A listing of dissertations completed in colleges and universities since 1960 in the areas of preschool, elementary, secondary, college, and adult reading is reported. Relevant issues of "Dissertation Abstracts" were reviewed, and dissertations on reading were noted. A comprehensive, analytical abstract was prepared by professionals in reading who worked from the summary reported for each dissertation. In many instances, the dissertation itself was reviewed in preparing the abstract. As much as possible of the procedures, design, and conclusions of each investigation was included in the abstract. Each entry includes complete bibliographic data. Three hundred and seventy-nine theses are listed alphabetically by the author's last name. Copies of any dissertation listed in the bibliography can be ordered from University Microfilms, Ann Arbor, Michigan, in positive microfilm or bound xerographic form. Complete information for ordering copies is included with each entry. (BK)
Recent Doctoral Dissertation Research in Reading

Edward G. Summers
Indiana University

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.
The ERIC Clearinghouse on Retrieval of Information and Evaluation on Reading is a national clearinghouse which collects, organizes, analyzes, and disseminates significant research, information, and materials on reading to teachers, administrators, researchers, and the public. ERIC/CRIER was established as a joint project of the International Reading Association and Indiana University in cooperation with the Educational Resources Information Center of the USOE. The Clearinghouse is part of a comprehensive information system being developed for the field of education.

September, 1967
The ERIC/CRIKR Reading Review Series has been created to disseminate the information analysis products of the Clearinghouse. Analysis of information can take place on a broad continuum ranging from comprehensive reviews of the state of the knowledge in a given area to bibliographies of citations on various topics. Four genres of documents appear in the Reading Review Series. The first type includes bibliographies, with descriptive abstracts, developed in areas of general interest. The second type consists of bibliographies of citations, or citations and abstracts, developed on more specific topics in reading. The third type provides short, interpretive papers which analyze specific topics in reading using the existing information collection. The final genre includes comprehensive state-of-the-art monographs which critically examine given topics in reading over an extended period of time.

Recent Doctoral Dissertation Research in Reading provides a listing of theses completed in colleges and universities which have pursued research in the areas of pre-school, elementary, secondary, college and adult reading. All dissertations listed have been reported in Volumes XXI through XXVI of Dissertation Abstracts, a publication of University Microfilms, Ann Arbor, Michigan. The Abstracts is a monthly publication which announces summaries of dissertations in cooperation with the majority of institutions in the United States conducting doctoral programs.

Relevant issues of Dissertation Abstracts were reviewed and theses on reading noted. A comprehensive analytical abstract was prepared by professionals in reading using the lengthy summary reported for each dissertation. In many instances the dissertation itself was reviewed in preparing the abstract. As much as possible of the procedures, design and conclusions of the investigation are included in the abstract. Each entry includes complete citation data for the thesis.

Complete copies of any dissertation in the bibliography can be ordered from University Microfilms by using the Order Number included with the citation data. Theses can be ordered in positive Microfilm or bound Xerographic copies. The Microfilm and Xerography prices are also included with the citation data for each entry. The Order Number must accompany requests for dissertations.
University Microfilms Library Services has recently instituted a new retrieval service called DATRIX. Bibliographies of dissertations on specific topics can be computer-compiled by using a key-word list and searching across the 126,000 post-1938 dissertations which constitute the basic corpus of material. Complete information on DATRIX can be obtained by requesting the DATRIX brochure from:

University Microfilms Library Services  
Xerox Corporation  
300 N. Zeeb Rd.  
Ann Arbor, Michigan 48106

This bibliography lists and abstracts recent dissertations in reading which have appeared since 1960. For the user interested in reading dissertations prior to 1960, an historical document is available. **Doctoral Studies in Reading, 1919 through 1960**, Fay, Leo C., Bradtmueller, Weldon G., and Summers, Edward G., Bulletin of the School of Education, Indiana University, 40, No. 4, July, 1964, lists over 700 dissertations in reading. The theses are indexed under 34 subject categories and a summary statement is provided detailing the important trends in each category. An author index is also included. This document is now being processed into the ERIC system and will soon be announced in Research in Education. By late 1967 it will become available in microfiche form through the ERIC Document Reproduction Service and can be ordered from:

Micro Photo Division  
Bell and Howell Co.  
1700 Shaw Avenue  
Cleveland, Ohio 44112

The ED order number must be secured from Research in Education before requesting the document from Bell and Howell.

(Appreciation is expressed to Billie Hubrig, James Laffey and Lowell Eberwein for their aid in compiling the bibliography.)

Seventy-two second grade children from Casa Grande, Arizona, were divided into experimental (E) and control (C) groups to compare the Pro-Reading (E) method with the Phonetic Keys (C) method of teaching phonics. The year-long study gathered data which included IQ scores, personality scores, sociological data, reading interests, attendance, responses of teachers to the two methods, and responses of visitors. The findings indicated no statistical difference between the achievement of the two groups in total reading, vocabulary, or comprehension. No statistical difference was found between the groups on an index of mental growth or between the personality development of the groups. Teachers were completely satisfied with the experimental method; however, they had reservations concerning the control method. Conclusions and recommendations for further study are included.


The use of multiple regression equations utilizing different numbers of variables to predict reading and number achievement in the first grade was studied. The sample consisted of 51 students from two first-grade classes. The tests administered to the subjects included The Reading Sub-Test and the Numbers Sub-Test of the Metropolitan Readiness Test, Form R, The Stanford-Binet Intelligence Scale, Form L-M, The Bender-Gestalt, The Hunter-Pascal Concept Formation Test, and The McGuire Index of Social Status. The author states in his findings that "neither equation using six predictor tests was any more accurate than the equations using four predictor tests when the Hunter-Pascal Test and the Reading Sub-Test were dropped from the reading achievement equation and the Hunter-Pascal Test and the McGuire Index of Social Status were dropped from the numbers achievement equation." The author concludes by stating that "the two best predictors were the Numbers Sub-Test of the Metropolitan Readiness Test and the Stanford-Binet Intelligence Scale for reading achievement and the Reading Sub-Test and the Numbers Sub-Test of the Metropolitan Readiness Tests for numbers achievement."


A modified basal reading program featuring speed reading was studied. Two reading groups at both the fifth and sixth grade
levels were randomly selected for participation in the experimental and control programs. The experimental program was 26 weeks long and was divided into two 13-week period. During the first 13 weeks, the experimental groups received a modified basal reading program, and the control group received a traditional basal reading program. The groups were rotated for the second 13 weeks. Tests were given as pre-tests and post-tests to measure reading rate, oral reading accuracy, and general reading ability. It was concluded that substituting speed reading exercises for oral reading activities results in a significant increase in the reading rate of the average fifth and sixth grade pupils. No significant difference in oral reading accuracy scores of the pupils was found to result from the program. No significant difference was noted between the high and low ability group in mean word per minute gain.


A group of 555 children who received remedial reading instruction and who were judged to have developed an independent word attack were followed up in grade school and high school to determine their scholastic achievement since leaving the St. Louis reading clinics. It was concluded that severely retarded readers in the St. Louis clinic are capable of making gains similar to those reported for other clinics in the literature. Children dismissed after achieving an independent word attack made gains nearly double those dismissed without acquiring an independent word attack. Seven out of ten children followed up graduated from elementary school and one out of five from high school. Small possibility existed for severely disabled readers eventually entering college. In this population students who fail and have to repeat grades have a greater tendency to drop out of school than children who are not failed. No assumption is made that remedial reading instruction is the dominant factor influencing improvement but improvement is attributable to a number of interacting factors.


The first-grade classes of eight teachers participated in a program emphasizing an individualized reading approach and a modified basal approach to reading. The groups were compared after 51 and 102 teaching days using the Metropolitan Readiness Test, Metropolitan Achievement Test, and a reading readiness checklist, sight vocabulary test, and reading checklist developed by the author. Beginning reading instruction, word recognition skills, and desirable oral and silent reading habits were improved under both programs. An individualized reading program was thought to be especially desirable for developing sight vocabulary, skill in phonics, positive
reading attitudes, high pupil interest, and desirable work-study habits. The author felt the modified basal program was weak in the above areas. The modified basal program was strong in developing comprehension while the individualized reading program was weak in this aspect. Basal readers were not felt to be essential in developing sight vocabularies. The author suggested a wider vocabulary with less stringent restrictions on kinds of words used and repetition of words for beginning reading. Materials at many different levels of difficulty should be provided for beginning reading instruction.


The effect of siblings on a child's reading achievement was studied in 159 pairs of subjects selected from the second, fourth, and sixth grade levels of school achievement. Those subjects with and without siblings were matched according to age, grade, sex, school, intelligence, socio-economic position, and whether they came from homes having both parents or a parent and a step-parent. Standard scores and grade equivalent scores on the Stanford Achievement Test were used for comparing reading achievement. Statistical analysis of the data warranted the conclusion that there is no significant difference in the reading achievement of children with or without siblings when children are matched according to age, sex, grade, school experience, nuclear family composition, intelligence, and socio-economic position. When matched according to the terms of the study, there was no significant difference in the reading achievement of children with or without siblings at the second, fourth, and sixth grade levels of school achievement.


A factor analysis of the Davis Reading Test, Form 2A was completed to determine if (1) in a typical test of reading comprehension, the items define a number of distinct factors of reading ability; and (2) those items written to measure one specific skill consistently had loadings on the same factor. The analysis was based upon the responses of 527 eleventh-grade pupils to the first 40 items on the instrument. A principal components analysis of the initial 40 x 40 inter-item matrix of phi coefficient was carried out and revealed a single common factor which was tentatively identified as "reading comprehension" or verbal reasoning. An orthogonal rotation was obtained by employing Kaiser's normalized varimax criterion. The
five orthogonal factors obtained in this fashion proved to be unidentifiable. This result seemed to arise from (1) the lack of clear indication of which mental processes are used in responding to a particular item, (2) the unreliability of responses to single items, and (3) the restrictions placed on the size of the phi coefficient.


The purpose of the study was to determine from the verbal responses of readers the types of contextual aids that served as clues to the meanings that might be attached to simulated words; and to classify these contextual aids on the basis of the elements of the verbal context that had been utilized; to determine to what extent the use of contextual aids could be considered a reliable means of deriving the meanings of simulated words; and to determine to what extent the use of contextual aids was related to the form classes of simulated words. The introspective method of investigation was employed to study the thought processes of advanced graduate students who had been directed to use contextual aids to determine the meanings of simulated words constructed by the investigator. An analysis of the readers' responses to 334 contextual situations yielded a classification scheme having substantial reliability. It was concluded that the use of verbal context aids appears to be a useful approach to the derivation of the meaning of unfamiliar words and is conditioned to a degree by the form classes to which the words belong. The ability to comprehend a rich background of experience and a functional knowledge of linguistics appeared to be very significant factors in conditioning a reader's success in using verbal context to derive the meanings of unfamiliar words.


The oral vocabularies of selected first-grade children were compared with the basal vocabulary words found in the instructional materials used by those same children. Schools were selected that would be representative of most average communities of Los Angeles city and county. Oral vocabularies were compiled from tape-recorded interviews and spot checking of the 200 children involved in the study. Twenty groups of 10 each were interviewed during two 30-minute periods. Stimuli such as pictures were provided to motivate conversation. The vocabularies of the pre-primers, primers, and first readers were compared with the oral vocabularies of the children in the following ways: by numerical comparison of
vocabularies; by comparison of vocabularies classified according to people, animals, common nouns, foods, clothing and accessories, regional words, travel, parts of the body, action words, descriptive words, relational words: and by length of words. It was revealed that 705 different words were found in the instructional materials used by the children and 2,239 words were found in their speaking vocabularies. It was also pointed out that their oral vocabulary related to different interests from that used in the basal-readers.

The effect of reading comprehension levels, sex and parental occupation on the amount and maturity level of tenth grade readers' voluntary reading patterns was studied in 327 students whose mean age was 15.7. Reading comprehension levels were derived from Test 7, "Literature- Interpretation," Iowa Tests of Educational Development. Sex and parental occupation were determined by questionnaire, and occupations were classified according to the Dictionary of Occupational Titles. Students also listed all full-length books read voluntarily over a five-month period. There were 1375 listings of 992 different books. Maturity levels were determined by reference to authoritative bibliographical sources or by direct analysis. Books were classified as Pre-Adult or Adult forms of Fiction, Biographical Material, or Informational Materials to determine reading patterns. Girls read significantly more than boys in all categories. Parental occupation did not affect the total number of books read by the students, but significant differences were found in the total Pre-Adult Classification with groups ranked from high to low in: Agriculture-Fishery- Forestry/ Semi-Skilled/ Unskilled/ Skilled, Clerical sales, Professional- Managerial/ Service. No significant differences were shown in the total Adult Classification, though there were some differences within the category of Adult Classification. Patterns of reading intensity indicated a general reversal, with lower occupational groups reading more in the "Pre-Adult Novel" and the higher groups reading more in the "Novel 1941-1960." In relating reading comprehension to reading patterns, significant differences were found in the total amounts of reading, in the total Adult Classification, and in all three categories of the Adult Novel with the high, medium, and low comprehension groups ranked in the same order of significance. There were no significant differences among the groups in the total Pre-Adult Classification, in any of the Pre-Adult categories, or in the categories labeled "Personal Narrative," "Adult Biography," and "Adult Informational."

Anderson, J. O. "A Study of the Relationships Among Academic Motivation Level of Aspiration, Level of Expectation, and Gain or
Loss in Achievement in a College Reading Improvement Situation," Ed.D., Michigan State University, 1962. Major Professor: Charles A. Blackman, Vol. XXIII, No. 10, 3766. (Order No. 63-1705, Microfilm $2.75; Xerography $3.80, 70 pages.)

The degree of academic motivation, the setting of levels of aspiration and expectation, and gain in reading rate and comprehension were studied in 99 males and 34 females. The M-Scale was used to measure academic motivation and was administered during the first class, followed by the Iowa Test of Silent Reading AM during the second class. Initial levels of aspiration and expectation for performance on the final Iowa Test were set during the fourth class as words per minute and comprehension score. Final levels of aspiration and expectation were set during the tenth class and were used in the study to achieve realism. Iowa Test CM was given as the post test and differences between AM and CM tests provided the gain in achievement variables. M-Scale scores served as significant negative predictors for male gain in comprehension while levels of aspiration were significant predictors of female gain in rate and were negative predictors for male and female gain in comprehension. Levels of expectation served as highly significant positive predictors of male gain in rate and female gain in comprehension, and as highly significant negative predictors of male gain in comprehension.


The effects of cross pattern creeping and walking exercises on the reading achievement of two selected groups of elementary students were investigated. Fifty-eight intermediate level students, matched according to grade level, sex, reading achievement, and intelligence, were involved in the first experiment. Cross pattern exercises were done by the experimental group 30 minutes per day for a 10-week period. The California Short-Form Test of Mental Maturity was used as the indicator of intelligence, and the Gates Reading Survey was used to measure reading ability. No significant differences were found between experimental and control groups in reading achievement, nor between pupils of higher or lower intelligence, nor between students who obtained lower initial reading achievement scores and students who obtained higher initial reading scores. Two kindergarten classes of 59 students, taught by the same teacher using the same materials and teaching technique, were involved in the second experiment. The experimental group contained students who averaged seven months younger than the control group. The experimental class was given creeping and walking exercises 25 minutes per day for a seven-week period. All students were given a pre- and a post-reading readiness inventory. No significant difference was found in changes in readiness scores as a result of the treatment.

First grade children's longitudinal growth was studied under the basal readers program (control) and an extended, intensified, enriched, and systematic reading readiness program (experimental). Six measures of reading readiness were administered in September, November, January, and March. The data were analyzed by race, sex, and age groups. Factor pattern changes in reading readiness were investigated. End-of-year reading achievement was analyzed in terms of main and interaction effects of race, treatment, sex, and age. Relationships between reading readiness and achievement were studied. Multiple regression equations and expectancy tables were developed. It was found that growth was continuous in Pattern Copying, Identical Forms, Auditory Discrimination, Phonemes, Word Meaning, and Listening; was more rapid during the first than during the second two-month training period; and leveled off during the third. There were no significant differences between the experimental and control treatments in first grade reading achievement. Phonemes were the best single predictor among the readiness tests. Additional findings are included.


The purpose of this study was to evaluate the effectiveness of a multiple-meaning vocabulary test as opposed to the more conventional single answer type test. A test was constructed using the words of the Scott-Foresman New Basal Reading Series which appeared in Webster's Dictionary of Synonyms. Using the C count of the Thorndike-Lorge Word Count, words of appropriate difficulty were retained. Questions were formed, randomly placing the synonyms in the questions. Decoy words were chosen to complete the question. Variation of questions gave a range of one to five response items per grade level. The author concludes that the evidence from this study suggests the multiple-meaning vocabulary test, linear-type item, does probe depth of meaning, variability of individuals, and extensiveness and richness of vocabulary better than the present single-answer-type tests. Highly valid and reliable tests with a small standard error were secured.

This study attempted to answer the following questions: (1) What are the effects of systematic reading readiness instruction and of incidental readiness instruction upon reading readiness of children? (2) To what extent are the effects of the programs influenced by individual differences, sex, method, intelligence, and socio-economic status? (3) To what extent are the effects of the program influenced by the interaction of the variables of the study? In the systematic approach workbooks, experience charts, labeled objects in the classroom, sequence picture stories, and charts of rhymes were used. The incidental approach utilized a traditional kindergarten program. Four groups of two schools each were selected for comparison. The schools were equated on socio-economic status. The Detroit Reading Readiness Test and the Detroit Beginning First Grade Intelligence Test were administered to 320 kindergarten pupils in eight schools. The reading readiness test was again administered at the end of the eight-week period. An analysis of covariance design was used to determine the main effects and the interaction effects for the variables in the study. The author concluded that (1) the systematic program was somewhat more effective than the incidental approach, (2) the intelligence quotient influences growth in reading readiness, and (3) methods of teaching and intelligence influence growth more than individual differences or socio-economic status.


The reading achievement of 1351 matched pairs of primary pupils under Split-Day Schedule were compared with those under a Regular Schedule. The advantages and disadvantages of the Split-Day Schedule were obtained from 140 teachers by a questionnaire. In the Split-Day Schedule, reading is taught the first hour in the morning and the last hour in the afternoon, with half of the class at school for each period of reading. The Split-Day Schedule pupils attained higher reading achievement, with the girls showing greater superiority than the boys. Most teachers favored the Split-Day Schedule for pupils rather than for teachers. Advantages of this schedule arise from smaller reading groups, which also gained parent support. Pupil fatigue is minimized if students are carefully selected for afternoon reading groups. Extension of the school day affects teacher willingness to accept the Split-Day Schedule. Teacher planning and administrative support can minimize classroom problems inherent in the Split-Day Schedule.

Visual perception factors were studied in primary grade pupils who had no serious visual, auditory, or language problems and who had not repeated any grades. The following tests were used to correlate visual perception and reading performance: Vocabulary (Wechsler Intelligence Scale for Children); Gates Primary Reading Tests and Gates Advanced Primary Tests; Visual Attention Span for Letters, Memory for Designs, Visual Attention Span for Objects (Detroit Tests of Learning Aptitude); Tests I and II of Visual Perception (developed by the investigator); Coding, Block Design, Object Assembly, and Picture Completion (Wechsler Intelligence Scale for Children). Results showed that alphabetic material, digital and geometric material, and pictorial material in that order, were not any more highly correlated than the others, nor were these materials found difficult in the order listed. Visual perception appeared to decrease in importance as a significant predictor of reading performance as the grade level increased.


The relationship of reading to personality in terms of dimensions hypothesized from an integration of Erikson's theory of personality development with Holmes' theory of the role of value systems in achievement was examined. A sample of 290 ninth grade students of the California Adolescent Growth Study, Institute of Human Development, University of California was selected. The reading criterion was the Paragraph Meaning subtest of the Stanford Achievement Battery. The personality test was the University of California Inventory (UCI) designed to assess normal personality development through adolescence. The 328 UCI items were submitted to item analysis, product-moment correlations, tetrachoric correlations, and factor analysis to find relationships between items and to cluster the discriminating items into new domains. A secondary analysis of the relationship of reading to the differentiating personality factors was made by social class and sex. The results showed 70 items survived the double cross-validation. The pooled samples of these items yielded a total correlation of .53 with reading. Seven factors accounting for 52 percent of the matrix variance and 59 percent of the reading variance were as follows: dependence-docility, negative self-concept, school dislike, family orientation, personal freedom, anxieties, and social relationships. Poor readers were psychologically immature, manifested a dependency and submissiveness associated with parental treatment, and negative self-concepts. Good readers demonstrated autonomy in school and home, were more intellectually oriented, liked school, and wished to continue their studies. Additional correlations with social class and sex were also reported. Conclusions follow the results.

The effect of special class placement on the self-concept, social adjustment, and reading growth of slow learners was investigated. The experimental population consisted of 30 pupils in two special classes for the slow learner on the sixth-, seventh-, and eighth-grade levels; the control population consisted of 30 slow learners in regular classes on the sixth-, seventh-, and eighth-grade levels. The tests and other measuring instruments administered to the groups included the Columbia Classroom Social Distance Scale, the Davidson-Lang Checklist of Thirty-Five Trait Names, and the Stanford Achievement Tests. The t-test was the statistical technique used. Following an analysis of the findings, the author concluded that special class placement in and of itself does not appear to produce differences between the self-concepts of slow learners in special and regular classes, special class placement for slow learners can be effective in enhancing their social adjustment in school, and special placement alone does not seem to enhance the reading growth of slow learners when reading growth is measured over the period of one academic year.


The utility of phonic generalizations in reading instruction through application of recommended generalizations to a representative list of words encountered in reading by children in grades one through six was investigated. Forty-five phonic generalizations identified by Theodore Clymer were selected for the study. A composite list of 5773 words was collected from the vocabularies of eight basal reading series textbooks, grades one through six, published in the United States since 1960. Computers were utilized for the identification of all words included in the composite word list to which each of the forty-five selected generalizations applied. Conformations and exceptions to each generalization were determined according to the 1961 edition of the Webster's New Collegiate Dictionary, and percentage of utility was computed by dividing the total number of conformations identified by the total number of incidents investigated for each generalization. The following six phonic generalizations had a high percentage of utility: c and h next to each other; c followed by e or i; c followed by o or a; two of the same consonants side by side; two syllable words that end in a consonant followed by y; and words that end in ie. A low percentage of
utility was found in the following: two vowels side by side; the phonogram \( ie \); \( a \) followed by \( w; e \) followed by \( y \); the sound of \( y \) when a vowel; the sound of \( a \) when followed by \( l, w, \) and \( y \); and when \( y \) or \( ey \) are the last syllable of a word.


Reading readiness factors in first graders was studied to determine the relationship of visual discrimination to reading achievement. The total sample of 632 subjects consisted of 331 boys and 301 girls. Seven of the nine factors involved were visual discrimination measures: Gates Picture Directions Test, Gates Word Matching Test, Gates Word-Card Matching Test, Pattern Copying Test, Gates Reading Letters and Numbers Test, Picture Squares Test and the Reversals Test. Additional measures were the Gates Primary Word Recognition Test, Gates Primary Paragraph Reading Test, Chronological Age, and the Lorge-Thorndike Intelligence Tests. The multiple regression analysis indicated that Reading Letters and Numbers was the best single predictor of first grade reading achievement, but no cause and effect relationship was implied. The optimum combination of variables for predicting first grade reading achievement was Reading Letters and Numbers, Pattern Copying, and Word Matching. Reading readiness measures used did not predict paragraph reading as well as they predicted word recognition and were more successful in predicting boys' reading achievement than girls'. Girls were significantly superior to boys on both measures of reading achievement. Predictive relationships appeared to be heightened when reading readiness tasks were similar to reading in terms of the visual discrimination abilities required. Pattern Copying was felt to be worth incorporating into reading readiness as a predictor of reading achievement.


An evaluation of a college reading program was completed. Specific aspects of the evaluation included: (1) a comparison of pre- and post-test scores of students who had taken the course, (2) a measurement of the students' retention of skills after a lapse of one quarter, (3) an evaluation of the course by senior students who had taken the course, (4) student appraisals of their own reading abilities, (5) an attempt to determine the effects of the course on improved study habits, and (6) an examination of students responses in an attempt to formulate these responses into recommendations for...
possible improvement of the course. The population of the study consisted of 144 students currently enrolled in the course and 40 seniors who had previously taken the course. The tests and other measuring instruments included the American Council of Education Psychological Examination for College Freshmen, Survey Section of the Diagnostic Reading Test, and a personal interview questionnaire. From an analysis of the findings the author concluded: (1) A program of organized reading instruction resulted in significant and lasting gains in rate of reading, vocabulary development, comprehension, and total reading ability; (2) the vocabulary study, reading laboratory experiences, and dictionary study were named the most valuable part of the course. A majority of the students in the study felt that participation in the reading course had made them more efficient and effective students.


Standardized test scores in reading, mathematics, English, Science, social studies, intelligence, and course marks were used to answer three questions: a) Is there a specific level of reading as measured by standardized tests below which academic success at the secondary school level is unlikely? b) To what extent is it crucial that a student maintain a good general reading ability for achievement in basic subjects at ninth and eleventh grade? c) How much is an eleventh-grade student reading at ninth grade handicapped in academic achievement when compared to a ninth-grade student reading at seventh-grade level? Eight hundred thirty ninth- and 720 eleventh-graders were chosen at random from mathematics, English, science, and social studies classes at the two grade levels from nine schools. Results revealed that the percentage of successful students increases with reading proficiency; seventh-grade math and science students appear to be more handicapped by a two-year reading retardation than do students in English and social studies. Correlations between teacher marks, reading scores, achievement scores, and intelligence scores were all positive but generally low indicating that marks were influenced by factors other than these. The use of regression equations using course marks and reading grade indicates that success in ninth grade would be concomitant with a reading range from eighth grade in English to eleventh grade in science. Passing would be likely, even though reading were as low as fourth grade in some subjects. In eleventh grade an eleventh grade reading level seemed to correspond to success in all subjects. Passing would occur even though reading were as low as seventh grade in some subjects. The author concludes that although there is a concomitance between general reading proficiency and success in school it does not establish a causal relationship. Instruction in reading skills needed for a particular subject is the proper province and obligation of the teacher in that area.
Analysis of the mean reading gain or loss over the summer vacation of the total experimental first grade population was undertaken. The results were classified according to membership in ethnic group, socio-economic levels, sex, intelligence levels, and end-term reading levels within each ethnic group. Intelligence measures were obtained from scores on the Pintner Cunningham Primary Test and on the Goodenough Draw-a-man Test. Reading scores were obtained from the Metropolitan Achievement Test, Primary I Battery, Forms A and B. Subjects were 2105 boys and 2138 girls from 116 first grades in 72 urban and suburban elementary schools. Subjects in white urban and suburban groups attained significantly higher I.Q. means on the Pintner Cunningham; Goodenough and Metropolitan Achievement Tests than did the children in the Negro, Puerto Rican, and bilingual groups. A direct relationship of intelligence and reading ability to socio-economic levels was revealed. Membership in ethnic group and socio-economic group was significantly related to mean changes in reading ability over the summer vacations. Greater mean gains by subjects classified on the highest intelligence level might indicate underachievement in bright children. The significant loss over the summer vacation of subjects classified at end-term as low-average or slow readers might indicate overachievement in order to obtain a promotion. More boys than girls had significant actual mean reading losses over the summer. End-term reading level affected significant mean changes over summer vacation more than did intelligence.

The vocabulary of Geography of Many Lands was examined by sampling from the nine chapters, making a comparison with Dolch's First Thousand Words for Children's Reading, Dolch's Basic Sight Vocabulary, Dale's 3,000 Familiar Words, Clarence E. Stone's Revision of the Dale List of 769 Easy Words, Luella Cole's Handbook of Technical Vocabulary and applying the Dolch Graded Reading Difficulty Formula, the Dale-Chall Formula for Predicting Readability, and the Spache Formula for Predicting Readability. The findings revealed that the vocabulary load of this representative geography is relatively heavy for the average fourth-grade reader. Seventy-five per cent of the different words appear on Dale's List of 3,000 Familiar Words. Nearly one half appear in Dolch's First Thousand Words. Dolch's Sight Vocabulary represents seven per cent of the different words but sixty per cent of the words in the text. One
of every twenty words is a technical geography term and one-fourth of the total running words are found on Stone's Revision of Dale's 769 Easy Words. Readability formulas place the text at "easy" fifth (Dolch), "middle" fourth (Dale-Chall), and "middle" third (Spache).


The influence of readability factors, style of writing, author's definitions, and students' general reading comprehension on their comprehension of science materials was studied. In addition to the eight science selections of 900 words each based on Kepler's Three Laws of Planetary Motion prepared by the author, other tests administered to the 240 randomly selected junior high school students included a four-item questionnaire rating scale, the reading section of the California Achievement Test, the California Survey Test of Science for junior high school pupils, and the Junior High California Short Form Test of Mental Maturity. The author utilized a $2 \times 2$ analysis of variance to test the null hypothesis, a linear hypothesis design to refine the analysis involving intelligence, and the Pearson Product-Moment correlation to determine the relationship between measures of general reading, science information, and science reading comprehension. In his findings and conclusions, the author states that: (1) There was no significant difference in science reading comprehension between seventh-grade students who read selections containing variations in readability difficulty of at least three years, style of writing, and the use of author's definitions of certain technical science words. (2) Science reading comprehension of selection variations for seventh-grade students of high and low intelligence was significantly different. (3) The exploratory data results suggest that a more positive relationship exists between measures of general and science reading comprehension than between measures of science information and science reading comprehension. (4) Seventh-grade pupils are aware of the reading difficulty factors, but these factors have little influence on pupils' comprehension of more difficult graded science material. (5) The data suggests also that seventh-grade pupils are consistently more interested in expository style of writing.


At the end of first grade, two groups of forty-three children were selected from cases of doubtful promotion according to teacher
judgment. One group had been promoted, the other had not. The two groups were matched on a number of variables and followed throughout the primary program by means of reading tests, and behavior ratings supplemented by health records, growth measurements, personal interviews and socio-metric choice techniques. The progress of the two groups was found to be similar with positive effects of promotion as well as negative effects of nonpromotion showing little tendency to endure beyond the year. The implication seemed to be that promotion or nonpromotion made little difference with the progress the students made. The crucial factor seemed to be the degree to which the school is prepared to deal with individual handicaps and growth of its pupils.


The STEP Listening Test, Piattner General Ability Test-Non-Language Series, Stanford Achievement Test Elementary and Intermediate and the Sonotone Hearing Tests were administered to 282 pupils in Grades Four, Five and Six. Correlation, Chi-square and multiple regression were used in the statistical analysis of the data. Significant correlations were found between listening and reading comprehension, total reading, and intelligence at fourth-, fifth-, and sixth-grade levels. Listening and vocabulary were significantly related at fourth-grade level. In fourth, fifth and sixth grades listening was correlated with reading with intelligence held constant. Intelligence was correlated with reading with listening held constant. The correlations ranged from .27 to .64. Negative correlations were found between listening and chronological age in Grades Four, Five and Six. Significant multiple correlations were found in intelligence, listening, and reading in Grades Four, Five and Six. Sex was not related to listening in any grade.


This study examines the relationship between the introduction and diffusion of certain practices in school systems and pupil achievement in reading. Questionnaires designed to determine the dates of introduction of sixteen practices such as free textbooks, standardized pupil permanent records, use of supervisory personnel, etc., were sent to all Virginia public-school superintendents. Reading scores were obtained from the Iowa Silent Reading Test-Elementary Test. Correlation analysis revealed a positive relationship between administrative adaptability, as revealed by date of introduction and diffusion of selected practices, and reading achievement in city and
county school systems. Pioneering practices took place at all levels of reading achievement in county and city school systems with pioneering most often found in county systems with reading achievement in the upper quartile. The higher the reading achievement in the county school system the more likely the system was to produce pioneering practices. Degree of diffusions in practices was almost uniformly high for all reading levels in city school systems.


Four teachers taught 240 seventh-graders by two reading methods: SRA Reading Laboratory and the regular program. Two teachers taught the SRA program to four classes the first semester and the regular program to the same classes the second semester. The other two teachers alternated this procedure with four classes. For analysis, students in the experimental and control groups were divided into four intellectual levels. The California Test of Mental Maturity and the California Achievement Tests-Reading Section were used as measures of intellectual and reading ability. Analysis of variance was used to test the significance of difference on scores between the regular reading and SRA Laboratory groups. No significant differences in reading achievement between the two groups were found. No significant interactions between methods of instruction and intellectual levels were found. The author concluded that the two methods were similar in their effect on this sample of seventh-grade students.


Thirty-nine students and their supervising teachers were studied during one semester to investigate the relationship between the elementary student teachers' skill in solving problems about teaching reading and their student teaching experience. Fifty-one elementary classroom teachers attending graduate education classes were selected as the general elementary classroom teachers. All subjects were tested by means of the Elementary Grades Teaching Tasks in Reading, Form B revised, tasks one through four, inclusive. Students were tested at the beginning and end of methods and at the end of student teaching. The supervisors and general elementary teachers were tested once. It was found that supervising teachers did significantly better on the reading tasks test as a group than did the group of general elementary classroom teachers. Student teachers made a significant gain in skill in solving problems related to teaching reading during
Individual student teachers tended to become more like their supervising teachers in solving problems related to teaching reading. The grade level at which a student takes student teaching, or at which a supervising teacher teaches, had no relationship to skill in problem solving related to teaching reading.


The purpose of this study was to determine the extent to which elementary teachers possessed information necessary for teaching basic reading skills found in the basal series and to identify factors associated with the information teachers possess. The skills common to ten series were determined. An instrument was developed to measure knowledge of the skills. Factors influencing knowledge of reading skills were determined. Thirty-six teachers constructed and evaluated the measuring instrument, which was then administered to 113 teachers. The author concluded that (1) a significant number of teachers showed a marked deficiency in their knowledge of structural and phonetic knowledge, (2) an advanced degree did not necessarily mean a better knowledge of skills, (3) years of teaching experience were related to significantly higher scores on the measuring instrument, (4) first-grade teachers scored significantly higher than third-grade teachers but not significantly higher than all other teachers, (5) teachers taught by a combination phonetic-sight method scored significantly higher than teachers taught by a sight method but not significantly higher than teachers taught by a phonetic method, (6) the majority of teachers have difficulty in teaching phonics skills, and (7) elementary majors did not score significantly higher than secondary majors although their mean scores were greater.


Sixty educable mentally retarded children of both sexes were selected from the elementary grades of a state residential school for dependent children. Using scores from the Peabody Picture Vocabulary Test, Biers-Cromwell Children's Locus of Control Scale, and the Children's Manifest Anxiety Scale four groups of equated subjects were formed. These included internal locus of control with high anxiety, internal locus of control with low anxiety, external locus of control with high anxiety, and external locus of control with low anxiety. All subjects were individually administered a reading pretest to establish basal and frustration reading levels, a sequence of three Close Procedure passages equivalent to the sub-
ject's basal level and accompanied by increasing monetary reward, and a sequence of three Close Procedure passages equivalent to the frustration level accompanied by decreasing monetary reward. Analysis of variance was used to analyze Close Procedure scores. The author concluded that the results of the study supported the conclusion that non-intellectual factors, such as personality variables, do play a significant role in the reading behavior of educable mentally retarded children. The data suggested that a factor analytic approach to identifying group factors that influence reading behavior seemed warranted.


The effect of reading for different purposes on the oculo-motor behavior efficiency and comprehension of advanced third-grade readers and retarded seventh-grade readers was investigated. Tests administered to the students included the Gates Reading Survey (for screening purposes) and the Wechsler Intelligence Scale for Children. Experimental reading sets included were a set to read in the usual manner, a set to read to understand the main idea, and a set to read for detailed information. Performances in comprehension and in reading rate and relative reading efficiency interpreted by eye-movement photography were used in evaluating the hypothesis. The analysis of data included the use of the analysis of variance for differences in reading behavior between each pair of reading sets within each group. The data were also subjected to an analysis of covariance to control for intelligence and for differences between the groups for each reading set. Among the author's conclusions were: (1) The advanced third-grade readers read with significantly lower comprehension than the retarded seventh-grade readers, but they excelled the retarded readers significantly in reading rate and oculo-motor reading efficiency. (2) The retarded readers read with greatest efficiency and rate when directed to read in their usual manner, in contrast to the advanced readers who read with greatest efficiency and rate when asked to read for the main idea. (3) The retarded readers exhibited more oculo-motor anomalies than the advanced readers. (4) The set to read for the main idea produced the highest comprehension for both the advanced and retarded readers. (5) Both groups responded to the set to read in their usual manner with significantly poorest comprehension.

The effect of a tape recorder upon reading achievement and psychological development in a first grade basal reading program was investigated. The experimental group were provided with tape recorded lessons and were compared for reading achievement and personality development with a control group who did not have the tapes. All tapes were made by the classroom teacher. The tapes were determined to be effective in the development of high reading achievement and strong personality development in the first grade experimental group. The tapes were also effective for providing independent work activity. The higher reading achievement still carried over to grade two, but the psychological development was not different at the second grade level.


An analysis of the results of five standardized reading tests and an informal reading inventory was made to determine if a difference existed in the instructional reading level of the various instruments. The California Reading Test, the Metropolitan Reading Test, The Stanford Reading Test, the Iowa Test of Basic Skills, the Gates Reading Test, and an Informal Reading Inventory were administered to 153 students. A second Informal Reading Inventory was administered to 49 randomly selected students to determine the reliability of the Informal Reading Inventory I. The major statistical treatment of the study was Wilk's criterion for parallel tests. A significant difference was found between the grade placement scores of the standardized reading tests and the instructional reading levels as indicated by Informal Reading Inventory I. Duncan's Multiple Range Test was applied to find combinations of tests which had the least significant difference. The California Reading Test was the only instrument that did not appear in a combination of means indicating a least significant difference.


