form S.

The experimental factor was that of taped lessons used to re-enforce lessons in reading and phonics. Daily the experimental group listened to a taped lesson 15 to 20 minutes in length as a review of their reading or phonics class. The control group followed the method of reading instruction as outlined in the Faith and Freedom basal readers plus an extra worksheet to provide practice in the same reading skills which were being re-enforced for the experimental group by the tape. The respective teachers frequently compared daily lesson plans so as to develop the same skills in their reading classes.

**FINDINGS.** At the end of the eight months' experiment, both groups were given a reading achievement test. In comparing the mean reading grade scores for the two groups there was found to be a difference in Word Discrimination significant at the .01 level of confidence and a difference in Word Knowledge significant at the .05 level of confidence. These differences favored the experimental group. The mean scores in Reading Comprehension were not significantly different.

**SUMMARY AND CONCLUSIONS.** This study suggested the following conclusions:

1. The tape was a substitute for individual teacher-pupil exchange, in that the teacher's voice immediately confirmed the student's mental or written response.
2. Interest and concentration were re-enforced by the use of earphones because they excluded distracting noise and fostered good habits of listening.
3. Tape-teaching via earphones is a valuable and practicable means of developing listening skills.
4. Tape-teaching is a time-saving method which enables the instructor to make more contacts with pupils.
5. Flexibility and adequacy in the application of educational methods results when the teacher makes full and efficient use of tapes.

## **A COMPARATIVE STUDY OF THE CRITICAL READING SKILLS STRESSED BY READING SPECIALISTS AND THOSE EMPHASIZED BY TEACHERS OF GRADES SEVEN AND EIGHT**

Sister Helen Miriam Gunn, S.C.

**PROBLEM.** The purpose of this study was to determine whether or not seventh and eighth grade teachers of 73 selected schools in seven states gave proper consideration and emphasis to critical reading skills deemed essential by leading authorities in reading. Two minor aims, inherent in the major one, were to clarify the nature of critical reading and to determine the skills embodied in it. To upgrade and enrich the junior high reading programs in the schools concerned, knowledge gained from this study should be useful in planning and executing effective in-service programs.

**PROCEDURE.** A normative survey, using the questionnaire and analytical techniques, was the procedure used in this study. The compilation of the questionnaire was based on research and the professional writings of reading authorities. It consisted of four parts: general information, check list of critical reading skills, attitudes, and in-service training.

Teachers' responses were tallied, converted into percentages, compiled into tables, analyzed, and interpreted from the viewpoint of stress recommended by reading authorities.

**FINDINGS.** The findings of this study may be summarized under four general headings, as shown below.

Teachers' Educational and Experiential Background. About 72 per cent of the teachers had a bachelor's degree; 15 per cent had a Master's degree; the remaining number were near the completion of their first degree. At the undergraduate

level, fewer than two-thirds of the teachers had methods and reading courses; nearly one-fifth had reading courses at the graduate level. Three-fourths had either bilevel or multilevel teaching experiences; nearly two-thirds had three or more years' experience at their respective levels.

Attitudes. College reading courses and present in-service programs were considered inadequate for teaching higher-level comprehension skills. The availability of professional books on reading was unsatisfactory. Workshops were favored as the most beneficial type of in-service program. A majority of the teachers recognized responsibility for teaching evaluative skills in reading and content subjects but also acknowledged personal inadequacies regarding them.

Teacher Use of Student Records. Nearly 90% of the teachers confirmed availability and frequent consultation of student records. Records and reading test results were used to identify and obtain help for retarded readers.

Skill Emphasis. Teachers were at variance with authorities regarding placement and degree of emphasis of some skills. In general, teachers tended to give inadequate development of skills. Reinforcement of six skill areas was stressed by half the teachers. A balance of emphasis and reinforcement was evidenced with regard to teaching recognition of author's purpose and making inferences. Assumptions regarding previously acquired knowledge seemed to influence some areas of teaching, such as organization skills, word meanings, and judgments. Approximately one-third of the teachers considered the teaching of propaganda techniques and investigation of sources beyond the scope of their teaching levels.

**SUMMARY AND CONCLUSIONS.** This study was undertaken to determine the status of instruction in critical reading in selected schools and to ascertain teacher needs so that effective in-service programs could be planned and executed. Through the questionnaire, teachers were stimulated to think about higher level comprehension skills and to evaluate their teaching practices regarding them. Findings tended to substantiate the conclusions of previous research. Further implications include:

1. Preservice training. Collegiate reading courses must be revised to include the why, what and how of reading instruction at all levels. More attention must be given to critical reading, the development of organizational skills, word meanings, judgments, investigating sources, and propaganda techniques in these courses.
2. In-service training. Teacher needs must be investigated and given consideration. Programs must be geared to assist or supplement classroom teaching. In-service programs should include a simple overview of the reading process, placement of evaluative skills, functional use of skills, lessons and lectures by teachers competent in the reading field.
3. Reading maturity of teachers. Intensive efforts should be made by teachers to assess personal reading habits. Self-improvement in critical reading skills should be undertaken whenever necessary.

## A DIAGNOSTIC SURVEY OF SPECIFIC STRENGTHS AND WEAKNESSES IN READING AT THE FIFTH GRADE LEVEL

Sister M. Jerome Hagen, P.H.J.C.

**PROBLEM.** The purpose of this study was to determine strengths and weaknesses in reading at the fifth grade level. Specifically the writer sought answers to the following questions:

1. In what areas of comprehension are the pupils weak?
2. In which areas of study skills are the pupils weak?
3. In which areas do the pupils show strength?
4. What are the specific weaknesses in the upper fourth of the class?
5. What are the specific weaknesses in the lower fourth of the class?
6. Do children of similar intelligence manifest similar weaknesses?

**PROCEDURE.** The subjects for this survey were 88 fifth graders from one parochial school in Gary, Indiana. The following tests were administered during the first two weeks of October: The Kuhlmann Anderson Intelligence Test, The Wide Range Achievement Test, The Durkin Phonics Survey, and The Iowa Basic Skills Tests of vocabulary, reading comprehension, and study skills. The writer scored the tests.

Quartile points and quartile deviations for each test were found for the total group. Since the Durkin Phonics Survey yielded no grade scores, the quartile points and quartile deviations were found using raw scores. The I.Q. was used

to find the quartile points and quartile deviations of the Kuhlmann Anderson Test. On all other tests, grade scores were used in calculating the quartile points and quartile deviations. The same procedures were used in studying the upper 27% and lower 27% of the group in each test. Quartile points and quartile deviations were compared with national norms both for the total group and for the upper and lower 27% of the group in each test.

**FINDINGS.** Generalizations were derived for the total group and for the upper and lower 27% groups.

Total group. The group was above average in ability. Intelligence quotients ranged from 84 to 142. All quartile points were above national norms; thus the group in general was achieving according to capacity. Knowledge of one work-study skill did not imply knowledge of another such skill.

The majority excelled in vocabulary. In comprehension skills, organization of material exceeded other scores. Among work-study skills, the use of reference material, alphabetizing, and reading and interpretation of facts were strong points. In the reading of graphs and tables, the group was superior in reading amounts and determining rank. Comprehension was good; evaluation of material was weak. In reading graphs and tables, pupils were weakest in determining underlying relationships.

Upper and lower twenty-seven per cent. The lower group found it difficult to compete with the upper group. Both groups achieved in proportion to their potential. The lower group exceeded national norms more often than did the upper group.

The upper group ranked high in the use of reference material; the lower group ranked highest in map reading. Both groups were proficient in pronouncing isolated words. The upper group was weak in determining distances in map reading while the lower group was relatively strong in this particular sub-skill. The lower group's weakest point was reading graphs and tables. Children of similar intelligence manifested similar strengths and weaknesses in reading. Generally, the children's

scores in each group corresponded to their respective abilities.

**SUMMARY AND CONCLUSIONS.** From the data in this study the following conclusions appear valid:

1. The group is apparently working at its capacity level. Results both of intelligence and achievement tests are above national norms.
2. As a group, the pupils of lower I.Q. were found in the lower quarter in achievement. Those with higher ability were in the upper quarter in each test.
3. Generally, the pupils were in the same quarter for each test and subtest, except in isolated cases.
4. Evidently vocabulary and reference work have been stressed in instruction.
5. The children in the lowest quarter have been helped to achieve their potential.
6. The children have had a well-balanced program of skills in the preceding grades.
7. Since the classroom teachers used the I.Q. to predict reading success, the teachers ought to be acquainted with the interpretation, the value of the tests, and the problems arising from misinterpretation.
8. Since the classroom teacher is usually the one to diagnose reading difficulties, she should be aware of the factors influencing or causing disabilities.
9. Teacher observation is important in evaluating and diagnosing reading difficulties, but it should not be the only criterion. Both standardized and informal tests are valuable.
10. If a significant difference appears between the child's potential as expressed by the I.Q. and the reading score, a diagnosis should be made.

## AN INQUIRY INTO PROVISIONS FOR CHILDREN WITH READING DISABILITIES IN SELECTED PUBLIC SCHOOL SYSTEMS OF THE UNITED STATES

Patricia Kratz

**PROBLEM.** The purpose of this inquiry was to determine whether cities in the United States comparable in size to the city of Milwaukee had provisions for children with reading disabilities and to learn what these programs included.

**PROCEDURE.** The procedure used in this study was to send a questionnaire to personnel in charge of the reading program in their city. Cities with a population of 470,000 or more were contacted. Replies were received from nineteen of the twenty-seven cities contacted.

The questionnaire consisted of five parts: organization, materials, records, qualifications of teachers, and budget. It was intended to answer the following questions:

Organization. Do most cities provide special instruction for children with reading disabilities, and if so, what kind of instruction? What qualifies a child for special instruction? What tests are used?