In comparing the rated readability of four college drafting textbooks with the reading abilities of 431 college drafting students, 59.87 percent of the students were found to be capable of reading the samples on the thirteenth to fifteenth grade level and 7.43 percent were capable of reading and understanding material on the sixteenth-plus level. Data for the study were gathered through tests and through application of the Dale-Chall Formula of Readability to
the selected textbooks. It was found that a small percentage of the material in beginning college drafting textbooks can be read by students with no higher than eighth grade reading abilities, while other parts would require sixteen-plus reading abilities. Beginning college drafting students would require higher reading abilities than those possessed by students in this study in order to read and comprehend the most difficult sections in the textbooks. General, rather than technical, vocabulary used in the textbooks was chiefly responsible for the reading difficulty. A college textbook should have a rated readability of less than the thirteenth grade to be readable by the majority of the students in the study. The "hard-word" factor had a greater effect than the sentence length factor on the readability rating given an engineering drawing textbook. The range of difficulty of samples in a given textbook is important when comparing books with readers since the average readability of the textbook may not always give a true picture of the various sections. Informational Achievement and one's reading abilities have a substantial positive relationship.

38. Buckley, M.B. "A Field Study Comparing Closed-Circuit Television and Face-to-Face Instruction for an Adult Reading Improvement Course," Ph.D., University of South Carolina, 1962. XXIII, No. 7, 2780. (Order No. 63-1907, Microfilm $3.10; Xerography $10, 80, 239 pages.)

Adults enrolled in a reading improvement course in the six-session adult evening schools provided the sample for finding out whether closed-circuit television would be as effective a medium as face-to-face instruction in a reading improvement course for adults having an eighth grade or better reading level. Televised sessions consisted of a thirty-minute lecture, exposition of reading techniques, and an equal amount of class practice supervised by a group leader. Face-to-face sessions were similarly taught, but the instructor conducted the practice portion of the session. Pre- and post-tests of reading rate and comprehension and an "Inventory of Reading Habits and Attitudes" were administered. Gains on all measures were favorable for both groups. Intelligence, sex, number of years of school completed, and age were not statistically significant. No significant difference was found in any of the measured areas except rate of reading. Although the group taught by television made a significantly greater gain in reading rate, this was considered a reflection of the tendency to regress towards the mean, since the greater gain tended to make the mean in rate of reading of the two groups more similar at the end of the course. Televising instruction for adult reading improvement may be considered as an effective solution to the shortage of qualified reading instructors.

Data from questionnaires about reading programs from 96 state colleges and universities were compiled and divided into three categories. The categories and some of the major points of the study are as follows: (1) Teacher education in the reading program—The majority of reading programs were organized within the past two decades; half the clinics were established within the past five years. The most frequently occurring courses were those dealing with analysis, diagnosis, and remediation of reading disabilities. Major emphasis was given to such areas as word recognition skills, materials and techniques of instruction, adjusting to individual differences, and instruction pertaining to the readiness program. (2) Developmental aspects of the reading program—The titles given to the courses may be listed under these headings: reading improvement, study skills, and vocabulary. Standardized achievement tests were employed most frequently in the selection of students for these courses. The education department was highly favored for the provision of this work, and a combination of methods was used in their courses. (3) Remedial and clinical aspects of the reading program—Most of the diagnostic work was handled by the reading clinics themselves. Most of the work was done by students enrolled in teacher education courses in reading. However, some graduate assistants and reading specialists were involved. Directors of clinics were well trained and almost invariably held advanced degrees. A summary statement about the University of Oklahoma Reading Laboratory is included.

40. Bunger, Marianna. "A Descriptive Study of Operation Alphabet in Florida and an Evaluation of Certain Procedures Employed," Ph.D., The Florida State University, 1964. XXV, No. 4, 2331.2. (Order No. 64-10, 568, Microfilm $2.75; Xerography $6.80, 143 pages.)

A description and an evaluation of the first state-wide literacy telecasts (Operation Alphabet) in Florida were made. Included in the procedures were interviews with the adult students, the volunteer teachers, and the directors of adult education. Also, the Gilmore Oral Reading Test was used as an informal reading inventory to determine the reading level of the adult student at the time of the interview. The population included 243 adult students, 31 volunteer teachers, and 10 directors of adult education. The author concluded that: (1) Although much time, effort, and money had been spent in the "Operation Alphabet" campaign, the overall program was not successful according to established criteria. (2) Group work seemed more beneficial than individual work for the adult student. (3) The use of the Home-Study Guide by the adult student did not appear to make any significant difference in reading improvement. (4) Regularity of watching the series did not assure reading improvement. (5) The "Operation Alphabet" telecasts did not seem to affect significantly the enrollment of public school adult literacy and elementary education classes.

The role reading plays in the educational experience of a group of undergraduate students was investigated. The population of 80 students, who scored either high or low on the Michigan State University Reading Test, were interviewed to explore their perception of reading. To supplement the interview, other data collected from their permanent records included the students' grade point averages; majors and changes in majors, courses failed, repeated, waived or passed by examination; and honors or probations. Following an analysis of the findings, the author concluded that, in general, this study gives evidence that some apparently successful college students have an inadequate conception of the reading process and its potential for learning, have poor reading habits, and avoid reading as much as possible.


An instrument was developed for use in determining the proficiency of elementary teachers in solving problems related to teaching of reading through use of five operations: (1) selecting the most useful information from a pool of data, (2) obtaining additional information, (3) interpreting the data, (4) making recommendations for improved instruction based on a limited amount of information, and, (5) making recommendations for improved instruction based on all available information. The above operations were used in solving two reading disability cases. The instrument approximated problems met in the classroom which could be judged on a logical set of standards. A group of reading specialists scored highest on the instrument. Undergraduate elementary education students were outscored by experienced elementary teachers with degrees. Split-half reliability techniques indicated a coefficient of .76 for experienced teachers, .84 for reading specialists, and .34 for undergraduate students. The instrument was judged to be too difficult for undergraduates. No significant differences were obtained between primary and intermediate teachers and between large city teachers and small city teachers. Teachers from public teacher preparation institutions significantly outscored those from private institutions. No increase in scores was observed for teachers beyond the third year in experience, teachers with a master's degree, or older teachers. The author concluded that a diagnostic problem-solving test is worthy of some confidence as a valid measure of the proficiency of elementary teachers in using diagnostic procedures in teaching reading.
This study compared the effects of two different classroom environments on the word learning ability of educable mentally retarded youths with two levels of motor ability. The activity level of the subjects was determined through a Teacher Rating Scale and an Investigator Rating Scale. The scales were applied while the subjects were engaged in reading or writing. Forty subjects were eventually selected from a possible population of ninety-two subjects. Four groups, matched on the basis of intelligence, reading, and grade level were formed. A restricted classroom was used in which all unnecessary stimuli were removed. The standard classroom was structured to the specifications of regular classrooms and included teacher materials and wall displays. One group of high-active and one group of average-active students were taught separately in the restricted classroom, and one group of high-active and one group of average-active students were taught in the standard classroom. Each subject was required to learn, orally, 45 new words. For a period of thirty minutes daily, during fifteen consecutive days, three new words were introduced to each group. The "t" test and analysis of variance results indicated that the predictions of significant differences favoring the groups taught in the restricted classroom environment and average-active groups were not supported on any of the statistical tests. There appeared to be other unidentified variables which were more effective determinants of learning ability of mental retardates than either classroom environment or activity levels.

The reading preferences of children in Grade Two were investigated. In addition, the influence of sex, intellectual ability, socio-economic environment, and reading competence upon these preferences was studied. Twenty-four books representing eight categories of reading interest were read orally to the children. Children were selected to represent varying ranges of intellectual ability, socio-economic environment, and reading competencies. From an analysis of the data, the author concluded: (1) Sex is a differentiating factor in the reading preferences by children enrolled in Grade Two. Favorite categories for boys in the study were fantasy, fairy tales, and biography, in that order; the first three choices of girls in the study were fairy tales, fantasy, and animal stories, in that order. (2) The variable factors of intellectual ability, socio-economic environment, and reading competence are not determinants of the top three category preferences. However, these factors appear to have an effect upon overall preferences expressed throughout the eight reading interests areas. (3) Fantasy appears to be
the overall favorite category, followed by fairy tales, animal stories, and home school life. (4) The category of science and nature was the least preferred by all groups.


Three unknown words in each of the following visual forms—words typed in lower case letters, upper case letters, written in cursive writing, or written in manuscript writing—were presented to a child on three successive days. The child then read orally a paragraph containing the 12 words, and his errors were recorded. To measure delayed recall, a paragraph containing 12 unknown words presented on the previous day was also read. Differential effectiveness of the four types of visual forms was determined by administering reading achievement tests and intelligence tests to children and grouping them according to one of four reading level-mental age categories. Regardless of mental age, no significant difference was found during immediate or delayed recall in the number missed that were presented by the four types of visual forms. During immediate recall, children of high reading level-high mental age category missed fewer words than the others; children with high reading level-low mental age missed fewer words than children with low reading level-high mental age or low mental age; children with low reading level-high mental age missed fewer words than those with low reading level-low mental age. During delayed recall, children in the high mental age category did not miss significantly more words of one type of visual form than any other. However, for children of low reading level categories, there was a relationship between word lists given and the type of visual form in which they were presented. The study pointed out that the type of visual form in which words are presented to children of fifth grade reading level or above should be of no concern, as they were able to learn words well enough to read them later in a paragraph, regardless of form. There is a possibility that as reading ability increases, configuration becomes less important in the learning of new words.


The effect of a multi-basal approach to reading instruction on silent and oral reading achievement and attitude toward reading in first grade was studied. The effect of the multi-basal approach on the teachers using it was investigated. The subjects were 460 first-grade pupils in Lawrence County, Pennsylvania. There were
nine experimental and nine control classes; three groups were in each room. The three groups in the experimental classes used three different basal-reading series; the three groups in the control classes used the same basal-reading series. Each teacher was instructed to follow the teacher's guides for the reading series being used. The Metropolitan Achievement Test, Primary I Battery, the Gilmore Oral Reading Test, and the Sartain Attitude Toward Reading Inventory were used to measure reading achievement and attitude. Experimental teachers also responded to a questionnaire. Analysis of variance was used to analyze the data. The three factors were basal-reader approach, sex, and intelligence. The results showed overall superiority in silent and oral reading for the experimental classes. Girls were superior to boys in silent and oral reading only in the lower 50 percent of the group. The experimental group also showed a more positive attitude toward reading. The teachers in the experimental group unanimously preferred the multi-basal approach for teaching reading in grade one.

47. Carlin, Francis X. "Intelligence, Reading and Arithmetic Scores as Predictors of Success in Selected Vocational High Schools," Ph.D.; Fordham University, 1962. Adviser: Frances F. Kline, XXIII, No. 4, 1241. (Order No. 62-3758, Microfilm $2.75; Xerox $7.00, 148 pages.)

This study investigated the practicality of using scores from standardized intelligence, reading, and arithmetic tests to predict success in the automotive, electrical, and wood-working courses in four selected vocational high schools in New York. Cumulative record scores of 906 tenth-grade boys were analyzed to determine whether statistical differences existed between the means for graduates and drop-outs. Critical scores were computed for reading, intelligence, and arithmetic and predictive equations derived from the discriminant function for the same variables. Correlation coefficient between each equation and the dichotomous criterion, graduate or drop-out, were calculated to appraise the effectiveness of the prediction. The author concluded that differences between mean intelligence scores of graduates and drop-outs were significant but small. Differences between mean reading scores for the two groups were significant for the electrical trades and for those categories which combined different trades. Differences between mean arithmetic scores for the two groups were significant and substantial for all groups. In several instances the arithmetic score was effective as a single predictor of success in the vocational school. Thus, the critical arithmetic score was the best individual predictor of success, the critical intelligence score the second predictor of success, and the critical reading score the poorest predictor of success. The discriminant equations using the three variables were effective in predicting success for individual trades, combinations of trades within each school, and the total sample.

48. Carline, Donald Eugene. "An Investigation of Individualized Reading and Basal Text Reading through Pupil Achievement and
Seventy-two teachers and their classrooms were used to determine the relationship between pupil reading achievement and methods of teaching reading. The California Achievement Tests and the Iowa Tests of Basic Skills were used to measure reading achievement. Three instruments, Teacher’s Attitude Towards Teaching Reading, Observation of Teacher’s Reading Programs, and Teacher’s Self-Report on Teaching Reading, were used to classify the reading method as either individualized or basal. No significant correlations between the three instruments and mean gain in reading were found, although the three instruments were significantly interrelated. A significant correlation was obtained between two independent observations of a teacher’s reading program. In a test of external validation, comparison of mean scores of teachers judged to be using an individualized approach with mean scores of teachers using a basal approach indicated there was a significant difference between the two groups of teachers. This suggests that the instruments were adequately discriminating between teachers using the two methods. The hypothesis of no significant difference in pupil gain between pre and post test scores was rejected. The author concludes that the direct measures of teacher’s performance seemed to be functioning, but in general, mean gains of pupils were so high that a linear relation with either method of reading was not discernible.


Pupils from public and college laboratory elementary school classes—including one second grade, two third grade, one fourth grade, one seventh grade, and a combined group of fifth and sixth grades—were used to determine the adaptability of certain techniques of self-directive dramatization for regular classroom use and their effect on the reading achievement and self-concept changes in the pupil. Pupils were given an intelligence test and an achievement test as pre-tests, and reading gain was measured by a comparable form of the achievement test at the end of a three and one-half months' self-directive dramatization period. A checklist of self-concept questions was also administered before and after treatments. All groups received the same treatment. Test results indicated that reading progress in all grades during self-directive dramatization was significant; there were permanent changes in self-concept; there was a correlation between progress in reading and self-concept in second through sixth grades.

Fifth- and sixth-grade pupils received television instruction stressing word attack skills, vocabulary development, comprehension skills, and literary appreciation or library skills. The Iowa Tests of Basic Skills and pupil and teacher questionnaires were employed to determine the effectiveness of the televised instruction. The study concluded that whole class instruction through television is not considered as being equally profitable for all pupils at specific grade levels. Use of television does reduce the need for differentiating instruction. Valid principles of teaching are as vital in television presentation as in the regular classroom. Television instruction can apparently be given over an extended period without losing its effectiveness, and an important by-product seems to be the establishment of more positive attitudes toward reading of students with initially negative attitudes. Teacher evaluation of the effectiveness of television and the results of evaluation through standard tests were in conflict with each other. Valid criteria for effective instruction are needed to promote more accurate teacher appraisal. Factors such as the organization of the television program, selection of the teleteacher, the choice of materials, and administrative responsibilities in guiding and promoting the use of television for educational purposes were deemed vital to the successful application of the medium.


An attempt was made to answer this general question: Do persons of normal intellectual capacity, and identified as disabled readers, adjust successfully to various demands of adult living? The population included 35 persons between the ages of 19.6 to 25.1, with a mean intelligence quotient of 104.6. The population was divided into retarded and non-retarded reading groups—based upon the results of standardized achievement tests administered in the seventh and eighth grades. Twenty-three were identified as the retarded readers and 12 were identified as the non-retarded readers. In the findings, the author states that 70 percent of the entry jobs of the retarded readers were classified as unskilled or semi-skilled. The data strongly suggests that vocational mobility and ambitions are horizontally oriented for the retarded reader and vertically oriented for the non-retarded reader. It was found that reading deficiency was an inhibiting factor for the retarded reader. The retarded reader pursued a vocationally oriented curriculum with a 70 percent drop-out rate. Eighty-one percent of this group gave reading disability as a causal fac-
The motives for reading varied between the groups. Retarded readers read more for pleasure; the non-retarded readers read more for information and education. No significant difference in vocational adjustment was found between the groups. A significant difference in social adjustment was found to exist at the .001 level.

52. Castens, Anne Cole. "A Comparison of the Two Organizational Approaches to Reading Instruction for Below-Grade-Level Readers in a Seventh Grade," Ed.D., Rutgers--The State University, 1963. XXIV, No. 7, 2733. (Order No. 64-1222; Microfilm $2.75; Xerography $7.40, 158 pages.)

The total seventh grade reading program of a small junior high school was evaluated in terms of the changes in reading achievement scores on the standardized reading tests of the Modern School Achievement Tests of selected seventh grade pupils over a one year period. All pupils, in the control and experimental groups, received some fundamental or developmental reading instruction of four 40-minute periods per week. Experimental groups received additional corrective reading instruction during three 20-minute periods per week in an attempt to discover the comparative efficiency of one or the other procedures of presenting reading instruction. One teacher taught all developmental and corrective reading classes, using the Scott Foresman plan. Fifty-seven subjects were identified as "Retarded Readers" (those reading more than one year below grade level) and "Low-Average" readers (those reading within one year of grade level) on the basis of the reading test scores of the Modern School Achievement Test. Other measuring instruments were a Pupil Information and Interest Inventory, the Iowa Test of Basic Skills, the Lorge-Thorndike nonverbal Test of Intelligence, the Scott Foresman Reading Survey Test, the Keystone Visual Survey Test, an Audiometer Test, the California Test of Personality, and the McCall-Crabbs Standard Tests Lessons in Reading. Report card grades were also examined. No statistically significant differences were found in either experimental or control groups on either the Retarded or the Low-Average level, nor did report card averages show any superiority of experimental groups. No evidence was found to indicate why some pupils made gains and some did not from data obtained on the California Test of Personality or the Pupil Information and Interest Inventory. While there appeared to be an improvement in class participation, interest and attitude, such changes were not measurable; and it was concluded that the fundamental reading instruction in the school investigated was as effective and economical in meeting student needs as was the corrective reading instruction.

53. Catteral, Calvin Dennis. "The Effects of Pretraining in Auditory and Visual Discrimination on Texting in First Grade Boys," Ph.D., University of Southern California, 1964. Vol. XXV, No. 6, 3387. (Order No. 71-13490, Microfilm $2.75; Xerography $5.00, 99 pages.)
The effect of pretraining in auditory and visual discrimination on texting (i.e., reading aloud) was studied. The subjects were 120 first-grade boys with average ability (IQ 85-115) and normal first-grade age. The subjects were randomly assigned to eight experimental groups. The interaction between the auditory variables was analyzed. The author states:

1. Visual pretraining on configuration cues without auditory training produced the greatest amount of texting transfer for this population (.05).
2. For a combined auditory-visual approach, training on vowel letter-names and letter-sounds produced more correct texting responses than did similar training on configurational cues (.01).
3. Texting interference was associated with auditory training on configurational cues (.01), the value of which appeared to be primarily visual. (4) Although the discrimination task did not appear to facilitate texting, significant learning (.001) did take place in all groups. (5) The number of correct texting responses did not, as was anticipated, vary with word difficulty. There was no consistent relationship between the number of correct texting responses and I.Q. A very significant difference in texting was found within subjects (.01) despite appropriate experimental control.


The difficulty patterns of phonemes and the relationship of knowledge of phonemes to reading and spelling achievement in grade two were investigated in this study. Nine group measures of phoneme knowledge were constructed to measure the abilities to identify the following: the position of phonemes—initial, medial, final; a phoneme within a group of phonemes; blends and digraphs in words in different positions; vowel sounds in words, phonograms, and homophones; and the ability to write phonemes, blends and digraphs, and the separate sounds in words. The Otis Quick-Scoring Mental Ability Tests, Metropolitan Achievement Tests, and Gates Word Pronunciation Test were administered to 204 children in grade two in a small city near Boston. The findings were as follows: the nine tests were suitable for the particular population; phonemes varied in difficulty according to their position in words; identification of vowels in isolation was more difficult than in phonograms or in homophones; phonemes were more difficult to write than to identify; knowledge of phonemes contributed to reading and spelling achievement; achievement of boys and girls was comparable on all measures; and intelligence appeared to be a contributing factor on all measures. Additional data to support these findings are included.

Standardized tests of personality, intelligence, and reading comprehension were administered to 167 fifth-graders. Correlations were computed and analyzed separately for the total group and for boys and girls. The author concluded that (1) personality factors have a positive but only a slight relationship to reading comprehension, (2) excluding the factor of cooperation common to both sexes, boys and girls are differentiated by the selected personality factors in their relationship to reading achievement, (3) the contribution to variance of the cluster of personality variables selected for boys accounted for approximately eighteen percent of the variance in reading comprehension, (4) the contribution to variance of the cluster of personality variables selected for girls accounted for approximately seven percent of the variance in reading comprehension, (5) as a group, boys who were defined as being adaptive and conformative in dealing with others, respectful of laws and regulations, free from fantasy, and possessing pride in their community have a moderate tendency to score higher on reading tests, (6) the contribution to variance in reading comprehension for the group of personality factors selected was of such a degree as to permit no valid characterization of girls, (7) in relation to reading comprehension, intelligence appeared to be considerably more significant than any of the personality factors studied. This was true for both boys and girls.

tions of books, professional preparation and efficiency of library personnel, availability of funds, circulation practices, a summer school library program, and the relationship between public library and the school. Criteria established for provision of learning experience involving trade books were: fostering further reading interest in children; using trade books for instructional, recreational, and functional purposes in all curriculum areas; providing opportunities for interpreting what has been read; and evaluating activities in which trade books are involved. These criteria were designed to serve as guidelines in planning in-service programs for educators and librarians.


Seventy-two freshman students from the Pacific area, entering Church College in Hawaii, who scored below the 25th percentile in reading on the Cooperative English test were matched by pairs to form an experimental and a control group. Alternate forms of the Gates Reading Survey were administered as pre- and post-tests. The Gilmore Oral Reading Test and a diagnostic word-attack skills check list were used as diagnostic instruments. The experimental group received remedial reading instruction for one year, while the control group did not. The significance of the difference in reading achievement and G.P.A. between the two groups was measured by the direct-difference method test for matched groups. Freshman students were found to be deficient from three to six grades in reading. Pronunciation and phonetic ability were the most pronounced weaknesses. A significant difference in reading achievement by the experimental group led to the conclusions that remedial reading instruction was valuable to this particular group of handicapped readers and that a program of remedial reading should be established. The program should be carried out by a Skills Improvement Service which would include a reading clinic.


The purpose of this study was to examine the effect of listening and reading as tools of learning. The relative effectiveness of presenting biographical selections by four methods: silent reading, simultaneous reading and listening, listening and note-taking, and listening alone were examined using 132 twelfth-grade girls in two academic high schools in New York. The students were arranged
randomly into four equal groups and the selections and methods rotated among the four groups in a Greco-Latin Square design in such a way that each of the methods was used only once with a particular group and a particular selection. The four groups did not differ significantly in beginning reading ability as measured by the Nelson-Denny Reading Tests. The selections used were biographies of approximately 1,200 words in length. Retention was measured by the investigator and was based on the biographical material. The analysis revealed that the most advantageous method of presentation was the method of silent reading. Silent reading combined with oral reading was not significantly more advantageous than silent reading alone. However, it was significantly more advantageous than either of the two methods of listening. There were significant differences in the results of the tests when subjects were required to take notes and when they were restricted from taking notes on what was being read. Thus, there would appear to be no justification for defending a restriction prohibiting students from taking notes during lectures on the grounds that it interferes with efficient listening.


The relationships among measurement of reading, intelligence, and vision in socially disadvantaged school children of average intelligence were investigated. Part one of the study consisted of development and validation of a Developmental Vision Survey (DVS). The second part reports the investigation of seventh and eighth graders' scores on the DVS, Primary Mental Ability (PMA), and four reading subtests of the Iowa Tests of Basic Skills (ITBS). The tests were administered to 352 underachieving children controlled for age, grade, socio-economic level, and intelligence. Multiple and partial correlations were computed among the DVS variables, ITBS Reading Subtest, and the PMA Subtests. It was found that vision development as measured in this study was not related to reading at a logically significant level for the total population. Relatively high correlations between vision and types of reading were shown by females. PMA subtest patterns were unable to discriminate among reading levels in relation to vision because of large overlap between the DVS and the PMA. It was concluded that developmental vision as defined by the study affects school achievement indirectly by affecting intelligence as measured on the PMA.

An attempt was made to determine whether or not reading materials of increasing difficulty produced significant changes in the eye movements and comprehension efficiency of a sample of mature readers at the college level. Three specific questions were asked: (1) What specific descriptions of the following eye movement and comprehension phenomena may be observed at various levels of difficulty? (2) Do mature college readers maintain consistent eye movement patterns and comprehension efficiency while reading increasingly difficult material? (3) If the mature readers do not maintain consistent eye movement and comprehension efficiency, do these patterns break down abruptly at a certain level, or do they gradually become disorganized with the increasing difficulty of the reading materials? Twenty-four sophomore or junior college students were selected and served as the experimental sample. Four experimental reading selections of the sixth, tenth, fourteenth, and graduate levels were developed with the use of the Flesch Readability Formula and were administered to each individual in the group. While they were reading, the subjects' eye movements were photographed. A test of comprehension was given after each selection was read. The statistical organization of the data included the analysis of variance and inter-correlations. The results of the analysis of variance indicated that the significant differences were caused, in part, by the increasing difficulty of the reading selections and, in part, by the individual differences in the reading efficiency of the subjects. Comprehension tended to react to the difficulty of the reading selections in a generally irregular manner; significant differences occurred between all reading grade levels except grade level six and college graduates. Perception time became abruptly disorganized at reading grade level ten. The analysis of variance and the difference in means statistics both indicated a significant change in eye movement behavior over the four reading grade levels.

61. Condie, LeRoy. "An Experiment in Second-Language Instruction of Beginning Indian Children in New Mexico Public Schools," Ph.D., University of New Mexico, 1961. XXII, No. 8, 2713-2714. (Order No. 61-5268, Microfilm $2.75; Xerox $7.00, 148 pages.)

The classes of rural public school kindergarten and pre-first-grade teachers were utilized to explore the possibility that the achievement of beginning Indian children in learning oral English and readiness for reading could be improved when teachers were trained in effective techniques of second-language instruction. The groups taught by the teachers the year prior to the experiment served as control groups. The experimental program included a list of 2,053 words as the goal of second-language instruction, extensive picture libraries especially prepared for the introduction of vocabulary, three-dimensional objects, use of tape recorder and filmstrips, games, finger plays, picture books, blocks, flannel boards, phonograph records and other aids. The teachers attended scheduled workshops at a university where methods of second-language instruction were demonstrated. Picture vocabulary tests were administered periodi-
oally providing an indication of pupil progress. The control groups taught under improvised techniques the previous year were compared to the experimental groups by use of the Metropolitan Readiness Test given to all groups after one year of instruction. The author concluded that, on total reading scores, three of the four groups compared showed significant differences in favor of the experimental program.


Attitudes which teachers of grade one, two and three in Louisiana have toward the teaching of reading were studied. The relation of these attitudes to grade taught, classification of school, teaching experience, amount of training, recency of training, and age of respondent was also studied. A check-list was sent to 750 teachers of grades one, two and three who were selected by stratified random sampling of the white, public elementary schools. Six hundred nine responses were received and tabulated. Most of the significant differences in attitudes of the respondents toward the teaching of reading were related to the area of readiness. Growth toward independence, initial instruction, and transition ranking were next in order of importance as significant differences. Significant attitude differences were also found between first-grade teachers and second-third grade teachers between younger teachers and older teachers; between more recently trained teachers and less recently trained teachers, and between less experienced and more experienced teachers. However, very little difference existed among the respondents in terms of the type of college training. The more modern practices were preferred by first-grade teachers, younger teachers, city teachers, recently trained teachers and less experienced teachers. Traditional practices were preferred by second and third grade teachers, older teachers, town and rural teachers, less recently trained teachers, and more experienced teachers.


The semantic aspects of reading and the literature of semantics were examined to propose objectives for a program for developing maturity in reading. Goals of a reading program in secondary schools were drawn from psychological and educational research, and recommendations of specialists in reading, general education, and English teaching. The literature of semantics provided a source of theories about language such as the processes of symbolization; the purposes of language; the nature of abstraction, classification and
and metaphor; and the role of context in meaning. The 51 objectives for a secondary-school reading program are described in terms of the semantic insights required of mature readers, and are consistent with those objectives of general education and the teaching of English. It was felt that, among other things, the mature reader should react to words as symbols for things and ideas, and not as the things themselves; distinguish among the purposes of discourse; recognize shifts in meaning with changes in context; regard any description or definition as partial and be conscious of additional characteristics left out as statements and terms become increasingly abstract; analyze metaphors to determine the nature of the parallel relationship which is being borrowed; and determine whether a particular use of symbols is primarily referential or emotive. It was concluded that secondary-school teachers should assume greater responsibility in developing reading expository skills as well as literary materials. Semantic theory is an important source of objectives for such a program.

64. Corcoran, Clare Mary. "Inductive Versus Deductive Methods of Teaching Word Analysis in Grade Three," Ed.D., Boston University School of Education, 1961. XXII, No. 12, 4290-4291. (Order No. 61-3362, Microfilm $3.25; Xerox $11.25, 249 pages.)

One hundred ninety-seven children in seven, third-grade classrooms used the inductive method to solve 720 new words and classified them according to meaning, and 195 children in seven third-grade classrooms solved the same words according to rules. A control group of 244 children in eight classrooms followed the word analysis program of the basal reading system. All lessons were self-directing and self-correcting, and were worked by students in pairs. The program of word study ran for six weeks. The schools were selected from two comparable communities of 20,000 population. Pre and post tests included the Metropolitan Achievement Test, McKee Phonetic Inventory, Durrell Visual Discrimination Test, Gates Word Pronunciation Test, a rules test built for the study, and the Otis Alpha Short Form Intelligence Test. No significant differences were found between the two methods and the control group on word pronunciation, phonics, visual discrimination, rules, reading achievement, vocabulary, and spelling. All groups made significant gains in phonics, visual discrimination, rules, and spelling. Children of 110 and above in intelligence made significant gains on phonics, visual discrimination, rules, and spelling. The inductive method produced significant gains in reading achievement. Children of 90-110 intelligence made significant gains in phonics. The inductive method and the control group made significant gains in visual discrimination. The deductive method and the control group made significant gains in rules and the control group in spelling. Significant differences favoring children with 110 and above intelligence were present at pre- and post-testing on word pronunciation, phonics, visual discrimination, rules, reading, vocabulary, and spelling.

The relationship between select oral language abilities and reading achievement of first grade boys was studied. A random sample of 351 subjects stratified on buildings was obtained from a population of 1,019 first-grade boys. Complete measures were obtained on 305 of the Bloomington, Minnesota, Public School sample. Readiness measures were: chronological age, Berko Morphology Test of ability to apply grammatical rules to new words, ten response segments of five each to ten pictures each focusing on a specific activity, total word output and mean of the five longest remarks, and intelligence. Reading measures were: the Gates Primary Sentence Reading Test, the Gates Primary Paragraph Reading Test, the Gates Advanced Primary Word Recognition Test, and the Gates Advanced Primary Paragraph Reading Test. It was concluded that the language tests used did not differentiate markedly among these students; that these language measures were not highly related to reading success; and that intelligence and chronological age of boys entering first grade are important factors to consider.


The effectiveness of group guidance activities upon personality conflict and reading disability was investigated. Eighteen fourth grade pupils from Petal, Mississippi, were classified as above average in intelligence, retarded in reading, and experiencing some personality conflict. Classifications were made on the basis of the California Test of Personality, Gates Reading Survey, and the Otis Quick-Scoring Mental Ability Test. Nine pairs of subjects were matched according to sex, age, and test scores, and divided into the control group and experimental group. The experimental group participated in group guidance activities for 30 minutes, three times a week for 12 weeks. Significantly higher scores were made by the experimental group on both the reading and personality post-tests. It was concluded that significantly higher retest scores for the experimental group tended to indicate that group guidance is an effective method for resolving some personality conflict, thereby, facilitating reading development.

A comparison was made of the vocabulary growth of freshmen college students in a basic speech class. One group of 37 students was designated as the experimental group and another group of 37 was the control group. Both groups were given one form of the Vocabulary subtest of the Diagnostic Reading Test at the beginning of the semester and another form at the end of the semester. The experimental group were given direct methods of instruction in vocabulary building while the control group were given no such direction. Vocabulary instruction was incidental. The scores of the two groups on the standardized test were analyzed. No significant differences were found between the gains in vocabulary growth. Conclusions are given.

68. Cushenbery, Donald Clyde. "The Intergrade Plan of Grouping for Reading Instruction as Used in the Public Schools of Joplin, Missouri," Ed.D., University of Missouri, 1964. Supervisor: A. Sterl Artley, XXV, No. 3, 1780-1781. (Order No. 64-9352, Microfilm $2.75; Xerography $7.80, 166 pages.)

A detailed study of the intergrade plan of grouping for reading instruction as carried out in Joplin was completed. The methods of research included extensive interviews and visits with school officials; a comparison of the measured reading achievement of 384 pupils in Grades Four, Five, and Six with the achievement test administered in 1954 when the "Joplin Plan" was initiated; and interviews with parents, teachers, and principals in Joplin. From an analysis of the findings, the author concluded: (1) The chief advantage of the plan seemed to be that there was a reduction in the number of ability levels with which the teacher was concerned. (2) The "Joplin Plan" has resulted in reading achievement considerably above national grade norms and in excess of mental-age grade expectancy. Present achievement is considerably better than that demonstrated by Joplin pupils prior to the initiation of the plan. (3) The "Joplin Plan" was widely accepted by the principals, teachers, and parents of Joplin. (4) Pupils in the three grades using the plan did an appreciable amount of voluntary reading as a part of the total reading program.

The reading preferences of 60 boys and 60 girls in the seventh grade having low, average, and high reading comprehension, were investigated to determine the relationship between the major themes in the novels chosen and the factors of sex and reading comprehension. Various national, economic, and religious groups were represented. Students were not pressured to read specific books. At the end of the school year, reading records were collected and analyzed. The chi-square test of significance was used to determine the significance of quantitative variation in the readings of various types of novels. Eight general types of novels were reported read: novels focusing on animals, problems of adolescence, careers, historical events in American history, solution of mysteries, adventures, and the problems of adults. Major themes were identified in animal novels as the effects of brutality and kindness on animals; in pre-adolescent novels as family and community centered; in adolescent novels as peer group problems and the reconciliation of conflicting values. Career novels dealt with frustrations and gratifications in particular occupations; historical novels viewed events in American history through teen-age eyes; mystery novels, such as the Nancy Drew series for girls, concentrated on evoking the "gothic chill," and for boys in The Hardy Boys series, continuous violent physical activity was presented in apprehending the wrongdoers. Adventure novels posed threats to survival in unfamiliar settings; and adult novels dealt with love, right and wrong, and the complexities of human behavior. Girls with high reading comprehension read the greatest number and variety and the most difficult books. Boys of high and average reading comprehension were not distinguishable from each other, concentrating mostly on adventure novels. Girls were more interested in the novel than boys and preferred themes involving introspection and emotional consequence. Boys preferred to read about continued violent physical activity. Boys with low reading comprehension had the poorest records and read a few badly written mystery novels. Girls of average and low reading comprehension preferred animal stories, mysteries and problems of preadolescence and adolescence.


Readers from primer to sixth-grade level which were published or revised between 1940 and 1957 were analyzed to develop two comparable forms of a word-recognition test to provide an accurate tool for measuring mastery of words commonly met at given reader
levels. Ninety-seven boys and one hundred and eleven girls in Grades One through Four were administered the tests using a manual tachistoscopic technique. Words common to nine or more series were considered high frequency words at a level. Findings revealed that at the pre-primer level there were 42 high frequency words with 16 common to all series; at the primer level 93 high frequency words with 22 common to twelve series; at first-reader level 20 words were common to all series with 110 for nine or more series; at second-reader level there were 334 high frequency words but only 37 common to all series; and at third reader level 852 words were common to all series with 149 occurring in twelve series. Testing revealed that the word-recognition test is reliable for readers at third level or below and test-retest evaluations are possible with the alternate forms. The large increase in vocabulary occurs between second and third reader levels and teachers should prepare children to meet this increase.


The effects of three different reading programs on junior high school students were studied. The population consisted of three groups of 20 Caucasian seventh graders for the eight-month study. The pupils were matched on the bases of chronological age, IQ, reading grade, years in school, and sex. The three programs were structured in the following manner: Group I – experience with investigator, Group II – basal instruction with investigator, and Group III – basal instruction without investigator. The following tests were used to determine the effect of instruction: Gates Reading Survey, Wechsler Intelligence Scale for Children, Betts Word Recognition, Informal Spelling Inventory, Stanford Achievement (comprehension), Philadelphia English Usage, Philadelphia Mental Ability, and Otis Quick Scoring Test of Mental Ability.

Group I obtained significantly higher scores than Group II in word recognition, English usage, and on all three intelligence tests, and on scores of achievement and intelligence when compared with Group III. Group II obtained significantly higher scores on speed, word recognition, and performance than Group III. Implications and conclusions are included.

72. Davis, Frank Reynolds, Jr. "Speed of Reading and Rate of Recovery in Certain Physiological Subsystems," Ph.D., University of California, Berkeley, 1963. Vol. XXIV, No. 12, 5188. (Order No. 64-5212, Microfilm $2.75; Xerography $7.00, 148 pages.)

The relationship between speed of reading and certain physiological variables was studied in 70 subjects drawn from the California Adolescent Growth Study pool, Institute of Human Development, University of California, Berkeley. Speed of reading was
measured using the eye-movement camera. Other factors were the assessed various dimensions within the domains of physiological functions at basal level, cardio-vascular and respiratory adjustments after strenuous exercise, and psycho-physiological response to and recovery from startle stimulation. The mean scores of fast versus slow readers were compared on oxygen transport efficiency, psycho-physiological arousal level, physical growth, psycho-physiological reactivity, and physiological maturation. Rapid reading was found to be associated with non-efficient oxygen transport following exercise, early physiological maturation, accelerated rate of physical development, and low chronological age for actual grade placement. Slow reading was associated with efficient oxygen transport following exercise, delayed rate of physiological maturation, delayed rate of physical development, and high chronological age for actual grade placement. Sub-systems of the physiological domain would appear to account for a significant portion of the variance in reading rate. A general domain of physiological efficiency was not found. Efficiency in one physiological subsystem may be unrelated to or incompatible with efficiency in another subsystem.


The ability of fourth, fifth, and sixth-grade pupils to distinguish between statements of fact and opinion was investigated. Specific questions dealt with: (1) differences between grades; (2) whether statements of fact or opinion are easily identified; (3) sex differences within grades; (4) the relationship between ability to distinguish between fact and opinion and (a) reading achievement, (b) general intelligence, (c) socio-economic level, and (d) the ability of classroom teachers to identify their most discriminative and least discriminative readers. A testing instrument was constructed and administered to the sample population of 409 fourth-, fifth-, and sixth-grade students. A one page teachers' questionnaire was designed to elicit information pertaining to the teachers' knowledge of the most and least discriminative readers in the 15 classrooms involved. The statistical technique used was the t-ratio. Generally, the subjects were not capable of distinguishing between fact and opinion. Pupils in Grades Five and Six were more capable than pupils in Grade Four in distinguishing between fact and opinion. The subjects were more capable in identifying statements of fact than statements of opinion. No significant sex differences were found within any grade. Pupils in upper socio-economic groups were more capable in distinguishing between fact and opinion than pupils in the middle and lower class. Correlations between fact-opinion and reading achievement score were .430, .553, and .554 for the fourth, fifth and sixth grades. Correlations between fact-opinion and general intelligence scores were .392, .621, and .553 for the fourth, fifth, and sixth grades.
Correlations between teachers' choices of most discriminative and least discriminative readers were .775, .890, and .863 for the fourth, fifth, and sixth grades.


The relative effectiveness of informal and formal evaluative criteria in determining independent instructional and frustration reading levels was studied. The informal evaluative materials included the Temple Informal Reading Inventory, Botel Reading Placement Test, teachers' evaluations and pupils' self-evaluations. Formal evaluative material included the Gates Reading Survey. The subjects were 50 randomly selected fourth-grade students. Each subject was given the Gates Reading Survey, W.I.S.C. (Verbal), Word Recognition Test, Temple I.R.I., and the Botel Reading Placement Test. The statistical analysis included the use of mean differences and coefficients of correlation. From the results the author concluded that at the independent reading level, standardized tests greatly overrated the levels established by informal inventories, showed more agreement with teachers' evaluations than informal measures, rated students somewhat lower than students rated themselves, and showed more agreement with evaluations based on story-type than with those based on science. At the instructional level, standardized tests showed somewhat more agreement with informal tests, but not enough to be substituted for them; rated some students lower than their teachers' evaluations; and rated students lower than they rated themselves. At the frustration level, standardized tests underestimated this level, when compared with informal measures, and rated most students lower than their teachers did and much lower than pupils rated themselves. Informal measures were compared. Despite their moderate correlations, non-standardized measures yielded mean differences and actual ranges great enough to discourage substitution of one for the other. Pupils' self-evaluations were not influenced by intelligence, type of material, or sex.


A survey was made of the workbooks of six basic reader series and four supplementary phonics series to determine the word analysis skills emphasized in the intermediate grades. Nine word-analysis tests were constructed including Syllabication, Accent, Root Words and Compound Words, Prefixes and Suffixes, Vowel Sounds and Diacritical marks to measure the skills found in the workbooks. A Visual Test, Auditory Test, and a test of Homophones were con-
structed to test related skills. Standardized tests included the Gates Reading Survey, Spelling List of the Stanford Achievement Tests, Beta Test from Otis Intelligence Series, the Boston University Word Pronunciation Test and a dictionary spelling test. Subjects were 298 fourth, fifth, and sixth grade students. The data were analyzed with IBM equipment to secure measures of central tendency, variation, and intercorrelations for the tests. Intermediate word analysis skills defined were consonant sound, vowel sounds and principles, root words, compounds and endings, prefixes and suffixes, syllabication, accent, diacritical marks and dictionary spellings, and visual discrimination of word patterns. Twenty-six out of twenty-seven word analysis skills were significantly related to word pronunciation while reading comprehension was held constant. Twenty-five out of twenty-seven word analysis skills were significantly related to spelling while reading comprehension was held constant. Holding reading comprehension constant, word analysis skills tend to relate more closely to pronunciation and spelling than to reading vocabulary. Ability to combine prefixes and suffixes with root words in a meaningful context appears to be the only exception to this trend.


Vertical ability groupings versus heterogeneously grouped classes in reading in the fourth, fifth, and sixth grades was studied over a period of three years. A One-Year Study of 10 percent random sample from a group of 1200 students in Grades Four, Five and Six, grouped vertically for reading and matched on IQ, grade level, sex and reading scores, with an equal number from a control group heterogeneously grouped according to regular grade level, showed no significant differences between groups when measured by the California Achievement Test. Only 32 parents did not favor vertical grouping, and teachers and building principals overwhelmingly recommended continuance of this type of grouping. The Four-Year-Cross-Sectional Comparison study of intelligence quotients and reading scores of sixth grade students during the two years previous to the experiment and for the two years of the experiment indicated no difference in the mean reading achievement gains of those in the vertical ability group. The Three-Year Longitudinal Comparison of reading scores of 180 students vertically grouped for reading in Grades Four, Five, and Six showed no significant differences in gains made by each group. Although all participants were in favor of vertical ability grouping, it did not contribute to reading achievement gains.
77. Di Nello, Mario C. "WISC Subtest Patterns as Predictors of Reading Achievement of First Grade Boys," Ph.D., The University of Iowa, 1965. Co-chairmen: Siegmar Muehl, Jack Bagford, Vol. XXVI, No. 10, 5862. (Order No. 66-3422, Microfilm $3.00; Xerography $5.20, 103 pages.)

A study was conducted to determine whether the end-of-year reading achievement of first grade boys could better be predicted by some combination of the Wechsler Intelligence Scale for Children (WISC) scores and reading readiness subtest scores than by either of these measures used independently, whether first grade boys assigned to extreme (high and low) reader groups on the basis of their performance on a reading achievement test given at the end of first grade (with IQ controlled) show unique subtest patterns on a WISC administered at the beginning of the year, and whether there would be any reliable differences between their Verbal and Performance scores. One hundred twenty subjects were selected randomly from a population of first grade boys from the Iowa City Community School District. Eliminated from the sample were boys who had repeated kindergarten or first grade or who had been identified as mentally retarded, physically handicapped, or emotionally maladjusted. The subjects ranged in age from 6-0 to 7-2 with a mean age of 6.7. Their WISC Full Scale IQ's ranged from 84 to 139 with a mean of 112.7. The Metropolitan Reading Achievement test was used as a criterion measure, and subtests of the Harrison-Stroud test and WISC Subtests, WISC Verbal and Performance, and Full Scale Scores were used independently and in combination with each other as predictor variables. Reading Readiness variables contributing significant betas to the final Pearson r correlation were Using Symbols, Using Context, and Auditory Clues, and C/ing the Names of the Letters. The only WISC subtest which contributed a significant beta in combination with subtests of the Harrison-Stroud test was Arithmetic. Information, Digit Span, and Object Assembly subtests contributed significant betas to the final Pearson r correlation. No reliable differences in WISC scores were obtained between the two reader groups. Numerical correlations are included.


A comparative study of a basal and a non-basal reading program at the seventh- and eighth-grade level was completed. The population included eight instructional groups. Two eighth- and two seventh-grade groups were assigned to each of the reading programs. All classes were pre-tested with the Iowa Silent Reading Test, Form AN. After one semester of instruction, all pupils were retested with the same test using Form CM. The interests of the total population were identified through the Science Research Associates.
Junior Inventory. Data from the Iowa Tests were analyzed statistically through the use of a Fortran Program employing the I.B.M. 1620 Computer and I.B.M. 1622 Accounting Machine. The SRA Data and recreational reading records were evaluated by use of descriptive statistical procedures. In the summary of findings, the author states that the reading methods employed did not significantly affect the achievement in reading of the population using either the basal or non-basal program. No significant difference was found in growth of children of the six areas of reading skills measured by the Iowa Silent Reading Tests. Neither the basal nor the non-basal program seemed to have a measurable effect upon the attitudes toward reading or on recreational reading habits.


The effect of two methods of instruction in word recognition skills was investigated to compare the mean reading achievement of beginning fourth-grade children and the mean reading achievement of the slow, average, and bright children. In addition, the power of six word recognition skills to predict seven reading abilities was investigated. The population consisted of 407 students from one school district in Dubuque, Iowa, and 411 students from a second school district in Detroit, Michigan. All subjects were given the Lorge-Thorndike Non-Verbal Intelligence Test, the Gates Reading Survey, the Bond Developmental Reading Test, and the Bond Silent Reading Diagnostic Test. Three statistical techniques were used to analyze the data: analysis of covariance, t-tests, and multiple regression. From an analysis of the results, the author declared that the students of the experimental group (composite approach with a modified linguistic emphasis) recognized words in isolation more readily, used the context with greater facility, had fewer orientation problems, possessed greater ability to analyze words visually, and had greater phonetic knowledge than the control boys and girls. The experimental students read faster and more accurately, had larger vocabularies, comprehended better, and were more able to retain factual information than the control boys and girls. Children of all mental levels profited from instruction under the experimental method, but those of average and low ability gained more than those of high ability. Girls benefited slightly more than boys. The author also indicated that six word recognition skills could predict, to some extent, the seven general reading abilities.

The relationship of first grade reading readiness to levels of adjustment and to achievement in the intermediate grades was examined. Factors of reading readiness considered were sex, intelligence, chronological age at entry, reading readiness, reading achievement, and school grades. The population studied included 410 boys and 415 girls enrolled in the intermediate grades in the schools of a city in Texas. Measures were obtained with the SRA Achievement Series, Harrison-Stroud Reading Readiness Profiles, California Test of Mental Maturity, and Ullmann's "Forced Choice Test" as a level of adjustment. The measure of school grades was obtained from permanent record folders. All factors investigated were found to be related to level of adjustment at the intermediate level. The factors of reading readiness which were related to levels of adjustment and achievement at the intermediate level were sex, chronological age at school entry, and IQ. Boys in general seemed to be more adversely affected in adjustment and achievement by starting to school younger than six years seven months than were girls. Additional findings, recommendations for future study, and recommendations for curricular change are included.


The effect of reading instruction on a group of adolescent delinquents' attitudes and behavior was investigated. Thirty-seven subjects were divided into three equal groups matched on the basis of age, I.Q., reading ability, and length of probation. The groups were also equated for ethnic background. The groups were given either reading instruction, swimming instruction, or no treatment. The results were separately organized according to effects of the various forms of treatment on certain attitudes toward authority figures, behavior, and reading ability. Each subject was given a pre-post series of tests. In addition, a follow-up study was done on each subject 18 months after the termination of the experiment. From an analysis of the results the author concludes that reading instruction is effective in modifying certain attitudes toward authority figures of adolescent delinquents and, concomitantly, there is an improvement in the behavior of the adolescent delinquents.
Scores from the Diagnostic Reading Tests, California Short Form Test of Mental Maturity, Kuder Preference Record (mechanical interest area), Purdue Mechanical Adaptability Test, Bennett's Test of Mechanical Comprehension, grades in "quality" and "quantity" of work in Blueprint Reading, Mathematics, Metallurgy, Metal Trades Science and Machine Shop Technology, and bi-monthly job-performance ratings were utilized to examine the correlation between standardized test scores and the school and job performance of machinist apprentices in a School of Adult and Vocational Education. Subjects were all males and chiefly high school graduates, average age 20, grouped into three categories: (1) N of 97, all who entered school and took a reading test, (2) N of 65, those who took the reading test and completed 576 hours of related instruction, and, (3) N of 33, those who took the reading test, completed 576 hours of instruction, and who were also indentured at least two years by a machinery-equipment manufacturing company. For the sixty-eight apprentices the majority of relations between reading scores and school grades were positive and significant. High interrelationships existed between predictor variables, especially reading scores and mental maturity. The most promising predictors for school achievement were total comprehension score, effective reading rate, and mental maturity score. For job performance ratings, the mechanical adaptability score and effective reading rate were the most promising predictors. Mental maturity and mechanical comprehension also warranted consideration as predictors of job performance. Mechanical interest was not related to school or job performance. All relations between school grades and total-score job ratings were positive, but significant relations were limited to the metallurgy, technology, "total quality," and "total quantity" school grades. Percentile rank comparisons indicated that generally, the reading performance of 97 apprentices was as good as or better than that of high school seniors and college freshmen. Generally, the apprentices who completed the most work also received the best grades.


The implementation of an administrative plan to provide additional instruction time for children attending double sessions and
the effect of a reading improvement program, utilizing the additional instruction time, on the reading comprehension of a selected group of second-grade boys were investigated. In the findings related to the administrative plan, the author concludes that the implementation of an administrative plan to provide additional instruction time for double-session children was successful. Following a comparison of pre-test and post-test results on the G-4 Primary Reading Test, the author states that the tests showed no significant improvement in the reading comprehension of the group of selected second-grade boys who participated in the reading improvement program.


Intermediate grade pupils were studied to determine their level of reading achievement, the relationship between pupil mobility and reading progress, and the types of reading errors made. The reading vocabulary and comprehension sections of the Iowa Tests of Basic Skills were given to 468 pupils who were grouped by mental age as high, average, and low mental ability. Students were also grouped as original pupils, those having all education in Moab schools, transfer pupils, and those having attended two or more schools including the present one. Transfer pupils were further categorized according to the number of schools attended: two schools, three schools, and four or more schools. The percentage of reading comprehension skill errors made by pupils on specific test items was compared for the original pupils, the transfer pupils, and the total grade. The medians of scores on both parts of the reading test were compared for original and transfer pupils for each grade as to their position relative to the fiftieth percentile. The total fourth and sixth grades ranked below the fiftieth percentile on median vocabulary score, while the total fifth grade ranked above. The total fourth and fifth grades ranked above the fiftieth percentile, but the sixth grade ranked below the fiftieth percentile on median comprehension scores. An analysis of vocabulary test scores for the categories of pupil mobility by mental ability levels showed a significant difference among the means in the fourth grade, but no significant differences among means in the fifth or sixth grades. Comprehension test scores for the categories of pupil mobility by mental ability levels showed only a significant difference among the means in the fourth grade. All three grade levels had the greatest comprehension deficiencies in the evaluation and organization skills for both the original and transfer pupils. No specific conclusions were drawn, but it was recommended that a long range reading improvement program be undertaken in the Moab elementary schools.
The relationship of anxiety, self-concept, reading achievement and creative thinking among four socio-economic status levels was investigated. Two hundred fifth-grade boys and girls were selected from a large group of fifth-grade students and placed in one of four socio-economic status levels according to the McGuire-White "Index of Social-Status Form": Upper-middle, Lower-middle, Upper-lower and Lower-lower. Administered to each subject were the Children's Manifest Anxiety Scale, Reeder Adaption of the Brownfain Categories Inventory, and the Minnesota Tests of Creative Thinking, Abbreviated Form VII. Reading achievement scores were obtained from the Stanford Achievement Battery, Intermediate Form. A $4 \times 2$ analysis of variance was used to determine variations among the socio-economic status levels; a product-moment coefficient of correlation was used to determine relationships; and $t$ ratios were computed to determine significance of differences. The following are some of the results reported: (1) Although the mean reading scores of the middle class groups were higher than the lower class groups, the scores were not significantly different. (2) The lower class students had significantly higher anxiety scores. (3) The self-concept scores of the students did not differ significantly. (4) On tasks of verbal creative fluency, verbal creative flexibility, and verbal creative originality, middle class students achieved significantly higher scores.

Auditory discrimination ability as a predictor of reading achievement in first grade was investigated in a group of 331 boys and 301 girls in 26 first grade classrooms. Auditory discrimination measures were selected from the Gates Reading Readiness Test, the Harrison-Stroud Reading Readiness Profiles, the Murphy-Durrell Diagnostic Reading Readiness Tests, and the Reading Aptitude Tests. Reading achievement was measured by the word recognition and paragraph reading subtests of the Gates Primary Reading Test. Intelligence was evaluated by the Lorge-Thorndike Intelligence Test. The intelligence test and the auditory discrimination tests were given the first four weeks of school, and the reading tests were administered the following spring. Girls were found to be significantly superior in readiness for reading and in reading achievement. It is difficult to predict beginning success in reading even when information is available concerning measures of auditory discrimination, intelligence, and chronological age at the beginning of
first grade. Many factors are important in learning to read, in addition to auditory discrimination ability. Intelligence is related to first grade reading achievement to such an extent that additional readiness testing beyond intelligence testing improves prediction very little.

The results of kindergarten children's Draw-A-Man Test were correlated with their first grade reading achievement. The author reported a predictive validity correlation of .64 between the Draw-A-Man Test and reading achievement. He also reported a correlation of .33 between reading achievement and a group intelligence test score. It was suggested that the kindergarten age drawings reflect an aspect of development that is more related to reading readiness than the visual structured intelligence test.


The relationship between vision and change in levels of reading skills as a result of a reading improvement course and the effect of uncorrected vision problems upon these relationships were studied. One hundred eighty subjects were selected from the lowest one-third according to reading skill of the entering freshmen class at Stetson University. Tests were administered both before and after a reading improvement course to determine changes in reading skills. The Ortho Rater was used for individual vision screening. Thirteen vision variables, six reading variables, two measures of mental ability, and two measures of academic achievement were utilized. The scores of 63 variables were factorized; nine factors were precipitated. The scores of 51 subjects who failed vision screening tests were factorized, and 12 factors were precipitated. It was concluded that there were independent measures of vision which could be measured by a commercial vision screening battery. Right eye acuity was found to be an important measure of vision, since it was definitely related to acuity imbalance. Students with uncorrected vision problems had significantly higher relationships between right eye acuity and initial reading skills, reading skill changes, academic achievement measures, and mental ability measures. Reading skills were relatively independent of measures of vision skills. It was suggested that subjects might be able to control vision problems during short periods of testing.


The educational effectiveness of reading materials prepared for a unit on Producing Clean Quality Milk, taught to high school vocational agriculture students, was evaluated. Conceptual and factual versions of the material were used along with combinations of the two. Four presentation methods, given in the order in which
they were read, were utilized: conceptual-conceptual, conceptual-factual, factual-conceptual, and factual-factual. The major variables were presentation methods, grade levels, and schools. Student achievement was appraised by scores on a test of knowledge of specific facts and reading comprehension achievement. The difficulty level of the material was evaluated at ninth grade. The tests used were tried out in a pilot study prior to the experiment. The population consisted of students from twelve schools which were randomly selected from Pennsylvania schools with vocational agricultural departments having a minimum of twelve students in each grade. The Cooperative English test was utilized as a measure of reading achievement. Analysis of covariance was used to test the major hypotheses and correlated "t" tests made for gains in student scores. The analysis indicated that (1) student achievement in reading the presentations was greater for students in Grades Eleven and Twelve than in Grades Nine and Ten on both tests, (2) no significant differences in student achievement in reading the presentations were found between the four presentation methods when evaluated by the two tests, (3) student achievement in reading the presentations varied among the schools when evaluated by the two tests, (4) students with dairying projects, whose parents had dairying as a major farm interest, had higher pretest and reading achievement scores on the subject matter but there was little difference in gain scores. The author concluded that the reading ability of each group of students should be considered in the selection and preparation of educational materials. Authors should carefully consider their educational objectives in writing a single version of a text and recommending that it be used by all grade levels. Teachers should be trained to select material most effective for specific groups of students.

90. Edwards, Donald Lewis. "The Relation of Concept of Reading to Intelligence and Reading Achievement of Fifth Grade Children," Ed.D., University of Buffalo, 1962. XXIII, No. 5, 1603-1604. (Order No. 62-4637, Microfilm $2.75; Xerox $8.60, 187 pages.)

A reading concept test was developed, based on verbal and nonverbal samples of reading behavior, in which students chose between descriptive phrases which appeared to be of equal value but were different in validity. Twenty triads of reading-behavior phrases were developed with the student determining which were characteristic of the good reader. Responses were weighted as to "function" or "form" with form constituting a response inappropriate to the theoretical concept of reading. The preliminary investigation and an exploratory study, using six students reading six months below intelligence grade placement and six students reading six months above intelligence grade placement, supported the hypothesis that a relationship exists, independent of intelligence, between a child's acquired concept of reading and his achievement in reading. However, a major experiment using 274 fifth-graders indicated conclusively that Reading Concept Test scores
have no value in predicting reading achievement test scores. The author suggested that the Reading Concept Test was sensitive to the effect of whether or not children read habitually. This factor was accommodated in the exploratory study but not in the major experiment. As the experiment progressed, it was discovered that reading achievement test scores are not necessarily valid predictors of whether children read habitually.


A group of 225 seventh-grade negro boys attending school in 1945 were compared with a group of 383 negro boys attending school in 1957 by use of the Pintner General Ability Tests and the Stanford Achievement Reading Tests. The two groups were found to be significantly different in reading ability and chronological age, so 168 matched pairs were selected, with a mean chronological age of 12 years and 6 months, and a mean I.Q. of 81.6. A number of factors were analyzed which established that the area from which the sample came was among the lowest socio-economic areas in the city. Analysis of the matched pairs revealed no significant differences in reading achievement between the 1945 and 1957 groups. The reading level on the average was below the seventh-grade norm but above the expectancy level in terms of mental age.


Interview questionnaires were used to analyze critically the way junior high schools initiated their developmental reading program. Data collected from the principal, the reading coordinator, the librarian, and a reading teacher from each of the 16 schools interviewed revealed that many of the larger schools began their reading programs before 1959; English chairmen, guidance counselors, and reading teachers were involved in the initial planning, aided by the assistant county superintendent, and in some cases, by book company specialists; reading teachers were obtained by training regular staff, hiring experienced teachers, and transferring elementary teachers; in-service training was provided prior to initiating programs; students were grouped homogeneously in most schools and three-fourths of the schools taught reading in English classes; schools relied on teacher judgment, testing, and student reading records to evaluate the student reading programs. Many different educational media and materials were used. A lack of desire to teach reading and a failure of teachers to accept responsibility to teach reading were noted as the most serious problems.

52
The attitudes of intermediate grade pupils toward intergrade ability grouping for reading instruction were investigated. Specific responses were elicited concerning special reading classes, personal relations, and parental expectations. The sample population included 582 intermediate grade children. The measuring instruments employed were a Pupil Opinionnaire and an Interview Schedule. The Opinionnaire was administered to the entire population; interviews were conducted with 25 percent of the pupils selected by a quota sample. A statistical inference process, involving the chi square distribution, was employed with items which appeared in the opinionnaire. The author revealed that the reading group assignment and the grade level and/or the school attended may have influenced the pupils' attitudes toward grouping and responses to the Pupil Opinionnaire and Interview Schedule. From an analysis of the findings the author states that pupils assigned to the lowest reading group provided evidence by their responses that: (1) They were significantly less favorable toward their reading teacher than the pupils in the higher groups. (2) They were significantly more dissatisfied with their group assignment than the pupils in the higher groups. (3) The personal relations were significantly more strained in their group than in the higher groups. (4) Their parents were significantly less favorable toward the grouping plan than the parents of pupils assigned to higher reading groups.

An auditory program, an adaptation of Durrell's Building Word Power, was developed for this study. The auditory program was composed of 40 segments of 15 minutes each, recorded on magnetic tape. Tape recorders were used in the third grade program to determine whether auditory discrimination can be developed through the use of the program, the effect on spelling skills, and the effect of the auditory program on the upper and lower one-third of the experimental group. The experimental groups consisted of 118 pupils, and 115 pupils from the same two schools acted as controls for the eight-week program. Pretest and post-test data were obtained from the Rush Hughes Auditory Test, the C.I.D. Auditory Test W-22, the Gray Oral Reading Test, and the Durrell Spelling Test. Age, sex, and IQ were determined from school records. It was indicated that auditory discrimination could be improved by use of a program of tape-recorded exercises, and that word recognition skills improved as auditory discrimination improved.
significant improvement was shown in spelling skills. It was found that students with poor auditory discrimination derive more benefit from the program than did those with good discrimination. Recommendations for future investigations are also included.


Mental maturity, paternal occupation, parent's years of formal schooling, silent reading ability, oral reading ability, and listening were variables assessed in determining the relationship between children's oral language and the structure of the language for sixth-grade pupils to silent reading comprehension, oral reading interpretation, and listening comprehension. Oral language was recorded mechanically while the students visited or told stories in small groups. The 2500 responses which were analyzed resulted in a total frequency of 4,066 structural patterns and 262 utterances. There were 1,041 different structural patterns of which 26 accounted for 46.61 per cent of the total frequency of structural patterns. The fifteen types of subordinate elements were identified a total of 6,660 times. Significant differences were found between the use of subordinate elements and occupational status, mother's education, verbal intelligence, and chronological age. Significant differences were found between the use of moveables and mother's education, verbal intelligence, father's education, and mental age. A relationship exists between the structure of children's oral language and silent reading comprehension, oral reading interpretation, and listening comprehension. The author concluded that maturity of oral language seems to be a composite of many linguistic skills which influence in varying degrees the use and structure of oral language at the sixth-grade level. The results indicate a closer relationship between oral language and reading than has been previously recognized.


A comparative study of two groups of children who had not learned to read after one year of school was completed to determine whether there were differences in visual and auditory perception and behavioral traits. One group of children emphasized the visual approach to reading (Basic Curriculum Series; Scott Foresman), and the other group had been taught by a method that emphasized the auditory approach (Phonetic Keys to Reading; Economy Company). Comparison groups of successful readers also were tested. The population in this study consisted of 40 children.
who had not learned to read and 25 successful readers. The unsuccessful readers were compared, taking 20 students in each method. The successful readers compared 11 children in the Basic Method with 14 in the Phonetic Keys Method. Tests administered to determine the visual and auditory perceptual abilities and behavior traits included (1) subtests of the WISC, (2) subtests of the Monroe Primary Reading Aptitudes, (3) subtests of the SRA Primary Mental Abilities, (4) Pacific Pattern Copying Test, (5) Thurstone Street Gestalt Completion (Form 1950-B), (6) Monroe Auditory Discrimination Test, (7) subtests of the Keystone Telebinocular Visual Screening Battery, (8) a test of auditory acuity, and (9) Scott's Behavioral Traits Check List. In the findings the author states that, at the five percent level of confidence, t-values for the combined auditory tests indicated significant differences between the means (1) of the two failure groups in favor of the Phonetic Key's groups, (2) of the two Phonetic Key's groups in favor of the success group, and (3) the two Scott Foresman groups in favor of the success group. On the combined visual tests, t-values of significance were obtained between the two failure groups in favor of the Scott Foresman group and the two Phonetic Keys groups in which the success group obtained the higher mean. There were no significant differences between the two failure groups in behavioral traits, nor were there differences between the two successful groups. Significant differences between the failure and success groups were in traits of Inherent Leadership and Aggressive Domination, favoring the success groups.
An analysis of the teacher’s manuals of four widely used elementary basal reading series was made to define the phonetic and structural analysis skills recommended for instruction. A test to appraise teacher knowledge of these skills was constructed and administered to 394 teachers in Grades One through Six, and to a special group known to have knowledge of these skills. Comparisons were made between teachers, college graduates and liberal arts graduates, non-degree, bachelors, and masters degree teachers, and various levels of graduate-credit teachers. The author concluded that a large number of teachers showed a marked deficiency in knowledge of skills tested. Type of college attended made no difference in performance, and an advanced degree could not be taken as an indication of better knowledge of phonetic and structural analysis skills.

Ninety-five children from kindergarten through Grade Five were measured on intelligence, the Bender Gestalt Test, Reversals Test, the Street Gestalt Completion Test, and two reading tests to determine if visual perception skills increase with age, to explore the relationship between visual perception skills and reading, and to determine if girls show more competence in these skills than boys. Intercorrelations were made between all measures and two factor analyses done. Test scores indicated an increase in visual perception skills with age and higher scores for girls at some grade levels. The visual perception scores were highly related with the factor of age-experience as was intelligence. Intelligence was related with visual perception skills at lower grades. Use of reduced cues showed no consistent developmental trend or any relation with the other measures. Writing hand showed no relation with visual perception skills. Form sequence and annotation showed a change in error type with age from complete or mixed reversals, to reversal letter errors, to no errors. Reading skills showed a positive relation to the three visual perception tests and a high relation to the age-experience factor. Those visual perception scores influenced by age and experience showed a developmental trend.
The influences of reading and discussion on the attitudes of fifth graders toward American Indians were explored in Berkeley, California. Three socio-economic areas were represented: a high socio-economic area composed mainly of middle class, Caucasian families; a low socio-economic area composed mainly of lower class, Negro families; and an in-between area representing a blending of the two extremes. Three treatment groups were selected from each area: a reading group, a reading group plus discussion group, and a control group. Gains on an attitude test constructed by the investigator were used to evaluate the three-week project. The following results were found: significant favorable changes in attitude were caused by independent reading, and significantly greater gains were caused by reading plus discussion; the attitude change favorable to Indians was greatest for the middle socio-economic area, greater for Negroes than for Caucasians in this group, and was significantly greater in the upper socio-economic level than in the lower; no significant difference in attitude change was found in regard to sex, IQ, or reading achievement; and attitude change was greater for girls in an independent reading situation, and for boys in a reading-discussion situation.


The author attempted to determine (1) how out-of-grade reading comprehension performances of accelerated and retarded readers compare with their performance on tests administered according to conventional grade placement, and (2) which type of test, the in-grade or the out-of-grade, is actually the better test to use with the types of students analyzed in the study. The population consisted of 1,041 elementary school children. The accelerated students were from Grades Four, Five, and Six. The criterion was a score of .5 of a grade equivalent score two years above the actual grade placement of the child. The retarded students were selected from Grades Five and Six. The criterion was a grade equivalent score within .5 of a point two years below actual grade placement. The performance of the groups was compared on two forms of the same test, one selected on the basis of grade placement and the other selected in terms of achievement level as measured by the first test. The terms of comparison were difficulty indices, discrimination indices, correlation coefficients, and an analysis of the functioning of four types of comprehension items. The authors concluded that the out-of-grade tests are consistently better suited to the actual ability of these types of students. They provide better discrimination between abilities of such students and probably contain materials with better content validity. Tests selected in this way merit more extensive use in cases where pupil abilities are markedly different from the average for grade placement.
The effects of a "Self-Managing Reading Group Plan" (SMRGP) and the three-group basal reader plan (TGBRP) were studied. The California Test of Mental Maturity and the California Reading Test were administered to a group of intermediate grade children. On the basis of the test scores, the pupils were equated and placed in either the experimental (SMRGP) or control groups (TGBRP). After a period of approximately eight months, an alternate form of the California Reading Test was administered and the results studied. The author concluded that although neither group nor group segments showed statistically significant superiority, the following marginal differences were found: (1) In Grades Five and Six, pupils with I.S.I.'s of 120 and above tended to do better in comprehension under the TGBRP (.10 level). (2) In Grade Five, pupils with I.S.I.'s below 120 tended to do better in vocabulary under the SMRGP (.15 level). (3) Pupils underachieving by six months or more in average reading pre-test scores tended to do better under the TGBRP (.15 level). (4) In a school system where curriculum-oriented principals devote the bulk of their time to helping teachers with instructional problems, administrative ratings are highly predictive of instructional success (.02 level). (5) B-rated teachers, using the SMRGP, tended to show greater instructional success as measured by test scores than did their counterparts using the TGBRP (.05 level).

One hundred and seventy-seven children in Grades Four, Five, and Six were given the Gates Reading Survey, Otis Intelligence Test, WISC, and the Verbal Battery of the Lorge-Thorndike Intelligence Tests to observe the discrepancy between group intelligence test scores and true intelligence of children classified as retarded readers. Pupils were selected to form groups having mean reading grades of 6.5, 5.6, 5.1 and 4.1 for grade six and mean reading grades of 4.1, 3.6, 3.1 and 2.6 for grade four. Two control groups were also selected with mean reading grades of 6.6 and 4.6. Four sets of mean discrepancy values were obtained for analysis by subtracting the group intelligence score from the WISC score. Analysis of variance of the significance of the differences of the means of the four sets of scores, and the use of "t" tests for comparisons of means within groups, supported the belief that children retarded in reading earn scores on group intelligence tests that are lower than their ability levels as indicated by individual intelligence test scores. The scores of the
four sets failed to allow prediction for the various amounts of reading retardation.


An individual intelligence test, two readiness tests, and seven measures of vocabulary were administered to 114 children. Vocabulary measurement included association of verbal descriptions with pictorial illustrations, supplying definitions, supplying words of opposite meaning, identification of opposites in a multiple-choice situation, verbalization of concepts or experiences, verbalization in the absence of a stimulus and composing a sentence containing a stimulus word. Correlations between measures were computed and multiple correlations used to determine the variables having the highest possible correlation with the criterion. The ability to supply a word of opposite meaning was the vocabulary measure most highly related with performance in beginning reading. The selection of opposites by multiple choice proved to be more difficult for the subjects than supplying a response to a stimulus word. The other vocabulary variables showed limited correlation with reading performance. At kindergarten level performance on the numbers sub-test of the Metropolitan Readiness Test appears to be the best estimate of probable success in beginning reading.


The relationships between visual and auditory perception to reading comprehension were investigated. Third-grade subjects were selected and those pupils below 90 on the CTMM or a grade score of two years five months on the CAT were excluded. A pretest consisting of half visual comprehension and half auditory comprehension was given all subjects. The subjects were divided into four groups: auditory, bi-sensory, visual, or control. The auditory group received auditory training through taped lessons in comprehension, and the bi-sensory group alternated between the auditory training and visual training. The comprehension lessons were read by the visual group. After an experimental treatment of four weeks, a post-test identical to the pre-test was given. An analysis of covariance was computed using intelligence scores and pre-test results as covariates. The following results were found: the auditory group's visual mean score significantly exceeded the control's; the visual group's auditory score significantly exceeded the control's; and the bi-sensory training group did not achieve
statistically superior results. The auditory group outscored the bi-sensory group on both tests and the visual group outscored the bi-sensory group in visual comprehension. It was concluded that transfer of skill does occur in relation to language comprehension from auditory to visual perception and from visual to auditory perception in third grade children.


Adviser: Walter Hill, Vol. XXVI, No. 9, 5223. (Order No. 66-604, Microfilm $3.00; Xerography $5.00, 99 pages.)

Selected aspects of verbal behavior of retarded and normal readers were analyzed. The situation chosen was one in which oral responses would be elicited by an ambiguous verbal set and non-printed visual stimuli which would be comparable to the reading situation. Cards representing pictures from third, fourth, and fifth grade readers, the Michigan Picture Test, and pictures from Caldicott Award winning children's books were randomized and individually presented to elicit free oral responses. Seventy responses were elicited from each child before the interview and recording session was terminated. Two groups of 20 subjects were used. The adequate group was composed of 17 boys and three girls in the fifth grade, and the retarded reading group was comprised of 18 boys and two girls who were fifth graders or who by their chronological age and intelligence would normally be placed in fifth grade. Four types of responses were obtained: text-naming something in the pictures including some noninterpretative relationship; tactics-responses to both the stimulus and other aspects of the situation; intraverbals- responses elicited by neither the presented stimulus or verbal set; and echics- responses substantially repeating previous verbal behavior of either the subject or the experimenter. Responses of the retarded reading group tended to be faster, longer, and less relevant to the stimulus. The data seemed to indicate an increasing involvement in the task for the adequate group. The consistently greater response speed among retarded readers suggests the possibility of greater task anxiety. Additional findings are included.


A committee of teachers and assistant principals constructed six reading selections for sixth-grade children to determine if teachers with limited writing experience could produce curriculum materials for a specific grade. The selections were evaluated in terms of reading level, content interest, and comprehensibility. Readability formulas indicated that four of the six selections were within the desired reading range with one slightly above
and one slightly below the desired range. Four of the six selections were completely acceptable on the basis of children's interests with two having relatively low interest levels. Comprehension of the selections ranged from satisfactory to excellent. The author concluded that with some modification the materials are suitable for sixth grade and that teachers are capable, at least in this instance, of coming reasonably close to the mark in writing for sixth-grade pupils.


Twenty brain-injured children, enrolled in a public school demonstration class for eight to fifty-four months, of average and retarded mental development, were compared with a group of matched non-brain-injured children on performance of standardized achievement and reading tests and types of reading errors made. The brain-injured group was significantly superior to the non-brain injured group on the Gates Primary, Monroe Word Discrimination Test, Gray Oral Reading Test, Iota Word Recognition Test and the Monroe Sound Blending Test. There were no significant differences on the Monroe Visual Memory Test and the Gates Reversible Words Test. The non-brain-injured group showed significant excessive errors on faulty vowels, faulty consonants, omission of sounds and substitutions of words on the Monroe Diagnostic Battery. No significant differences were found on reversals, addition of sounds, repetition, addition of words, omission of words, and words added and refused. The author concludes that the findings of the study suggest that brain-injured children can learn to read and in some areas of reading they perform better than a control group of non-brain-injured children. Use of specialized teaching techniques, special preparation of teachers, a public school sample, length of the school day, number of months of special instruction for the experimental group, the age of the children and the emotional support of the special class may have contributed to the superior results for the brain-damaged children.