Materials. What types of materials are used? What types are preferred?

Records. What, if any, records are required? What information is required?

Qualifications of teachers. What qualifications are necessary?

Budget. Who orders the materials used for special instruction? How much money is allotted for materials?

**FINDINGS.** Analysis of the data revealed the following information.

Organization. Almost all cities contacted provided special instruction in a remedial room, classroom help, and individual help when needed. The latter was given by a special teacher. They provided special instruction in groups ranging from two to fifteen pupils. Class periods were usually thirty to forty-five minutes in length, five times weekly. Pupils were usually two years retarded in reading and were grouped according to level. They were selected in all cities both by teacher judgment and by test results with various methods being used to compute the amount of retardation. Both intelligence tests and reading tests were employed by the majority of systems. Many different tests, both group and individual, were used.

Materials. Different materials were used by all systems with preference shown to basal materials. No other materials were preferred to a great extent over others, except basal readers.

Records. Most of the cities required records although the information varied. The information required from the individual centers was much the same for all cities and included the number of students, admissions, dismissals, and number of boys and girls. The information required for the individual student was more varied but most cities required the name of the reading tests administered, a statement of the child's problem, the I.Q., and gain or loss in reading achievement.

Qualifications of teachers. The qualifications necessary ranged from no requirements in one city to a Master's degree. Some cities followed state requirements while others had their own set of standards.

Budget. Most systems indicated that the person in charge of the reading program was in charge of ordering materials but the same materials were not necessarily ordered for all the schools. The amount of money allotted to each school differed greatly from city to city. The range was from \$50.00

to \$100.00 per center in one city to \$80,520 for 75 schools in another city. This amount included audio-visual material.

**SUMMARY AND CONCLUSIONS.** This survey was undertaken to determine what provisions large cities had for children with reading disabilities. Consideration of the responses led to the following generalizations.

1. Although most cities have some form of program for children with reading disabilities, as yet there do not seem to be enough schools with reading personnel to serve all children with reading disabilities.
2. There is little agreement among systems and schools in computing the amount of reading retardation of children.
3. Materials vary a great deal though basal materials are frequently mentioned as preferred.
4. Qualifications of reading teachers are not uniform from state to state. About one-half of the cities' requirements were consistent with their state's requirements for qualification.

## AN EVALUATIVE STUDY OF THE READING PROGRAMS IN SELECTED ELEMENTARY SCHOOLS IN NORTH AND SOUTH DAKOTA

Sister Mary Annette Lampl, O.S.B.

**PROBLEM.** The purpose of this study was to evaluate the reading programs in the elementary schools conducted by the Sisters of St. Benedict, Pierre, South Dakota. Schools evaluated were located in North and South Dakota.

The study sought to secure information related to: (1) the teacher's background in preparation for teaching reading, (2) the type of reading program in the school, (3) the organizational plan within each classroom, (4) the time allotment for the teaching of reading, (5) the materials used for reading instruction, (6) the greatest need of teachers in teaching reading, (7) the type of in-service aid provided for teachers, and (8) the attitudes of teachers toward the teaching of reading.

**PROCEDURE.** The study was conducted among ten principals and 67 teachers, both lay and religious, in ten elementary schools in North and South Dakota. Questionnaires were utilized to provide data for an evaluation of the reading programs in these schools. The principal's questionnaire included sections for general information, the reading program, organization and time allotment, and materials. The teachers' questionnaire consisted of eight sections incorporating the eight areas listed above.

**FINDINGS.** Teacher background. The majority of the teachers who answered the questionnaire had 16 or more years of teaching experience. The largest number of teachers with the least experience was in the primary grades. Sixteen primary, ten intermediate, and four upper grade teachers had taken a basic reading course. One primary and two intermediate grade teachers had taken two courses in reading.

One primary, two intermediate, and one upper grade teacher had taken three reading courses.

Reading program. All the schools identified the basal reader as the principal tool in reading instruction, but a combination of materials was also indicated. Reading skill development was considered important in reading instruction by the majority of the teachers in all the grades.

Organizational plan. Standardized achievement tests were given in grades one through eight in half of the schools. These tests were given in selected grades in the other five schools. Intelligence tests were usually administered to pupils in grades three, five, and seven. First grade readiness tests were given in six of the ten schools.

Criteria for grouping included reading ability, intelligence or achievement tests, and combined results of intelligence and achievement tests. In some schools, classes were heterogeneous. The majority of the primary grade classes were divided into three groups for reading instruction; intermediate grade classes were usually divided into two groups; the upper grades were taught either as a whole class or in two groups.

Time allotment. The time allotted for reading instruction varied in the different grades. According to the majority of primary and intermediate grade teachers, the time allotted for reading instruction was adequate. Less than half of the upper grade teachers considered the time allotted for reading instruction to be adequate. Teachers who had combined grades also indicated that there was inadequate time for reading instruction.

Materials. A variety of materials was used for teaching reading, but the basal reader was used in all the primary and intermediate grades. Not all upper grades used a basal reader. Other materials used occasionally in the various classes were the following: books for individual instruction, multi-level materials, teacher-prepared worksheets, pictures, reading charts, records, film-strips, magazines, newspapers, and trade books.

Workbooks to accompany basal readers were used by the primary grades. A decline in the use of such workbooks was manifest in the intermediate and upper grades. The majority of the teachers of primary and intermediate grades considered the materials available to be adequate for reading instruction. The majority of teachers of upper grades did not consider their materials adequate to meet pupils' reading needs. Every school had access to library facilities.

Greatest need of teachers. In-service programs for teachers of reading were indicated as a present need by a majority of the teachers. There was a dearth of professional books and journals related to reading available in the schools.

In-service aids provided. The majority of principals and teachers indicated that the reading of professional journals, attendance at county teachers' institutes, and informal contacts with teachers were the chief in-service aids provided.

Attitudes of teachers. A majority of teachers indicated that sharing experiences with teachers of the same grade and informal contacts with teachers contributed most in their preparation for teaching reading. Most of the teachers described their attitude toward the daily reading lesson as one of enjoyment or challenge.

**SUMMARY AND CONCLUSIONS.** The following conclusions were drawn from the findings of this study:

1. The expressed need of teachers warrants the initiation of an in-service program.

2. Judging from their educational background, nine of the teachers could help to conduct in-service programs in reading.

3. The fact that the majority of teachers considered "sharing experiences with teachers of the same grade" as the greatest contribution in their preparation for teaching reading implies that small group discussions could prove of further value to the teachers.

4. There is a lack of professional references which teachers could use for self-help. This implies the need to supply a bibliography of reading materials to principals.

5. The fact that most teachers enjoyed teaching reading and found it challenging to prepare reading classes offers hope for the improvement of the existing program.

6. Although the basal reader is used consistently in the primary and intermediate grades, it does not seem to satisfy the expectations of upper grade teachers.

7. Decline in use of the basal reader workbooks in the intermediate and upper grades may be due to one or several of the following factors: lack of time, lack of funds, teacher's evaluation of the suitability of workbooks for skill development, and availability of workbooks for the text employed.

8. The general tone of dissatisfaction with the current reading program expressed by upper grade teachers indicates the need for a more thorough evaluation of special problems at these grade levels.

9. Further study needs to be made of the type of materials lacking for reading instruction in upper grades.

10. Concern for pupil progress is manifest in the administration of both standardized and informal tests.

11. Although nine of the ten schools consistently administered intelligence tests three times during the eight grades, these results were not used as a basis for grouping in all nine schools.

## A SURVEY OF THE RELATIONSHIP OF ABILITY TO NUMBER AND TYPE OF BOOKS READ BY HIGH-SCHOOL FRESHMEN

Mary I. Loehnertz

**PROBLEM.** This study was designed to determine the influence of ability and other factors on the reading habits of high-school freshmen. Specifically, it sought answers to the following questions:

1. Does reading ability have any effect on the number and type of books read by high-school freshmen?
2. Does the I.Q. of the student have any significance in regard to the number of books he reads?
3. How do factors such as outside employment and place of residence affect the amount of reading done by high-school freshmen?

Since the amount of reading done by students declines during the high-school years, it was thought that if the factors controlling the interests and the number of books read by high-school students could be discovered, steps could be taken to broaden interests and to encourage more reading. Freshmen were chosen because they were likely to do more reading than students who had been in high school longer.

**PROCEDURE.** In the spring of 1965, The Nelson Silent Reading Test and the Otis Quick-Scoring Mental Ability Tests were administered to all prospective freshmen entrants to New Holstein, Wisconsin High School. These tests yielded a reading grade score and an I.Q. score, respectively. In September, 1965, a questionnaire was issued to all freshmen to gather information concerning place of residence, hours of employment per week, and hours spent in extra-curricular activities per week. This questionnaire was re-issued for up-dating at the end of the school year.

A daily record was kept of the number and type of books withdrawn by freshmen from the high school and public libraries during the school year. Freshmen were interviewed periodically and asked to delete books not actually read and to add books obtained from other sources.

Correlations were found between I.Q. scores and total number of books read, fiction books read, and non-fiction books read. The same correlations were found for the reading grade scores. Tables were constructed to show the relationship between the number of books read and place of residence, hours of employment per week, and hours spent in extra-curricular activities per week.

**FINDINGS.** The correlations between I.Q. scores and total number of books read, fiction books read, and non-fiction books read were only .24, .23, and .15, respectively. The correlations between reading grade scores and total number of books read, fiction books read, and non-fiction books read were even lower: .21, .20, and .07, respectively.

Urban freshmen were found to have read more books, both fiction and non-fiction, than had rural freshmen. No relationship was found either between employment or extra-curricular activities and the number of books read by freshmen.

**SUMMARY AND CONCLUSIONS.** There was little relationship between ability and either the number or the kind of books read by the freshmen in this study. The highest correlation noted was only .24.