The effect of an enriched reading program on a fifth-grade population of 92 students was investigated. The following specific questions were asked: (1) What is the effect of an enriched reading program on reading achievement? (2) How does this achieve-
ment compare with that of a similar population for whom no special effort is made to enrich the program? (3) Are gains achieved during the fifth grade still apparent at the end of the sixth grade with no special program? (4) What characteristics are associated with the reading achievement of high and low gainers who have received the special program? In the conclusions, the author states that the enriched group made substantially greater gains than the comparison group. Teachers noted improvement in behavior, in voluntary reading, and in parent-school relationships for the enriched group. From the limited gains made the following year, it was concluded that continuous programs are needed to maintain the momentum established by improved reading instruction. Children from the very low income level of homes made significant gains in reading when their intellectual potential was released by a school program.


The effect of the cloze procedure on the comprehension ability of foreign students was studied. Tests administered to the group included the Metropolitan Achievement Test, Reading Section, as a pre- and post-test and a vocabulary-in-context test, based on the vocabulary subtest of the Metropolitan Achievement Test. The procedure included giving the experimental group a series of 20 deleted readings selected from the McCall Crabba Standard Test Lessons in Reading Books A to E. The control class was given the same readings undeleted. From the findings, the author concluded that: (1) The cloze procedure is as effective in producing improvement in comprehension and vocabulary-in-context as a method using close reading without deletions. (2) The validity of the cloze procedure as a measure of comprehension for foreign students has been established by its significant correlation with the Metropolitan Achievement Test and the multiple-choice tests. (3) A complete knowledge of the vocabulary is not essential to the understanding of a reading if the subject matter is within the experience of the subject. Cloze tests measure familiarity with the subject as well as the difficulty of the article. This may confuse the readability scores.


The effect of two instructional programs on reading improvement was studied. The criteria for reading improvement were silent
reading ability, oral reading ability, attitude toward self, and self concept. One of the two programs was described as being a reading-for-pleasure program; the second, as a traditional skill-for-pleasure program. The sample consisted of 116 seventh-, eighth-, and ninth-grade students who were retarded at least one and one-half years in reading. The statistical model included both group and matched-pair data. A nonparametric (chi-square) evaluation of group test-retest gains compared the two programs by class, total enrollment, and socio-economic status. The Wilcoxon matched-pairs signed ranks test assessed the significance between the matched-pairs. The author concluded: (1) The reading-for-pleasure program and the skill-oriented program were equally effective in producing reading improvement. (2) Improvement of basic reading skills was obtained in the reading-for-pleasure program despite lack of direct instruction in these skills. (3) The two programs were equally effective in producing reading improvement with the students at each of the three socio-economic status levels. (4) Within each program, equivalent gains in reading improvement were made by students in the three socio-economic status levels.


The differences in means among the subtests of the Verbal and Performance Scales and between the total Verbal and Performance scores of the WISC were studied to determine if there were any statistically significant differences on these scales between unsuccessful and successful readers in Grades Four, Five, and Six. A population of 92 males was matched on the basis of California Short-Form Test of Mental Maturity, Total I.Q., sex, age, grade, and school. All the pupils were administered the Iowa Test of Basic Skills; and subjects having a percentile rank below the fiftieth percentile were designated as unsuccessful readers. The findings indicated that the successful reader group was significantly superior to the unsuccessful reader group on the total Verbal scale of the WISC. The mean differences of the Similarities Subtest appeared to be the most significant of the Verbal Scale Subtests in distinguishing between the successful and unsuccessful reader groups. Among the subjects of the successful reader group there was a significant mean difference between the Verbal and Performance Scale scores, favoring the Verbal scale. Except for the coding subtest in the WISC Match, all other Performance Scale Subtests did not demonstrate a significant difference in means between the two reader groups.
The effect of two kindergarten curricula, identified as the sub-first-grade and informal, was studied to answer these questions: (1) Is there a difference in attitudes concerning children and teaching in the sub-first-grade kindergarten situation and teachers teaching in the informal kindergarten situation? (2) Are there differences in the time allotment, learning activities, and materials between the existing sub-first-grade and informal kindergarten programs? (3) Is there one kindergarten curriculum which contributes more to the pupils' reading readiness growth? (4) Is there a difference between the sexes of children as to the kindergarten curriculum which contributes most to the pupils' reading readiness growth? The population included eight groups of kindergarten children and their teachers. Four groups of children and their teachers were assigned to each of the curricula. Tests and other measuring instruments were administered to both the children and teachers. The teachers were given the Minnesota Teacher Attitude Inventory. The children were given the California Short-Form Test of Mental Maturity Pre-Primary Form S and the Metropolitan Readiness Test Form R and S. The statistical technique used was the analysis of variance. In the summary of the findings the author states: (1) It appeared that the kindergarten teachers in both programs were not demonstrably different in attitudes toward children and teaching. (2) It appeared that the kindergarten programs differed in time allotment, learning activities, and materials. (3) It appeared that both programs were equally effective in promoting reading readiness growth. (4) It appeared that both programs resulted in wider distribution of reading readiness growth for boys than for girls.

The use of the close test as a measure of readability of materials for primary grade pupils and the effect of increased sentence length on the readability of materials for use with primary grade pupils were investigated. The close tests and a comparable form of the Metropolitan Test were administered to 273 pupils. Pearson product-movement correlation was used to determine if the rankings of pupils on the close test corresponded with the rankings on the standardized achievement test. For the second problem, two sets of passages were written, each consisting of five levels of reading difficulty as measured by the...
Spache Readability Formula. A set of revised passages, with increased sentence length, were administered to the 273 pupils. The set of revised passages increased the Spache readability level so that the level ranged from three months to one year higher than that of the basal passages. From an analysis of the results, the author concluded that cloze tests were valid and reliable measures of readability for the primary grades. Increase in sentence length appeared to increase the difficulty level of materials for first- and second-grade pupils, but this increase did not hold true for all sub-groups of Grade Three.


Sections of the Coop English Tests, the Iowa Tests of Educational Development, and the Verbal Battery of the Lorge-Thorndike Intelligence Tests were administered to 760 vocational agriculture students in four grades in twenty-two cooperating schools. Ten commonly used vocational agriculture textbooks were analyzed using the Dale-Chall Readability Formula. Analysis of variance was used to test for significant differences in readability of the ten books and the reading and mental ability of the students using them. The author concluded that careful consideration should be given to the reading ability of vocational agriculture students when selecting reference books for their use. In light of the variation of reading ability found within any one class it seems unwise to use a single reference book for all students. The suggestion is advanced that vocational agriculture teachers be trained in the basic principles of reading instruction.


Twenty male public school students, 12.3 to 15.9 years of age and retarded in reading, were matched on the basis of age, I.Q., reading grade level, and teacher's rating of classroom behavior. Half the group received individual reading therapy, and the other half were placed in two equal groups and received group reading therapy. At the end of twenty sessions evaluations were made on the basis of rate of improvement in reading ability, attitudes toward reading, self-evaluated personal needs and problems, and classroom behavior. The author concludes that individual reading
therapy is not superior to group reading therapy on the variables measured and that a psychoeducational approach may be helpful in improving reading ability, and to some extent attitudes toward reading, personal adjustment, and classroom behavior.


The differences in certain facets of intellectual ability, reading vocabulary, reading comprehension, and arithmetic reasoning ability among students from a state-supported residential school and a public day school were investigated. Sixty subjects, 30 from each school, were selected. The subjects ranged in age from seven years to twelve years, six months. Each subject had a severe sensory-neural hearing loss of 70 decibels or more. Tests and other measuring instruments administered to the group included the Minnesota Scale of Paternal Occupation, Stanford Progressive Matrices, Chicago Non-Verbal Examination, and the Stanford Achievement Test. In the conclusions, the author states that differences in intellectual patterns did exist between the students from the two schools and that differences may be related to the differences in school environment and/or the difference in verbal communication ability. There were significant but unexplained differences on certain facets of intellectual ability between the sexes at the two schools. There were no significant differences for school or sex on the reading ability and arithmetic reasoning sections of the Stanford Achievement Test.


Three different reading techniques at the third- and fifth-grade levels were studied to determine their effect on reading comprehension. The methods compared were Science Research Association's Multi-Level Readers, primary level Ic and elementary level IIb, a Controlled Reader program, and a Developmental Reading Approach. Forty Spokane, Washington, public school fifth-grade teachers were randomly selected from volunteers and 40 third-grade teachers were randomly selected by schools. Twelve-hundred students in the third and fifth grade completed the study. The experimental period was 120 days, with a 45-minute reading period each day at the fifth grade level and a 75-minute reading period each day at the third grade level. The teachers were given
six hours of training in the various techniques to be used in the study. A test was administered prior to and after each 40-day period. A comparison of gains was made using each technique with an analysis of variance. No significant difference was found between any of the techniques compared with the control group. Scores indicated a Hawthorne effect which caused a progressive decrease in gains with each period of the study.

Geake, Raymond Robert. "The Differences in Reading-Rate Improvement Between Slow and Fast Readers of Average and Above-Average Ability," Ph.D., The University of Michigan, 1963. XXIV, No. 3, 1073. (Order No. 63-4956, Microfilm $2.75; Xerography $5.60, 115 pages.)

Students enrolled in the University of Michigan School in Grades Seven through Twelve were divided into four groups designated by predetermined criteria as "slow" or "fast" readers of "average" or "above-average" intelligence. "Slow" and "fast" readers were those whose scores fell in the first and fourth quartiles, respectively, on the national norms for the "Rate of Reading" part of the Survey Section of the Diagnostic Reading Tests. "Average" intelligence encompassed those students who scored in the middle 50 percent of the population on either the Stanford Binet Intelligence Scale or the Wechsler Intelligence Scale for Children. The "above-average" group scored in the upper 15 percent of the population in intelligence. The four experimental groups were: fast readers, above-average intelligence; fast readers, average intelligence; slow readers, above-average intelligence; and slow readers, average intelligence. Students were given a training course in rapid reading consisting of verbal instruction and supervised practice for 50 minutes twice a week, for a total of 16 sessions. Classes were composed of students from different grade levels and all four experimental groups. Equivalent forms of reading rate tests with comprehension were given as pre-test, post-test, and again 15 weeks later. All groups showed significant increases in reading rate, but significant losses in comprehension during the training period were noted. Testing after 15 weeks showed a drop in reading rates and a return to pretraining level in comprehension scores. The major finding of the study was that scores on a simple test of perceptual closure accounted for approximately 25 percent of the variation in the distribution of final reading-rate gains. Bright students who are rapid readers showed more progress, and those of average ability also showed impressive improvement. Since only a limited number of students can be helped in reading improvement programs, administrators must decide which students are to be helped.

Reading achievement gains of more than one school year of pupils in remedial classes were compared with average yearly gains prior to remedial treatment and characteristics of remedial teachers. A group of 1,512 pupils from grades three through twelve enrolled in 85 remedial classes throughout the state were tested at the beginning and end of the remedial year on alternate forms of the Gray Oral Reading Test. A sample of 443 pupils was measured for silent reading achievement using the Gates Reading Survey. The gains of 1,003 pupils from grades three through six were compared with the characteristics of teachers on the following dimensions: general verbal ability, diagnostic proficiency, personality characteristics, special training, and years of experience in teaching. Measuring instruments were the Terman Concept Mastery Test, Diagnostic Abilities Test and a Case Report Test, Edwards Personal Preference Schedule, and an Educational Data Sheet. Average gain in oral reading was significant when compared with the previous years average gain. The difference in silent reading grade was not statistically significant. Neither measures of teacher diagnostic proficiency yielded significant correlations with reading gains of pupils. Only two of the Edwards personality scales were significantly related to reading gains-teachers who scored low on "Deference" and those who scored high on "Endurance" obtained greater gains in their remedial pupils. Neither the amount of training in remedial teaching nor years of experience in teaching appeared to be related to the criterion.


A comparison between advanced third-grade readers and retarded seventh-grade readers was made to determine differences in fundamental reading behavior. The population for the study included 30 third-grade children and 31 seventh-grade children. Each subject selected attained at least a 90 on the Wechsler Intelligence Scale for Children and an average reading score within the fifth-grade range on the Gates Reading Survey. During individual testing sessions, tachistoscopic presentation of individual words was made. Also, observation of oral and silent reading of graded selections from the Spache Diagnostic Reading Scales with comprehension checks was completed. Finally, Bett's criteria was applied to identify each subject's independent instructional and frustration level of reading and listening. The analysis of covariance, utilizing the .05 level of confidence, was used to determine the significant differences between the mean scores of the advanced and retarded readers. Included in the findings were the following: (1) Retarded readers made more errors, involving several parts of an individual word in a time tachistoscopic presentation than did advanced readers. (2) Although not signifi-
cantly different, advanced readers were superior to the retarded readers by approximately one-half grade level on the independent instructional reading criteria. (3) Retarded readers maintained significantly higher mean scores than the advanced readers on the frustration and listening levels. (4) Significant differences favoring the advanced readers were found in silent reading rate at independent, instructional, and frustration reading levels. (5) At the independent and instructional reading levels, there were no significant differences in the comprehension scores of the two groups. Retarded readers achieved a significantly higher comprehension score at the frustration level. (6) Retarded readers made significantly more word repetitions, non-meaningful substitutions, and errors involving several parts of a word than did the advanced readers.

Gliessman, David Henry. "Abstractness and Informal Organization of Reading Material: Their Effect on Reading Performance and Relationship to Selected Intellectual Characteristics." Ph.D., University of Illinois, 1961. XXII, No. 5, 1506-1507. (Order No. 61-4297, Microfilm $2.75; Xerox $6.00, 121 pages.)

It was hypothesized that the ability to comprehend abstract reading material would be limited by a tendency to form and use concrete verbal concepts and a tendency to react rigidly in other verbal problem situations. Also, the relationship between intellectual ability and these two factors, and the relationship between cognitive rigidity and concreteness of thinking and general reading comprehension were explored. A pair of abstract and concrete reading passages and a pair of formally and informally organized reading passages were read by 103 male and 84 female eleventh-graders from rural high schools. The type of comprehension tested was literal understanding of the passages. A reading rate was obtained for each passage and the total comprehension and rate averaged for the four passages to obtain a general measure. A test of verbal concept formation (the Similarities Test), measures of rigidity on thinking tasks (the Sign Changes and Reversal Reading tests), and intellectual and writing skills measures were obtained. Findings revealed that abstract content did not significantly affect comprehension, and significantly reduced mean reading rate only for girls. Informal organization significantly reduced mean comprehension but not reading rate. Those showing the greatest comprehension losses on informally organized materials were compared with those showing no significant comprehension losses. No differences were found between the two groups on cognitive rigidity, intellectual ability, language ability, and reading comprehension. No significant sex differences appeared. Cognitive rigidity was positively related to general reading comprehension controlling on intelligence; its relation to reading rate was inconsistent. One test of rigidity was positively related to girls and the other positively related to boys. Concreteness of thinking was not significantly related to general reading comprehension.
A comparative study of the Basal Reading Program and the Economy Reading Program was made. One hundred pupils in Grade One in a selected district who were taught to read by the conventional "basal approach" were matched with 100 pupils in the same school district who were taught to read by means of a program which stressed an early emphasis upon phonetics and word attack skills. Pupils were post-tested by means of the Gilmore Oral Reading Test and the California Reading Test, Lower Primary. From the findings, the author concluded that to the extent that all the related variables were controlled, the utilization of the Economy Reading Program does not produce results superior to those achieved by means of a basal reading program.

Matched groups of good and poor readers were used to determine whether poor readers possess greater rigidity of performance on a battery of psychometric tests including measures of perceptual, cognitive, emotional, and attitudinal variables. Gough's Children's Anti-Democratic scale indicated that poor readers showed a greater number of authoritarian attitudes than good readers. Poor readers demonstrate more personality problems than good readers as measured by the Schmieding Pre-counseling Inventory. Poor readers were not more intolerant of ambiguity than good readers as measured by Smock's Ambiguity tasks. Good readers achieved greater perceptual accuracy on the Smock's test as a result of prior practice than did poor readers. Poor readers identified the incomplete drawings of the Street Gestalt test as well as good readers. Poor readers had more difficulty solving the problems of Kutner's Deductive Reasoning test and Concept Formation test than did good readers, but did not have greater difficulty than good readers in breaking an induced mental set. Both groups showed decreasing problem solving flexibility with age. No differences were found in perceptual flexibility as measured by the Hidden (Gottschaldt) Figure Test. Good readers showed greater competence in perceptual and cognitive function with increasing age. The lack of consistency contraindicated an attitudinal, perceptual, and cognitive rigidity syndrome for boys with reading disability. However, the relationship of reading disability and emotional disturbance was fully established.


The relationship of visual perception, auditory perception categorization and word recognition was studied to determine whether auditory perception has a significantly higher positive correlation with word recognition than does visual perception at the second-grade level and whether categorization, one aspect of conceptualization, has a significant positive correlation with word recognition at the same level. The population consisted of 83 children in an average socio-economic neighborhood, reading on a second-grade level. Tests administered to the group included seven subtests of The Developmental Reading Tests by Bond, Clymer, and Hoyt, The Marianne Frostig Developmental Test of Visual Perception, The Wepman Auditory Discrimination Test, The Otis Quick-Scoring Mental Ability Test, and a specially constructed test to measure categorization. A correlation analysis of the test results was made on an I.B.M. 7072. The author states the first hypothesis that auditory perception has a significantly higher correlation with word recognition than does visual perception at the second-grade reading level was not upheld.
by the correlation analysis. The second hypothesis that categori-
ization, one aspect of conceptualization, has a significant positive
 correlation with word recognition, was upheld. The evidence seems
to support the theory that when groups are heterogeneous and not
matched or balanced in I.Q., the statistical effectiveness is
lessened.

126. Goodson, Roger Allen. "The Development of Three Instruments to
Aid in the Analysis of Teacher Practices, Problems, and Theoretical
Beliefs Concerning the Teaching of Reading in the Later-Elementary
Grades," Ed.D., Columbia University, 1965. Project Sponsor:
Leland B. Jacobs, Vol. XXVI, No. 8, 4498-4499. (Order No. 65-
10, 034, Microfilm $4.15; Xerography $14.65, 321 pages.)

The development of three instruments to aid educators in analy-
zing the practices, problems, and theoretical beliefs of teachers
concerning the teaching of reading in the later-elementary grades
was explored. After studying the literature, the following eight
basic skill areas were identified as essential to the competent
reader: sight vocabulary; word attack; word meaning; mechanics of
oral and/or silent reading; taste and enjoyment in reading; study
skills; comprehension: critical; comprehension: literal and inter-
pretive. These areas provided the structure for the development of
a classroom observation guide, a questionnaire of teacher problems,
and an inventory of teacher beliefs concerning the teaching of
reading in the later-elementary grades. The three instruments were
refined and used by the investigator and nine cooperating educators
in doing case studies of 14 classroom teachers' programs of reading
instruction. The three instruments developed in the study were
considered to be helpful and practical by the teachers and super-
visory personnel who worked with them. Suggestions were made for
the applications of the instruments.

127. Grandison, Francis Leonidas. "An Investigation of the Effects of
Two Schedules of Reading Instruction on Manifest Anxiety and
Behavior Adjustment: A Comparison of Varied Amounts of Time
Devoted to Reading Instruction and Their Effects on Level of
Manifest Anxiety and School Behavior Adjustment Among Fifth and
Sixth Grade Children in a Public School Setting," Ph.D., New York
University, 1961. Vol. XXIV, No. 11, 4541. (Order No. 62-1465,
Microfilm $2.75; Xerography $7.20, 151 pages.)

Effects of reading improvement instruction and group counseling
on the level of manifest anxiety and on school behavior adjustment
were studied on 44 fifth and sixth grade pupils below grade place-
ment in reading achievement. Two groups were formed, Group I re-
ceiving 40 sessions of reading instruction, and Group II receiving
27 sessions of reading instruction plus group counseling. All
sessions lasted 50 minutes. Changes from pre-test to post-test
were evaluated by Iowa Silent Reading Test, for reading achievement;
Children's Form of the Manifest Anxiety Scale, for measuring level of anxiety; and the Winnetka Scale for Rating School Behavior and Attitudes, for measuring personal-behavioral adjustment. Both groups made significant gains from pre-test to post-test. Differences between the two groups on the final test were not significant, nor was the difference significant between the anxiety level of the two groups at the end of the experiment. Increased reading achievement showed a significant reduction in anxiety from pre-test to post-test in both groups. Group II showed greater improvement in behavioral adjustment and a tendency to excel in subtests measuring the more difficult reading tasks.

128. Graubard, Paul Stuart. "Psycholinguistic Correlates of Reading Disability in Disturbed Children." Ed.D., Yeshiva University, 1965. Vol. XXVI, No. 6, 3172-3173. (Order No. 65-11, 975, Microfilm $3.00; Xerography $5.60, 113 pages.)

Twenty-three children who had been institutionalized for antisocial conduct were studied to identify certain psycholinguistic correlates of reading disability. The reading achievement for each subject was at least one year below expectancy. Subjects ranged in age from six to eight years and from ten to eleven years and were normal in intelligence as measured by the WISC. All subjects were disturbed, but overtly psychotic subjects were excluded as were those with sensory or medical evidence of organicity. Each child spoke English as his primary language. The Illinois Test of Psycholinguistic Ability, WISC Mazes, Monroe Sound Blending, and Harris' Lateral Dominance were administered. The subjects were equal to normals in the decoding process, the encoding process, auditory-vocal association, auditory vocal sequential, and sound blending. They were poorer than normals in visual motor association, auditory vocal automatic, visual motor sequential, WISC mazes, and right-left discrimination. The results suggest that this sample had more difficulty with visual motor tasks than with auditory vocal, and more difficulty at the automatic sequential level than at the representational level. The implication is that this special population has special attributes and defects and needs special teaching designed to remediate these areas of weakness.


The author reports an investigation of the effect on concurrent validity of modifying the standard cloze procedure and an attempt to demonstrate two components of reading comprehension as measured by the cloze technique. The standard cloze procedure used was the automatic deletion of every twelfth word with no word class restric-
tions. The subjects were 128 students enrolled in the graduate and undergraduate schools at the University of Michigan. From the findings, the author concluded that the modified cloze procedure does not improve the effectiveness of the standard cloze procedure as a measure of adult reading comprehension and the two vocabulary tests (power and context) do not by themselves account for the variance of the cloze measure of reading comprehension.


The purpose of the study was to determine the learning evidenced by kindergarten children of different levels of mental maturity when introduced to beginning reading by a method which utilized a modified form of the Fries' linguistic approach in combination with certain of the Dr. Seuss' beginner books which were later reproduced on filmstrips. The essential questions were: What were the observed behaviors of five-year-old children when introduced to a modified linguistic design for teaching beginning reading? What were the differences between these observed behaviors and the variables of sex, age, and mental maturity? Was there any apparent relationship between the child's behavior in the reading situation and his previous experience in reading obtained from parent and teacher interviews? The 21 five-year-old children were in a kindergarten class in Bloomington, Indiana. The amount of letter recognition which the children possessed at the initial interview determined the two groups. These children were taught daily in sessions of 15 to 20 minutes during the month of April. Data were obtained from interviews with parents, the Peabody Picture Vocabulary Test, an initial and a final interview with each child, a series of lessons utilizing the modified linguistic approach according to a prepared plan and recorded on tape, and a detailed description of each child's behavior and responses during class sessions. The effect of a modified linguistic design for teaching beginning reading was generally favorable as measured by attitude, insight, and growth in ability to attack the reading process. In general, age, sex, and mental maturity seemed not to have a significant effect. However, the grouping of the children according to letter recognition provided a marked difference, especially in growth in attacking the reading process. It was concluded that the linguistic scheme for beginning reading can be combined with the rhyming style found in the Dr. Seuss' beginner books presented on filmstrip. Additional conclusions are included.

74
The influence of scholastic aptitude, reading ability, and sex on college achievement was investigated by analyzing scores of 482 college freshmen, part of whom were enrolled in a college reading program. By use of analysis of variance subjects were compared on achievement in English, sociology, religion, history, biology, mathematics, and chemistry. The author concluded that in courses which require extensive reading of materials similar to that included in the reading test, reading level appears to be important to academic success. Reading classes appear to be more beneficial for men than women, for poor readers than for good readers, and of particular benefit for students with high intellectual capacity and low reading ability.

The degree to which fourth grade students from North Carolina acquired 11 word recognition skills which are developed in a basal reading series program was explored. The random sample of 1,711 fourth grade students was divided into above average, average, and below average groups on the basis of scores obtained from the California Reading Test. The Doren Diagnostic Reading Test of Word Recognition Skills was administered and the scores for the three groups were compared. Better scores on all of the 11 word recognition skill tests were made by the above average group than by the other two groups. The lowest scores on all of the tests were made by the below average group. It was also found that a random sample of students did equally as well as the norms on the Doren test.


The California Test of Mental Maturity, SRA Reading Test, and an author constructed Comprehension X test were used in evaluating the effects on reading achievement in teaching fifth-grade pupils the nature and use of selected context aids. Analysis of covariance, "t" tests, and Chi square were used to evaluate the effect of teaching contrast, explanatory words and phrases, and two inferential aids for three thirty-five minute periods per week for four weeks. Intellectual and reading ability were controlled for experimental and control groups. No significant differences were found for the major null hypotheses between the experimental and two control groups on reading comprehension, vocabulary in context, average reading, and context comprehension scores. Though no significant differences were found there is a suggestion that in the area of vocabulary in context achievement the teaching of context aids would be most productive. Analysis of scores of children who were similar in intelligence and background of experience showed that those who received instruction in context aids made greater gains in comprehension than children who had not received instruction.

Six hundred and three kindergarten age children, matched on intelligence and chronological age, from comparable communities, one offering kindergarten and the other not, were compared on arithmetic and reading achievement from Grades One through Six. The author concluded that kindergarten experience had no significant effect upon reading achievement in any grade while it did have a significant effect on arithmetic achievement in Grades Two and Five.


The effects of selected aspects of the organizational climates of 13 schools upon pupil achievement in reading, arithmetic, and language as measured by the California Achievement Test were studied. The organizational climate was defined through the use of the Organizational Climate Descriptor Questionnaire. Factors identified were disengagement, hindrance, esprit, intimacy, aloofness, production emphasis, and consideration. The magnitudes of correlation coefficients calculated to assess the relationship between reading achievement and organizational climate and between arithmetic achievement and organizational climate were not significant. Language achievement was correlated with hindrance, .604; with esprit, -.580; with aloofness, -.580; and with production emphasis, -.712.


This study was conducted to gather information which could be used to prepare a handbook to guide principals in organizing high school reading programs in consolidated high schools for Negroes in Mississippi. A related problem was to ascertain the reading status of high school pupils in such schools. The test population consisted of a stratified random sample of high schools for negroes enrolling a little better than ten per cent of the total 1958-1959 school population. Reading and intelligence tests were administered to 6,958 students in Grades Nine through Twelve. A questionnaire was sent to 137 principals to elicit the needs for guidance in organizing and administering high school reading programs. Extensive study of the literature containing descriptions of seventy-two high school reading programs, supported by interviews of representatives of some of the schools, yielded information relative to organization and administration procedures. Books, articles, and reading conference reports were studied to
determine expert opinion relative to the topic. On the basis of the information collected, a handbook for principals was developed. The author concluded that the average negro student was retarded four grade levels in reading and that definite steps should be taken to improve the situation. Principals, in an eighty-three per cent return of questionnaires, were concerned about such retardation, and all expressed a need for guidance in improving the situation. The handbook was submitted to forty principals for evaluation.

Hend, Mary Gertrude. "Teacher Characteristics Associated with Changed Attitude and Performance in the Teaching of Reading," Ed.D., The Pennsylvania State University, 1964. Vol. XXV, No. 8, 4575. (Order No. 64-13,401, Microfilm $2.75; Xerography $5.00, 97 pages.)

The effects of a series of television programs concerning reading instruction on teachers' attitudes and classroom behaviors were studied. A group of 43 teachers were divided into four groups: two representing the greatest change, and two groups representing the least change on the "observation scale" and "attitude scale." Statistical techniques used in this study included the t-test and correlation coefficients. The author concluded that certain personality factors such as social presence, tolerance, achievement via independence, and intellectual efficiency were associated with change in classroom behaviors of teachers. Interpersonal relationship with pupils and value felt to have been derived from viewing the TV programs were additional factors associated with change. Favorable reception of the individualized reading approach, a tendency toward more progressive beliefs, and achievement via conformity were factors associated with change in teachers' attitudes. Three variables relating to college training in years, academic objectives, and professional objectives characterized the least change group.

Hansen, Duncan Newell. "Paired-Associate Learning With Pre-School and Elementary School Children," Ph.D., Stanford University, 1964. XXV, No. 3, 1743. (Order No. 64-9826, Microfilm $2.75; Xerography $8.20, 179 pages.)

In two separate experiments, paired-associate learning of pre-school and elementary school children was investigated. In Experiment I, 40 three-, four-, and five-year-old non-reading subjects learned three paired-associate lists composed of four number (stimuli)-letter (responses) pairs on five consecutive days. On Days II through V, the subjects received familiarization training on half the letters of each list prior to paired-associate learning. The author concluded that neither age nor frequency of letters in print were significant factors. However, the familiarization training significantly decreased the mean errors on the S-R pairs having such familiarized letters. Little or no evidence
could be found for stimulus or response differentiation processes during learning. All-or-none learning models provided superior fits to the sequential data in comparison to incremental models. In Experiment II, 120 sixth-grade subjects were tested with paired-associates lists of 12 number-letter pairs. Eight groups of 15 subjects each were randomly formed by the nested factorial design of two lists of letters times two positions of letters in the S-R pairs times the availability or absence of the set of responses. Some of the concluding statements made by the author are the following: There were significantly different error rates on both numbers and letters in all experimental conditions. There were no differences in error rates between the two lists of letters, but there was a significant second order interaction between availability of responses and letters. In addition, there was a significant third order interaction between S-R position, availability of responses, and letters. Unlike results reported for college age subjects, there was no positive relationship between the frequencies of letters in printed material and the speed of learning. Thus, frequency theory sustained no corroboration from Experiment II. The two element learning model rendered the best fit to the overall trial to trial data in Experiment II.


The effects of the direct teaching of the principles governing the use of variant word endings upon the reading capabilities of first grade children was investigated. Information concerning the relationship of mental ability level, reading ability level, socio-economic status, and sex to the children's ability to utilize variant word endings as aids to word recognition was collected. One first grade class from each of 13 St. Paul, Minnesota, public schools was assigned to an experimental group and one to a control group. The 554 subjects had been randomly assigned to their classes the previous fall; no significant differences were found between the groups. The experimental group received 18 periods of special instruction concerning variant word endings and the application of them to contextual material over a period of four weeks. The control group used the same periods of time for independent reading. The Bond-Balow-Hoyt Developmental Reading Test and a Variant Ending Test were used for evaluation. Children in the experimental group profited significantly from special instruction in the principles of using variant word endings. Children at all three mental ability levels and at all five reading ability levels also profited significantly from instruction in variant word endings. However, no significant difference in reading progress after special instruction was noted between the groups.
Changes in the reading abilities, attitudes, and behavior of 29 reading clinic clients were studied following their evaluations in a Child Study Clinic. In addition, an attempt was made to determine the extent of utilization of the case studies by teachers and parents. Methods of research included the administration of the appropriate levels of standardized reading tests, the interviewing of 58 school persons who had worked closely with the clients, and a comparison of final test scores and information obtained from school persons with initial test scores and information obtained during the initial evaluations. From the findings, the author concluded that: (1) A majority of the clients made gains in measured aspects of reading achievement; however, only a minority were achieving up to reading expectancy. (2) Improvement in reading, similar to that measured by the reading tests, was observed by school personnel. Also, improvement in reading areas other than measured by tests was observed by these persons. (3) The majority of clients improved in aspects of behavior. (4) The number of teachers having access to case studies left much to be desired. The major deterrents in the use of case studies were lack of time and lack of trained personnel. Teachers were satisfied with the inclusiveness and organization of the reports. (5) School persons consistently shared the case studies with parents in attempts to coordinate efforts to correct reading problems.

In this study the hypothesis was explored that college reading improvement programs might yield results which reflect the nature of the measurements used as well as the effects of the programs themselves. Four hundred three college students in ten groups of one-semester reading improvement courses, and 123 control students were used. Pre- and post-testing was done with the Iowa Silent Reading Tests. One form of the test was administered in the standard way wherein the amount comprehended is a function of the amount read. Another form was adjusted in administration to evaluate rate of reading and percentage comprehended. The comparisons were made on the assumption that, unlike most reading tests which measure comprehension as the total amount of material gathered in a fixed time, college reading tests should
reflect a thoroughness of understanding and emphasize percentage of comprehension rather than total comprehension. With the standardized administration of the test students made gains in rate and total comprehension beyond the one per cent level of confidence. With the modified test losses in percentage of comprehension were found well beyond the one per cent level of confidence. A negative correlation was found for changes in rate and changes in percentage of comprehension and for total comprehension changes and changes in percentage of comprehension. The author concludes that the hypothesis is tenable and that gains in college programs are not indicative of the kind of comprehension necessary in college environments.


The effect of double-session attendance and regular session attendance on measured educational achievement was studied. A total population of 2,232 students from Grades One, Two, and Three were included in the study. The measuring instruments used were the Otis Quick-Scoring Mental Ability Tests, Gates Primary Reading Test, and the Iowa Tests of Basic Skills. A three-factor (A X B X C) analysis of variance with treatment by levels was the statistical design used. Session attendance, intelligence level, and sex were sources of variation. On the basis of the findings, the author concluded: (1) Morning and/or afternoon double-session attendance during the primary grades was not a detriment to pupil progress. (2) Achievement differences at the end of the third grade in skills other than reading and arithmetic, while slight, favored regular-session attendance. (3) Pupils appear to make the same progress regardless of whether they exclusively attended morning classes or afternoon classes. (4) Session attendance did not appear to unduly influence achievement of above average, average, or below average pupils. (5) Session attendance did not appear to unduly influence achievement of either sex. (6) Girls maintained a consistent and significant superiority over boys in measured achievement, save in arithmetic, where their achievement was equal to that of boys.

The effectiveness of basic readers and published high-interest, low-vocabulary materials in improving the reading achievement and attitude toward reading of retarded readers in intermediate grades was investigated. Ancillary problems included the relationship of personality problems to improvement in reading and attitude toward reading, and the attitude toward reading as a Boy-Girl Activity. Forty intermediate pupils, retarded nine months to a year on mental age-reading age comparisons, comprised the population and were randomly assigned to the two groups. Pre-tests on eleven variables revealed no significant difference between the two groups. The twenty pupils in each group were sub-divided into four groups on the basis of an informal reading inventory. All groups were taught by the investigator for fifty-seven sessions. The California Silent Reading Test, Gilmore Oral Reading Test, Sentence-Completion Attitude Scale scored by the three judges, California Personality Test, and a revision of the Mazurkiewicz Attitude-Activity Inventory were the measuring instruments used. The author concluded that basic readers are equally effective as high-interest, low vocabulary materials when used in the treatment of retarded readers. Retarded readers, when given special instruction in reading by use of either approach, show positive change in attitude towards reading.


Second-grade children who were reading below grade level were instructed with a programmed linguistic method and their reading test scores were compared with those of a matched group instructed with a developmental method and with those of a control group instructed with a basal reader-phonemic method. Sixteen pupils from an Athens, Georgia, elementary school were divided into two matched groups to form the experimental classes. These pupils were matched on chronological age, mental age, IQ, and reading level. A third matched group was used as a control. The control group was taught a basal reader-phonemic method by the regular classroom teacher. One experimental group used the programmed linguistic method and the other experimental group used a developmental method. The experimenter taught both experimental groups. The period of instruction was 60 one-hour daily reading sessions. The following tests were used for evaluation: the California Reading Test, the Gates Primary Reading Test, and the Gray Oral Reading Paragraphs Test. The findings revealed that there were no significant differences between groups on the Gates Reading Tests, and that gains were significantly in favor of the experimental groups on the reading vocabulary and total reading scores of the California Reading Test and the Gray Oral Paragraphs. Findings concerning language, mental age, and chronological age are also reported.

The purpose of this study was to construct a valid and reliable test of auditory integration sensitive enough to detect the possible existence of sub-clinical, organic brain malfunction in children with reading disability to aid in differentiating children with a basic organic etiology from those with a more non-organic causality. An adaptation of the test developed by Metzker was used to explore the existence of brain malfunctioning of children with reading disability who were otherwise free from obvious symptoms of brain pathology. The test of auditory integration consisted of presenting spoken words at a comfortable loudness level via earphones so that one ear received only certain low-frequency acoustic elements and the other ear received only certain high frequency elements. In order to correctly perceive the word, the subject had to use his central auditory mechanism to integrate the different acoustic elements. The subject's score consisted of the per cent of correct responses for a normal control auditory condition minus the per cent correct for the condition of auditory integration. A list of fifty high-familiarity monosyllabic words was used. Ninety-six, eight to eleven-year-olds divided into two equal groups, matched on age, sex and intelligence, and designated retarded and non-retarded students on the basis of their RA/NA, were administered the tests. Tests used included the Stanford Binet, Gates Advanced Primary, and Reading Survey. The author concluded that although it is possible that subclinical, organic brain pathology exists in a significant number of reading cases, it does not significantly affect auditory integration.


The instructional reading practices of cooperating teachers in 14 State College campus schools in Pennsylvania were studied. The investigator recorded classroom observations; and, interview questionnaires for cooperating teachers were completed. Attitude questionnaires and checklist reports on reading instructional practices were completed by cooperating teachers. Teachers' attitudes were compared with observed and reported practices. Teacher checklists and observed recordings were examined to determine instructional reading practices. The interview questionnaires were examined for possible changes in materials used for reading.
instruction, for classroom organization during reading instruction, and for procedures used in teaching children to read. It was concluded that Basal-Series textbooks and their accompanying manuals were used by the cooperating teachers in campus schools for reading instruction; that actual practices of instruction differed from expressed feelings; that cooperating teachers meet instructional reading needs through ability grouping; and, that procedures of reading instruction of cooperating teachers tended to follow the more traditional program. The following recommendations were made: public school instructional reading practices should be compared with campus teachers' reading practices; the reading practices of public school teachers should be compared with the recent writings of recognized authorities; and, planned periodic classroom observations and participation during the early years of college training should be made. It was also recommended that the effects of college reading courses, in-service programs, materials of instruction, and instruction on varying geographic, urban-rural, and population areas should be studied.


An auditory program based on principles of programmed learning and auditory communication was developed for classroom use. The following three treatments were arranged: (1) presenting the program recorded on an audio tape one frame at a time to the entire group, (2) providing each child with his tape recorder and headphones and allowing him to work independently, and (3) providing the students with a self-paced visual program from which the auditory program was developed. The visual program was Figures of Speech published by Coronet Instructional Films. The reading gains were analyzed according to high, average, or low reading abilities. It was concluded that students of high reading ability performed more efficiently on the visual program than with the program in the self-paced situation, that students of average reading ability performed equally efficiently with either the visual or auditory program in the self-paced situation, and that low reading ability students performed most efficiently with the auditory program in either the group-paced or self-paced situation.

148. Henney, Robert Lee. "Reading Instruction by a Phonic Method for Functionally Illiterate Adults at the Indiana Reformatory," Ph.D., Indiana University, 1964. Vol. XXV, No. 5, 2812-2813. (Order No. 64-12,360, Microfilm $2.75; Xerography $9.00, 197 pages.)

The effect of group and individual reading instruction utilizing a phonic method with a group of functional adult illiterates in a
Each subject was given a pre-test and post-test to determine gains in reading performance. The test used to determine reading level was the Standardized Oral Reading Paragraphs by William S. Gray. The Gates-McKillop Diagnostic Reading Tests were used to test areas of reading difficulty. The author concluded that age, I.Q., and beginning reading level do not affect the progress and rate of improvement of a functionally illiterate adult in reading performance. He concluded also that the Family Phonics System is an effective educational tool which can be used to improve the reading ability of functionally illiterate adults. Finally, it was reported that the Family Phonics System was as effective when used in teaching in a group situation as when used in teaching in an individual situation.


Different methods of diagnosing oral reading errors of disabled readers were compared using the Monroe Diagnostic Reading Examination and the Durrell Analysis of Reading Difficulty. New norms for error types on the two tests were developed to test the hypotheses that (1) both the Monroe and Durrell diagnostic methods, reading grades, and age-grade norms would yield the same diagnostic information; and (2) that oral reading error norms would remain constant regardless of differences in educational experiences, basal readers, or unique school experiences. (Reading grades and age-grade norms were similar at the mean, but age-grade norms had larger standard deviations. Mean gross error counts on the two tests were not the same, but disability cases were diagnosed similarly by gross error diagnosis from the tests.) Intercoefficients of the same error types on the different tests were high enough to suggest error type similarities, but low enough to suggest considerable error possibly due to inadequate sampling of specific error types. Basal reader groups had similar error patterns and school group differences in errors were accounted for by I.Q. and reading achievement differences in different schools. Results tentatively suggest a remedial teacher could use either of the diagnostic methods in determining oral reading errors with a reasonable amount of confidence.


Factors that influence reading readiness of children in kindergarten were identified. Kindergarten children who scored high
or low on the Lee-Clark Reading Readiness Test were administered the California Short-Form Test of Mental Maturity, Level O. The children from the high or low groups were matched by pairs on the bases of sex, chronological age, and intelligence quotient. Information from parents of the matched pupils was obtained by questionnaire. The following findings were significant: more parents in the low group wanted their children to read at an early age; parents who received newspapers regularly and/or daily were more likely to have children who scored high in reading readiness; children who could recognize and or write their names were more likely to be ready for reading than children who could not; the number of children who listened to records was significantly in favor of the high group; the high group had the ability to read some words; and, the low group had more emotional problems than the high group. Additional findings are reported.


Tests of intellectual ability and reading and listening skills were administered to sixty-four freshman students enrolled in a college reading improvement program to determine the relationship existing between reading and listening skills of a group of students who received training in reading and a group who received training in listening. The results indicated that training in listening improves listening comprehension and training in reading improves reading comprehension. Improvement in listening and reading continues after the term of instruction. The ACE Psychological Examination, the Coop English Test C2 and Form PM sub-test scores and total scores are usable instruments in predicting differences in ability and aptitude of students to benefit from listening and reading comprehension training. Both verbal and non-verbal intelligence were found to be factors in improving listening and reading skill. Speed of reading and poetry-reading were developed more effectively by special training in reading as compared to special training in listening. Students can develop in one semester reading comprehension, technical vocabulary, general vocabulary and over-all reading skill while their rate of reading increases more slowly. They fail to develop quick reference skills and accuracy in sentence meaning without special training.

Eye dominance tests and a handedness test were administered to 400 subjects in kindergarten and again in Grade Two, and a 50-item reversal test was administered in Grades One and Two in order to determine the relationship between eye-head dominance and reading achievement. Eye-dominance tests given in both kindergarten and Grade Two were the V-scope and the hole-in-paper tests. A modified tapping test was given in Kindergarten and a connecting dot test in Grade Two for handedness. Reading achievement was based on scores from the California Short Form Test of Mental Maturity, 1957-S Form, Primary Level, in Grade Two, and from the reading section of the California Achievement Test, Form W, Upper Primary Level in Grade Three. Subjects were classified in five groups on the basis of the dominance test results in Grade Two: right-handed, right-eyed; left-handed, left-eyed; right-handed, left-eyed; left-handed, right-eyed; and mixed dominance. The total group was divided into those reading at or above grade level, and those reading below grade level. In comparing the unilaterally right dominant group with groups of left, crossed, or mixed eye-hand dominance, no significant difference was found between the groups in mean reading achievement, mean reading differential, mean intelligence, or mean reversal test score. Nor was there a significant difference in the percentage of mixed, crossed, or unilaterally dominant children in a group of below average readers compared with those scoring average or above in reading. Positive correlations were found between reading achievement and reversal scores and between reading differential and reverse scores. There was a tendency toward greater unilaterality in eye-hand dominance in second graders as compared with kindergarteners.


An analysis of the phonological structure of the English-American orthography was completed to determine if the phonological factors underlying the orthography tend to restrict the selection of graphemic options (letter representations) for phonemes (distinctive speech sounds) in syllabic environment, and if so, to what extent do phoneme-grapheme relationships approximate a one-to-one correspondence when analyzed in terms of these phonological factors. In addition to 15,284 words selected from the Thorndike-Lorge Teacher's Word Book of 30,000 Words, Part I, the author selected 2,026 words from the Merriam-Webster's New Col- legate Dictionary. A computer program was prepared by which the graphemic options comprising the standard spellings of the selected word list were matched to the phonemes forming the pronunciation spellings of these words in each of three categories of the phonological structure underlying the orthography: the number of different spellings of phonemes in the 17,310 word corpus; the number
of different spellings of phonemes as they occur in initial, medial, and final positions in syllables of these words; and the number of different spellings of phonemes as they occur in each of these positions in primary accented, secondary accented, and unaccented syllables in the selected word list. A majority of the phonemes were found to have single graphemic representations which are used 80 percent or more of the time throughout the selected word list, irrespective of phonological factors of position in syllables and syllabic stress. The author then concludes that this study offers statistical evidence to support the assumption that the American-English orthography is substantially a surrogate of spoken language, to the extent that increasing restrictions are placed upon phoneme-grapheme correspondences when analyzed in terms of phonological structure underlying the orthography.


The effect of corrective reading instruction at the fourth-grade level on subsequent school success was investigated. Three groups of students were identified as E1 (experimental group of students who needed and received corrective instruction at the fourth-grade level), E2 (experimental group of students who needed corrective instruction but did not receive it), and the control group (a group of students who were identified as not needing corrective reading instruction). Data for subsequent success consisted of the results from the Metropolitan Achievement Test Series in Grades Five, Six, and Seven. The analyses of variance and covariance were the statistical techniques used. The author concludes that the findings of this study indicate that corrective instruction is beneficial for students with reading disabilities in that it enables them to succeed in the regular instructional program.


Two methods of teaching word parts were compared. The independent discovery method was tested by lessons using the classification technique. The materials gave practice in solving the meaning of word parts by classifying words using these elements into meaningful, designated categories. Practice on over 2,300 words was given. The usage method was tested by lessons similar to those appearing in word study books at the high school level. A glossary of word parts was provided, giving the meaning of all word parts used in the ninety exercises of this method. The word
parts and vocabulary presented were the same as in the independent discovery method. The exercise material was self-correcting and replaced any formal method of vocabulary study. The study was conducted for a period of ten weeks with students using the material ten minutes per day at the beginning of English classes. Fifteen English classes in Grades Ten, Eleven, and Twelve were exposed to the treatments. A control group of eight classes followed the required procedure for teaching vocabulary. Five hundred and eleven students participated in the study. The three groups were equated on the basis of intelligence, knowledge of word parts, vocabulary, speed and comprehension, total reading achievement, spelling, and visual memory of words flashed. Tests used included Otis Gamma Intelligence Test, Cooperative Reading Test, Morrison McCall Spelling Scale, Beckwith-Hedrick Visual Memory Test, and the author's Applied Word Parts Test. The author concluded that the study of word parts is an efficient means of teaching vocabulary to high school students. The independent discovery method is superior to the usage method in teaching word meaning in all areas of achievement measured by the study. The independent discovery method seemed particularly useful in teaching boys and students of lower ability. Students using the independent study method registered the greatest gains in vocabulary with a marked transfer to other related areas such as general reading achievement and spelling.


The effects of a supplementary reader written for children from lower socio-economic circumstances on reading achievement, attitude toward reading, and self perception were studied. Sixteen third-grade classes in a low income urban parish in southern Louisiana were involved in this study. Half the classes were experimental and half were control. They were carefully equated on the basis of reading achievement, intelligence, and school environment. The experimental variable in this study was the Button Family Adventures. From an analysis of the findings, the author concluded that: (1) The experimental materials, when used for the length of time that they were, seem to make no significant difference in reading achievement for children from either high or low socio-economic circumstances. (2) The same conclusion was reached in the area of self perception. (3) The experimental variable did improve attitude toward reading of children from homes of lower socio-economic circumstances to a highly significant degree. (4) The value systems and identifications in these readers are positive for children from lower socio-economic circumstances.
The effect of two listening programs on the listening comprehension and reading achievement of three groups of eighth-grade pupils was studied. The materials used were commercial programs published by the Educational Developmental Laboratories and Science Research Associations. One taped lesson was given each week for a period of 10 weeks to two experimental groups. A third group which received no instruction was used as a control group. Each pupil was given the Stanford Achievement Test; Advance Reading Tests, Form J.K. and K.M.; the Otis Quick-Scoring Mental Ability, Beta Test Form E.M.; and Sequential Tests of Educational Program, Listening Test Form 3A. The results of chi-tests were analyzed statistically by the analysis of covariance. The level of confidence was the five percent level. No significant differences were found in either reading achievement or listening comprehension. This study does not indicate that these two listening programs did affect either reading achievement or listening comprehension.

Children's understanding of various meanings of selected high frequency, monosyllabic, multiple meaning words which appear in scientific word lists were measured. The study investigated whether there was a relationship between the children's scores on the Multiple Meaning Word Test (MMWT) and the following: intelligence, silent reading achievement, and reading vocabulary; and whether change in the parts of speech of these high-frequency words affected children's understanding. The boys' and girls' scores on the MMWT were also compared. A test was constructed of words which appeared in scientific word lists and were all considered easy or familiar words. The MMWT used 40 different monosyllables in four different contexts each, and it offered four choices for each item. The population was 526 pupils in grades four, five, and six. The major conclusions follow: a developmental pattern was exhibited by the upper elementary students; the ease or difficulty of the words was not solely dependent on frequency with which the words appear in reading context, but was significantly affected by which meaning of the words the reader knows; the difficulty of certain words classified as easy or familiar might be extremely difficult for certain readers depending on the particular context; and the individual who knew several different meanings of words was almost certain to know many
different words. Very high positive correlations were found between the MMWT and IQ and the reading sub-test scores. No difference was found between the MMWT and boy-girl differences or the speech sub-problem. Additional findings are reported.

159. Howe, John Wesley. "The Visual Fusion Threshold (VFT) Test as a Measure of Perceptual Efficiency in Kindergarten and First Grade, and as a Possible Predictor of Later Reading Retardation," Ph.D., University of Southern California, 1963. Chairman: Professor Meyers, XXIV, No. 2, 626. (Order No. 63-5054, Microfilm $2.75; Xerography $9.70, 211 pages.)

Application of the Visual Fusion Threshold Test (VFT) to kindergarten and first grade children was investigated to determine its validity and predictability on concurrent or subsequent reading difficulty in children younger than eight years of age. VFT equipment was constructed by the investigator. It consisted of an eye-piece, test-patch, and viewing tube fitted to a commercial stroboscope. Children were tested on the VFT at the end of kindergarten. After four months, subjects were re-tested by the Lee-Clark reading readiness test; and after 12 months, by the Harsh-Seberg SPRD reading test, the SRA Primary Mental Abilities intelligence test, and the VFT. After 30 months (beginning third grade), subjects were given the California Achievement Test as a measure of reading ability. It was found the VFT can be used validly with children as young as 5½ years. Reliability for a one-year interval retest will be low. Portable testing equipment, with special adaptation, will permit individual use of the test in a classroom. The VFT is related positively but modestly to the visual perceptual aspects of readiness and early reading tasks, supporting the etiological theory that stresses organismic conditions as one of the causes of reading difficulty. VFT is minimally, even negatively, related to the complex intellectual aspects of reading.


The interrelationships of intersensory integration, visual sequential memory, spatial ability, and reading ability in second and third graders were investigated. The following hypotheses were tested: integration defects will distinguish adequate readers from inadequate readers, and defects in immediate memory or spatial-closure necessitate a defect in integrative ability. The subjects were 27 matched pairs of boys and 13 matched pairs of girls selected from two Illinois school systems. One member from each pair was an inadequate reader and one was an adequate reader. The following extensive battery of individually administered tests were used: Visual-Motor Sequential, Knox Cubes,
Visual Attention Span for Letters (short term memory), PMA Spatial Relations, Frostig Figure Group, Spatial Relations (spatial ability), and Astereognosis, Birch and Lefford Tests of Intersensory Coordination (intersensory coordination). A second-order Principal Axis Factor Analysis with a Varimax rotation produced five relatively distinct factors: Intersensory Integration (Unlike Forms), Spatial Ability, Intersensory Integration (Like Forms), Visual Sequencing Memory, and Reading. Significant differences were shown for all groups between the reading groups on the Reading Factor. Additional findings are included.


The effects on achievement and attitude of intermediate grade children toward reading when taught by a traditional textbook and when taught individually were investigated. The subjects were a randomized sample of 12 classes from the Midwest and South, 264 children from grades four, five, and six. The control groups were given instruction in reading using the method suggested by the basal textbook. The experimental groups were taught using an individualized approach which included teacher conferences with pupils, individual selection of books, use of individual pupil records, and attempted reading skills development in small groups. The California Reading Test, and Attitude Toward Reading Test, and an Attitude Toward Individualized Reading Test were used to compare the two groups. Reading achievement scores were not significantly different when the groups were compared, and gains in reading were made under both treatments by individual pupils. However, no pupil showed a loss in reading achievement under either approach. When paired groups were compared, a more favorable attitude toward reading was found among children taught individually than those taught in groups. Conclusions are included.


Principals of Wisconsin secondary schools were contacted to determine if recommendations found in the literature regarding reading instruction were being implemented. English teachers were asked to identify instructional practices in reading, personal preparation to teach reading and recommendations for continued, improved instruction. The nature of teacher preparation programs in secondary school reading in Wisconsin colleges and universities was sought from English methods instructors. Principals, English
teachers, and college methods instructors all agreed that reading is an instructional problem in Wisconsin secondary schools. The responsibility of the English staff for reading instruction has been recognized while total school responsibility has been ignored. College methods instructors suggested that there is a need for secondary school reading instruction but few colleges require courses in the area of reading techniques. The majority of English teachers reported having no course work in the teaching of reading. Few had graduate work in reading techniques and English teachers as a whole judged undergraduate work to be inadequate in this area. The principals indicated the importance of adequate teacher preparation in reading techniques with the need for additional class time, space and materials coming secondary. Almost half the principals expressed the concept of reading instruction as an all-school task. The majority of the schools reported no plan for reading instruction, and much of the reading instruction taking place was being done in special classes. Well-developed programs occur almost exclusively in large school systems.


The effect of a planned program in word analysis on reading achievement, spelling achievement, the knowledge of phonics, and ability to pronounce unfamiliar words was studied. A second-grade population was divided into two groups and equated on the following variables: intelligence, reading achievement, spelling achievement, and knowledge of phonics. At the completion of the program and again two months later, tests were administered and the data were analyzed to determine the effect of the program. Test instruments used included the Metropolitan Reading Achievement Test, Metropolitan Spelling Achievement Test, Gates Word Pronunciation Test, and a phonics test. In the findings, the author states that: (1) Reading and spelling achievement were increased. In reading, there was a statistically significant increase in favor of the experimental group. Although the increase in spelling achievement was not statistically significant, it did favor the experimental group. (2) There was an increase in the transfer of phonetic knowledge to the pronunciation of unknown words as well as an increase in specific phonetic knowledge. The increase was statistically significant and, in both instances, favored the experimental group. (3) The program was equally effective for children of different intelligence levels. (4) The program was equally effective for boys and girls.

Attitudes of parents and teachers toward pre-school reading instruction initiated by parents were assessed through use of a questionnaire in a middle to upper middle class area of Glenview, Illinois. It was found that 105 parents of pre-school age children had had some exposure to the Chicago Tribune's "Short Cut to Reading" series. The teacher population was composed of 60 teachers associated with four elementary schools. A six-item Attitude Scale was developed and submitted to both groups. Significant differences were found on four of the six statements. Differences on these four statements were a matter of degree rather than of direction. Although no significant difference was noted on a statement referring to the school providing for children who have been taught to read at home, a majority of the teachers disagreed and a majority of the parents agreed with the statement.

The degree of principal participation in reading was compared to that found in the literature, to that recommended by a nationally selected jury of educators and to that perceived by a systematic sample of teachers. A questionnaire was utilized based on sixty specific reading program functions found in the literature grouped under five categories: philosophical, supervisory, instructional, library, and administrative aspects. The questionnaire was first validated by a pre-test group from a neighboring state. A jury of nineteen educators was selected to assess their agreement with the literature recommendations concerning the reading functions of principals. A questionnaire was also sent to a sample of teachers. The academic preparation of principals to participate in the reading program was ascertained from state files. No differences were found in administration and philosophy while significant differences were obtained on supervision, instruction, and the library when comparing the questionnaire responses with the recommendations found in the literature. No differences were found in the area of supervision while all other areas were found to be significantly different when comparing the questionnaire responses with the jury. The hypothesis stating that a substantial difference would be found between principals' participation and their teaching staffs' perception of their participation was not substantiated. Extent of participation was also unrelated to academic participation.


This study attempted to determine the relative reading difficulty of chemistry and physics textbooks, ascertain whether difficulty was operative in textbook selection, and develop regression equations for predicting the reading difficulty of physics or chemistry passages. Materials were selected from sixteen high school physics and chemistry texts, three college chemistry texts, two college physics texts, and a high school physical science text. The physics and chemistry texts were separated into ten content units, and two-hundred word samples were randomly selected from each unit. These were assembled into booklets and assigned to schools according to an incomplete Latin square design in which books were assigned to treatments, units to columns, and students to rows. The relative difficulty
of a passage from a chemistry or physics text was defined as the number of words underlined by chemistry or physics students. The population consisted of students enrolled in classes from a randomly selected group of public high schools. Twelve schools were used for the physics study and ten for the chemistry study. The test-retest procedure for the Underlining Test established a product moment reliability correlation coefficient of .85 for chemistry and .97 for physics. Correlation of the number of passages underlined and scores on a vocabulary test indicated the students with larger vocabularies underlined fewer words. Thus, the Underlining Test was considered to be valid. Analysis of variance revealed a significant difference in reading difficulty between the texts used, the units used, and the school, by unit and student, by school interaction at the five- and the one-percent levels of confidence. Multiple regression equations, two each for chemistry and physics, were determined. Variables used included the average underlining score, average of words per sentence, concentration of simplified mathematical terms, concentration of words not on the first 6,000 of the Thorndike 30,000 word list, concentration of words not on Powers' list of 1,828 common science words, and average number of syllables per word. One equation was developed for physics and chemistry when the book-unit effects were extricated and another developed for physics and chemistry when these factors were not considered. The author concluded that reading difficulty is an important variable for selecting physics and chemistry textbooks. The regression equations developed are applicable for determining the reading difficulty of physics and chemistry texts.


Selected parts of the Goldstein-Scheerer battery of Abstract and Concrete Thinking Tests and the California Reading Test were used to explore the ability of a group of 170 fourth-, fifth-, sixth- and seventh-grade advanced and retarded readers to behave in an abstract fashion. Significant differences were found between advanced and retarded readers on the Color Form Sorting Test. Advanced readers, with few exceptions, were found to be abstract thinkers. Retarded readers may be retarded because of limitations in concrete thinking, but other causes are also operating to produce retardation. Girls in all grades tended to behave more abstractly than boys. The relationship between concept attitudes and reading achievement tends to increase at the higher grades.

The 100 gifted children from Grades Four, Five, and Six used in this study were chosen by using four intelligence tests. Those selected had an I.Q. score of 120 or more on the California Test of Mental Maturity, and no less than 115 on the other intelligence tests. Students were then administered the California Reading Test, the California Personality Test, and the Step Listening Test to determine the contribution to reading comprehension of each of the following variables: vocabulary, language intelligence, non-language intelligence, listening ability, and personality. The criterion was the California Reading Test, Comprehension Section. Case studies also were made of the 10 students having the greatest degree of overachievement in reading of the 100 students. Reading vocabulary and language mental age were found to be the best combination of predictors for success in reading comprehension on the basis of the reduced battery of tests used. The case studies showed the most important single distinguishing factor of the bright achiever from the underachiever to be the vast difference in the amount of reading done. Unrestricted television viewing appeared to affect the level of reading achievement. Neighborhood environment did not make any difference in achievement or underachievement, nor was there any difference in attitude of achiever and underachiever towards parents, teachers, and classmates. Achievers more often had regular study times, their own room to study in, a personal library, homes of high cultural level, and parents who attended college and planned to send their children to college.


The purpose of this study was to explore the possibilities for the enrichment of the Sub A Chimanyika reading program in Southern Rhodesia with hand-printed materials. A statement of standards for instructional materials for the selected reading program served as a basis for the evaluation of current materials, the establishment of needs for supplementary materials, and for the evaluation of materials printed and designed by the author. Standards were based on an historical survey of the educational objectives of mission, government, and African community groups involved in the development of the selected reading program and on a survey of research and expert opinion with regard to content and physical make-up of the instruction material in relation to the establishment of favorable attitude toward reading, the programming of learning experiences, and adaptation to individual differences. After evaluation, the author concluded that material currently used provided a systematic programming of word-analysis.
skills. An analysis of vocabulary control revealed that the material did not provide sufficient drill on new words in meaningful contexts. Picture and story-content analysis indicated that content was consistent with rural Manyika life. An analysis of word-meaning clues revealed an initial emphasis upon picture clues and sight words developing to an increasing emphasis upon verbal context clues and word analysis clues. The typography met the proposed standards. The author designed three types of supplementary materials: a supplementary reader, a reading readiness worksheet, and pages for a picture dictionary.


The organization and methods of instruction in reading and children's achievement and attitudes were investigated. Four school reading programs were analyzed in obtaining the data on organization and methods of instruction. Sources of data included interviews with principals and teachers and observation of classes. Data for children's achievement were taken from their permanent records. The children's attitudes were assessed through the use of an inventory of reading attitude. The statistical techniques used in this study were the t-test and the analysis of variance. From an analysis of the results, the author concluded that: (1) The reading programs in all four schools were very similar regardless of the methods used to organize children for reading instruction. (2) Teachers using "individualized reading" had different concepts of what it meant and how it operated. (3) Children in the lower grades indicated better attitudes toward reading than children in each successively higher grade tested. (4) Girls had better attitudes toward reading than boys. (5) Children in the second grade in each school read further beyond their expected reading levels than children in the fourth and sixth grades.


Abstract not available.


Subtests from the Harrison-Stroud Reading Readiness Profiles and the Lee-Clark Reading Test, the Stanford Binet Intelligence
Test, and the SRA Primary Mental Abilities Test were used to
determine the effectiveness of an experience chart method and a
basal method in teaching beginning reading to classes of educable
mentally retarded children. Significant gains favoring the ex-
perience chart group after seven months of instruction were found
on both reading tests. No significant differences were found
in intelligence gains on the Stanford Binet. On subdividing the
groups into high and low ability levels, the experience-chart
children in the low group gained significantly more than the basal
group. The gains of the more able children in both groups were
not significantly different. The experience-chart children made
greater gains on items which require a greater exercise of ver-
bal and reasoning skills than the basal children. On the PMA
the experience chart group scored significantly higher on the
verbal section and the basal children on the Perceptual section.
High Binet scorers gained significantly greater scores on the
Verbal section than did their peers.

173. Justison, Gertrude G. "Visual Perception of Form and School
Achievement (An Exploratory Study of the Relationship between
Form Perception and School Achievement Among Third Grade Pupils
in the Public Schools of Montgomery County, Maryland)," Ed.D.,
University of Maryland, 1960. XXII, No. 6, 1907-1908. (Order
No. 61-4907, Microfilm $2.75; Xerox $5.80, 118 pages.)

The purpose of this study was to demonstrate a range of in-
dividual differences in reading and related school performance
in order to show the integration of visual perception with the
total performance in the symbolic tasks of the school curricu-
ulum. A stratified random sample of 398 third graders represent-
ing fourteen randomly selected schools in five geographic areas
was used. A copy test was developed to serve as a gross measure
of the maturational and experiential readiness of the child to
perceive form with accuracy and efficiency. The test utilized
six geometric forms from the Bender Visual-Motor Gestalt Test,
the Ellis Visual Motor Test and the divided rectangle from the
Stanford Binet. Five of the test scores were correlated with
achievement scores in reading, arithmetic, mental maturity scores
in language and non-language factors of intelligence, and chron-
ological age by month and grade placement. Positive, significant
correlations were found between copying ability as a measure of
form perception and the separate tasks of achievement in reading
and arithmetic as well as mental maturity. Significant inter-
correlations between items were found and a reliability of .98
on test-retest analysis. Analysis of the ten per cent at the
upper and lower extremes revealed uniformly consistent inter-
relationships well above or below the mean for the entire sample.
Analysis of twenty cases at the mean revealed a much wider range
of performance and much less consistency of performance than that
noted for the extremes. The analysis of fifteen per cent of the
total sample gives some support to the value of the copy test.
as a gross screening device for identifying markedly superior or inferior visual perceptual functions. The author concludes that the findings give limited quantitative evidence of the critical role of visual form perception and its relationship to the reading task.


The relationship between audio-visual integration (A-V I) and reading achievement was investigated. A random sample of 350 boys was chosen from the second through the sixth grades in a suburban public school population. A 10-item method of equivalence developed by Birch and Belmont, with 10 new items to increase reliability and ceiling of the instrument, was used as the basis for measurement. The A-V I task was individually administered to all subjects. The Metropolitan Reading Achievement Battery and the Lorge-Thorndike Intelligence Battery were administered in groups. Chronological age and WISC Digit Span Scale Scores were variables. It was shown that A-V I was related to chronological age with an overall relationship of .51 and to reading achievement with coefficients ranging from .37 to .57. Significant positive relationships were obtained between A-V I and intelligence. The subjects were asked to describe their techniques for dealing with the A-V I test. Rhythmic body movements were observed in 18 percent of the total sample. It was suggested that the development of A-V I is an important correlate in reading achievement, especially in the acquisition of vocabulary.


The origins of the program, a survey of the influences and trends contributing to its development, and a description of its current status were used for an historical account of the remedial reading instructional program in New York City public elementary schools. The first officially organized remedial reading program was begun under the Works Project Administration in 1934, and at the conclusion of that program, the New York City Board of Education established its own remedial reading project in 1944. This program has been expanded to service thousands of children with reading disabilities and to include the reading clinic program, the summer reading program, the reading specialist program of the schools concerned with the rehabilitation of delinquent children, and the secondary school program. A shift in emphasis was indicated over the years from remedial reading as important in the
eradication of delinquency and maladjustment to a belief that remedial reading, when coupled with improvement in classroom teaching of reading, may be the key to raising the over-all quality of education. A reading improvement teacher has now been assigned to help upgrade classroom teaching of reading. Remedial reading teachers are now designated "Corrective Reading Teachers," indicating a positive trend toward reading and books as children are given greater opportunity to follow their own interests and needs in reading. The future of the corrective program may be influenced by the licensing of instructors, utilization of television techniques, and the employment of programmed instruction.


One hundred and thirty-eight children in the second half of first grade in nine elementary schools were placed in two experimental groups and one control group. The control classes followed the Scott-Foresman basal textbook and teacher's manual. One experimental section was grouped according to ability in reading and used filmstrips reproducing the text and pictures of the Scott-Foresman materials, plus lessons from the teacher's manual in structural and phonetic analysis. The other experimental group followed the same procedure but was not grouped for reading instruction. Analysis of variance revealed no significant difference in intelligence scores between the three groups. Analysis of covariance using Gates Primary scores, and controlling on initial reading scores, revealed that the experimental classes were significantly superior to the control classes on word recognition, sentence reading, and the mean of the three reading tests. No significant differences were found on paragraph reading. Girls' scores analyzed separately revealed no significant differences on any of the measures while boys' scores indicated that the experimental classes were significantly superior on all three scores and the mean of the scores. Questionnaires sent to teachers indicated that teachers saw many advantages to the filmstrip method. The author concludes that the superiority of the filmstrip method in word recognition and sentence reading indicates it would be especially valuable during early reading training. The method seems particularly suitable to boys. The superiority of the grouped classes to those taught as a whole further supports grouping as an instructional technique.

177. Keogh, Barbara Kolts. "The Bender-Gestalt as a Predictive and Diagnostic Test of Reading Performance," Ph.D., The Claremont Graduate School, 1963. XXIV, No. 6, 2360. (Order No. 63-7749, Microfilm $2.75; Xerography $6.60, 137 pages.)
A longitudinal study of 127 children evaluated the use of the Bender-Gestalt at the kindergarten level as a predictive measure of later reading achievement, and at the third grade level as a diagnostic test of reading performance. Data were collected from a Bender-Gestalt (BG) at kindergarten and third grade, from the third grade teachers' ratings of reading ability, three subtests of the California Test of Mental Maturity (CTMM), and individual interviews with third grade teachers. The Bender was administered by individual and group methods and scored with the Keogh-Smith Rating Scale and the Koppitz Revised Scoring System. Performance on individual designs, and on clinical checklist characteristics of perseveration, truncation, rotation, verticalization, primitization, integration, erasure, and mark-over were also considered. Analysis of results revealed significant improvement in BG performance from kindergarten to third grade on total score, individual designs, and on six of eight checklist items. There was no significant difference between performance of boys and girls at either grade level. Reading measures and the CTMM revealed nonsignificant differences favoring the girls. Results of the study suggest that the Bender total score is the most appropriate basis for evaluation of Bender performance of kindergarten and primary grade children. The Bender-Gestalt was found to have limited value as a diagnostic test of reading difficulty, but useful in identifying potentially good readers.

178. Kerfoot, James Fletcher. "The Relationship of Selected Auditory and Visual Reading Readiness Measures to First Grade Reading Achievement and Second Grade Reading and Spelling Achievement," Ph.D., University of Minnesota, 1964. Adviser: Theodore Clymer, XXV, No. 3, 1747-8. (Order No. 64-9492, Microfilm $4.95; Xerography $13.75, 305 pages.)

The relationship of selected auditory and visual readiness measures to first-grade reading achievement and second-grade reading and spelling achievement were investigated. Appropriate hypotheses were tested concerning the following questions: (1) What are the sex differences in multiple regression equations used to predict reading and spelling achievement? (2) What does each measure contribute to predicting reading and spelling achievement? (3) What combination of measures best predicts reading and spelling achievement? (4) What are the interrelationships among all the variables? (5) What are the sex differences in mean achievement on all measures? A stratified random sample of 462 children--239 boys and 223 girls--was selected for the study. The measures used were C.A.; Lorge-Thorndike Intelligence; Gates Rhyming; Harrison-Stroud Making Auditory Clues; Murphy-Durrell Discrimination of Beginning and Ending Sounds; Reading Aptitude Pronunciation and Blending; Gates Picture Directions, Word-Matching, Word-Card Matching, and Naming Letters and Numbers; Goins Picture Squares, Pattern Copying and Reversals; Gates
Primary Word Recognition and Paragraph Reading; Gates Advanced Primary and Paragraph Reading; and Metropolitan Spelling. Among the findings listed by the author were the following: (1) Multiple regression equations designed to predict reading and spelling achievement from measures of auditory and/or visual discrimination must be derived separately for boys and girls, since the combinations of variables which predicted effectively in the equations for boys and girls were clearly different. (2) Measures of visual discrimination were better predictors of reading and spelling achievement than were measures of auditory discrimination, although the best auditory measures were better predictors than the poorest visual measures. (3) Intelligence was less effective as a predictor than visual discrimination. (4) The readiness variables most highly correlated with reading and spelling achievement were Word Matching, Naming Letters and Numbers, and Pattern Copying. (5) Separate sex treatment of data was indicated by the superiority of girls over boys in most aspects of reading behavior measured in this study as well as in spelling and the readiness variables most highly related to spelling.


Seventy-two children were selected from three communities of differing socio-economic status by random stratified sampling to determine some of the physical, social, emotional, and environmental characteristics and experiences of children who have learned to read successfully. A case-study method utilizing standardized tests, data on reading, intelligence, personality, physical ability, and questionnaires and school health records was employed. The author concluded that reading success is a result of many factors rather than one single variable. Health, access to reading materials, intelligence, formal education of parents, being read to by parents in early childhood, and emotionally integrated home life encouraging reading all seem to be factors in reading success. Socio-economic status, and height and weight, were not related to reading success. Successful readers are well adjusted, but do not represent any one personality type.

180. Kheiralla, Sayed Mohamed Hassan. "The Relationship Between Creativity and Intelligence, Achievement, Physical Growth, Certain Personality Traits and Certain Reading Habits in Elementary and Secondary School Children," Ph.D., University of Michigan, 1963. XXIV, No. 6, 2360. (Order No. 64-839, Microfilm $2.75; Xerography $7.80, 169 pages.)
Students in Grades 4, 6, 8, 10, and 12 enrolled in the University of Michigan School were studied to examine the interrelationships of creative abilities, intelligence, achievement, physical growth, personality traits, and reading habits. Children were typically of higher than average intelligence and had fathers engaged mostly in professional or semi-professional occupations. Data were obtained from standardized tests except for the estimate on children's creative thinking, certain behavioral characteristics, and a checklist of certain reading habits which sought to differentiate between highly creative and less creative children. Information on the latter was supplied by the investigator. As a result of the study, it was found that all children showed creative abilities to some extent and that highly creative children varied extensively in the combination and quality of their intellectual and personality characteristics and behavior patterns. Creativity appeared to be unrelated to age. Creative children were, in most cases, of superior or gifted mental capacity. Creativity depended on achievement. Nonintellective factors—such as a high degree of divergent thinking, meditative thinking, tolerance of ambiguity and self-confidence—together with a low degree of orderliness and discipline may facilitate the production of creative responses. More creative children and less creative children did not differ in the books, periodicals and newspapers read outside of their class assignments.


This study examined (1) the effect of anxiety-producing environments on reading test performance of high school students, and (2) the possibility that clinical data would support anxiety classifications of selected individuals and indicate possible sources of anxiety. Four high school English classes, a total of ninety students, made up of two groups of presumably average students and two groups of students whom counselors deemed incapable of the work in a regular class, for mental, physical or social reasons, comprised the population. Measures included the Taylor Scale of Manifest Anxiety, Terman-McNemar Test of Mental Ability, Iowa Silent Reading Tests, WAIS, Rotter Incomplete Sentences, Symonds Picture Story Test, and a sheet of biographical items. Students were categorized as being high, average, or low anxious and as bright, average, or dull in intelligence. An environment producing anxiety and an environment producing the opposite effect were utilized. Pre- and post-testing of both groups revealed that there were no significant differences between reading test scores following exposure to the two environments. Subhypotheses relative to differences between high anxious vs. low anxious, bright high anxious vs. bright low anxious, dull high anxious vs.
dull low anxious, bright vs. average, and average vs. dull subjects were rejected with no significant differences following the setting of a high-anxiety producing environment. Statistical techniques included the Wilcoxon Matched-Pairs Signed-Ranks Test and the Mann-Whitney U Test for testing sub-hypotheses. Eight selected individuals typifying the four categories of intelligence and anxiety were selected for individual clinical study. The author concluded that (1) there was a readily observable difference between kinds of test responses obtained by given groups and kinds of test responses obtained by selected individuals from those groups, and (2) clinical data supported the categorization of the eight subjects and, in part, indicated source of anxiety.