Place of residence seemed to have some effect on the amount of reading done, with urban freshmen reading more books per student than did rural freshmen. The difference between the two groups was slight in regard to the number of books read.

Outside employment and extra-curricular activities had no discernible relationship to the number of books read.

The low correlation between ability and number and type of books read suggests a need for motivation of the more able students to increase the number and improve the quality of the books they read.

The fact that urban freshmen did slightly more reading than did rural freshmen might indicate a relationship between culture and amount of reading. A study of the difference in the amount of reading done by urban and rural freshmen with a comparable number of hours per week spent in employment might show whether there is a real relationship between cultural background and reading.

## **AN EXPERIMENTAL STUDY OF THE EFFECTIVENESS OF TWO METHODS OF IMPROVING VOCABULARY OF AVERAGE AND ABOVE AVERAGE EIGHTH GRADE PUPILS IN THE CLASSROOM READING PROGRAM**

Sister James Marie O'Leary, O.S.U.

**PROBLEM.** The purpose of this experimental study was to evaluate two methods of building vocabulary—the direct teaching method and the wide reading method. The population of the study was eighth grade students of average and above-average ability. The writer hoped to determine which method would effect more improvement. A further desired outcome was to discover which method was more effective with the higher ability students in each group and which method would be more beneficial to pupils with limited ability.

**PROCEDURE.** This study was conducted in two eighth-grade reading classes. Eighty-eight pupils of average and above-average ability were divided into two groups of equal size. The groups were equivalent in mental age and I.Q. as found by the Otis Quick-Scoring Beta Test and in vocabulary as measured by the New Standard Vocabulary Test. One group was taught by the direct teaching method and the other by the wide reading method. Two ten-minute periods per week were devoted to vocabulary development.

The experiment was continued for seven and one-half months. Control of the experimental factor was attempted through equal instructional time and using the same teacher for both groups. Teachers of content subjects worked together to equalize vocabulary instruction in their classes, as well.

**FINDINGS.** The experiment resulted in significant gains by both groups. However, the gain made by the direct teaching group was slightly greater. The highest 27% of

each group made approximately equal gains. A comparison of gains made by the lowest 27% of the groups revealed a slightly greater gain for the group taught by the direct teaching method.

**SUMMARY AND CONCLUSIONS.** Upon completion of this study, the writer drew the following conclusions:

1. Vocabulary can be improved substantially over a relatively short period of time when instruction is systematic and enthusiastic.
2. With students of above-average ability, vocabulary improvement depends not so much on the method used as on the continued interest of the instructor and the students.
3. Since students of above-average ability in the wide reading group made significant gains equal to those made by pupils of like ability in the direct teaching group, it would seem worthwhile to recommend a wide reading approach for these students. The concomitant learning that would be acquired would justify such a course.

It is hoped that the outcome of this study will alert teachers of reading to the need for and value of specific instruction in vocabulary. Both the direct teaching method and the wide reading method have a definite place in the classroom reading program.

## **A STUDY OF THE READING STATUS AND MENTAL ABILITY OF FRESHMEN ENTERING ST. FRANCIS BROTHERS' SCHOOL AND RELATIONSHIP TO ACADEMIC SUCCESS**

Rev. Valery Pearce, O.F.M. Cap.

**PROBLEM.** The purpose of this research was to study the reading status of students in St. Francis Brothers' School and the present facilities and equipment in order to make plans for an efficient reading program. The specific objective was to seek answers to questions concerning the average intelligence of the students, their freshman reading level, and areas of reading weakness and strength. Further, this research concerned itself with faculty opinion regarding reading facilities and reading needs of students.

The significance of this study lay in the importance of providing high school candidates for the Brotherhood with the best possible education. This research was limited to the students of St. Francis Brothers' School. This four-year high school enrolled approximately 50 students. Specific data concerning reading, spelling, and intelligence scores were limited to these students over a period of four years.

**PROCEDURE.** Standardized tests, a faculty questionnaire, and an inventory of facilities for reading instruction were utilized. Data were gathered on the intellectual ability and reading levels of students at St. Francis Brothers' School. A comparison was made between reading levels of students and reading levels of available materials.

**FINDINGS.** The following information was gathered in this investigation:

1. The average intelligence quotient of students entering St. Francis Brothers' School was 102, with a range of 76-134.

2. The median reading level of entering students was eighth grade. The range was 4.9 to 12.2. Weaknesses were found in spelling, pronunciation, rate and comprehension. Many students were deficient in meaning vocabulary but this aspect of reading was relatively better than those previously cited.

3. There was a group of students superior both in ability and achievement. Similarly, there was a small group deficient both in ability and in reading achievement.

4. Not all freshmen need to take the present required course in reading. The course is not adequate to meet the variation of potential and achievement found through this investigation.

5. Faculty members felt the need of a remedial reading program although they judged that the majority of the students were capable of handling their textbook material, except for one science text. Further objective study of this evaluation seems necessary, judging from the low reading level of some students.

6. Present materials and physical facilities for the reading program were inadequate.

7. One reading instructor seemed adequate for the number of students enrolled.

**SUMMARY AND CONCLUSIONS.** The writer arrived at the following conclusions and recommendations concerning the reading program required by the students of St. Francis Brothers' School.

Diagnostic study and general reading needs. 1. Some type of reading test, perhaps the Gates Reading Survey or the survey section of the Diagnostic Reading Test, should be administered to the student prior to the opening of the school term.

2. Individual diagnostic reading tests and intelligence tests should be given to those scoring low in group tests.

3. Some form of in-service program for the faculty should be provided to acquaint them with reading methods in their specific field and with ways of identifying students who need reading help.

4. A greater variety of texts, supplementary materials, and aids should be provided for the reading program.

5. Individual instruction should be given to students at lower reading levels if their potential warrants it.

Physical facilities. A room should be provided which would allow adequate space for materials, reading booths, group and individual teaching, and storage.

Curriculum changes. A new reading program should be planned to allow for two classes meeting five periods per week. This program would provide for the wide range of reading achievement present among the students. A special English course should be introduced for students scoring in the lower quarter in reading. This would include instruction in spelling, word perception, and writing sentences and paragraphs.

Since these young men need continued training and guidance to meet the challenges of religious life in the twentieth century, provision should be made for wide reading. Awareness of the need for reading on the part of the faculty suggests interest in implementation of the above recommendations and in continued evaluation of instruction.

## **AN EXPERIMENTAL STUDY OF THE COMPARATIVE VALUES OF THE INDIVIDUALIZED READING PROGRAM AND THE STRUCTURED READING PROGRAM IN GRADE EIGHT**

Sister Joseph Rossini, C.S.J.

**PROBLEM.** The purpose of this study was to determine the effectiveness of the individualized reading approach at the eighth grade level as compared with the effectiveness of the structured group reading approach.

The specific objectives were to evaluate the influence of the two methods of teaching reading in various areas of the reading task, to see whether the less capable students profited more from the individualized approach or from the structured approach and to evaluate the number and kind of books read by the students of each group.

**PROCEDURE.** To evaluate and compare these two methods of teaching reading in grade eight, equivalent groups were formed on the basis of the Kuhlmann Anderson I.Q. and mental age, and of the median grade equivalent scores of the Iowa Silent Reading Test. After teaching the two groups for a six-month period, one by the individualized approach and the other by a structured approach, the writer evaluated achievement by administering an alternate form of the Iowa Silent Reading Test. Besides this device, other methods of evaluation were used, including an informal questionnaire and teacher observation.

**FINDINGS.** Analysis of the data showed no significant difference in the reading achievement of the two groups. However, the data seemed to suggest that students who were below average in reading achievement profited more from a structured reading program than from an individualized approach. This could be explained in part by the fact that a number of the better students reached the test ceiling. This made the validity of the median grade score questionable.

Observation and informal testing gave evidence that students involved in the individualized reading program had a more positive attitude in their approach to the reading task and toward self-improvement in reading. The number of books read by the experimental group was slightly higher than the number read by the control group.

**SUMMARY AND CONCLUSIONS.** The data from this study suggest the following conclusions within the limits of the population:

1. Since the results of this study showed no significant difference in reading achievement between groups, neither method was proved to have greater effectiveness.
2. Despite the lack of statistical significance, comparison of the mean reading achievement of the groups favored the control group.
3. The less able students profited more from a structured reading approach than from an individualized approach.
4. The attitudes of students in the experimental group seemed more positive and enthusiastic regarding self-improvement in reading than did those of the control group.
5. Nothing in this study supported the claim that individualized reading markedly increases the number and variety of books read.

## A STUDY OF THE CHOICE FIRST GRADE CHILDREN MAKE WHEN PRESENTED WITH A PAIR OF BOOKS, ONE OF WHICH IS AN EASY-TO-READ TYPE

Sister Mary Rosemond Seymour, R. S. M.

**PROBLEM.** The purpose of this study was to determine the appeal of easy-to-read books to first grade children. A secondary purpose was to judge their ability to read these books. The degree of interest first grade children have in easy-to-read type books and their ability to read them should prove helpful to first grade teachers in their selection of books for this age level.

**PROCEDURE.** The children who participated in this study were the 64 first-grade pupils attending St. Anselm School in Dearborn Heights, Michigan, during the school year 1964-65.

Twenty pairs of books were matched on the basis of their similarity of theme or main character. One of each pair of books was an easy-to-read book designated as such by the publisher. The other was a trade book of first grade interest as recommended by publishers or the Children's Catalog. Each child was asked to choose between each pair of books. This was done twice; first, after the child examined the pairs, and second, after he had read a passage from each book. Choices and comments were recorded by the examiner. The chi-square technique was used to determine the significance of the differences between their choices.