The general purpose of this investigation was to determine possible perceptual and cognitive processes called forth by the Rorschach test which might be essential to the reading process. Sixty-two first-grade children were grouped into two groups of good and poor readers on the basis of Gates Primary reading scores. The partial correlation technique was used to control differences between the two groups on intellectual ability. The male group of good readers demonstrated significantly greater language facility than did the male poor readers. No significant differences in language facility were found between good and poor female readers. The female group of good readers displayed a genetically superior approach over the poor female readers as measured by Rorschach location scores. The male good and poor readers demonstrated no such differences. Both male and female poor readers lacked the flexibility evidenced by male and female good readers. The female group of good readers functioned at a significantly more abstract level than the poor readers. This difference was not observed between good and poor male readers. The hypothesis that good readers would function on a more mature level on tasks dealing with language, perceptual and cognitive approaches, as measured by the Rorschach, was not supported by the study. The author concluded that the Rorschach test has limited application to the study of psychological processes related to reading and that the ambiguous nature of the Rorschach stimuli call forth perceptual and cognitive processes which have little relation to the nature of the reading process.

Fifty sixth-grade students were equated on the basis of intelligence test scores, divided into two groups and administered reading, science, and ability to read for problem-solving in science tests. Tests measuring purposeful reading of science materials and checklists recording the students self-perceived reading behavior, and perception of an ideal reader's behavior, constructed by the author, were also used. One group read to understand step by step directions while the other read to find the best explanation for an event. Passages were followed by two multiple choice items. Correlations, percentages, and "t" tests were used to check differences in reading time, relation between the tests and the standard reading scores and the check list responses. Purposes in reading were found not to affect rate, fast readers were not necessarily the best comprehenders, and high non verbal intelligence scores tended to have high comprehension scores but intelligence did not predict rate. Those with high science scores on the standardized measures tended to achieve best on the constructed purposeful reading science test, but not when rate was measured. Readers who excel on one test of comprehension tend to excel on others. Readers who score high on comprehension may not score high on rate. Readers who read rapidly for one purpose may not read rapidly for other purposes. Purpose does seem to have some effect on rate strategy. Sixth-graders tend to manifest rigidity in reading irrespective of purpose. Confusion as to what constitutes an effective purposeful reading pattern was also evidence with superior readers being less sure of the pattern than inferior readers.


The author recorded the spoken words of 494 children from three geographic areas of the United States. A total of 897,973 spoken words were recorded; 491,129 during free play, 307,883 in response to stimulation by question and pictures and 98,961 in the home. To tabulate words the International Kindergarten Union method was used. Words with a frequency count of seven or more were included in the final list of 3,728 words. This is considered a minimal estimate of the spoken vocabulary of kindergarten children. The most frequently used words were: a, I, in, is, it, it's, mine, the, to, and you (20% of the total number). The children in the sample had 97% of the reading vocabulary of first grade books in their speaking vocabulary.

School entrance age, sex, Metropolitan Readiness Test scores, Kuhlman-Anderson intelligence scores and mental ages, general health, father's occupation and education and mother's education, for 121 boys and 142 girls, available from their entrance into Grade One through Grade Three, were studied to determine if they were significantly related to reading vocabulary, reading comprehension and total reading scores for Grades Two and Three. Using a multiple regression technique the author found the number readiness score and the matching item from the Metropolitan Readiness Test, and the sex and general health of the child to be significantly related to reading achievement in Grades Two and Three.


The relationship between phonic ability and various aspects of silent reading comprehension was studied in a sample of 27 males and 31 females in the eleventh grade at Garfield Heights, Ohio. Phonic ability was defined in terms of the ability to work out the pronunciation of an unfamiliar word with no clue other than letters and diacritical marks assigned to long and short vowels of these nonsense words. A Test of Phonic Ability was constructed by the investigator and used to measure ability in phonics. Ten individual scores, including a total score, from the Iowa Silent Advanced Reading Tests were used as the criterion of silent reading comprehension. It was revealed by the results that three statistically significant relationships existed in the scores of the combined sample when intelligence was held constant: phonic ability and word meaning, phonic ability and sentence meaning, and phonic ability and total reading. Five to six percent of the variance in the scores pertaining to word meaning, sentence meaning, and total reading was found to result from variation in phonic ability. It was concluded that phonic ability is essential but not sufficient for effective skills in silent reading comprehension.


The effect of two methods of listening and reading instruction in an eighth-grade language arts program was investigated. The Listen and Read Program was compared to teacher constructed lessons composed of the same basic concept as those found in the first 25 tapes of the Listen and Read Program. The population of the study consisted of 157 students enrolled in six English classes. Three classes were used as experimental and three as control groups.
Differences between pre-test and post-test scores for specific skills in the areas of listening, reading study skills, and English determined the amount of achievement gains. Analysis of variance was used to determine the significance of gains between the two principal groups and between high ability and low ability students. From an analysis of the results, the author states that the general conclusion from the comparison of achievement gains between the two principal groups was that the Listen and Read Program served as an effective adjunct of the language arts program to produce significant achievement in listening comprehension, reading ability, following directions, recognizing transitions, reading graphic materials, and capitalization. Both methods were equally effective in producing achievement gains in immediate recall, word meanings, lecture comprehension, vocabulary, reference skills, interpretation, verbal study skills, punctuation, and word usage. Furthermore, the Listen and Read Program, when used as a supplement to the language arts program, was significantly more effective with low ability students for instruction in listening comprehension, reading ability, reading vocabulary, and capitalization. Both high and low ability students profited equally from instruction by the taped exercises in the areas of immediate recall, following directions, recognizing transitions, word meanings, lecture comprehension, reference skills, interpretation, verbal and graphic study skills, punctuation, and word usage.


The ability to match within and between the visual and auditory sensory modalities was studied in relation to reading. One hundred eight first grade children were tested on their ability to make the following associations: visual to visual (V-V), visual to auditory (V-A), auditory to visual (A-V), and auditory to auditory (A-A). Two broad questions were investigated: (1) what is the relative difficulty of the tasks? Are differences related to age or sex? (2) Do these measures relate to reading readiness or achievement? The initial testing was done prior to formal reading instruction. Visual stimuli were a pattern of dots and dashes presented on plain white cards; auditory stimuli (dots and dash sounds) were presented with an electric telegraph key. Each subject was exposed to four matching sets, six pairs of stimuli in each set. The subjects were required to make a same-different response. The Harrison Stroud Reading Readiness Profiles, Metropolitan Achievement Test, and the Lorge-Thorndike Intelligence Test were administered. The tasks differed in difficulty in the following order: V-V, V-A, A-V, and A-A. No age
or sex differences were related to performance of the tasks. The V-A and A-V tasks were significantly related to later reading; the A-V task contributed more to the correlation. A significant relationship was found between letter naming and A-V and V-A matching. A high score in A-V and letter naming did not assure success in reading, although a low score in each often resulted in poor reading. Additional findings are included.
Forty teachers who had no previous experience scoring a standardized oral reading test were given two patterns of training and compared on effectiveness in scoring the Gilmore Oral Reading Test. Half the teachers scored the oral reading performance of ten cases while observing and listening, then rescored the tests using tape recordings of the observed previous performance. The teachers then scored recorded tests of children they had never seen. The second group of teachers engaged in the same three activities but first scored previously recorded tests of children they had never seen, then scored oral reading performance while observing, and finally rescored the taped performance of children previously observed. The two groups of teachers were considered to be equated. Comparisons were made in terms of improvement in ability to detect errors the children actually made (Type I), and the frequency of reported errors which were not actually errors (Type II). The data indicated that training improved the ability to detect and to discriminate among the seven categories of errors. Either training method improved the accuracy in detecting errors and reducing overcalls. The training program which introduced tape recordings of unknown cases as the first activity proved more effective and efficient than did the program which used them as a final activity. The training period in which teachers rescored protocols on the basis of tape recordings taken during actual observation did not serve to improve accuracy in scoring either Type I or Type II errors.

The relative efficacy of perceptual training and of skimming drill in a college reading improvement course was measured in 56 college freshmen matched for academic ability, reading speed and comprehension, and chronological age. Three groups were formed. One group received 24 training sessions practicing skimming, a second group received perceptual training and practiced mechanically paced reading. The third group received a combination of the training given to the other two groups. Standardized reading tests were administered to all subjects initially, after one month, and at the conclusion of the two months' experimental period. All three groups increased significantly in reading speed, and average gains shown by the three groups were not significantly different. All three groups failed to gain significantly in comprehension, and the mean gains by these groups were not significantly different.
It was concluded that various techniques used in reading improvement programs provide gains in reading speed but may not elicit comparable comprehension increases. These reading programs may obtain similar results regardless of their particular goals or training methods.


The effects of two specific teacher-directed verbal cues upon the performance of second and third grade pupils on a group reading test were investigated. The two types of cues were designed to encourage pupils to work either rapidly or accurately. Forty-seven second and third grade classrooms in and around the Minneapolis-St. Paul area furnished the population. The classes were assigned randomly to treatment groups. The treatments consisted of verbal cues encouraging the pupils to work rapidly, verbal cues encouraging pupils to work accurately, and no specific cues. The treatments were administered while the pupils were taking two sub-tests of the New Developmental Reading Tests. The tests and treatments were administered by female student teachers who had received pre-experimental training. A sample of six classes in each grade by treatment combination was used for analysis. Pupils were classified on the basis of five independent variables: grade level, treatment, sex, reading achievement level within each grade by section combination, and class. The findings revealed no significant differences among treatment groups. Girls' scores were significantly higher on the dependent variables except on the number of items attempted; a sex by treatment interaction variable was significant for the girls. It was concluded that verbal cues encouraging second and third grade pupils to work either rapidly or accurately did not affect significantly the responses of the pupils in general on a group reading test. Additional findings and conclusions are included.


The role of the child's perception of himself and his world was explored in regard to the process in his learning to read in the first grade. Perception data during kindergarten and first grade was made available from the research of Combs and Soper on "The Relationship of Child Perceptions to Achievement and Behavior in the Early School Years." Trained observers worked individually with 52 children during kindergarten and first grade using observations, interviews, and specially devised projective tests from which inferences could be made regarding the child's perceptions.
of his personal adequacy and his adequacy in dealing with the various aspects of his world. Ten measures of perception were obtained for each year. Reading achievement was measured by first-grade teachers' ratings and by the California Reading Test. Intelligence was pro-rated from eight subtests of the Wechsler Intelligence Scale for Children. Evidence obtained in the study suggests that a child's self-concept and the perceptions he holds of himself in relationship to the aspects of his world are related to, and may be causal factors in, his subsequent reading achievement. Study of a child's perceptions gives as good a prediction of reading achievement as do intelligence scores, and the combination of these two factors gives a greater predictive power.


A description, analysis, and evaluation of the Basic Reading Approach, the Individualized Reading Approach, and the Language Experience Approach were completed. In addition, the effects of implementing these three programs in Grades One through Six in selected school districts were investigated. The population for the study included 59 teachers and 1,274 students. All the pupils were measured three times during the study in reading achievement, pupil attitude toward reading, and pupil personal-social adjustment. The author concluded that "exceptional gains in achievement for the eight months of study were reported for all three approach groups. No clear-cut superiority of any one of the approaches (when compared in terms of pupil gains) is indicated by the findings of this study."


Three types of vocabulary studies in context were used to determine which would be most effective in the development of reading comprehension, and to determine if Group A would gain in thinking ability as defined and measured by a standardized test of intelligence. Group A studied multiple-meaning, abstract words, and processes of definition drawn from semantic theory; Group B studied important words chosen by the teachers from the social studies textbook; Group C studied key words in special World Book Encyclopedia reprints. Three groups of sixth graders participated in the 17-week study which included three periods per week. The Durrell-Sullivan Tests of Vocabulary and Reading Comprehension and
the Lorge-Thorndike Intelligence Test were used for evaluation. All three approaches resulted in significant improvement in vocabulary skills with no significant difference among the groups. By comparison, less improvement was made in comprehension skills. However, all three groups improved significantly in reading comprehension. Only the lower third of Group A which studied multiple-meaning words improved significantly in thinking ability. Additional conclusions and recommendations are included.


The effect of 77 reading lessons (Richards and Gibson Methodology) and certain structured experiences in the content areas of mathematics, social science, and science on the oral reading, word knowledge, and word discrimination ability of a group of 48 gifted five-year-old children was investigated. The total group was divided into a control and an experimental group. Both groups were given the reading lessons. Only the experimental group was subjected to the structured experiences in the content areas. Gray's Oral Reading Paragraphs and the Metropolitan Achievement Test were the tests used. The statistical techniques included the use of the Chi Square test, z-scores, and Spearman's coefficient of rank correlation. There were no significant differences in oral reading, silent reading of both sentences and paragraphs, word knowledge, or word discrimination.

196. La Pray, Margaret Helen. "An Investigation of the Linguistic Approach to Beginning Reading with Respect to Word-Perception," Ph.D., Cornell University, 1961. XXII, No. 9, 3118. (Order No. 61-6756, Microfilm $2.75; Xerox $7.20, 151 pages.)

The purpose of this investigation was to determine the value of four sets of first-grade linguistic reading texts in teaching beginning reading with particular emphasis on word perception. Three of the sets were composed of two and three-letter words with the reading content consisting of a series of sequential statements rather than stories of high interest level. The fourth set did not have the above characteristics. The author conducted a study to determine the importance of configuration and letter identification in word perception of first grade children. It was hypothesized that good and poor readers would not differ significantly in perceiving known words with respect to configuration, configuration plus initial letter, and configuration plus ending letter. The study indicated that configuration was exceedingly important in the success of first grade children with high reading achievers tending to also be highest in recognizing known words through configuration. The author concluded that three out of the
four sets of first-grade linguistic reading texts are considered of
doubtful value in teaching beginning reading because of the focus
of attention upon identical words except for the change of one
letter rather than on words which change in length and total con-
figuration.

197. Laubach, Robert Seely. "A Study of Communications To Adults of
Limited Reading Ability by Specially Written Materials," Ph.D.,
Syracuse University, 1963. Supervisor: William D. Sheldon, XXIV,
No. 8, 3151. (Order No. 64-2298, Microfilm $2.75; Xerography
$8.60, 189 pages.)

Communication with functionally illiterate adults, those with
less than five years of schooling, was studied by means of specia-
ly written materials prepared in ways which differentiated in
communication conveyed. Four articles from the Christian Science
Monitor were re-written three ways: as a simplification based on
the writer's experience and understanding of the readability
theory, with certain linguistic elements of speech structure added
to the simplification control, and with linguistic control tighter.
The mean reading grade level of the original article was 9.0; the
mean reading grade level of the re-written articles was 2.7. A
single comprehension test with a mean reading grade level of 2.7
was prepared for each selection. The 16 articles (four treatments
of four articles) were administered as silent reading exercises in
adult elementary reading classes in two different cities. The
Philadelphia sample consisted of 164 adults, mostly bilingual,
white, foreign-born, largely male, whose median age was about 57
years. The Cleveland sample of 104 adults was largely Negro;
spoke English as their native language; was more nearly equated as
to sex, females being more predominant; and had a median age of
about 41 years. It was found that communication may be increased
by specially written materials, but different ways of writing the
special materials did not differentiate in results. The investi-
gator concluded that care should be taken to assure appropriate
use of simplified adult reading material, and it may not be ad-
visable to depend on the simplified written message as an inde-
pendent channel of communication to adults of limited reading
ability.

198. Lawson, Hoyle DeLayne. "Effects of Free Reading on the Reading
Achievement of Sixth Grade Pupils," Ed.D., George Peabody College
XXV, No. 11, 6340-6341. (Order No. 65-3549, Microfilm $2.75;
Xerography $5.40, 109 pages.)

The effect of free reading time on the reading achievement
of 329 sixth-grade pupils was investigated. Four methods of
instruction, each with varying lengths of free reading time, were
utilized. The methods were identified as Conventional, Indivi-
dualized, Experimental A, and Experimental B. Gains in achieve-
sent were determined by the use of the reading tests in the Metropolitan Achievement Test-Intermediate Battery. The analysis of variance, utilizing the F-test and the t-test at the .05 level, was the statistical technique employed. From an analysis of the findings, the author concluded that greater gains in word knowledge seemed to be associated with more time spent in free reading. Greater gains in reading tended to accompany more time spent in systematic instruction. The Experimental A method exhibited the best combined plan.


The validity of the Dale-Chall Readability Formula was investigated. The methodology consisted of a cross-validation of the readability index of 12 selected passages from a general psychology text with the reading-grade level of the grade-equivalent groups in which 75 percent of each group were able to answer three or four questions correctly on that passage. The Nelson-Denny Reading Test, 1960 Revision, was used to measure the reading level of the 396 subjects involved. From an analysis of the findings, the author concluded that the Dale-Chall Readability Formula may be a valid predictor of comprehension difficulty of general psychology textbook material.


The Gates Advanced Primary Reading Tests (GAPRT) and an Informal Reading Inventory (IRI) were studied to identify differences in reading measurement. Attention was focused on dissimilarities in the criteria used in scoring and on test composition affecting the type of reading performance measured and the interpretation of this performance. In May, the GAPRT and the IRI were administered to 70 second-grade children attending schools in West Babylon, New York. A second form of the Gates test was administered to these children in October. Sections of the GAPRT were administered using several different instructions. To demonstrate the differences in interpreting test results because of dissimilarities in test composition, responses on the Gates test were analyzed according to their difficulty, error patterns and children's expectations for choosing an answer. The general findings indicated that there were sufficient differences between these two tests to conclude that the grade-placement score of the Gates test reflects a more global measure of reading performance than does the instructional level of the Informal Reading Inventory. It was concluded...
that the range of test difficulty and the variety of skills employed on the Gates test should not be expected to result in a score equivalent to the instructional reading level as determined by the more narrowly conceived performance measured by the IRI. Additional results are included.


The extent to which family social-status as measured by the McGuire-White Index of Value Orientation is related to the development of selected science-related conservation tasks developed by Jean Piaget was explored. A correlational analysis was made between success on the Piagetian tasks and scores on the Metropolitan Reading Readiness Test. The tasks used in this study were the conservation of continuous substance, conservation of discontinuous substance, conservation of number, conservation of length, and conservation of area. The subjects were all first graders drawn from an all-Negro elementary school and an all-white elementary school. Thirty Negro and 30 white subjects were matched and stratified into three groups on the McGuire-White Index for the social-status comparisons. The correlations between success on the Piagetian tasks and scores on the Metropolitan Reading Readiness Test were positive, statistically significant, and numerically low. It was concluded that the practice of grouping children exclusively on the basis of reading readiness scores for their science classes should be seriously questioned. Additional findings are included.


Auding instruction was added to instruction in reading improvement for 167 college students ranging from freshmen to seniors enrolled in reading improvement courses. Eighty-five students were designated as the experimental group, and eighty-two were in the control group. Pre-testing on the Iowa Silent Reading Test and the STEP Listening Test found the two groups to be similar in reading, listening, and general intelligence. The experimental group received lectures and exercises in auding and a self-evaluation each week. After nine weeks, both groups were tested on alternate comparable forms of the pre-tests. The experimental treatment did not affect increased performance in reading improvement over the regular program of the control group. No significant difference in listening improvement was found between the
two groups at the end of the experimental period. There was little correlation between pronounced increases in reading improvement and the slight changes in listening performance among all students. Experimental students were not penalized in reading improvement progress when compared with control students.


The effect of the behavioral change process on the reading and arithmetic achievement of seventh-grade pupils was investigated. Tests and other instruments used in the study included The Principal's Questionnaire, The Teachers' Observation Form, standardized achievement tests in arithmetic and reading, and standardized intelligence tests. The analysis of covariance was the statistical technique used in the study. The author states in his list of major findings that achievement scores in reading and arithmetic of seventh-grade students involved in this study reflected no significant gains.


Responses to reading selections from three commonly used social studies textbooks, at fourth, fifth, and sixth grade levels were collected and analyzed. Eighteen reading selections were randomly chosen from nine textbooks on three grade levels and the reading difficulty was evaluated through use of the Dale-Chall Formula. Three forms of multiple choice comprehension tests and cloze test were devised for the material. The comprehension test scores of 317 children were correlated with the grade equivalent scores of the reading, work-study skills, and composite results of the Iowa Tests of Basic Skills. Pupils were tested using a cloze test and additional students were interviewed about the reading material to determine concepts and word understandings. Indications were noted in the intercorrelations of the comprehension and cloze tests that some of the same skills were measured at the fourth grade level, fewer at the fifth grade level, and skills of a different nature at the sixth grade level. There was also an indication that the Dale-Chall Formula predictions and the cloze tests had a relationship more in common at the sixth grade level than at the fourth grade level, but a higher correlation between cloze results and grade equivalent scores on the ITBS existed at the fourth grade level. The lowest correlation between
cloze results and ITBS grade equivalent scores was found at the sixth grade level. Additional findings and conclusions are included.

205. Lindeman, Carol Ann. "Concept Attainment and Reading Ability: The Effects of Selected Variables Upon Information Processing by Fifth-Grade Children," Ph.D., The University of Wisconsin, 1964. Supervisor: Theodore L. Harris, XXV, No. 4, 2350. (Order No. 64-10, 263, Microfilm $2.75; Xerography $4.00, 73 pages.)

A 2^4 factorial design, nested within a 3 x 2 factorial design, was used to investigate the effects of four stimulus variables and two stratifying variables in an information processing task. The four stimulus variables were: (1) exemplar or non-exemplar focus card, (2) exemplar or non-exemplar second information bearing card, (3) amount of information, and (4) verbal or figural stimulus material. The stratifying variables were reading ability and sex. Forty-two fifth-grade children were used as subjects. Four conclusions were stated by the author: (1) Problems for which a definite "yes" or "no" answer was correct were easier than those for which an "indeterminate" answer was correct. (2) An exemplar focus card with problems for which a definite "yes" or "no" answer was correct resulted in the greatest number of correct responses. (3) A mixed series -- i.e., one exemplar and one non-exemplar information bearing card -- resulted in more accurate processing of information than did either two exemplars or two non-exemplars. (4) No significant relationship was shown between reading ability and information processing.


The effect of bibliotherapy on the improvement in individual personality traits and interpersonal relations was studied. Bibliotherapy in this instance was in the form of 36 literary selections read orally to a group of sixth-grade children. The instruments used included the Kuhlman-Anderson Intelligence Test, Scattergrams, Ohio Social Acceptance Scale, Rosenzweig Personality-Frustration Study, Self-Rating Personality Scale, and Who's Who in My Group? Following an analysis of the results, the author concluded: (1) Reading gains by both groups were not significant. (2) Although the class as a whole seemed to lose in good relations and democratic practices, at least one-fifth of the rejected children seemed to gain socially, and seven-tenths of the group showed gains in personality traits. (3) Children from lower cultural groups may know as much good literature as more privileged children. (4) Children low in intelligence and social acceptance seem more likely to profit from bibliotherapy.
An investigation was undertaken to determine whether critical reading ability of tenth grade students improved as a result of instruction in selected principles and techniques of general semantics. The investigation was conducted in six tenth grade classes in three schools located in the suburbs surrounding New York City. Each of the three English teachers, one from each school, taught one class using an experimental approach and a regular English class serving as a control. No significant difference between the experimental and control classes was shown by pretest results. The experimental group was given instruction in selected principles and techniques of general semantics. The participating teachers were required to read *Language in Thought and Action* by S. I. Hayakawa, *Language Habits in Human Affairs* by Irving Lee, and *Words and What They Do* by Catherine Minteer. The materials used were based on exercises from these three books. The Watson-Glaser Critical Thinking Appraisal was used to measure critical reading ability. The results indicated a significant difference in gains in scores of the experimental group and no significant difference among teachers. No significant difference could be attributed to interaction among teachers and groups. The opinions of the participating teachers regarding the experiment are discussed. Conclusions are included.

The opinions of teachers of educable mentally retarded children were compared with the opinions of teachers of normal children toward certain items pertaining to the teaching of reading. A questionnaire consisting of 48 items, and a set of six seven-step bi-polar adjective scales to go with each item, was administered to 205 pairs of teachers in Iowa. The experimental group was composed of special class teachers at the primary and intermediate level and their counterparts were regular class teachers. The teachers were instructed to mark their opinions on items concerning the following broad areas: skills taught, materials and methodological procedures used, and professional training and experiences. Statistical differences were found between the mean scores on 204 of the 288 scales. No significant differences were found in the importance of teaching reading, their knowledge of the psychology of the reading process, and their daily time for teaching reading.

The effect of two instructional programs, one using only printed materials and the other using only mechanical devices (tachistoscope and the controlled reader), on reading rate, level of comprehension, and paragraph comprehension was studied. The subjects were 142 undergraduate students enrolled in one of six eight-week reading improvement classes. Tests administered to the students included the Subtests I and VI of the Iowa Silent Reading Tests, Form AM, the Cooperative School and College Ability Test, and Form CM of the Iowa Silent Reading Tests. From an analysis of mean gains from pre-test to post-test the author concluded: (1) Printed materials and mechanical devices appear to be equally effective in producing gains for reading rate and level of comprehension. (2) Printed materials seem more effective than the tachistoscope and the controlled reader for improving paragraph comprehension. (3) Students receiving reading instruction with either of the two methods develop greater reading efficiency than students who receive no special instruction in reading improvement.


A group of first graders from a socially and economically disadvantaged population was used to investigate the interrelationships among auditory discrimination as a reading readiness factor, intelligence, achievement, and background of experience and information through both individual and group measures. One hundred five Negro, White, Puerto Rican, and Oriental first grade pupils from four schools in Philadelphia served as subjects. The following tests were administered: Wepman Auditory Discrimination Test, Phonics Mastery Survey, Gates Reading Readiness (Rhyming), Monroe Reading Aptitude (Auditory Word Discrimination), Wechsler Intelligence Scale for Children, Philadelphia Verbal Ability, Informal Word Recognition, Informal Reading Inventory, Metropolitan Readiness, a questionnaire, and the Van Wagenen Readiness (Range of Information). It was concluded that group tests were not adequate measures of abilities of children in this type of population. Additional conclusions and suggestions for further study are included.

The California Elementary Vocabulary and Reading Comprehension Tests were typographically changed in format; with the content of the tests remaining the same. Types used in the experiment were IBM typewriter type; Arcadia 12-point; Varitype typewriter faces in Bodoni 8-point Bookface, Bodoni 12-point Bookface, and Bodoni 12-point Bookface Bold; Linotype Spartan 11-point Lightface with Boldface; Linotype Fairchild 14-point Roman with Italics; and Bodoni Bold 14-point, which was a replica of the typeface used in the original publisher's format. A typographical preference test was used which represented the five formats in the experiment. Five fifth grades were randomly selected as the experimental sample from thirty-five fifth grades in a California school district. Each subject was tested once. The five experimental test formats and the preference test were randomly handed to subjects in each school. The raw reading test scores comprised the dependent variable in the experiment. Analysis of variance was used to determine the significance of the difference within and between group means for the subjects. The analysis revealed that test format did not appear to have any significant effect on the reading behavior of children. Type preference also did not appear to be a significant factor in reading achievement. Facsimile printer's "cold type" such as IBM or Varitype typewriter had no deleterious effect on reading achievement scores. Analysis of reading achievement scores for boys and girls revealed the Spartan Format contributed to the significant difference for girls. The author concluded that caution usually exhibited in regard to varying type in reading achievement tests employed at this level could be minimized and that publishers should give more attention to varied typography and the aesthetics of printing.

212. Lorance, Theodore Wayne. "The Relationship of Reactive Inhibition to Intelligence and to Achievement in Reading and Arithmetic," Ph.D., University of Missouri, 1965. Supervisor: Paul C. Polmantier, Vol. XXVI, No. 9, 5238. (Order No. 66-117, Microfilm $3.00; Xerography $4.80, 93 pages.)

The relationship of reactive inhibition to intelligence and to achievement in reading and arithmetic was investigated. The subjects, 266 boys and 252 girls in the fourth grade of one public school system, were administered the inverted numbers task. The students were asked to make the numbers from one to ten upside down and backwards as quickly and accurately as possible and to skip a space whenever the signal was given. Twelve massed 30-second trials followed the five-minute rest period. The IQ scores were obtained from the Lorge-Thorndike Intelligence Tests, and the achievement scores were obtained from the Stanford Achievement Test. Correlations indicated no significant relationships.
between reactive inhibition and each of the other variables. Intelligence, reading achievement, arithmetic achievement, and/or sex did not have a differential effect upon the accumulation of reactive inhibition. The average intelligence-high achievement group in arithmetic, which appeared to accumulate more reactive inhibition than did the various other groups, may be a possible exception.


Two hypotheses were explored in this study: live television demonstrations of the individualized approach in reading instruction will effect a positive change in observed classroom performance and the attitude towards reading instruction, of 213 viewing elementary teachers. Teachers were randomly assigned to four treatment groups in a two-by-two factorial design and analysis of covariance used to compare the pre- and post-treatment mean achievement on the two criterion measures: observed classroom performance and attitude toward reading instruction. The null hypothesis of no significant differences between viewing and non-viewing groups was rejected. Thus, it appears that the television series had a real and measurable effect on both observed classroom performance and attitude towards reading instruction of viewing teachers.


A comparison between children's achievement levels and a derived readability level of their written composition was made. Furthermore, the influence of age, intelligence quotient, grade level, and sex upon this compared relationship was studied. Three hundred students were selected. The Primary Mental Abilities intelligence scores, the vocabulary and comprehension scores of the Iowa Tests of Basic Skills, and other pertinent information were obtained from the official school records of 300 intermediate grade children. Two written compositions were obtained from the students, and the Dale-Chall Readability Formula was used to determine readability score. The t critical ratio was used to determine the significance of mean differences. The author concluded that a readability formula could be applied to children's writing to judge sophistication of certain components of juvenile composition. There were no significant differences between readability scores of girls' and boys' compositions, nor was age alone a significant factor. The influence of intelligence in affecting higher readability scores was conclusive at Grade Six only. In deter-
mining the significant differences in the Pearson Product-Moment Coefficients, the author found a significant relationship between the level of writing as measured by the Dale-Chall Readability Formula at the intermediate grade levels. There were more instances of significant correlations between reading achievement scores and readability scores of children's written compositions at lower intelligence levels than at higher intelligence levels.

The effect of controlled reading and regular classroom instruction was studied: (1) to determine whether there is a significant difference in scores made on the Iowa Silent Reading Test, Forms AM, BM, and CM between students in the controlled reading groups and those in regular reading classes; (2) to determine whether scores made by students in the controlled reading groups differ significantly from scores made on the test following the speed reading; and (3) to determine whether the use of the school and city libraries by students in the controlled reading groups has increased significantly during the period of controlled reading participation. The population included four eighth-grade classroom groups selected at random. Two groups were assigned to each treatment. Fisher's t formula was utilized as the statistical test of significance. Analysis of variance was used to determine if there was a difference between mean scores of the Iowa Silent Reading Tests. In the findings, the author states that although there was a statistical difference among Groups A, B, and C, the only statistically significant differences were between Group D and each of the other groups. The difference was significant at the .01 level. The author concludes by stating that the evidence seems to support the theory that when groups are heterogeneous and not matched or balanced in IQ, the statistical effectiveness is lessened.


Abstract not available.


The word recognition abilities, comprehension abilities, and the environmental, reading, and educational experiences of superior readers in the elementary grades were investigated. A sample of 145 superior readers in grades two through six were selected. Word perception abilities were assessed with the Silent Diagnostic Reading Tests; comprehension abilities were measured with the Gates Basic Reading Tests. Environmental, reading, and educational information was obtained from Parent Questionnaires, Student Interview sheets, Teachers' Rating Sheets, and cumulative folders. Data analysis consisted of both intergrade and intragrade com-
parisons on the 10 word-perception skills and five comprehension skills. The findings revealed that the subjects were without serious physical handicaps, were above the general population in mental maturity, had varied nonreading interests, and came from families which provided both residential and marital stability. Findings relative to word perception skills revealed that the subjects had mastered seven of the 10 skills by the end of third grade. Comprehension testing disclosed that each grade level performed significantly higher for 15 of 17 mean comparisons; however, the amount of acceleration was not uniform. The developmental history in reading showed that the subjects were provided with encouragement and assistance in reading prior to first grade. Fifteen percent of the subjects were able to read independently before first grade and 90 percent were successful from the beginning of first grade. The subjects were rated high in responsibility, attention span, cooperation, interest in learning activities, independence, and verbal expression.


One hundred and three first-grade pupils were placed in an experimental and a control group on the basis of performance on the Harrison-Stroud Reading Readiness Tests administered in kindergarten. Seventy-four lessons with instructional aids and independent activity materials were constructed and used in an extended readiness program for the experimental group lasting one semester. The Harrison-Stroud tests, a learning-rate test, the Reading Readiness Listening Test and the Gates Primary Reading Tests were used. Informal devices gave estimates of attitudes and work habits. At mid-semester mean differences favored the control group although only one sub test, using context and auditory clues, was significant. Differences in means at the end of the semester favored the experimental group although no significant differences were found. After six months of instruction for the control group and three months for the experimental group differences favored the control group. Differences in sentence and paragraph reading were significant. The range of reading at the final testing was wider for the control group indicating an apparently more rapid rate of progress for the experimental group. Teachers used a variety of instructional materials without using a textbook. Attitudes of other children towards the readiness group were negative at first and gradually changed to positive attitudes which were reflected in the pupil's attitude towards self and the teacher's attitude toward them. Parents' attitudes were generally passive. A sample of subjects generally revealed more positive attitude towards reading and better work habits for the experimental group.
Two approaches for teaching reading to pupils within the normal range of intelligence but retarded 12 months or more in reading were compared. Two experiments were provided for in the study. In Experiment I, a linguistic method was employed by Teacher A and a conventional method by Teacher B. In Experiment II, a conventional method was used by Teacher A and a linguistic method by Teacher B. Twenty-eight intermediate grade pupils enrolled in the regular classrooms in the schools of the Nashville, Tennessee, area were chosen as subjects. Classes met 60 minutes daily for six weeks. Significant gains in reading vocabulary and comprehension during the six weeks of the study were made by all groups, regardless of method or teacher. Teacher A was more effective with the linguistic method and Teacher B was more effective with the conventional method. Advantages inherent in the linguistic approach were indicated by non-statistical observations of the two methods as an economy of time and materials. Recommendations for further research are included.

A comparative study of two approaches to reading instruction with seventh-grade students was completed. Of the two approaches, instructional Approach A was described as instruction specifically emphasizing the reading skills. Instructional Approach B was described as instruction using the regular classroom activities. The sample population consisted of 290 seventh-grade pupils. Tests administered to the students included the California Test of Mental Maturity, Diagnostic Reading Tests, Booklets I and II, Form A, and Work-Study Skills Form A. Alternate forms of the Reading and Work-Study Skills Tests were given as post-tests following the completion of the instructional period. Fisher's t technique was used on the gain scores to test the significance of gain scores. The author states that "the post-tests indicated significant gains in references and charts in favor of the experimental pupils. Story rate favored the control subjects, but was not statistically significant." Also, the author states that "on the post-tests the Experimental High Mental Ability Group had higher mean scores on all reading skills than the control High Mental Ability Group, but comprehension was the only variable to reach a statistical significance. The Experimental Low Mental Ability Group had higher mean scores on all reading skills than the Control Low Mental

Three aspects of the instructional programs in word recognition in the basal reading series were compared with three corresponding programs in the phonics materials. Those aspects compared in eight leading basal reading series and seven published phonics programs were sequences in which understandings and skills are introduced, levels at which these are introduced, and the extent of instruction in terms of the forms, pronunciations, and meaning of words and letters as well as the letter names. The sequences and levels of introduction described are those of phonic, structural, and dictionary or glossary word recognition skills and understanding. There were some general agreements, but more important was the difference in programs. Basal reading series usually employed the whole word as pronunciation and visual units for presentation in teaching sound values. Initial consonant sounds were taught first. Subsequent skills and understandings varied considerably in the manner in which they were presented, differences being mainly in the levels at which the skills and understanding were taught. Dictionary and glossary skills are taught at approximately the same levels, but varied in the specific skills and understandings taught. Five of the seven phonics programs presented consonant letter sound relationships before vowel sounds, frequently employing isolated letters and sounds for establishing letter-sound relationships. The levels at which letters are related to sounds are usually lower than those at which the basal reading series present similar relationships. Phonics materials presented structural word recognition understandings and techniques, but often did not refer to these as such. There was less agreement upon what is taught and the levels at which to teach it than in basal reading programs. Further investigation is necessary to ascertain the value of choosing one set of sequences in preference to another.


Individual bibliotherapy, group bibliotherapy, written compositions, a problem box, sociometric devices, pupil-written books, and personality identification were used with a sixth-grade class from January to June to test the hypothesis that books may help children face and solve problems arising from everyday living. Another sixth-grade class served as a control group. Children's oral and
written statements about books read, books they had written, observations of the investigator, and the Bloomer Identification Figure Test supported the hypothesis. The hypothesis was not supported by scores from the California Test of Personality. Children's problems centered around developmental tasks and basic human needs. The author concluded that books that helped children had high interest and books prevented future problems by building vicarious experiences and providing children with insight into problems of their classmates. Under certain conditions both individual and group bibliotherapy are feasible in the self-contained classroom.