**FINDINGS.** Preferences manifested by the children in this study included the following:

1. The group as a whole chose eleven of the easy-to-read books a significantly greater number of times than their matched trade books, for their first choice. They chose fourteen easy-to-read books for their second choice, that is, after reading

a passage from each book. The group chose one trade book a significantly greater number of times both for first and second choices.

2. Eleven of the easy-to-read books were chosen a significantly greater number of times by the girls when making their first choices. Fourteen easy-to-read books were chosen by the girls after reading passages from the pairs of books. Girls did not choose any trade books for their first choice but chose one trade book after reading.

3. Boys chose ten easy-to-read books a significantly greater number of times for their first choice and twelve easy-to-read books for their second choice. They preferred one trade book for their first choice and one for their second choice.

4. The number of children able to read the easy-to-read books varied from six to fifty-six children per book, with an average of twenty-one children. Those able to read the matched trade books ranged in number from four to twenty-two with an average of nine children.

5. The reason most frequently given for choosing a book was that it was easier. The second most frequent reason given was some characteristic of the book which the child noted in examining it. This was often an insignificant characteristic not indicative of the story as a whole. Pictures ranked third and humor fourth, in frequency of reasons given for choices.

**SUMMARY AND CONCLUSIONS.** According to this study easy-to-read type books appealed to first grade children and were preferred by them to other trade books. Easy-to-read books were found to be easier both according to formula and according to the number of children who could read them. However, high first-grade or second-grade reading level was required for success with most easy-to-read books. They were found to be too difficult for the beginning reader. Thus, there is a need for books which can be enjoyed by first graders with initial reading skill.

Ease of reading seemed to have the greatest influence on first grade children's choice of reading material. Since this is an important factor, authors of easy-to-read books should be careful to make them readable to children of low first-grade reading ability.

Illustrations are also important to this age group. Many of the children's choices were based on some incident or character noted in illustrations. Neither color, format of the book, nor size of the book seemed to be important factors in the children's choices.

Simpler texts with worthwhile illustrations should make it possible for children to be enriched by independent reading earlier. Quality of these books should be insured so that not only reading power but literary taste may be developed from the very beginning.

## RELATIONSHIPS BETWEEN STUDENTS' ACTUAL READING STUDY SKILLS ABILITIES AND THE STUDY SKILLS NEEDED AT THE TENTH GRADE LEVEL

Marvin Solomon

PROBLEM. This study was undertaken as an attempt to determine some of the relationships which might exist between ability in reading study skills and the reading study skills actually needed in required subjects at the tenth grade level.

The objectives of the study focused on these specific questions:

1. Are there any relationships between students' reading study skills abilities and the reading study skills needed in the required subjects at the tenth grade level?
2. Are there any differences between the reading study skills of the above average, average, and below average readers?
3. Are the teachers of the required tenth grade subjects aware of the reading study skills needed and the abilities of their students in these skills?
4. Are teachers moving to ameliorate weaknesses when they exist?

The study was limited to questionnaire responses of the nine teachers of English, biology, and social studies at the Hamilton High School, and to interpretation of data compiled from the scores of 160 tenth graders at this school on The Spitzer Study Skills Test, The Cooperative Reading Test, and The Henmon-Nelson Tests of Mental Ability.

The study was justified by the belief that any validated conclusions would be useful in supporting the present program

or in providing direction for improvement in the program. Since the school is fairly typical in program and outlook of exurban schools in the area, such schools might also find the conclusions applicable.

**PROCEDURE.** A survey of related literature was first made.

This survey revealed much disagreement regarding the nature of study skills and much overlap in classifying reading comprehension skills and reading study skills. A definition of terms and an explanation of the nature of study skills were formulated as a result of this survey. The definition called for retention and application as basic intentions in the implementation of the skills.

On the basis of these understandings, a questionnaire was constructed and administered to determine teachers' ratings of students' needs and abilities in terms of study skills. Ratings of study skills being taught in the required subjects were also determined from the questionnaire, as were ways of ameliorating weaknesses. A study skills test was selected and administered to provide objective data on student abilities. Test data on I.Q. and reading ability were secured from the school's guidance department.

**FINDINGS.** It was found that teachers tended to concentrate on and to understand best those study skills which were directly related to the subject which they taught. Teachers were agreed on the need for more emphasis on the teaching of study skills and for greater coordination in the development of programs to teach the skills, but were disagreed on how to accomplish this. There was fairly strong disagreement between test data and teachers' ratings of their students' abilities in study skills.

The differences between the means of the upper and lower I.Q. and reading groups were significant at the .001 level of confidence. Differences between the means of the various study skills tests were also significant at the .001 level of confidence, indicating the variation among students in the various types of study skills used in high school.

Relationships were less strong between total and organizational skills in the lower I.Q. and lower reading groups than they were in the upper I.Q. and upper reading groups.

**SUMMARY AND CONCLUSIONS.** There is need for a coordinated, objective approach to the evaluation of students' needs in reading study skills and to the manner in which they might be strengthened.

There is also need for further investigation into the nature of study skills and how they can be evaluated with greater validity and reliability; in short, better tests for measuring them are needed.

## **A STUDY OF THE AVAILABILITY OF READABLE AND INTERESTING BOOKS IN AREAS OF GREATEST INTEREST TO EIGHTH GRADE PUPILS IN A SELECTED SCHOOL**

Sister Mary Anthony Tenaglia, O.S.U.

**PROBLEM.** The purpose of the study was to determine the availability and attractiveness of books of varied difficulty in the most prominent areas of interest to eighth-grade pupils. The specific objectives of the study were to determine: the areas of interest to eighth-grade pupils, the five most common areas of interest, the differences in reading interests of boys and of girls, the availability of interesting books in a range of difficulty from third to tenth grade, the readability and attractiveness of these books according to formula and to pupil evaluation, and the comparison of the reading level of the students and the difficulty of the books.

The study investigated the availability of interesting books in a wide range of difficulty and considered pupil-evaluation of the attractiveness of these books in order to provide teachers with a guide in directing the free reading of their pupils. It was also intended to alert those who supply reading materials to the need of providing attractive books suited to the interests and reading achievement of all pupils of a particular age group.

**PROCEDURE.** One hundred eight students, fifty-six boys and fifty-two girls, enrolled in the eighth grade in an elementary parochial school during the 1965-1966 term participated in the study. Books used were limited to trade books which were available in two public libraries and in the students' school library.

The principal areas of reading interest to the students participating in the study were discovered through the construction and administration of a reading interest inventory. Units composed of sixteen books for each area of interest, ranging from third to tenth grade readability, were collected

and presented to the students for examination of their attractiveness. Pupil responses were used to compare the interests of boys, girls, and the entire group and to note the relationship of interest to pupils' choices of books. A comparison was also drawn between the students' reading ability and the level of difficulty of the books which they chose to read.

The study was somewhat restricted by the limitations of the interest inventory in determining reading interests and the failure of readability formulae to indicate the exact degree of difficulty of the books examined. Personal interviews and more subjective criteria for the evaluation of books were therefore included.

**FINDINGS.** For the entire group, mystery stories constituted the area of greatest interest. Next followed the categories of adventure, history, biography, romance and sports. Boys and girls differed both in their choices of interest areas and in the rating of the attractiveness of the books which they examined. Boys chose books of sports and adventure and girls preferred stories of romance and of home and school life. Books in these areas of interest were found in a range of difficulty from third to tenth grade reading levels except for the area of romance stories. Books in this area were not available at the upper and lower extremes of reading difficulty.

**SUMMARY AND CONCLUSIONS.** Although books were available to students in most areas of interest to them, romance stories, which were ranked as highly interesting by girls, were not easily found on readability levels three through ten. When rating the attractiveness of books, students were more greatly influenced by the theme of the story than by the readability level of the book.

Style, theme, type of characters, content and format were factors which influenced the students' selection of books.

Results of the study suggested that pupils require teacher guidance in their choice of free reading materials. Both basal and recreational reading should be provided which takes into account students' interest as well as their reading ability levels. Characters to whom students can relate should be included in these materials.

## A STUDY OF PERCEPTUAL-MOTOR SKILLS OF SUPERIOR AND RETARDED READERS IN THE PRIMARY GRADES

Patricia M. Twohig

**PROBLEM.** The purpose of this research was to compare the performance of superior and retarded readers at the primary level on perceptual-motor tests. It was thought that results of the research could suggest one means of identifying potential retarded readers so that preventive instruction could be given. The study was concerned with answers to these questions:

1. Is there a difference in the performance of superior and retarded readers on these tests?
2. What is the relationship between scores in reproducing forms and in rhythmic writing?
3. Would these tests offer predictive value for reading readiness?
4. Do the tests isolate deficiencies so that correction through instruction is possible?

The significance of the problem lay in the acquisition of additional knowledge concerning reasons why children of similar backgrounds and ability vary in their capacity to learn to read. Identification of deficiencies in perception might be followed by corrective perceptual-motor activities in order to prevent reading disability in some cases.

**PROCEDURE.** A total of 38 superior and retarded readers participated in the study. These children were paired according to reading ability, sex, chronological age, IQ, and socio-economic background. Following the selection of matched pairs, two subtests of the Roach-Kephart Perceptual-Motor Survey, developmental drawing and rhythmic writing,

were administered to the pairs. In addition, the Keystone Visual Survey Test was used to screen the vision of the participants in order to study the relationship of any unusual visual difficulties to low scores on the perceptual-motor tests.

Following the administration of the perceptual-motor tests the t-test was used to determine the significance of difference between means of superior and retarded readers in developmental drawing, rhythmic writing, and the total scores of both tests. The scores of the boys and girls on each test and the total of both tests were also evaluated separately.