Experienced and prospective teachers' knowledge of and ability to apply word analysis skills and linguistic concepts were investigated in relation to (1) sex of the teacher, (2) type of undergraduate institution, (3) geographical location of the undergraduate institution, (4) grade level taught, (5) previous primary teaching experience of upper-grade teachers, (6) years of teaching experience, (7) amount of training devoted to word analysis skills, (8) amount of training devoted to linguistics, (9) differences between experienced and prospective teachers, and (10) grade-level performance of prospective teachers. The population consisted of 230 experienced elementary teachers, 111 prospective teachers without formal teacher education preparation, and 110 prospective teachers with formal teacher education training but without experience. The criterion instrument used consisted of a battery of subtests designed to measure (1) knowledge of and ability to apply phonics rules, (2) ability to use a dictionary pronunciation key, (3) knowledge of and ability to apply rules of syllabication, (4) ability to identify root words, and (5) ability to understand linguistic terminology. The statistical technique used was the analysis of variance. On the basis of the data obtained, the author concludes that: (1) Both experienced and prospective elementary teachers displayed wide variability in their understanding of word analysis skills and linguistic concepts. (2) Both experienced and prospective elementary teachers evidenced little understanding of linguistic concepts. (3) Experienced teachers did not display greater knowledge of word analysis skills and linguistic concepts than did prospective teachers with complete training. Prospective teachers with complete formal training did not display greater knowledge of word analysis skills and linguistic concepts than did prospective teachers without formal teacher training. (4) The sex of the teacher, the undergraduate institution attended, the grade level taught, previous primary teaching experience of upper grade teachers, the amount of teaching experience, the amount of undergraduate...
ate training devoted to word analysis skills, the amount of post-
graduate training devoted to word analysis skills, the amount
of training devoted to linguistics—all had little or no relation-
ship to the knowledge or word analysis skills and linguistic con-
cepts possessed by experienced elementary teachers. (5) The
adequacy of the teacher training program, as it relates to word
analysis skills and linguistic concepts, may be related to the
geographical location of the institution. (6) Grade-level teach-
ing preference had no relationship to the knowledge of word anal-
ysis skills and linguistic concepts possessed by prospective
elementary teachers with complete training. (7) The present
teacher training program and entrance requirements of two dif-
f erent types of institutions may affect the knowledge of word
analysis skills and linguistic concepts possessed by the stu-
dents of the institutions.

224. McCracken, Robert Allen. "The Development and Validation of the
Standard Reading Inventory for the Individual Appraisal of Reading
Performance in Grades 1 through 6," Ph.D., Syracuse University,
(Order No. 64-5659, Microfilm $2.75; Xerography $6.80, 141 pages.)

A valid and reliable individual reading test with two equi-
valent forms for measuring reading achievement in elementary
school children was developed to determine the child's indepen-
dent reading level, his instructional reading levels, and his
frustration level in reading. The test is named the Standard
Reading Inventory and has content validity based upon an analysis
of the Curriculum Foundation Basic Readers, the Ginn Basic Read-
ers, and the Sheldon Basic Readers. Stories are written at 11
levels corresponding to the basal reading book levels used in the
basic reading series from pre-primer through Grade Seven. The
child's reading is determined by evaluating his isolated word
recognition, oral reading (word recognition errors, total oral
reading errors, speed of oral reading, vocabulary in context,
and comprehension), and silent reading (speed of silent reading
and comprehension).

of Parents of Superior and Inferior Readers Toward Certain Child
Rearing Practices, the Value of Reading, and the Development of
Language Skills and Experiential Background Related to Reading,"
Ph.D., Michigan State University, 1963. XXIV, No. 6, 2361.
(Order No. 64-952, Microfilm $2.75; Xerography $8.80, 192 pages.)

The Reading Attitude Inventory was developed to evaluate the
reading attitude of parents in order to determine differences in
attitudes between parents of inferior readers and superior readers
with regard to child rearing practices, the value of reading, the
development of language skills, and the building of experiencial
background. Nine scales were selected from the Parental Attitude
Research Instrument to measure attitudes toward child rearing
practices felt to be related to reading achievement. Five reading specialists classified 45 statements designed to appraise attitudes toward three aspects of reading, according to the attitudes they thought were being measured. Responses of 200 mothers were analyzed to determine the difficulty and discriminative power of each item and five of the best statements were selected for each scale to form the Reading Attitude Inventory. Both inventories were administered to parents of 50 children classified as inferior readers and to parents of 50 children classified as superior readers. Data results showed the attitudes of parents of superior readers to be significantly different from that of parents of inferior readers. Parents of inferior readers manifested these attitudes toward child rearing practices more predominantly: intrusiveness, acceleration of development, fostering dependency, approval of activity, excluding outside influences, avoidance of communication, and deification of parents. There was a significant difference between the parents of both groups of readers toward the value and importance of reading, the development of language skills, and the building of experiential background. In general, parents of superior readers held attitudes usually considered to be more acceptable and healthier than did parents of inferior readers. A significant difference was found in the educational levels of the parents of both superior and inferior readers. The effectiveness of the Reading Attitude Inventory as a research instrument was demonstrated.


The status of the state mandated reading program in Grades Seven and Eight of the third- and fourth-class school districts of nine selected counties of western Pennsylvania was examined. Questionnaires were sent to the school administrators and to the teachers of reading in the area of the study to secure their opinions of the effectiveness of the functioning of the reading mandate in their districts. An interview record form was used to record information received through personal interviews with 26 teachers of reading in 19 selected districts involved in the study. The following conclusions were reached: (1) In the majority of cases, the various reading programs are operating under the minimum requirements of the mandate. (2) Many subject-matter teachers who are not qualified to teach reading are assigned to the reading program. They have had no instruction in how to teach reading. (3) The reading teachers seem to be confused about the type of reading instruction to be given to their students and how to teach reading so as to have an effective pro-
gram. (4) The administrator sees his role in implementing the program as mainly supervisory. (5) The administrator introduced the mandated program largely through the use of in-service workshops.


Gains in the reading achievement and attitude change of retarded readers of one ethnic group (Negro) in Grades Four, Five, and Six of a large urban school were compared between those taught under an individualized reading program and those taught by a basal reading program. Retarded readers were identified by a reading achievement test and paired classes set up. An alternate form of the reading test was given following the experiment. Retarded readers using an individualized reading program did not make greater gains in reading achievement than those using a basal reading program; however, they did develop a more positive attitude toward reading as indicated by their written statements. In the fourth grade group, the individualized reading class showed a statistically significant gain difference by the analysis of variance technique over the basal group. A very slight difference was found to favor the basal reading group in the sixth grade. There was no difference in the fifth grade groups. The investigator suggests that frustration and defeat may become cumulative in retarded readers so that the pattern of basal reading instruction cannot be changed by the fifth grade and may affect pupils adversely by the time they are in the sixth grade.


A questionnaire study was designed (1) to determine what reading approaches were employed by teachers for instruction in the fields of science and social studies, (2) to determine what instructional materials were being used in these areas, (3) to determine the relationship between years of teaching experience and the approach taken to teaching reading in the content fields; and (4) to determine the relationship between academic preparation of teachers and the materials and methods used. The questionnaire items were drawn from the recommendations of experts and represented their judgment of "good reading practices" in the content fields. The questionnaires were distributed to 177 teachers. A response of 84.1 percent was obtained. From the findings, the following general conclusions were drawn: (1) The application of "good" reading practices was more frequent at successively higher grade
levels. (2) Good reading practices were more commonly found in social studies teaching than in science teaching. (3) Years of experience were not a significant factor in determining the methods employed by teachers. (4) Advanced training and preparation were not significantly related to differences in method. (5) Teachers appeared to follow the recommendations of reading experts in using available materials.


Forty-five planned lessons in listening comprehension were utilized to determine the effect of a program in listening upon listening comprehension, reading comprehension, and reading vocabulary of fourth-grade pupils. Analysis of variance indicated that all treatment classes were comparable prior to treatment on listening comprehension, language and non-language ability, reading comprehension, and reading vocabulary. Results of the study indicated that mean listening comprehension improved significantly while mean difference in reading comprehension and reading vocabulary were not significantly different. The effectiveness of the treatments appeared approximately the same for each of the three ability levels considered. The author concluded that planned listening lessons had a positive and significant effect on listening comprehension of four fourth-grade pupils.


Multilevel intermediate grade enrichment literature relating to American history was analyzed. Data were compiled from current juvenile literature catalogs and periodicals. The books were subdivided into "Fiction", "Biography", and "Other Nonfiction" categories, and were arranged in three reading levels based on catalog recommendations. Information regarding author, title, price, publisher, and classification was coded and placed on data cards for use in data processing devices. The following conclusions were supported: many trade books in juvenile historical literature are suitable for supplementary history reading; specific areas of American history lack a sufficient number of books of particular literary types and different reading levels; books at the lowest reading level are most needed; selected people, events, and movements are unavailable; and publishers' standards for judging reading levels of juvenile literature vary. Detailed findings and additional conclusions are given.
A matrix of subject reading difficulties on the secondary level was structured to determine the reading difficulties of individual subjects as actually taught, the extent of commonality and contrast of difficulties, and the effect of varying methods of instruction. Questionnaires were given to 579 senior high school students in English, chemistry, plane geometry, and U.S. history classes asking them to describe usual assignments, explain usual methods of reading assignments, and list major subjects in order of reading difficulty. It was concluded that a teacher's procedures were potent in shaping subject reading difficulties. No fixed generalized syndrome of reading difficulties for a subject could be formulated. A large proportion of students expressed a lack of difficulty. The most pervasive difficulties were those difficulties with comprehension in general, connotationally with inability to combine details into an organized structure, and denotationally because of the concentration of facts and ideas and insufficient vocabulary and background concepts. Lack of interest provided a problem with mental concentration.

The effect of two reading readiness programs of different durations on control and experimental groups of first-grade students was investigated. The population consisted of 51 pairs of first-grade children. The students were matched within three months of their chronological age, three points of readiness scores, and by sex. Nine hypotheses of no differences between the two approaches to reading readiness were analyzed by the t-test at the five percent level of significance. The hypothesis of no difference was accepted at all stages of the study with the exception of the comparison at the ninth month between the girls with lower initial readiness. The mean score of the conventional group was significantly higher. The control group had a greater loss in retention between the ninth and twelfth months. The loss was large enough to be significant at the five percent level when compared with the small loss of the experimental group. Sex was not a significant factor in reading readiness levels for beginning students in this study. Those students who entered the first grade with chronological ages of 72 months or above achieved on a higher level in reading 12 months later than those students.
who were younger. The difference was significant at the five percent level.


The reading achievement of first grade children using a reading program of both the Basic Reading Series (Scott, Foresman) and the Phonetic Keys to Reading (Economy Company) was compared with that of first graders who used only the Basic Reading Series. Pupil achievement was measured by the Kuhlman-Anderson Intelligence Test, Form A; The Metropolitan Achievement Test, Primary Battery I, Form A (pre-test), Form B (post-test); The Stanford Achievement Test, Primary Battery, Spelling, Form L (pre-test), and Form N (post-test). Analysis of co-variance was used to determine differences of mean raw scores for the two groups. Evidence obtained showed that at the end of the first grade neither method of teaching beginning reading appeared to be superior. Neither method appeared to be more beneficial to boys, with the exception of the word knowledge portion of the test and, for boys of the second quarter, intelligence test scores in spelling. Neither method indicated an excellence in beginning reading instruction for girls. It was concluded that the additional emphasis on a phonetic word attack method is not fully justified.

234. Mitchell, Virginia Louise White. "An Analysis of the Grade Expectancy and Actual Reading Achievement of Sixth Grade Pupils, With Special Attention to Six of the Possible Factors in Reading Underachievement," Ed.D., Indiana University, 1963. Chairman: Hanne J. Hicks, XXIII, No. 11, 4481. (Order No. 64-1683, Microfilm $2.75; Xerography $5.60, 114 pages.)

The extent to which broken homes, school transfer, non-promotion, low intelligence quotient, premature school entry and inferior housing affect pupils' actual reading achievement compared to their grade expectancies was studied in 14 sixth-grade pupils enrolled in schools representative of dissimilar housing conditions. Intelligence quotients and grade expectancies were established by the SRA Test of General Ability, Form A. The SRA Achievement Series Reading Test, Form A, was used to determine reading achievement. Underachievers were those achieving more than a full grade below grade expectancy. Other data were collected from property evaluations, student information sheets, cumulative records, teacher and principal conferences. Underachievement in reading was not found to be significantly related to any one of the six investigated factors or any combination of them. Neither were these factors more significantly related to the reading underachievement of boys than of girls. Underachievers may read above grade placement and achievers may read below grade placement. School records proved
ineffective in furnishing information for helping teachers predict and explain reading underachievement as did intelligence quotients. Underachievement in reading may be represented by pupils whose actual reading grade level equivalents cover a range of many years.


Scores for seventh-grade students on the Iowa Silent Reading Tests, Wechseler Intelligence scale, Bills' Index of Adjustment and Values, and the California Test of Personality were used to determine the relation between perception of self and achievement in reading. Correlations were computed on the six possible pairs of tests and partial correlation used as a method of controlling on differences in intelligence. No significant correlation was found for reading test scores and the index of adjustment and values. A significant correlation was obtained between the reading test scores and the personality test scores. The investigator concluded that if a child has an unfavorable self-perception it is likely that his reading achievement may be affected. Also, a child who has reading problems may develop an unfavorable perception of himself.


Instruction in critical thinking and its relationship to improved achievement in reading, English usage, spelling, literature, and vocabulary were examined. The difference in critical thinking by students taught with television and students exposed to conventional instruction was also investigated. A subsample of 180 students randomly selected from a working sample of 380 ninth-grade students was studied. All students were tested in January and May with the New York State Junior High School Survey Test to measure skills and knowledge in English language arts and with the Glaser-Watson Critical Thinking Appraisal to measure critical thinking. The following conclusions are reported: students who received instruction in critical thinking registered significant gains; conventional classroom instruction proved to be the superior instructional medium; only in the area of reading was there a suggested relationship between instruction in critical thinking and gains in achievement in the language arts; low-ability students showed greater gains in critical thinking;
above average and average students showed greatest gains in language arts; and, girls surpassed the boys in language arts achievement. A list of the questions investigated and recommendations formulated as a result of the study are also included.


The effect of inter-class ability grouping on the reading achievement of 27 fourth, fifth, and sixth grade classes was analyzed. These classes consisted of nine each at the high, average, and low ability levels. Four hundred fifty students, fifty at each ability level of each of the three grades, were selected at random from the experimental classes and paired with students attending homogeneous classes in School District 22 of Calcasieu Parish. The children were paired according to sex, age, Stanford Achievement Test scores, and California Mental Maturity Test scores. The 40-minute reading classes followed the local course of study. Supervisory services and instructional materials were the same for the experimental and control groups. The Stanford Achievement Test was administered at the end of the semester to all students used in the study. The difference in mean gains was not significant for any of the three ability levels.


The Frostig Program for the Development of Visual Perception (FTVP), which emphasizes Visual-Motor Coordination, Figure-Ground Perception, Perceptual Constancy, Position in Space, and Spatial Relationships, was investigated. All children in the controlled study had been referred to the Student Personnel Services from the regular classroom because of a learning problem. Only children who manifested visual perceptual distortions were considered for placement in one of the groups. Both the experimental and control groups consisted of 21 children individually matched in terms of sex, age, grade, IQ, reading score, and perceptual quotient on the FTVP. Both the experimental and control groups received essentially the same reading instruction. Both groups were administered the Wechsler Intelligence Scale for Children, the Durrell Analysis of Reading Difficulties, and the FTVP. The experimental group participated in the Frostig perceptual development program for a period of two hours a day for six months. The mean perceptual quotient score increase and gains in oral reading
were significant only for the experimental group. No significant gains were found for total reading for either group. Retest results of the Bender-Gestalt test showed that the experimental group did considerably better than the control group.


The author hypothesized that (1) the location of the summary in relation to the body of the reading material affects immediate recall, and (2) the location of the summary in relation to the body of the reading material affects delayed recall. A total of 585 college freshmen were randomly placed in five equal groups. Group I was tested on material preceded by a summary, Group II was tested on material followed by a summary, Group III was tested on material preceded and followed by a summary, Group IV was tested on material without a summary, and Group V, the control group, was tested without reading the material or the summary. The material used was a passage describing Buddhism judged by a panel of experts to have a suitable reading difficulty level. A twenty-six item test was developed and judged to be reliable. The author concluded that the summary in any location acts as an aid to learning in both immediate and delayed recall. The most effective location was either preceding or both preceding and following the body of the reading material. The findings support those of other authors relating to the effectiveness of advanced organizers in learning.
Tests to predict reading success were administered during the first month of school to 132 first grade children. Predictor tests given were Metropolitan Readiness Test, selected items on the Stanford-Binet Intelligence Scale (Form L-M), a sociometric technique, Draw-a-Man Test, Learning Rate of Words Inventory, New Gestalt Test, and Maturity Level for Reading Readiness Scale. The criterion test, Gates Primary Reading Test, was administered the last week in February of the same school year. A multiple regression equation showed the best predictors of reading success to be the Metropolitan Readiness Test, Learning Rate of Words Inventory, and Stanford-Binet items. An alternate composite was formed from the Metropolitan Readiness Test, Learning Rate of Words Inventory, and new Gestalt Test. Results implied that there are many complex and interrelated factors influencing the reading process. Predictor tests measuring specific aspects of the reading process are best in predicting reading success. Use of the composite predictors listed above increases the reliability of prediction over that obtained using any one of the predictors. There is no significant decrease in prediction reliability when the alternate composite predictors are employed.

The relationship of personality variables to reading ability was studied. A population of 348 college sophomores was given the MMPI, the Kuder Preference Record, the Cooperative English Examination, and the SCAT Ability Test. Linear and curvilinear correlations were computed. In addition, a canonical analysis was employed to discover a maximal correlational measure for the two sets of variables—personality and reading performance. Following an analysis of the findings, the author concluded that an affiliation between personality and reading ability has been supported in the present study. Thus, the interrelationship of emotional and interest factors to the cognitive variable of reading tends to support the thesis that there is an interrelatedness of the human organism with regard to learning and personality. The association indicated in this study is that the neurotic aspects of personality tend to be negatively correlated to reading performance— that is, the poorer reader is apt to have more neurotic tendencies even in a highly able population— although the neurotic tendencies are
different for different sub-groups within the major sample. Moreover, the personality complex reveals an interesting syndrome of characteristics which describe or relate to the able reader. The complex of personality traits which relates to reading ability within this highly able population tends to reveal that cognition is related to neurosis or the lack of it.


Children's knowledge of multiple meaning words was investigated. The total population consisted of 616 fourth-grade students. Of these, 314 were boys and 302 were girls. A list of 180 words was divided into 10 lists of 18 words each. The students were given the words and asked to write sentences using the words as many ways as possible. A total of 1,646 different meanings were given by the 616 subjects for the 180 words. The average was 9.14 meanings per word. In comparing the number of different meanings of words given by boys with those given by girls, the author states that there was no significant difference between means. In correlating nine percent of the children's meaning scores with their mental age score from the California Test of Mental Maturity, the author found a correlation of .32. A correlation of .61 was found between the Language Data as measured by the California Test of Mental Maturity and the meaning scores. Also, the author found a correlation of .30 between the children's reading grade placement and the meaning scores.


Descriptive information about children who learn to read at an early age, their parents, and their environment was gathered to identify characteristics which differentiated these children from a group of children similar in intelligence, age, and social class. Sixteen children were identified as Early Readers (ER), and fourteen Nonreaders (NR) constituted the control group. NR kindergarten children were matched with ER kindergarten children on these variables: intelligence, social class, sex, and age. The criterion for reading was recognition of nine or more words of a word list taken from the Durrell Analysis of Reading Difficulty. As a part of the experimental procedure, tests of visual discrimination, visual memory, phonetic ability, and interests were administered to the children. Parents completed a vocabulary test, a personality test, and a test of attitudes toward child rearing. Each parent filled out a personality rating measure for his child, and the child's teacher
completed a similar measure. The mothers were interviewed. The results supported the following assumptions: ER had developed an ability to attack unknown words using phonetic skills; ER had interests which motivated them to enjoy reading more than the NR; there were personality differences between ER and NR; and there was a difference in child rearing practices between groups. Assumptions about visual discrimination and personality characteristics of parents were partially supported. The assumption about differences in parent vocabularies was not supported.

Two problems were investigated: (1) Would poor readers who were successful academically be different from unsuccessful poor readers, successful average readers, and unsuccessful average readers? (2) Would poor readers who tried to improve their skills by attending the Reading Laboratory and who were eventually successful be different from poor readers who attended the clinic but were unsuccessful? A total of 261 college freshmen comprised the population. Poor readers were those who scored below the twenty-fifth percentile on the Diagnostic Reading Test. Average readers scored between the fortieth and sixtieth percentiles. Successful average readers, successful poor readers, failing average readers, and failing poor readers were compared on scores from the following: ACE-College and High School, Cooperative English Test, Cooperative General Achievement Test, age, sex, size of high school attended, months elapsing between high school graduation and college entrance, and level of education of father. An analysis of variance, followed by a multiple range test on significant variables, was used to analyze the test score and age variables. For all other variables a chi square analysis was employed. The author concluded that while the failing poor reader group differed significantly on most test scores, the differences were large enough to predict with only limited accuracy, failure or success among poor readers. Reading ability influenced test scores more than academic success because the failing average reader group had mean scores consistently higher than the successful poor reader group. This violates the assumption of numerous counselors that poor readers, to be successful, must score higher than good readers on tests in order to compensate for their poor reading skills.

Vocational high school students who had one or more terms of reading instruction were studied to determine how the program of remediation had served their personal, academic, and vocational needs. From a total of 184 students enrolled in the investigator's reading classes, 33 graduates and 34 dropouts were accessible and available for participation in the study. To determine the long-range effect of remediation, a standardized reading test was administered and a number of open-ended questions from a questionnaire were administered orally. It was reported by the participants that subsequent to remediation they felt more hopeful of improving their reading, more relaxed, more confident, and better able to relate to people. The graduates were enabled, through remediation, to improve their comprehension and grades. However, similar improvement was not reported by the dropouts. The greatest gains on standardized tests were made during remediation, and both groups failed to make appreciable gains after remediation.


An evaluation of selected series of elementary school science textbooks was made with reference to teachers' objectives in the teaching of science. The following series of textbooks were evaluated: Allyn and Bacon; American Book Company; Ginn; Harper and Row; Heath; Lyons and Carnahan; Macmillan; Singer; and Winston. An evaluation instrument was derived from a synthesis of pertinent judgments expressed by authorities in the field of education, research findings concerning science books, elementary science textbook authors, elementary science specialists, and elementary school teachers. The rating of each series on the evaluation criteria was determined by pooling the judgments of five evaluators. The following evaluation criteria were used: mechanical make-up and attractiveness...; philosophy or point of view of the author(s); content; organization; developmental methods; visual aids; formula readability level; teaching aids; and provisions for meeting objectives. It was concluded that the Heath, Macmillan, or Ginn series would best meet the needs of teachers who find that reading is a problem in their classrooms. Additional findings and conclusions are included.


The differences in vocabulary performance between average, bright, and educable mentally handicapped (retarded) children in relation to selected words from the vocabulary list of the
Ammon's Full Range Picture Vocabulary Test were investigated. The sample population consisted of average, mentally retarded, and bright children. The analysis of variance technique was used to test the findings. The author states that "there were no significant differences between any two of the four groups of girls on the concrete, abstract, or composite portion of the Ammons'. There were no significant differences on the concrete portion of the Ammons' for boys. Significant differences were obtained on the abstract scores between educable mentally handicapped boys in special classes and young bright boys, and mentally handicapped boys in regular classes and young bright boys. The educable mentally handicapped in both education classes and regular classes obtained significantly higher scores than the young bright boys of the same mental age."

Sixty-eight incoming first-graders who met the criteria of one full year of non-public school kindergarten experience were matched with sixty-eight first-graders with no kindergarten experience on the basis of sex, age, position in family, occupation of father, education of father, and mother working or in the home. The Pintner-Cunningham, Metropolitan Readiness Test, teacher and parent maturity ratings on a checklist, height and weight, citizenship grade after first six weeks of school and average for the year, scholastic average for the year, and academic achievement for the year were used to compare the two groups. Significant differences favoring the kindergarten group were found for reading readiness, total readiness, maturity rating by teachers, arithmetic readiness, citizenship average for the year, scholarship average for the year, and number achievement. When the scores were adjusted by covariance for the greater mental ability of the kindergarten experience group, significant areas favoring the kindergarten group were total academic readiness and the maturity rating by teachers. No significant differences were found between the two groups on the remainder of the variables previously listed. The author concluded that to the short-range benefits gained by the kindergarten experience group were added the long-range benefits of citizenship, scholarship, and number achievement.
visual-auditory, was utilized to assess the acquisition and retention of paired associates by good, average, and poor readers. One hundred eight subjects, with a male and female subject in each condition, served under 27 experimental situations with the task to learn, and to recall and relearn after twenty-four hours, a list of five paired associates. Performance measures were associations evoked by the figures and trigrams, total acquisition trials necessary to master the list, quality of performance when the forms were presented in series, and total trials to relearn the list after acquisition trials. The author concluded that good, average, and poor readers, in that order, require increasingly more trials to master the paired associates. This suggests that auto-instructional devices may be of value in building word mastery among average and poor readers. The reading-level-grade interactions indicate that further investigations must consider these as affecting variables. The mode of reinforcement-grade level interaction—suggests that studies attempting to investigate the relative efficiency of different modes of reinforcement must recognize grade placement as an affecting variable. No significant interaction was found between mode of reinforcement and reading level. In analysing the total relearning scores, grade level was the only significant variable. It appears that in mastering paired associates, once they have mastered a series, poor readers will retain the associates as well as good readers.


The relationship of anxiety and its effect on reading achievement was studied. The Children's Manifest Anxiety Scale and Form W of the California Reading Test were administered to 549 sixth-grade children. The t-test of significance was applied to correlations and to differences between means. The .05 level of confidence was used. The author states that sixth-grade students, exhibiting the highest level of anxiety, can be expected to achieve at a lower level in reading vocabulary and comprehension. Level of anxiety tends to affect reading comprehension more than reading vocabulary in sixth-grade students. Sixth-grade youngsters who exhibit a high level of anxiety on the CMAS are less likely to falsify their responses than those subjects exhibiting a low level of anxiety. Finally, sixth-grade girls can be expected to score higher than sixth-grade boys on the lie scale.

A survey of articles in periodicals, professional books, yearbooks, association proceedings, and investigations was made to trace the development of remedial reading instruction in elementary schools from 1920 to 1959. An emphasis on skill building, personality development, and stimulation of a greater desire to read pervaded remedial instruction during this period. The dominant stress was on skill-building in the twenties and thirties, a movement towards personality development in the forties, and a highly noticeable trend in emphasizing personality improvement in the fifties. Remedial pupils were selected and diagnosed largely through standardized tests. Remedial instruction was provided for the most part through classroom teachers, with remedial teachers, adjustment teachers, clinicians, and occasionally principals and directors of remedial instruction also providing remediation. From 1929 through 1939, and in the forties, activities in remedial classes were designed to improve specific handicaps. In the fifties the emphasis swayed towards mental hygiene and personality development without minimizing skill activities. Reading rate, comprehension, word attack, and vocabulary enrichment were skills emphasized. A variety of mechanical devices and printed materials have been used in remedial programs.


Programs for accelerated readers in grades four, five, and six in 70 Texas school districts with 5,000 and above enrollments were investigated. Accelerated readers were defined as children reading two or more years above grade placement. Identification of programs was made by means of a questionnaire sent to superintendents of the 70 school districts. Special reading programs were identified in 33 percent of the 70 districts contacted. In the four largest districts, 50 to 60 percent of the schools provided special reading programs, while in the smaller districts 32 percent made these provisions. Questionnaire responses, interviews, and examination of school-published materials were used to obtain data on the following: budgetary allotments and presence of the reading program; percentage of pupils placed in the program; type of classroom grouping; percent of instructional time spent on developmental, functional, and recreational reading; range of content of the curriculum evaluation techniques; and comparative research.

The effect of an individualized reading program in grades four, five, and six was investigated. The investigation attempted to determine whether the Science Research Associates Reading Laboratory would improve reading achievement when such a program is used in conjunction with a basal reading program. Thirty-seven teachers in eight public schools of St. Tammany Parish, Louisiana, were selected for experimental or control classes through random sampling and were paired with control teachers. One hundred thirty-two pupil pairs were established, based on sex, grade, age, grade placement on Gates Reading Survey, and intelligence determined by Otis Quick Scoring Mental Ability Test. The experimental classes used the Ginn and Company Basal Reading Program three days each week and the SRA Laboratory two days each week. The control classes used the Ginn and Company Basal Reading Program every school day throughout the semester. When the basal reading program was used, the classes were taught by the class-as-a-whole method. Conferences were held with participating teachers prior to the beginning of the study. Supervisory services were identical for both groups. The experimental classes achieved significantly higher gains in total reading average and reading rate. The high reading group achieved significantly higher gains in reading average and reading rate. The average group achieved significantly higher in reading rate, and no significant differences were found between gains in the low reading group. Additional findings and conclusions are included.


Five basic aspects of a university reading program were considered in attempting to evaluate its effectiveness: organization of the program, descriptive analysis of the evaluations of the program by student questionnaires, rate and comprehension changes, permanency of gains in reading rate and comprehension skills by class levels, and the effect of the reading program on academic achievement as evidenced by grade point averages by individual class. Data were gathered on academic classification, age, referrals to the program, hours spent in study and pleasure reading, academic majors, number of hours in the reading improvement program, and responses to a questionnaire. Pre-tests, post-tests and re-tests were given for rate and comprehension. The prime concern of the organizational and administrative techniques of the reading program is to meet the individual needs of its students in rate, comprehension, vocabulary, study habits, and spelling. Seventy-five percent of the students listed rate as one of their major interests in the program, 58 percent listed comprehension, 57 percent listed spelling, and 32 percent listed vocabulary and study habits. The median increase on rate from the pre- to the post-test was 97.15 percent and the median
change on comprehension for these two tests was -3.74 percent. Grade point averages tabulated for students before and after formal training in reading against post- and re-test score on rate and comprehension correlated negatively for rate and only slightly positively for comprehension.


The purpose of this study was to examine the Pascal and Suttell assumptions that individuals of normal intelligence and free of brain damage do not differ in the motor and perceptual phase of the Bender-Gestalt test. A group of reader and a group non-reader first grade boys were given the Bender-Gestalt and six additional simple geometric designs representing different levels of maturity to test the motor and interpretative phase hypotheses. To test the perceptual phase hypothesis both groups selected from an original design and three distorted replica designs, the original design and the original and least distorted design. Reader and non-reader first-grade boys of average intelligence do not differ significantly in copying ability or in discrimination in the perceptual phase of the test. Significant differences were found between reader and non-reader in the reproduction of Bender-Gestalt designs. Deviant performance on the designs of the Bender-Gestalt was attributed to interpretative factors. The author concluded that the clinical utility of the tests with young children was confirmed and the test seemed capable of discriminating between reader and non-reader first-grade boys when the modified scoring system of Pascal and Suttell was used.


The attitudes of fifth grade pupils toward the language arts and their perception of their own performance were related to the pupils' achievement in language arts as measured by standardized tests, teacher's grades, intelligence, and repetition of grades. The population was 369 pupils from a public school in Washington state. A Language Arts Evaluation Scale consisting of twelve concepts based on the criteria proposed by Osgood was devised. The concepts were school, tests, free reading, oral reports, discussion, assigned reading, assignments, grades, following written instructions, spelling, and story reading. A Language Arts Check List was devised to measure the pupils' perception of their own performance in the following areas related to reading: Eng-
lish usage, original writing, speech, and skill and tools. Co-
efficients of correlation and tests of significance were employed
to find relationships and significant differences between the
variables. Few significant relationships were found among pupils' attitudes toward language arts, or pupils' perception of their performance in the language arts, and standardized test scores of intelligence, regularity of attendance, and repetition of grades. Significant differences were found between the high and low groups on achievement, as represented by teachers' grades, and between the sexes on the number of pupils who repeated grades. No significant difference was found between the high and low groups on a standardized achievement test.


The study was designed to determine whether reading inventories and standardized oral reading tests yield similar data for determining reading levels of children. The following were investigated: the instructional reading level, independent reading level, frustration reading level, contextual word pronunciation level, comprehension level, reading rate, reading time indicated by performance on the Informal Reading Inventory, the Informal oral passages, Informal silent passages, the Gilmore Oral Reading Test, and the Gray Oral Reading Test. The population consisted of 30 percent of the children in grades one through six or 178 children. The Gray test and the Informal oral passages were considered the most desirable instruments for determining levels of reading because either test was administered in less time than other instruments and either test yielded adequate data for assigning reading materials. However, it was impossible to generalize whether standardized oral reading tests usually indicate the various reading levels of children as do informal reading inventories. Additional conclusions are included.


Eye-hand dominance was measured in reading achievers and retardates in the fourth, fifth, and sixth grades by the results of the Harris Tests of Lateral Dominance. Subjects were classified as to their lateral dominance: right-dominant (right-handed and right-eyed), mixed-dominant (right-handed and left-eyed), and left-dominant (left-handed and left-eyed). Subjects were divided according to their levels of reading, achieving or retarded, and placed in the three aforementioned dominance groups. Groups were
equated by chronological age and intelligence. There were 15 matched units for each level of reading achievement. Scores representing each subject's response on a tachistoscopic test composed of reading material printed in a horizontal and in a vertical arrangement were then analyzed statistically. No significant differences were found among the dominant groups and the two levels of reading achievement when comparing total scores for all subjects with reading material printed in a vertical arrangement. There was a significant relationship between the two levels of reading achievement and the three lateral dominance classifications when the comparison was based on the total scores for all subjects with reading material printed in a horizontal arrangement. The evidence of the effect of hand and eye dominance on reading achievement was found to be inconclusive in both reading achievers and retarded readers when their performance in the various lateral dominance classifications on reading material printed in a horizontal and in a vertical arrangement was compared.


The relationship between training in instrumental music and selected aspects of language growth in third-grade children was investigated. Specifically, the investigator compared the reading and spelling achievement of music students and non-music students. Aspects of language growth were also correlated with an auditory discrimination test. The population consisted of 110 third-grade children divided into equivalent experimental and control groups. "Groups were equated on the basis of reading and spelling achievement, but no significant differences appeared between groups in IQ or auditory discrimination." The experimental group was subjected to a 25-week course of instruction on the experimental instrument. In the findings, the author states that no significant differences in reading vocabulary or spelling gain were found between groups. The mean gain in reading comprehension was 1.9 months greater for the experimental group, a difference significant at the .10 level. Highly significant correlations were found between aspects of language growth and the rhythm-tempo and pitch subscores of the Conn Music Aptitude Test (Auditory Discrimination).


The selected characteristics of disabled readers who dropped out of school and disabled readers who stayed in school were co-
Two samples of disabled readers (disabled reader being defined as those readers who have an 85 or higher I.Q. and whose reading scores indicated them to be two grades or more retarded in reading) were obtained. One sample of 32 disabled readers was randomly selected from a total population of 374 school "stay-ins." The instruments and techniques employed were scores from standardized tests, rating scales, interviews, and case summaries. The author states that there was no significant difference between the two groups in their reading difficulty or in intelligence. The dropouts were significantly different from stay-ins in their attitudes of being more irresponsible, impulsive, careless, having interest in the opposite sex, and being less liked by their classmates. The school attendance, physical health, and social-emotional health were significantly lower in the dropouts. The dropouts felt their teachers and parents were helpful to them in their reading. There was no significant difference between two groups in their feelings toward their peers. In the primary grades, the reading of the stay-ins was significantly better, but in the fifth and seventh grades, their reading was similarly retarded. Some improvement was shown by the stay-ins in the ninth grade. The case summaries revealed low socio-economic home and neighborhood conditions with a low level of parent education. Most of the parents of dropouts had been dropouts themselves. Attitudes of the families of dropouts were not conducive to staying in school.


This study attempted to (1) develop a checklist that could be used as a basis for appraising the effectiveness of a teacher's procedures in the teaching of reading, (2) determine the relation between the instrument as a whole and gains in reading achievement, and (3) determine the relation between the individual items in the instrument and gains in reading achievement. The goals in reading were developed from a review of the literature. Twenty-eight fourth-grade teachers in relatively homogeneous classrooms were observed twice. Their teaching of reading procedures was appraised using the instrument. The California Reading Test was used to determine reading ability. Growth in reading and the teacher ratings were correlated. The author concluded that pupil growth in reading was significantly related to the teaching procedures used. The correlation between gain in reading and teacher rating was .74. The following procedures had a high relationship to growth in reading: systematic and meaningful development of vocabulary, employment of a variety of techniques in vocabulary development, availability of a variety of instructional materials, use of teacher observations and other informal techniques to appraise pupil attitudes toward reading, development of
Purposes for reading, preparation by the teacher for the reading lessons and activities, practice of affording time during the school day for independent reading, use of a variety of instructional materials, provision for a constructive independent reading program, practice of silent reading occurring prior to oral reading. Most of the specific aims as listed by authorities and research had a significant relationship to growth in reading.


The data collected for this study were analyzed to determine whether differences in practice give English children an advantage in learning to read and spell. Samples of more than 300 subjects from Leeds, England, were selected at each of the following ages: 7, 11, and 14. The paragraph meaning and the word meaning subtests of the Stanford Achievement Test and the spelling subtest of the Metropolitan Achievement Test were administered to measure achievement. The Leeds scores were compared with those of pupils of equivalent ages from Pinellas County, Florida, on the Stanford subtests and with scores of pupils from Jackson, Michigan, on the Metropolitan subtest. In general, the Leeds samples lost their initial advantage on the paragraph meaning test with an increase in ages, but retained their advantage on the word and spelling tests at later ages. The greater variability of the Leeds sample reflected the acceleration of the program. The superiority of the Leeds children on the spelling test was attributed to their ability to apply phonics to spelling. In the Leeds sample girls tended to get off to a faster start in learning to read and spell, and boys tended to be more variable in reading and spelling, especially at later ages.