**FINDINGS.** Analysis of the data indicated the following findings:

1. The total scores of the tests were found to be significant in evaluating perceptual-motor abilities of superior and retarded readers.
2. The least significance was found in the total score of boys. The small number of subjects could have been a limiting factor in this instance.
3. The test of rhythmic writing resulted in a greater significant difference between means of superior and retarded boys than between means of superior and retarded girl readers.
4. Developmental drawing was of no discriminative value for either boys, girls, or the total group.
5. Intelligence level did not appear to contribute to high or low achievement in the perceptual-motor tests.

**SUMMARY AND CONCLUSIONS.** The following conclusions were suggested by the writer on the basis of her findings:

1. Research in the past 35 years has emphasized the importance of reading readiness skills and the fact that readiness is composed of a variety of abilities. It would seem that assessment of perceptual-motor ability could be helpful in evaluation of reading readiness skills. The test of rhythmic

writing would be one test which could be included in such evaluation.

2. Instructional activities for developing perceptual-motor skills involved in rhythmic writing should be considered.

3. The less refined perceptual-motor skills involved in reproducing figures were fairly well developed in the subjects. While these skills are a step in the developmental sequence, they do not seem closely allied to the refined nature of perception of word form.

## A STUDY OF THE EFFECTIVENESS OF PRE-SERVICE COURSES IN THE TEACHING OF READING

Sister Mary Elizabeth Voss, B. V. M.

**PROBLEM.** The purpose of this study was to determine which aspect of the content and organization of the pre-service teaching of reading course proved most beneficial to teachers during their first years of experience. Specific objectives were to determine:

1. Which specific skills areas and organizational techniques did the new teacher find most helpful in her actual teaching of reading?
2. Which organization and presentation method used by the college instructor seemed most efficacious?
3. Are the needs expressed by respondents influenced by the grade level being taught?

**PROCEDURE.** The study was conducted by means of a questionnaire sent to teachers of less than three years' experience in six midwestern cities. The distribution of the questionnaire was approved by the superintendents of the respective public and Catholic school systems.

The questionnaire was composed of three parts. Part One sought information pertinent to the respondents' educational background in the area of reading and the grade levels of their teaching experience. Part Two was concerned with specific aspects of the content of the pre-service course. Part Three was constructed to secure information concerning the most beneficial type of presentation used in the college course.

Parts Two and Three required respondents to rate each item listed under content and organization of the course according to the degree of benefit they realized in their actual teaching experience.

Data from Part One relative to educational and experiential background of respondents were tabulated. Data from Parts Two and Three were separated according to grade level taught by the respondent. The responses of primary teachers and of teachers of grades four to eight were recorded separately. A third tabulation was made including primary teachers, teachers of grades four to eight, kindergarten teachers, teachers of special classes, and those respondents who did not designate their area or level of teaching.

Percentages representing degrees of benefit received were calculated for each topic on the questionnaire and tables were prepared containing these data. Comments pertaining to each section were studied. The numerical data were then interpreted in the light of pertinent comments in order to realize the objectives of the study.

**FINDINGS.** Part One. Of the 215 teachers comprising the population of the study, 114 were primary teachers, 81 taught grades four to eight, seven were kindergarten teachers, six taught special classes and seven did not designate the level at which they taught. One hundred three had taught one year or less and 105 had more than one but less than three years' experience. Seven did not respond to the item concerning years of experience.

All had had at least one course pertaining to the teaching of reading.

Part Two. Findings from the section concerning the content of pre-service courses in teaching reading included the following:

1. General aspects of the course. Understanding the reading curriculum was considered the most beneficial general aspect of the pre-service course. Most teachers considered the philosophy underlying the teaching of reading to be of only moderate value. The physiology and psychology of reading were considered relatively beneficial.

2. Word attack skills. Training in all areas of word attack skills, especially phonics, was highly valued. Dictionary

skills were found beneficial by a slightly larger proportion of the upper grade teachers than of the primary teachers.

3. Oral and silent reading. Much value was realized from knowledge of the purposes for which oral reading can be used. No emphasis was noted for training in forms of oral reading. Definite lack of stress was recorded pertaining to time allotment in both oral and silent reading. Training in developing speed of reading, among upper grade teachers as well as primary teachers, received relatively little emphasis.

4. Comprehension and reading study skills. General comprehension skills were found of value by all teachers. Organization skills received somewhat less emphasis by all teachers but especially by the primary teachers. Primary teachers reported little benefit from preparation in reading study skills. Upper grade teachers placed considerable value upon reading study skills. Training in interpretive reading was relatively valuable to new teachers.

5. Classroom organization and general techniques. Teachers reported that they felt inadequately prepared for meeting individual needs of readers of varied abilities. They valued highly lesson planning and use of the manual, as well as motivational techniques. Familiarity with evaluative devices and record keeping received relatively less emphasis. They considered familiarity with a variety of teaching materials to be vital, especially if this familiarity were acquired with actual teaching.

Part Three. Findings concerning assignments, testing and method of conducting the college course itself, included the following:

1. Method of conducting the course. By far the most beneficial means of preparing the future teaching of reading was found to be observation of a reading lesson being taught to a class. Panel discussions and oral reports were relatively beneficial. The lecture method was not considered highly beneficial. Negative emphasis was apparent with regard to demonstrations given by college students to fellow students.

2. Assignments. Answering questions from texts and making reports on current literature were reportedly of little value to new teachers. Panel discussions and oral reports were rated relatively beneficial. Practice in devising independent instructional work was reportedly in need of greater emphasis.

3. Testing. The new teacher recognized little value in objective testing alone in the pre-service teaching of reading course. The combination objective and essay was reportedly the most satisfactory type of test. The elimination of tests was not favored.

**SUMMARY AND CONCLUSIONS.** The following conclusions seem warranted with regard to the content of the pre-service course in the teaching of reading:

Skills. 1. Phonetic principles and methods of presenting them should be mastered during the college course.

2. With regard to study skills, preparation should be geared toward the grade level for which the prospective teacher is preparing.

3. Reading comprehension skills and specific skills such as identifying sequence should be presented so that they will be recognized as aspects of teaching reading to be initiated at the primary level and developed throughout the grades.

4. Interpretive and critical reading should be emphasized as characteristics of good reading at every level.

5. Greater emphasis could be given to training in dictionary skills for upper grade teachers.

6. Since speed and adjusting rate to purpose are characteristics of mature readers, upper grade teachers should be made aware of their relationship to efficient reading.

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Approaches and practices. 1. Knowledge and practice in providing independent instructional work in reading should receive greater stress.

2. Approaches and methods of instruction appropriate to ability groups should be given greater emphasis.

Principles. 1. An appreciation of the diagnostic aspects of teaching should be fostered.

2. Convictions and principles pertaining to grouping and meeting individual differences should be formulated during the pre-service course. If possible, experience should be provided for utilizing these principles.

The following conclusions seem warranted with regard to the organization of the pre-service course in the teaching of reading:

Method of instruction. 1. The lecture method as an adequate method of preparing future teachers of reading should receive thorough re-evaluation.

2. Ways of providing opportunity for developing principles of psychology and philosophy of reading and exercising these principles concretely should be explored.

Developing attitudes. 1. Research and current literature in the field of education are apparently of little interest or value to the new teacher. The causes of this situation should be investigated and recommendations made to correct it.

2. A study of the possibility of developing educational principles of reading solely by the inductive method should be undertaken.

## A STUDY OF THE PERCEPTUAL-MOTOR DEVELOPMENT OF SUPERIOR AND RETARDED READERS IN THE PRIMARY GRADES

Margaret Lillian Werner

**PROBLEM.** The purpose of this study was to determine whether a relationship existed between reading achievement and perceptual-motor development which would help predict reading success. Answers to the following questions were sought:

1. Is there a significant difference in the performance of superior and retarded readers on individual perceptual-motor tests?
2. Is there a relationship between results of primary reading tests and performance on perceptual-motor tests?
3. Would results of these tests prove the need for formal reading readiness?
4. Do test results offer a possible solution for corrective instruction?

The justification of this study was the need to verify general statements in educational and popular writings concerning the relationship between sensory and motor development and academic achievement, especially reading achievement. Research dealing with this relationship is limited.

**PROCEDURE.** Thirty-eight paired pupils were involved in this study. Nineteen were retarded readers and nineteen were superior readers. They were pupils at the Cardinal Stritch College Reading Clinic and at two suburban schools. Pairing was based on sex, chronological age, mental age, reading achievement, and socio-economic background.

Eight tests of the Roach-Kephart Perceptual-Motor Survey were administered to the subjects. These tests were in three categories: the motor skills tests, the laterality-directionality skills test, and the perceptual skills tests.

**FINDINGS.** The following information was obtained through analysis of the perceptual-motor test data:

1. In general, retarded readers exhibited lesser skill in the performance of the perceptual-motor tests.
2. The differences between the means of the superior and retarded readers in the Walking Board tests were significant in favor of the superior readers. The difference in total scores was significant at the .001 level, the difference in sidewise walking was significant at the .01 level, and the difference in backward walking was significant at the .05 level. There was no significant difference between the means of the two groups in forward walking.
3. The performance of the superior readers excelled that of the retarded readers in the jumping tests with a difference between the means significant at the .01 level.
4. There was no significant difference between the means of the two groups on the following tests: identification of body parts and imitation of movement; angels-in-the-snow, which involved laterality and directionality, and the chalkboard tests of drawing circles, double circles, lateral and vertical lines. In the latter tests, the retarded readers had a higher mean than did the superior readers.
5. On the Kraus-Weber test, involving motor co-ordination and skill, there was a difference significant at the .05 level between the means of the superior and the retarded readers.
6. The difference between the mean of the retarded readers and the superior readers in the total of all tests was significant at the .001 level of confidence in favor of the superior readers, indicating the possibility of utilizing these tests as a total in identifying retarded readers.

7. Although superior readers generally excelled in the perceptual-motor tests, in some instances they scored lower than did retarded readers.

8. In the more complex skills the majority of the subjects had difficulty. These tests were specifically those of drawing vertical lines, Kraus-Weber, angels-in-the-snow, and backwards and sidewise walking.

**SUMMARY AND CONCLUSIONS.** The following conclusions were drawn from the study of test data and from observations made throughout the study:

1. Since many children had difficulty in the more complex skills and the retarded readers were lower in perceptual-motor skills, it would seem advisable to include more work in the development of perceptual-motor skills in the curricula of kindergarten and primary grades.

2. Teachers of kindergarten and primary grades should receive more background in this particular area (perceptual-motor skills) which seems to be a factor related to reading readiness. However, further study is needed to determine the relationships existing between the various tests and reading readiness.

3. New, more accurate tests of perceptual-motor development need to be devised.

4. Since the test involving laterality showed no significant differences between superior and retarded teachers, the relationship of laterality in learning to read was questioned. Further study is needed of this relationship.

5. It is possible that the results would have been more predictive at a lower age level, such as kindergarten or pre-kindergarten. Study of perceptual-motor development of a lower age level might well be helpful in identifying potential retarded readers.

## **THE DEVELOPMENT OF SPECIAL EDUCATION FOR MENTALLY RETARDED CHILDREN IN THE NEWARK ARCHDIOCESAN SCHOOLS FROM 1930-1945**

Sister Mary Ramona Borkowski, C.S.S.F.

**PROBLEM.** The purpose of this investigation was to present a genetic study of the development and growth of the special education program in the Archdiocese of Newark, New Jersey, beginning with the formation of the Mount Carmel Guild in 1930. Since the special education program for the mentally retarded in the Archdiocese of Newark has become permanently established and has successfully developed, this study was proposed:

1. To present the history of the Archdiocesan program.
2. To give a synthesis of the services offered.
3. To predict future needs and probable developments.
4. To delineate a pattern of Catholic educational services for the mentally retarded which can be of value in initiating programs in other dioceses.

**PROCEDURE.** Interviews were held with the assistant supervisor of special education, the heads of all departments within the Guild, the school psychologist, and teachers from all the centers. Additional data were gathered from the official files of the Mount Carmel Guild, from files of the special education testing center, and from files in each of the special classes.

**FINDINGS.** Among the findings of this research were the following:

1. More boys than girls have been referred and placed within the Archdiocesan program.

2. There has been a gradual and continuous increase in the number of children benefiting from the special education program.

3. The majority of children in the program are in the mildly retarded category, with I.Q. of 50-75.

4. Continuous progress is being made by the students as indicated by the results of bi-annual achievement tests.

**SUMMARY AND CONCLUSIONS.** As a result of this study, the writer was able to conclude that:

1. The special education program has been accepted as one segment of the total Archdiocesan educational program and as a result, the children in the special classes have been integrated into their respective school programs.

2. An understanding and beneficial relationship has developed between the children and teachers of the special classes and those of the regular classes.

3. The special education program within the Archdiocese has made steady progress from year to year and has improved and increased its facilities.

4. The Mount Carmel Guild is a unique Catholic organization which meets the needs of the various handicapped children within the Archdiocese.

## A STUDY OF THE GROWTH AND DEVELOPMENT OF CHRIST CHILD SCHOOL FOR EXCEPTIONAL CHILDREN, ST. PAUL, MINNESOTA

Sister Mary Madeleva Conway, C.S.J.

**PROBLEM.** The purpose of this historical survey was to present a comprehensive study of the growth and development of the Christ Child School for Exceptional Children from 1948-1966 inclusive. The physical facilities, the administration, the personnel, the number and type of children enrolled, the daily program and the need for such services in the community were studied.

**PROCEDURE.** Information for this historical survey was gathered mainly from primary sources since the writer has been associated with the school since 1961, both in the capacity of teacher and principal. Personal interviews were held with the foundress, who is presently Project Director of The Christ Child School for Retarded Youth and Occupational Training Center, and with personnel from the Special Education Department of St. Paul, Minnesota. The St. Paul Confraternity of Christian Doctrine office furnished helpful information. Examination of material in the school files, the daily newspapers, the Archdiocesan weekly paper, and other papers and magazines yielded valuable data. Other useful sources were the school publication, The Gentle Voice, an unpublished history of Christ Child School by Sister Anna Marie, C.S.J., and a community history, The Sisters of St. Joseph of Carondelet, by Sister Dolorita Marie Dougherty, C.S.J. and others.

**FINDINGS.** Findings of this study are given in the following order: physical facilities, administration, personnel, enrollment, program, and the need for services provided by a day school under Catholic auspices in the St. Paul, Minnesota area.

1. A new structure was erected to replace the old home which served as the first elementary school. Extensive remodeling on the old home adjacent to this property rendered it suitable for classes at the secondary level. Architectural plans have been drawn for a new building on this site.

2. A lay Board of Directors worked closely with the Sister Administrator until 1958 when the Archdiocese accepted the responsibility and direction of the school.

3. The complete staff consists of eight Sisters of St. Joseph and 17 lay teachers. Five Sisters and 12 lay teachers comprise the faculty of the elementary section of the program. The majority of these teachers have taught in regular school systems. They are encouraged to participate in workshops, conventions, and local special education meetings, as well as to update their training by taking advantage of the special education courses offered at various colleges and universities.

4. The 170 children, adolescents, and young adult retardates, with intelligence quotients ranging from 50 to 80, are chiefly from the Twin Cities area. Admission is between ages 5 and 21. Children are referred to the school by doctors, social workers, teachers, parents, and friends.

5. Through a developmental program extending from pre-school, school, and post-school levels, skills and concepts are introduced and taught when the individual retardate has achieved the maturity and had the experiences necessary for their acquisition. Younger children are enrolled in the elementary school program where the curriculum is adjusted to meet the needs of the individual child at his level of achievement. Occupational training, counseling and placement opportunities are offered for adolescent and adult retardates. Throughout the program moral growth, acceptable human relations, and civic responsibility are emphasized.

6. Since 1957, Minnesota has had a clear constitutional mandate to provide suitable education for all children. Present facilities accommodate less than half of the mentally retarded in Minnesota. Special released time religion classes are also

inadequate. Christ Child School is the only day school under Catholic auspices in the Archdiocese of St. Paul and Minneapolis. It is unique in that it strives to educate the whole child, to meet the Christian and democratic rights of handicapped persons by means of a continuum of services from kindergarten to job placement for the educable mentally retarded individual.

**SUMMARY AND CONCLUSIONS.** An historical survey was conducted to study the growth and development of the Christ Child School for Exceptional Children, St. Paul, Minnesota, from the years 1948-1966 inclusive. The extent of the physical facilities, the administration, the personnel, the types and number of the children enrolled, the daily program in the elementary and secondary departments, and the need for the services offered were described.

## **A STUDY OF THE MARITAL STATUS AND ATTITUDES OF PARENTS OF RETARDED CHILDREN IN A PRIVATE RESIDENTIAL SCHOOL IN MARYLAND**

Sister Miriam Thomas Gerstenberg, O.S.B.

**PROBLEM.** This study was undertaken to determine the attitudes of parents toward their mentally retarded child, the effect of the child on the marital status of the parents, and the specific needs of the parents as they plan for the future of the retardate.

**PROCEDURE.** A questionnaire was distributed to 175 couples whose child was enrolled in a private residential school for mentally retarded children at the time of the study or who had been enrolled in the school at some time since its beginning in 1959.

The questionnaire contained 26 items designed to elicit responses which would reflect the attitudes of the parents toward the mentally retarded child and which would give insight into the marital status of these parents as it was influenced by the child.

The results of the questionnaire were presented in tabular form. Some parents sent letters explaining why they had not completed the questionnaire. These letters were also reported.

**FINDINGS.** For the most part, the condition of mental retardation in the child was recognized by a doctor. Husbands found it more difficult to admit and accept the fact that the child was retarded than did wives. More wives than husbands experienced guilt feelings at the time the diagnosis was made. In general, parents acted quickly to provide for the child's special needs.

The parents experienced no outstanding problems in explaining the child's condition, limitations and capabilities to siblings, relatives, friends, and neighbors. Parents were unified and consistent in their approach to discipline used and privileges granted to the child. The retardate was evaluated by half of the parents as having a good relationship with siblings and by the other half as having a fair relationship.

The majority of parents lived together and got along well. This majority felt that while the child did not cause quarreling between husband and wife, the child was often a source of tension and misunderstanding. In planning for the retardate's future, most parents were not specific nor entirely realistic. A very small percentage of parents mentioned gainful employment in society as a future goal for the retardate.

A very small percentage of parents claimed that the retardate caused a break between them. A few were reluctant to have more children after the birth of the retardate and a few refused to have more children. Some parents were misguided by ill-informed members of the medical profession.

**SUMMARY AND CONCLUSIONS.** The medical profession needs education concerning the nature of mental retardation and its impact on parents and families. Medical personnel also need more positive insight into the possibilities of a retardate becoming a contributing and productive member of society.

Doctors need training in parental counseling not only for the time of diagnosis, but also throughout the life of the retardate.

Wives seem to accept the fact of retardation in their child more readily than do husbands. Parents need guidance and counseling in accepting the fact that the child is retarded, in understanding his capabilities and limitations, and in planning for his educational and vocational training.

The retarded child can have a positive influence on a family and can be well accepted by relatives, friends, and neighbors.

**A COMPARATIVE STUDY OF ACADEMIC ACHIEVEMENT MADE BY CHILDREN WITHIN THE IQ RANGE OF 60-89 IN REGULAR CLASSROOMS IN MULTI-GRADED SCHOOLS VERSUS THOSE IN SINGLE-GRADED SCHOOLS IN THE DODGE CITY, KANSAS DIOCESE**

Sister Mary Jacinta Langlois, Ad.PP.S.

**PROBLEM.** The principal purpose of this study was to investigate whether a difference in amount of academic achievement existed between children with the I.Q. range of 60-89 in multi-graded regular classes and those in single-graded classes, in the Diocese of Dodge City, Kansas.

The study had a two-fold objective:

1. To investigate whether or not a statistically significant difference in amount of academic achievement existed between children attending multi-graded and single-graded schools.

2. To show in which of the five basic areas—English, spelling, arithmetic, religion, and reading, or the total battery—the greatest gain in academic achievement lay.

**PROCEDURE.** The population of the study included all students of grades five through eight in the Diocese of Dodge City, Kansas whose I.Q. scores ranged from 60-89. The study was limited to the 1963-1964 school enrollment. There were 41 subjects in multi-graded schools and 31 in single-graded schools. Test data included the California Mental Maturity 1957 S Form, the Scholastic Achievement Test, and the Scholastic Diagnostic Reading Test.

A comparison was drawn between mean gains in English, spelling, arithmetic, religion, reading, and in the total battery for the two groups being studied.

**FINDINGS.** The data yielded insignificant critical ratios, the highest being 1.76. It was inferred that there was no significant difference between the academic achievement of children within the IQ range 60-89 in multi-graded schools as compared with those in single-graded schools in the Diocese of Dodge City, Kansas.

Pupils in the multi-graded schools had a mean gain of 2.0 years in English and arithmetic, which was the highest mean gain achieved. The lowest mean gain was that of 1.2 years in reading for pupils in single-graded schools. The highest mean gain, 2.0 years, was in accord with the actual time limits between the first and last test scores used for comparison. The first test was administered in October, 1961. The third test was administered in October, 1963. Eight mean gains varied from 1.2 to 1.6 years' progress while the other four means showed approximately two years' growth. It was found that the multi-graded schools consistently maintained a higher rate of progress in all areas except religion. Multi-graded and single-graded pupils had similar mean gains in religion.

**SUMMARY AND CONCLUSIONS.** Within the limits of this study the following conclusions appeared to be valid:

1. There was no significant difference between the academic achievement of children within the IQ range of 60-89 in multi-graded schools as compared to those in single-graded schools in the Diocese of Dodge City, Kansas.
2. Over the two-year period October, 1961—October, 1963, the highest mean gain was 2.0 years for English and arithmetic by pupils in multi-graded schools. Over the same period of time, the lowest mean gain was 1.2 years in reading by pupils in single-graded schools.
3. Although no statistically significant difference was found between the two types of schools being studied, the multi-graded schools consistently rated higher in terms of mean gain, except in religion, in which both groups made the same degree of progress.

4. The educational program offered to the children of the Diocese of Dodge City, Kansas is meeting the needs of the child as adequately in the multi-graded schools as in the single-graded schools.

## A SURVEY OF THE EDUCATIONAL PROVISIONS FOR SLOW LEARNING CHILDREN IN THE SIXTH GRADE IN SELECTED SCHOOLS OF THE CLEVELAND DIOCESE

Sister Mary Zeno Lemmerman, S.N.D.

**PROBLEM.** Society in general and educators in particular are concerned over the number of dropouts from our educational system. Many dropouts are slow learners and have not met success in school. Several suggestions regarding provisions for slow learners in regular classes have been discussed by educators but most of them indicate that the classroom teacher must provide success for these pupils. If the method is left to the teachers, several questions need answering. Are slow learners receiving some consideration in regular classes? What provisions are being made for them? How are they achieving in the tool subjects of reading, arithmetic, and spelling? Are slow learners finding success in the graded school plan? What is the attitude of teachers toward the education of slow learners?

To obtain answers to these and to related questions, this survey was made in the sixth grades of selected schools in the Cleveland diocese.

**PROCEDURE.** Preliminary questionnaires were sent to the 32 schools in the Cleveland diocese staffed by the Sisters of Notre Dame, requesting the number of sixth graders who had scored below 100 on the Kuhlmann-Anderson Intelligence Test administered in October, 1964. Twenty-seven schools or 84.4 percent responded, indicating a total of 210 children. During November, 1964 the Lorge-Thorndike Non-Verbal Intelligence Test was administered to these children by the classroom teachers. Twenty-three schools or 71.9 per cent cooperated in this phase of the survey, revealing 107 pupils with intelligence quotients between 70-95. Only those pupils who scored below 6.5 on four or more of the subtests of the Stanford Achievement Test given in January, 1965 were

retained in the survey. The final population was 91 slow learners, including 60 boys and 31 girls.

The 29 teachers of these children answered a questionnaire for each child indicating the instructional aids provided for him in the classroom. The attitudes of teachers toward the education of slow learners were determined in follow-up interviews. Questionnaire responses were tabulated according to school provisions and teacher provisions for the tool subjects of reading, arithmetic, and spelling.

**FINDINGS.** Reading provisions. Three types of grouping were reported by eight schools for reading: departmental program, intraclass ability grouping, and homogeneous grouping. Thirty slow learners of 33.0 per cent of the group participated in these programs. No special curriculum was provided and all the children were using sixth grade readers, workbooks, and skill texts. Ten schools reported using multi-level reading kits with 45 slow learners. Extra skill texts were provided for 76 slow learners.

One teacher used the multi-level kit as a basis for a special group which met at least four times per week. Another teacher provided a fifth grade level skill builder for her two slow learners. The teachers reported giving extra time to 30.7 per cent of the children and providing pupil help to 23.0 per cent of the children. Parents helped 13.2 per cent of the children at home.

Arithmetic provisions. Five schools reported departmental programs in arithmetic in which 18 slow learners participated. Three schools reported homogeneous grouping for slow learners. Two children used multi-level math kits. Thirty-three received extra practice sheets. All children in the sixth grade were using approved sixth grade math texts.

Over 50 per cent of the slow learners were regrouped for special lessons by teachers. Individualized assignments were given to 27.5 per cent of the slow learners. Teachers gave extra time to 49.5 per cent of the children and provided pupil help for 45.0 per cent. Twenty children or 22.0 per cent received help from their parents.

Spelling provisions. One school reported a departmental program and another, homogeneous grouping in spelling. A total of 13 slow learners or 14.2 per cent were involved in these programs.

Teacher provisions for spelling for slow learners were at a minimum. Thirteen children were given a modified weekly spelling list. Twenty-one children were given individualized assignments. Sixteen children were given extra time by the teacher and 15 received help from fellow students. Twelve received help from parents.

Student success. Over 50 per cent of the 91 children had repeated at least one grade. Two boys had repeated two grades. All of the children scored below grade level 6.5 on four or more of the subtests of the achievement test. Report card grades are probably the only means the student has of judging his success. No child received a grade higher than C in reading or arithmetic. In spelling, two children received an A and 19 children a B. Nearly one-fourth of the children received a failing mark in arithmetic.

Teacher attitudes. Although the teachers were required to use diocesan approved sixth grade texts for all pupils, the Teacher Questionnaire revealed a desire among teachers to make other provisions for slow learners in their classes. Individualized instruction on achievement level was considered by 75.9 per cent of the teachers to be the best provision but only one teacher thought this could be done frequently under the present organizational plan.

**SUMMARY AND CONCLUSIONS.** Conclusions drawn from the findings of this survey were limited by the small number of slow learners in one grade of selected schools in one diocese. These conclusions may be legitimately postulated for the other elementary grades in the diocese, as essentially the same conditions prevail.

Slow learners were receiving some consideration by teachers in the form of extra help, special grouping, and individualized assignments. The schools were not providing adequately

for the educational needs of slow learners because all students were required to use sixth grade texts even though their achievement test scores revealed that they were unable to learn from such material. Report card grades as well as standardized tests indicated that the children were under-achieving in the tool subjects.

Replies to the Teacher Questionnaire indicated that teachers were aware of the individual differences of slow learners and desired to provide sequential learning for them on their instructional level, but were hampered by lack of time, materials, and methods.

## **ANALYSIS OF THE FACILITIES AVAILABLE FOR RETARDATEES IN THE PAROCHIAL SCHOOL SYSTEM IN THE NORTHERN KENTUCKY AREA**

Sister M. Ann Joseph Middendorf, O.S.B.

**PROBLEM.** The purpose of this investigation was to locate retardates between the chronological ages of six and sixteen with intelligence quotients below 75, residing in the Northern Kentucky area and not enrolled in the diocesan system of special education, to determine the extent of their need for a special education program. Facilities available for the mentally retarded in parochial schools in this vicinity were examined and attitudes of personnel relevant to their acceptance of retardates were elicited.

**PROCEDURE.** This study was limited to Kenton, Campbell, and Boone Counties, with a population of approximately 20,000 children attending 43 elementary parochial schools. The number of children with intelligence quotients below 75 was determined by examining records of the Scholastic Intelligence Test, Form O, in the diocesan superintendent's office.

The survey was conducted by means of four questionnaires which were sent to a random sampling of physicians, to all principals of parochial elementary schools, to all pastors of Catholic parishes, and to the social worker at Catholic Social Service in this area, to locate any mentally retarded Catholic child not attending a parochial school and to elicit attitudes of respondents.

Interviews were arranged with the Director of Special Education and with the Superintendent of parochial schools in the diocese of Covington, to which Northern Kentucky belongs, to determine their attitudes and to discover the facilities they had established for mentally handicapped children.

**FINDINGS.** 1. Names of 305 Catholic children in this area not receiving special educational services were found. Lack of facilities was the chief reason for this condition. Accommodations for only 90 children have been provided in the diocesan school for the mentally retarded.

2. Only four schools had made any provisions to aid mentally handicapped children who were not able to progress with their classes.

3. Most principals, physicians, and pastors realized the need for special education for the mentally retarded.

4. Principals were cognizant of the need for more special classrooms in order to provide for retarded children in their regular classes.

5. The majority of the physicians felt that they were able to counsel parents of the mentally retarded, while pastors in general believed that they were not adequately prepared to counsel parents of retarded children because of their unfamiliarity with the problems of mental retardation.

**SUMMARY AND CONCLUSIONS.** In studying the results of the questionnaires, the following conclusions seemed to be justified:

1. Leadership for improving the situation of education for the mentally retarded in Northern Kentucky has been lacking. Less than 30 per cent of the retarded children are receiving special educational services and the majority are placed in regular classes.

2. Physicians and pastors are aware of the needs of the mentally handicapped child, but have been ignorant of the extent of those needs.

3. Pastors have displayed willingness to help, but at the same time have admitted their lack of preparation for guiding parents of retardates.

4. Parents have evinced extreme concern for the alleviation of the problem.

## **A CRITICAL STUDY OF MOVEMENTS WHICH AFFECTED CHANGE IN ATTITUDES TOWARD THE EDUCATION OF THE MENTALLY RE- TARDED IN THE UNITED STATES**

Sister Mary Andrea Mohr, R. S. M.

**PROBLEM.** The purpose of this study was to identify and evaluate movements which have been a vital force in the growing interest in educating the mentally retarded child. The specific aims were to determine as far as possible:

1. The period when this trend toward educating the mentally retarded became most prominent.
2. The particular movements which were most influential in bringing about change.
3. The manner in which these movements affected attitudes toward educating the mentally retarded.

**PROCEDURE.** This investigation was conducted by examining government documents, periodicals, and books, and by interviewing people who have experienced this evident change in education for the retarded. To limit the scope of an otherwise boundless inquiry, minor influences were ruled out and major forces were considered under three categories. The first category included the origin, aims and projects of the American Association on Mental Deficiency (AAMD), The Council for Exceptional Children (CEC), and the National Association for Retarded Children (NARC). Findings from educational, psychological and medical research were presented in the second category. Government interests, which included the White House Conferences, the President's Panel on Mental Retardation, and national, state, and local legislation comprised the third category.

**FINDINGS.** Most of the noticeable change dates to the period after World War II in which were envisioned equal educational opportunities for all. The period between 1950-1960 was indicated by all eight persons interviewed as the decade of greatest change.

Research and interviews showed that the Parent Movement, organized under the corporate title, National Association for Retarded Children, has been the most influential factor in disseminating the knowledge that education of the mentally retarded would ultimately benefit society.

Although this movement gave dynamic leadership, it was also the climax of various other movements which had noiselessly and perseveringly nurtured the idea of education for the retarded. The change in attitude regarding the education of the retarded was reflected in six phases.

1. The philosophy has changed from hope, to care, to happiness, to sharing and participation.
2. Services offered have been developed from those found only in institutions and schools in large urban centers to a continuum of care offered in rural areas as well as urban. Pre-school evaluations and job placement are included. Comprehensive state planning has moved toward completion of all phases of community services offered to educate the mentally retarded.
3. From limited in-service training, usually summer school courses, provisions for educating teachers of the retarded have evolved to graduate and under-graduate degrees offered in almost every state. All states have specific provisions for the education of these teachers. Several universities now offer doctoral level work in the field.
4. The development of standardized tests has become important in identifying and selecting the various types of handicapped children. Formerly, mentally retarded, emotionally disturbed, and delinquent children were frequently grouped together.

5. Sense training and didactic teaching introduced by Sequin and Montessori have been incorporated, refined and used as a basis for modern individualized teaching. Today's trends are away from group classification and group teaching.

6. Classes for special education were often relegated to remote parts of the school building. Today an especially designed room is often included in the plans of a new school. Use of the school's physical education, workshop and home economics facilities is permitted.

**SUMMARY AND CONCLUSIONS.** In the early 1900's, parallel with the great eugenical alarm and the idea that intelligence is a fixed entity, interest was aroused regarding the education of the retarded.

During the thirties and forties the movements for the retarded persisted but their influence was mitigated by a depressed and turbulent social milieu. World War I, the depression, and World War II occupied the public, the legislative bodies, and research fields. Despite the lull, some progress was made.

In the late forties and fifties, the greatest change in education for the retarded occurred. Some of the important factors in this decade were the Forty-Ninth Yearbook for the National Society for the Study of Education, Part II The Education of Exceptional Children; advances in biochemistry, modern surgical techniques, and the development of new drugs; the merger of isolated parent groups into the National Association for Retarded Children; the inauguration of the AAMD Project on Technical Planning in Mental Retardation; and the passage of Public Law 88-926.

The present decade has been most productive of movements promoting education for the mentally retarded. Among the most important events have been: the Report to the President concerning the problems connected with mental retardation, issued October 16, 1962; the establishment of the National Institute of Child Health and Human Development; the establishment of a new Division of Handicapped Children and Youth

within the U.S. Office of Education; the White House Conference on Mental Retardation, September, 1963; the passage of two bills significant to the welfare of the retarded, October, 1963; and the continued federal sponsorship of programs to eliminate poverty, which was cited in the Report to the President as a primary factor in mental retardation.

**A CRITICAL SYNTHESIS OF COMMUNITY ATTITUDES WITH SPECIFIC FOCUS ON THE ACCEPTANCE AND PROVISIONS MADE FOR RETARDED CHILDREN IN THE STATE OF MARYLAND**

Sister Mary Jeannette Murray, O.S.B.

**PROBLEM.** This study was undertaken to elicit community attitudes relevant to the detection and acceptance of mental retardation as well as to learn the provisions made by the state of Maryland for its retarded citizens.

**PROCEDURE.** A questionnaire was devised exploring various attitudes pertaining to acceptance of and provisions for the mentally retarded within Maryland communities. This questionnaire was sent to the Board of Education, the Board of Health, and the Welfare Boards of the twenty-four counties and to all private and public facilities offering services to the mentally handicapped. An explanatory letter accompanied the questionnaire.

The questionnaire included items on recognition and acceptance of the mentally retarded, social life of the retardate, clinical and diagnostic services available, and agencies within the community which provided the continuum of necessary care.

**FINDINGS.** Analysis of questionnaire responses indicated that communities within the state of Maryland were, in general, providing for their retarded citizens. The following findings were selected from among the more specific attitudes expressed.

Most respondents considered the continuum of care to be of primary importance.

Counseling and guidance services for parents of the retarded were considered adequate.

The majority of respondents indicated that the retarded could be served better by constructing small units throughout the state rather than by expanding present units.

Many respondents indicated that occupational training and job placement services were available to adolescent retardates.

There seemed to be a need to improve attitudes concerning home placement for the retardate.

**SUMMARY AND CONCLUSIONS.** On the basis of the findings of this study, the following conclusions were drawn. Some of these conclusions were observational rather than conclusive.

1. Residential school plans should be reassessed in relation to smaller units. Perhaps four or five small institutions, community-oriented and treatment-rehabilitation oriented would be desirable. The prime purpose of these schools would be rehabilitation for life in society under some degree of supervision, although some retardates may achieve independence. The secondary purpose would be practical training for young professional people and planned and systematic research by the staff.

2. Many retarded people leave school unprepared and/or unable to be independent members of society. More sheltered workshops are needed in order that young retardates can make a contribution to society and, in many cases, become proficient enough at a given task to support themselves. Sheltered workshops should be established throughout the state. A minimum of one in each county, with more workshops proportionate to need in more densely populated counties, should be provided.

3. Very few recreation facilities are available for use by the mentally retarded. Provisions should be made for summer day camps and residential camps for the retarded with appropriate programs for the various age levels of both sexes.

4. Many mentally retarded individuals are a burden to the family because they need constant supervision. More day

care centers should be established for school age retardates who are too handicapped to attend special classes.

5. A committee should be formed to make a survey of jobs at state and business levels which could be filled by the mentally retarded.

## **A STUDY OF THE GROWTH AND DEVELOPMENT OF THE DAY CLASSES IN THE ARCHDIOCESE OF ST. LOUIS, MISSOURI**

Sister Mary Agnes Richter, S.L.

**PROBLEM.** The purpose of this study was to present in detail the historical development of the special day classes in the Department of Special Education in the Archdiocese of St. Louis, Missouri, during the years 1950 to 1967 inclusive. Specific objectives of the study were:

1. To show the development and growth of the day classes during the years 1950-1967.
2. To indicate the types, number, age range and mental level of children within the Department with special emphasis on the day classes.
3. To show the qualifications of the personnel: teachers, consultant, psychologist and supervisor.
4. To describe the children's daily program in these classes.

**PROCEDURE.** Information for this historical survey was gathered mainly from primary sources including personal interviews with administrative and other personnel of the Department, data from school files, and the unpublished doctoral thesis, Organization of a Department of Special Education in the Archdiocese of St. Louis, by Monsignor E. H. Behrmann, founder and director of the Department.

**FINDINGS.** A survey conducted in early 1950 through the Archdiocesan newspaper revealed that approximately 98% of mentally handicapped children were living at home without benefit of educational services. One per cent were living in public residential institutions and one per cent in private residential schools.

In September, 1950 Msgr. Behrmann inaugurated the Department of Special Education integrated within the parish school system but under its own director. The Department opened with five classes and five teachers.

The present study revealed growth and development in the establishment of twenty day classes. These classes enroll boys and girls between the ages of six and sixteen who are handicapped either mentally, physically, and/or emotionally. Methods and services necessary to develop each child's potential are employed. Teachers in the Department have cooperatively developed a curriculum guide.

**SUMMARY AND CONCLUSIONS.** This study revealed that the original survey conducted by Msgr. Behrmann has been implemented in the growth and development of the Department of Special Education. It is recommended that an attempt be made to diagnose children with learning difficulties precisely and at an early age. It is also recommended that flexibility in incorporating children from special classes into regular classes for short periods of time be encouraged.

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