A comparison of the effects of semantics and syntax on the acquisition and use of new words was studied. Semantic meaning was defined as that which signifies the referent. Syntactic meaning was defined as the category of attributes shared by members of the same grammatical form class. Forty-eight fourth-grade boys and girls were used as subjects. Within each sex, subjects were divided by median split into high and low word knowledge levels and randomly assigned to one of three training conditions. The Duncan Multiple Range Test was used to statistically analyze the data. The author concluded: (1) Semantic attributes can be inferred from grammatical use, but referential
association is a more effective method of acquiring semantic meaning. (2) Semantic attributes can designate membership in a syntactic category, but grammatical use is a more effective method of acquiring syntactic meaning. (3) Ability to use rules of syntax may be related to the frequency with which the various form classes have been encountered in the language. (4) Neither chance selection nor the skew phenomenon can adequately predict numbers of form class intruders used to complete sentences. Intruder responses are chosen systematically, probably under stimulus control.


The effect of 50 selected trade books and corresponding records on the reading interest attitudes, skills, and experiences of two first-grade reading groups was studied. The instruments used to determine any changes in the above mentioned variables included The Harrison-Stroud Reading Readiness Test, The California Reading Achievement Test, Lower Primary, and a reading interest and attitude schedule for children designed by the investigators. In addition, an interview schedule was used with the parents of both groups of children. Statistically, the Fisher t-test was used to analyze the data collected. The author concluded that a more positive change had taken place in the experimental group than in the control group regarding reading interests and attitudes. The experimental group (which used the trade books and phonographs) achieved higher scores on the reading vocabulary and reading comprehension sections of the California Reading Achievement Test than did the control group (which only used the phonograph records). The children using the combination of trade books and recordings developed more independence in reading than did those children having access to only the recordings. The parents of the experimental group indicated a higher level of enthusiasm and interest in the reading innovation than did those parents of the control group.
Seven textbooks used at the junior high school level were evaluated in terms of readability, interest appeal, and conceptual difficulty. Readability was estimated by the Dale-Chall Formula and the interest appeal was evaluated by use of the Flesch Human Interest Index, an interest checklist on sections from the text completed by students, and the percentage of pages devoted to illustrations and the proportion of color and action illustrations. A test was administered to 450 junior high students on a section from each text possessing high interest appeal and low conceptual difficulty and a test over a section from each text with low interest appeal and high conceptual difficulty. The author concluded that all the language arts and social studies texts were judged to be suitably placed in terms of readability and interest appeal. The science text was judged to be grossly inappropriate for its intended reader because of an extremely wide range of reading levels, its high average reading level, and low interest appeal. In all instances the mean scores for the tests over text sections with high interest, low conceptual difficulty were higher than the mean scores for the tests over sections with low interest, high conceptual difficulty. The combination of interest appeal and conceptual difficulty was considered to be a significant determinant of reading success.

A mathematical model for misreadings in an oral reading test proposed by George Rasch of the Danish Institute for Educational Research was studied. Investigated was whether a difficulty parameter for any passage ($D_i$) and an ability parameter for any examinee ($A_j$) possess the property of invariance. The following major issues were dealt with: the general appropriateness of the model for the misreading scores of 429 reading clinic children on the Durrell oral reading subtest; the degree of invariance of the ability estimates for 74 of these children across the eight paragraphs of the subtest; and the degree of invariance of the difficulty for the eight paragraphs across different ability levels. In the investigation, two graphs were constructed for each of the seven consecutive paragraph pairings. In all the paragraph pairings studied, the model appeared in a general way to be appropriate for the data. In addition the difficulty estimates of
the eight paragraphs were found to be invariant over ability levels to a fairly high degree. Additional findings about the scatter, cluster, and correlations are included.


A study was designed to determine whether or not a significant relationship exists between scores on a Cloze Test and an Informal Reading Inventory. Both tests were administered to 178 students in grades one through six in a Muncie, Indiana, elementary school. The data were correlated for the entire population on the two instruments. Correlations were obtained at each grade level and for boys and girls. A silent reading test and an intelligence test were administered to the group to ascertain normalcy of the sample during the six-week testing period. The two sets of criteria used in identifying levels from the Cloze Test were the 50/30/20 criteria and the raw score criteria. Coefficients of correlations were used to compare three reading levels, independent, instructional, and frustration, as determined from pupil responses on the Cloze Test and the Informal Reading Inventory. The correlation between the Cloze Test scores and the instructional and frustration reading levels, grades two through six, were statistically significant. Only at the fourth grade level was the independent reading level, determined from the two test methods, statistically significant. First grade performance on the two tests yielded no statistically significant relationship. The Cloze Test 50/30/20 criteria, based on percentages of correct responses, proved to be the more accurate indicator than raw-score criteria. Additional findings and suggestions for use of the Cloze Test are included.

268. Ranta, Taima Maria. "Methods and Materials of Teaching Reading in Finland Under Church and State," Ph.D., University of Minnesota, 1964. XXV, No. 3, 1790-1791. (Order No. 64-9505, Microfilm $9.15; Xerography $33.00, 721 pages.)

The methods and materials of teaching reading in Finland under the church and state were studied. The methods of the study included the tracing of the development of public instruction, the summarization of some of the distinguishing characteristics of the Finno-Ugrian language, and a field study of the currently used methods and materials of teaching reading. In conclusion, the author states that "during the centuries literacy has been considered indispensable for salvation and survival in Finland. As early as the beginning of the eighteenth century, it has been a condition for enjoying civic rights. Hence, it is apparent that literacy has been a fundamental instrument of the church, state and individual."
Sixty pupils were selected from a screened population to form two matched groups of thirty high achievers in silent reading and thirty low achievers in silent reading. Matching was done on the basis of sex, age, I.Q., reading achievement, and the absence of speech and physical defects. Disparity in reading achievement between the two groups at the eight, nine and ten-year-old levels was one year, one and one-half years, and two years. The oral vocabulary data were derived from tape-recorded protocols using nineteen frames of an uncaptioned film strip as a stimulus. All intelligible words of the sixty protocols were punched on IBM cards along with the 3,000 most frequent words of the Rinsland List. Sixty alphabetized and coded lists of oral vocabulary data were obtained. Each word had a frequency number and a number corresponding to the seven Rinsland categories. Lists were printed for each of the two groups sub-divided into males and females. Analysis of variance was used to determine the variability on the word lists of the two groups. On the basis of reading achievement, a significant difference between the groups in gross total words, total different words, and total different words in the 3,000 and over category was found. On the basis of sex there was a significant difference in gross total words, average difficulty of words, and total words in the 3,000 or over category. When a comparison was made between reading achievement level and sex, differences appeared only in gross total words and total different words. No significant difference was obtained in the interaction of reading achievement level and sex when comparisons were made on average difficulty of words and total different words in the 3,000 or over category.

Changes in reading performance as a result of a college reading improvement program were investigated in two groups of students following their completion of the program. Comparisons were made in pre-training test scores, post-training test scores, and retest scores for one group retested after a three months' course completion and for one group after a six months' course completion. Scores were obtained from the Nelson-Denny Reading Test, which included measures of vocabulary, comprehension total reading performance and rate of reading. Results indicated no significant difference between the change in reading performance of students initially testing below the median and of students...
initially testing above the median. For the sample tested, the reading improvement program materially changed reading performance and this gain was retained without significant loss for the time period covered by this study. Both groups of low initial performance and high initial performance would equally benefit from the reading improvement program.


The vocabulary of California state-adopted mathematics programs for grades one through three was analyzed to determine the actual technical and supporting vocabularies introduced at each grade level, the extent of agreement between these and the vocabularies introduced in the state-adopted basic readers at the same grade levels, and the extent of agreement between the math vocabularies and those contained in certain standard word lists. Two master lists were constructed at each grade level. One list consisted of all technical words introduced and the other consisted of all supporting words. The lists were checked against two state-adopted basic reader series, against words contained in Dale's "List of 3000 Familiar Words", Dolch's "Basic Sight Vocabulary," and Dolch's "First Thousand Words for Children's Reading." Further analysis of the frequency of selected letters of the alphabet was also carried out. Little agreement was found between the vocabularies of the state-adopted mathematics and the state-adopted basic reading series. Greater agreement existed between math test vocabularies and the three standard word lists. The frequency of selected letters was also reported. Recommendations indicated by the findings and conclusions are included.


Thirty tape recorded listening lessons taken from the Gates-Pearson Reading Exercises were used to determine the effect of training in listening on reading achievement. Ten fourth grade classes with 228 pupils served as the experimental group and 216 fourth grade pupils in nine classes served as the control group. Each of the 15-minute lessons consisted of four short selections followed by questions on main ideas and details. The lessons were substitutes for part of the regular reading program over a 15-week period. The STEP and the Metropolitan Reading Achievement Test were used to measure performance. Four and one-half months after the conclusion of the listening lessons, the tests were readministered. No significant differences were found between
the mean gain scores of the two groups at the end of the study. However, both the experimental and the control groups improved significantly on the tests four and one-half months after the conclusion of the treatment. It was concluded that listening training of this type did not favorably affect the retention of listening and reading achievement.


The remedial reading programs in Granite School District, Utah, were studied to indicate a possible design for a reading clinic. The effectiveness of the remedial program was determined through statistics of gains made by 470 remedial reading pupils on a test of oral reading, annual gains of 989 pupils, and responses of 45 remedial reading teachers to a questionnaire. A description of reading clinics was obtained through a visit to the University of Chicago Reading Clinic, correspondence with directors of many national clinics, and a review of the literature. The findings indicated that full opportunities cannot be offered to pupils unless developmental, remedial, and clinical services are available and are staffed by qualified teachers. Recommendations for improvement of the reading program are also included.

274. Reid, William Rosa. "Psychological Subtest Patterns and Reading Achievement," Ph.D., State University of Iowa, 1963. Chairman: James B. Stroud, XXIV, No. 6, 2366. (Order No. 63-8024, Microfilm $2.75; Xerography $3.00, 59 pages.)

Comparison was made of the WISC subtest scores of average, above-average, and below-average readers drawn from lower, middle, and upper social classes in male fourth grade pupils from 19 public schools. The mean Full Scale I.Q. was 105.2. Average readers scored not more than one-half grade above; and below-average readers obtained scores in the upper or lower quarters, respectively, on the Reading Comprehension test of the Iowa Test of Basic Skills. Social class levels were determined by the Warner Scale Values for occupation and head of the household. No significant effects were found associated with social class. No significant differences were found between the three reading levels on Information, Comprehension, Picture Arrangement, Block Design, Object Assembly, and Coding subtests. The below-average reading group had a significantly higher Performance than Verbal Scale I.Q. Significant Verbal and Performance Scale subtest differences were present as well as interaction between reading achievement levels and Verbal and Performance Scale subtests. Below-average and average readers scored better than the above-average readers on the Performance Scale, but lower on the Verbal Scale
as to mean I.Q.'s. No significant differences were found between the mean I.Q.'s of the below-average and average reading groups on either the Verbal or Performance Scales.


Few differences could be indicated when pre-school reading experiences of children identified as outstanding readers were contrasted with pupils experiencing least success. This study identified six second-grade pupils and their parents in each of eight elementary schools whose enrollment exceeded 500 pupils. Three pupils from each building were considered outstanding readers by principals and teachers, and three were among those judged as experiencing least reading success at comparable grade placement. Pupils were matched on chronological age, I.Q., and sex. Pre-school experiences of the children in both groups as reported by parents in structural interviews were analyzed. Parents responded to 186 individual questions. Three of the six items that were found to be significant indicated that pupils in the outstanding readers' group could recognize significantly more words identified for them, could recognize their names prior to kindergarten, could form letters of the alphabet more readily than could pupils with least success in reading. These items only lend credibility that reading is the identification and recognition of words and outstanding readers would be expected to possess these qualities.


A recording of verbal description, music, and sound effects was used to determine the effect of a controlled auditory distraction factor upon the performance of students on the Gilmore Oral Reading Test. The analysis revealed that the distraction factor did significantly impair the performance of students. Of the eight types of errors substitutions, mispronunciations, and repetitions increased significantly while the remaining five increased, but not significantly. A relation was also established between grade level and errors and achievement level and errors. These relations appeared to become more pronounced under the distraction factor. The author concluded that individuals susceptible to stimuli of an internal or external nature may be mismeasured by diagnostic instruments for assessing oral reading.
Three general questions were explored: (1) Are the goals children set for themselves significantly related to those goals their parents set for them? (2) Do those children who have had unsuccessful experiences in reading in the past set significantly different goals for themselves than children having had successful reading experiences? (3) Do the parents of unsuccessful readers set significantly different goals for their children than the parents of successful readers set for themselves? Two matched groups of seventh-grade boys were used. One group was two years more advanced in reading than the other. Goal-setting behavior was measured through three tasks: a target-shooting task, a vocabulary task, and a target-throwing task. The tasks were administered in the homes of the subjects. Following the experiences, the subjects and the parents were asked to indicate how they felt the subjects had done. The findings indicated that eleven of the sixty hypotheses relative to the three major questions were significant, two of them opposite from the predicted direction. There was some indication that closer relationships exist between the goals fathers set for their sons and their sons' goals than between those the mothers set and their sons set for themselves when the tasks involved physical performance. The fathers of unsuccessful readers tended to set more extreme goals for their sons than the fathers of successful readers.

Individual differences in the interpretive process of eleventh-grade students in reading the short story were investigated. The sample population consisted of 28 high school juniors, 14 of whom were low level readers and 14 high level readers. The data came from tape recorded interviews, questionnaires which explored the integration of the short story into the personal life of the reader, and questionnaires which explored five factors related to the interpretive process. The major conclusions reached were: (1) Students' processes of interpreting the short story could be identified through their verbal responses to general and specific questions concerning the interpretive process. (2) There were individual differences in the interpretive process within, as well as between, the low level and the high level readers. (3) The high level readers were familiar with more short stories and more short story writers than low level readers. (4) The attitude of
high level readers toward reading short stories was not significantly different from that of low level readers. (5) The attitude of high level readers toward reading in general was significantly different from that of low level readers. (6) There were significant differences between the low and the high level readers in their grasp of the literal and implied meaning of the short story. (7) No significant differences were present between the responses of the two groups on reporting integration of the ideas of the short story into their personal lives.


The purpose of this investigation was to compare the methods used by scientists in reading science material to understand the main idea and to relate facts and ideas in sequence, with reading comprehension and rate scores and practices considered ideal by sixth-grade children. Twenty-four scientists read for the main idea and twenty-four read to relate facts and ideas in sequence. Comprehension questions answered by forty-sixth-graders were also answered by the scientists. Overt reading behaviors were noted, reading and question answering time recorded, and a structured interview used to enable the scientist to explain how he thought the ideal reader would read. It was concluded that science material is read differently when read for different purposes, some reading practices of scientists are different from the reading practices of children, and some reading practices of scientists are different from practices which children believe ideal readers would use when reading science material.


The effect of a speed reading course and its relationships with academic grades, sex, socio-economic status of the family, junior high attended, number of children in the family, and grade level of the students were investigated. From an analysis of the findings, the author concluded: (1) The findings indicated no significant difference in gains in grade point average between the two groups in English and mathematics. A significant difference was found, however, in history and science. (2) Sex did not prove to be a contributing factor in English, mathematics, or science. (3) Junior high school attended proved to be significant to the gain in history and science, but not significant in English and mathematics. (4) The number of children in the family proved to be a significant factor only in science. (5) Grade
level that the student was in at the time of participation was significant only in science. (6) Socio-economic status proved to be significant to the gain in grade point only in history.


The effects of a visual perception training program, as measured by the Frostig Developmental Test of Visual Perception, upon growth in perceptual capabilities and reading achievement of first grade pupils were studied. The sample included 324 boys and 313 girls in eight Minneapolis, Minnesota, elementary schools representing all socio-economic levels. Classes were randomly assigned to experimental and control groups resulting in twelve experimental and thirteen control classes. An adaptation of the Frostig Visual Perception Training Program was utilized. A basic training workbook was used by each child during the 29-day program. Regular reading instruction and 30 minutes of perceptual training were given in each daily session. An equivalent amount of regular reading instruction was offered the control group each day. Initial testing was accomplished by using the Metropolitan Readiness Test and pre-tests of visual perception. Post-tests of visual perception and Bond-Balow-Hoyt New Developmental Reading Tests were administered as final tests. Although the initial Frostig perceptual measures were found to be highly related to the Metropolitan Readiness and total reading scores, the perceptual measures correlated higher with readiness than with reading measures. Reading achievement and readiness were not predicted as accurately by IQ as by the three perceptual measures. Significant differences were found in post-perceptual measures favoring the experimental group. Additional findings are included.


Scores from the Reading Comprehension and Work Study Skills sections of the Iowa Basic Skills Tests were used to evaluate reading gains after eight months of instruction for fourth- and fifth-grade students taught reading using a developmental program, an approach grouping students by reading ability, and an individualized reading plan. An analysis of covariance design controlling on previous reading achievement, intelligence and test differences between sexes was used. For fifth-grade scores no significant differences were found between the three approaches on the Reading Comprehension gain. Significant differences were found favoring the grouping plan on the Work Study Skills gains.
For fourth-grade scores significant differences favored the grouping plan for Reading Comprehension gains and Work Study Skills gains. The individualized approach scored the second highest gains for fourth- and fifth-grade Work Study Skill scores and fourth-grade Reading Comprehension scores for the three approaches. Gains were favorable for all three approaches, and it was concluded that above average gains could be made under any of the three approaches if proper materials and good teaching methods were used. No one of the plans produced better results for the top and bottom quartiles of students. In developing work study skills some individualization seemed of value to slower students. An attitude survey indicated the individualized group seemed to form better attitudes toward reading and appeared to do more library reading as indicated by books read records.


Creativity as a factor in reading achievement was studied to determine if it accounted for an additional component of variation in reading, which is distinct from the variation which can be accounted for by intelligence; to determine if intelligence was more closely related to critical reading than to creative reading; to determine if creativity was more closely related to creative reading than to critical reading; and to determine if creativity was more closely related reading performance at higher levels of intelligence than at average and lower levels. The population consisted of 232 eleventh-grade students enrolled in English classes in a metropolitan high school. Sample groups for a completely randomized 3 x 3 factorial design with 10 replications were identified on the basis of intelligence and creativity. For the three levels of the creativity classification, separate groups were identified on the basis of verbal, non-verbal, and total creativity scores. The statistical technique used in analyzing the data was the analysis of variance. The tests and other instruments administered to the subjects included The Nelson-Denny Reading Test Form A; The Watson-Glaser Critical Thinking Appraisal, Form AM; The Cooperative Literary Comprehension and Appreciation Test Form I; The Test of Imagination, Form R-G; and the Otis Quick-Scoring Mental Abilities Test, Gamma Form. In his summary, the author states that on the basis of the results obtained, all four hypotheses were rejected and the findings of this study did not support a conclusion that creativity is a factor in reading achievement of high school students.

The Children's Manifest Anxiety Scale and the Iowa Basic Skills Test were used to determine the relationship between anxiety and reading and arithmetic disparity. Six hundred fifty-nine sixth-grade boys and girls, in four groups significantly different in the areas of anxiety, I.Q., intelligence, reading, arithmetic, and total level of achievement were used. None of the four groups yielded significant correlations between anxiety and disparity in reading and arithmetic. Although some correlations were elevated, the hypothesis of anxiety being related to disparity was rejected. The hypotheses that a higher level of achievement may influence anxiety to cause greater disparity in favor of reading, and that anxiety in children working below the level of their peers may be inversely related to disparity (that is, arithmetic expected to be greater than reading), were also rejected.


The oral vocabulary skills of pupils of comparable intelligence and disparate reading achievement were studied. The vocabulary skills investigated knowledge of multiple meanings of words, ability to judge word meanings appropriate to given contexts, length of response, and number of different words used in response. The population was 62 white, upper-middle-class boys enrolled in sixth grade in Milwaukee parochial schools. The range of Lorge-Thorndike Nonverbal intelligence quotients was 115-131. Thirty-one boys were classified as good readers by Stanford Total Reading scores of 8.6 or above; 31 as poor readers by scores of 7.0 or below. A test of 26 sentences, each containing a multiple-meaning word, was constructed. The test was administered individually and responses were tape recorded. Responses to context and additional meanings given for stimulus words were scored with the Thorndike-Barnhart High School Dictionary as criterion. It was concluded that reading status as measured by standardized tests of paragraph meaning and word meaning is a relatively poor index of oral vocabulary skills such as knowledge of multiple meanings of words, length of response, and number of different words used in response; that poor readers are less homogeneous than good readers in ability to judge appropriate word meanings in context, in length of response, and variety of vocabulary; and that the variety of vocabulary and the length of a pupil's oral responses are relatively poor indexes of his reading achievement.

Chairman: Ruth G. Strickland, XXIV, No. 12, 5207. (Order No. 64-3826, Microfilm $2.75; Xerography $9.00, 196 pages.)

Language patterns of fourth grade children were studied to determine the effect of children's oral and written language patterns on their ability to comprehend reading passages that utilized language patterns similar to that of their oral language structure. Subject background variables of fathers' occupational status, parents' educational background, and subjects' intelligence, mental age, chronological age, and sex were also investigated to determine their effect on comprehension scores over written material utilizing high and low frequency patterns of oral language structure. Structurally controlled reading passages were designed by determining the frequency values of oral patterns of fourth-grade children's language structure in the reading passages and totaling the assigned frequency values. Vocabulary difficulty, sentence length, specific subject-matter content, and passage length were equated in the reading passages. Close comprehension tests were constructed for the reading passages and administered to 131 fourth grade subjects. Reading comprehension was found to be a function of the similarity of oral patterns of language structure to written patterns of language structure used in reading materials. Reading comprehension scores over materials that utilize high frequency patterns of oral language structure are significantly greater than reading comprehension scores over materials that utilize low frequency patterns of oral language structure. The fathers' occupational status, parents' educational background, and subjects' intelligence, mental age, and chronological age were significantly related to reading comprehension over materials utilizing high and low frequency patterns of oral language structure. Sex differences were not significantly related to reading comprehension.


The effect of perceptual-motor training on reading readiness as measured by the Metropolitan Reading Tests was studied. The population included 64 children enrolled in four kindergarten classes. A 2 x 2 x 2 factorial design was used as the experimental design for the study, with treatment, sex, and age being the three variables. The author concluded: (1) The experimental group made greater mean gains than the control group. (2) No significant differences occurred when comparing boys with girls or younger and older subjects. (3) There were no significant interactions. These findings indicate that the perceptual-motor training program used in this study was highly effective in pro-
motivating total readiness as measured by Metropolitan Readiness Tests.


The public elementary school reading program in France was described to provide a basis for future comparisons with various reading programs of the public schools in the United States. Professional literature was reviewed, checklists were developed to collect data about materials and methods used in the reading programs, and selected French schools were observed for a five-week period. In France, the Ministry of Education regulates the amount of time for reading instruction, school-age entrance requirements, and teacher preparation. Books selected for instructional purposes in the schools lacked a sequentially developmental series, correlated workbook, and practice material. Supplementary materials were teacher-made: reference books, standardized reading tests, and audio-visual aids were not used in the reading program. No one reading method of instruction was required. Three methods used were the synthetic or phonetic, the analytical or whole word, or a combination of these two. Reading instruction occupied 30 to 50 percent of the total school day.


The effect of parental participation, described as characterized in one instance by a planned program of parent participation and in the other instance by incidental participation, on the reading achievement scores of 232 second-grade children was studied. Testing procedures included the administration of the Ginn Second Grade Readiness Test, the "Paragraph Meaning" and the "Word Meaning" sections of the Stanford Achievement Test, Primary Battery Form J and K. Questionnaires were used also to determine the reading patterns in the home and evaluate the planned program of parent participation. The author summarized his findings by stating: (1) The experimental group was significantly superior to the control group on the Word Meaning Test. (2) On the Paragraph Meaning Test, there was no significant difference between the experimental and control groups. (3) On the Paragraph Meaning Test and the Word Meaning Test, there were no significant differences between the boys, girls, pupils with a higher level of readiness, or pupils with a lower level of readiness in the experimental and control groups. (4) Children in
the experimental group read more extensively, visited the library more frequently with parents, and expected less help with new words from parents than did the control group. (5) The parents and teachers of the experimental group reacted favorably to the home reading program.


The effect of experimentally learned word associations on textual response learning was investigated. Forty-four second semester first graders were presented word associate stimulus and response words. All the subjects were able to text the stimulus words, whereas none of them were able to text the response words at the beginning of the experiment. The subjects had to learn to text the response words. It was hypothesized that word associations can exert a powerful effect upon learning textual responses. Four treatments—including a facilitation treatment, an interference treatment, a neutral treatment, and a textual response only treatment—were administered consecutively to each subject. The data were analyzed by an analysis of variance technique. From an analysis of the results, the author concluded that textual response learning could be facilitated if the same word associations learned during familiarization were visually presented during textual response training.

291. Saporiti, Angelo Louis. "An Investigation into the Suitability of a Story Written for Use with Retarded Reading Pupils at Tenth Grade Level," Ed.D., Brigham Young University, 1963. XXIV, No. 10, 4057. (Order No. 64-2997, Microfilm $2.75; Xerography $5.40, 110 pages.)

A high-interest, low-vocabulary story was written for use with tenth-grade pupils of average intelligence and several years' reading retardation. The story was written by chapters with a continuing theme, each chapter being read as a separate short story. Chapters were submitted to pupils for reactions and suggestions before construction of the final story. The completed story was tested for readability and interest by application of the Dale-Chall readability formula and the Flesch interest formula to the beginning, middle, and end of each of the five chapters of the story. All chapters were close to the seventh-eighth grade range according to the Dale-Chall formula. The Flesch interest formula rated the story between "Very Interesting" and "Dramatic." The author concluded the story should be suitable reading for the segment of the retarded reading population for which it was written.
The extent to which WISC sub-tests discriminate between a group classified as mildly disabled in reading as contrasted with a group classified as severely disabled was studied. A random sample of 180 subjects was drawn from the disabled readers who came to the Syracuse University Reading Center. Those whose instructional level was less than half the reading expectancy grade score were termed severely disabled; those who had made at least half the progress were classified as mildly disabled. The study was limited to those whose IQ's were between 90 and 119 and whose chronological ages fell between eight years and 15 years five months. Substantial evidence supported the possibility of distinguishing between mildly disabled and severely disabled readers on the basis of the sub-tests of the WISC. More effective discriminations were found at the younger age levels than at the older age levels. It was also found that probable group membership prediction as determined by cross-validation was highly efficient. Additional findings and implications are reported.


The reading improvement of pupils who remained in the developmental reading program, received corrective reading therapy, and received remedial reading therapy was measured after one year of instruction and again one year later. The results were compared. From a group of 597 students in the elementary and secondary schools of Baltimore County, Maryland, identified as remedial readers, three groups of 80 pupils each were at same reading levels according to the Stanford Reading Achievement Test, of the same ability according to the Wechsler Intelligence Test, and at the same grade level were selected. The students were divided into 80 sets of three students and randomly assigned to either the remedial, corrective, or developmental programs. This selection procedure was replicated 40 times with elementary and 40 times with secondary pupils. The remedial program included pedagogical remediation, individual or group psychotherapy, and family counseling. The corrective program included the standard corrective program at each local school. The developmental program included the regular developmental program in each
classroom with no additional instruction. During the subsequent school year all pupils returned to the regular classroom developmental reading program. At the close of the one year instructional period and the one year follow-up, the pupils in the remedial group made significantly greater improvements than pupils in the corrective and developmental programs. The secondary pupils in the corrective program also scored significantly higher than the pupils in the developmental program on both evaluations. Additional findings and conclusions are included.

294. (Schlueter), Sister Mary Peter. "The Role of Intelligence, Personality, and Selected Psychological Factors in Remedial Reading Progress," Ed.D., The University of Rochester, 1963. XXIV, No. 10, 4088. (Order No. 63-7780, Microfilm $2.75; Xerography $5.00, 98 pages.)

The possibility of predicting remedial reading gain by means of intelligence and personality tests, and of specifying psychological factors characteristic of students making the most and the least progress during a remedial reading course was investigated in the Catherine McCauley College reading laboratory at Rochester, New York, using 135 fourth, fifth, and sixth grade children receiving remedial reading instruction. Three separate multiple regression analyses were conducted to predict gain in vocabulary, comprehension, and speed. Tests used were the Lorge-Thvendike Non-Verbal Scale of Intelligence, the California Test of Personality, and the Gates Reading Survey Tests. The relationship between remedial reading gain and psychological factors was treated by the Chi-square technique. A prediction equation was formulated, using the Stepwise Multiple Regression Program, making it possible within certain limits to predict the amount of progress children in fourth, fifth, and sixth grade can make in a summer remedial reading session. Personality was found to be more predictive than intelligence, and intelligence and personality combined was the best predictor in all areas (vocabulary, comprehension, and speed of reading). Thirteen psychological factors were studied. Children most likely to make the greatest gain in a remedial session are those who read at least one hour daily at home, are not overdependent on the reading teacher, increasingly enjoy reading and attending the reading laboratory, have good listening comprehension, work diligently, like their teacher, are quick to move and respond, have parents who are readers, and have no upsetting factor in their lives.

State-directed reading circles for teachers and pupils in American public schools were studied to discover (1) how and why this movement originated and expanded, (2) what contributions should be credited to it, (3) how the children's circles differed from the parent organization, (4) why the Midwestern states' circles were particularly vital and enduring, (5) whether the program itself failed or whether educational and social changes reduced its usefulness, and (6) whether there is any justification for continuing such a program. From the sources used, which included federal and state educational documents, records and publications of reading circles, and a doctoral dissertation, the author found that reading circles emerged in a period of social reform to aid general self-improvement through reading and because of dissatisfaction with contemporary provisions for teacher education. The children's circles were organized to help teachers instill in children a permanent love of reading. Their chief contribution resulted from their acceptance by both teachers and administrators as a means of improving professional competence. Indirectly they led to more permanent forms of teacher education. The 20 children's circles established between 1888 and 1925 retained their voluntary aspect and developed from an annual selection of several books to an extensive list of carefully selected books for the school library. The Midwestern states' insistence on local administration led to a flexibility which other states' programs lacked. They were useful longer because of the preponderance of rural school districts with poorly prepared teachers and meager book funds. The twentieth century found the teachers' reading circles inadequate for teachers entering service or continuing their professional growth. It must be concluded that the movement generally outlived its usefulness.


Thirty pairs of sixth-grade bilingual children of Puerto Rican origin or extraction were matched according to sex, age, I.Q., reading achievement and school class in an effort to test the effect of choral speaking on silent reading achievement. One member of each group was designated as experimental and the other as control. Both groups received reading instruction from the Scott Foresman Basal Reading Series. The experimental group received a series of 44 choral speaking sessions of 40 minutes each, taught by the investigator twice weekly over a period of six months outside of the regular classroom. During these periods the control group engaged in extended social studies activities with their regular teachers. Alternate forms of the Metropolitan Achievement test, Intermediate Reading Test were administered as pre-tests and post-tests. Comparisons of gains in silent reading
achievement between the experimental and control groups and be-
tween boys and girls in both groups indicated no statistically
significant differences between the various groupings that could
be attributable to other than chance alone.

297. Seay, Lesten Clare. "A Study to Determine Some Relations Between
Changes in Reading Skills and Self Concepts Accompanying A Remedial
Program for Boys with Low Reading Ability and Reasonably Normal
Intelligence," Ed.D., North Texas State College, 1960. XXI, No. 9,
2598-2599. (L.C. Card No. Mic 60-6164, Microfilm $2.75; Xerox
$8.00, 173 pages.)

The California Test of Personality and the Reading Test of
the California Achievement Tests were administered to an experi-
mental group of 72 boys in Grades Four through Seven attending
reading clinics, and a matched group serving as a control who
had no reading problems, to determine the relationship between
changes in reading skill and aspects of self-concept. After
seventeen weeks retests were administered to both groups and
differences between test and retest data computed. The devia-
tion of the initial self-concept scores and reading grade place-
ments from actual grade placements were also determined. A sig-
nificant positive correlation was found between personal, social
and total self-concept levels and levels of vocabulary, compre-
hension and total reading scores for experimental and control
groups. Using "t" tests, no differences were found in levels of
self-concept between the two groups. Changes in self-concept
levels and in total self-concept levels seem to be positively
related with experiences in a clinical remedial program. Changes
in personal self-concept do not appear to significantly related
to these experiences. Changes in level of vocabulary, compre-
hension, and total reading skills are each positively (but not sig-
nificantly) related to changes in level of personal, social, and
total self-concept associated with experiences in a clinical re-
medial reading program.

298. Sebesta, Sam Leaton. "Artificial Orthography as a Transitional
Device in First-Grade Reading Instruction," Ed.D., Stanford
University, 1963. XXIV, No. 8, 3237. (Order No. 64-1578,
Microfilm $2.75; Xerography $7.60, 161 pages.)

An artificial orthography using graphemic symbols repro-
ducible on a standard typewriter and corresponding as much as
possible to the traditional writing system was devised to deter-
mine the extent of non-correspondence between grapheme and phoneme in affecting first grade reading ability and whether the
imposed correspondence would simplify reading training through
consistent illustration of the alphabetic principle. A grapheme
was designated for each of the sounded phonemes in the language, and
primary reading materials were reproduced using consistent
spelling based on an analysis of subjects' dialect. Thirteen
female and fourteen male pairs of first grade students from a
lower-middle class community were matched according to reading readiness and intelligence as determined by standardized tests. The investigator taught 70 50-minute reading lessons on consecutive days in each of the two classrooms, using a methodology described in teacher's manuals for a current reading textbook series. The only difference between the experimental and control groups was the orthography. During the final 15 lessons of the training period experimental subjects underwent transition from artificial to traditional orthography, reading materials in both orthographies. Following training, subjects were given the Familiar Words Test of written identification of 70 words taught during the training, oral individually-administered tests of 50 common words chosen from the Rinsland and Dolch lists but not previously taught, and the FWR and PSR types of Gates Primary Reading Tests. All three tests appeared in traditional orthography. The imposed orthographic consistency and subsequent transition to traditional writing failed to produce superior gains on Familiar Words recognition or on standard word recognition tests. The transition from artificial to traditional orthography did not appear to hinder word recognition. If confusion did result from use of the two orthographies, its effects appear to have been compensated by learning of the alphabetic principle facilitated through consistent use of artificial orthography.


An analysis of the performance of 24 educable retarded adolescents and 24 intellectually normal adolescents on an Embedded Figures Test and a Structural Analysis Test was completed. The author concluded that the data supported the hypothesized differences between normals and retarded on the two tasks with significantly inferior performance demonstrated by the retardates. Sex differences did not appear on EFT performance but were evident on the SAT. There were generally low and insignificant correlations between retardate performance on the EFT and SAT subtests, which tend to leave the postulated unitary function of visual perception largely unsubstantiated.

300. Shaffer, Edward John. "Pupil Dictated Captions and Prose for Familiar Comics and Cartoons As a Stimulus for Reading in Grade One," Ph.D., The Florida State University, 1965. Vol. XXVI, No. 12, 7121. (Order No. 66-5460, Microfilm $3.00; Xerography $4.60, 86 pages.)

Total reading scores for first grade students who supplied captions for cartoon characters and projected them on a screen were compared with reading scores of a control group which used
a conventional approach to reading during the year-long study. The Metropolitan Readiness Test and the California Mental Maturity Test were administered at the beginning of the study. The groups were similar in terms of intelligence, reading readiness, age, and socio-economic background. The California Reading Test was used to measure gains in reading. The data were analyzed in terms of the performance of subjects by treatment, the performance of subjects according to sex, and the performance of subjects based on sex and treatment. No significant difference was found between the groups in reading achievement at the end of the study.


A correlation study was completed to determine the best predictor of reading achievement at mid-year. The Visual Discrimination Word Test, the Metropolitan Reading Readiness Test Form R, and the Lorge-Thorndike Intelligence Test were administered to 76 first-grade children. After five months of formal first-grade instruction, a word recognition test constructed by the investigator was administered to these same children. From an analysis of the data, the author reached the following conclusions: (1) The Lorge-Thorndike Intelligence Test and the Visual Discrimination Word Test had the greatest correlations with the Word Recognition Test. (2) The Visual Discrimination Word Test was the best predictor of word recognition ability for the pupils in the lowest quarter, the low middle quarter, and the highest quarter of the group. (3) The Metropolitan Reading Readiness Test was the best predictor of word recognition ability for the pupils in the high middle quarter of the group. (4) There was a high correlation between achievement on the Visual Discrimination Word Test and achievement on the Word Recognition Test, and an almost identical relationship existed between achievement on the Lorge-Thorndike Intelligence Test and the Word Recognition Test.


Male subjects in classes for the educable mentally retarded who were reading above their mental capacity (Adequate) were compared with subjects reading below their mental capacity (Inadequate). Mental age scores were used to match the two groups. The chronological ages of the total group ranged from 9-7 to 16-3, mental ages from 7-5 to 9-10, and IQ's from 56 to 83. The following tests were individually administered to each of the 40 subjects: Gates Advanced Primary Reading Test, Monroe Word Dis-
crimination Test, Gray Oral Paragraphs Reading Test, Jota Word Recognition Test, Illinois Test of Basic Information, an un-standardized test of ability to use context clues, Monroe Sound Blending Test, Kass Visual Automatic Test, Automatic-Sequential subtests from the Illinois Test of Psycholinguistic Abilities, and the Harris Test of Lateral Dominance. Questionnaires concerning each subject's personal adjustment and home conditions were completed by the teachers. Significant differences were found on the measures of silent and oral reading. Significantly more errors were found for the Inadequate Group, particularly faulty vowels, faulty consonants, reversals, omissions of sounds, substitutions of words, words aided and refused, inferiority on the test of sound blending, and the total test of basic information on Part 2. Significant differences were found in favor of the Adequate Group on the test of ability to use context clues, a test of digit repetition, and a test using 25 indicators of social and emotional adjustment. No significant differences were found on the other measures. Other results are included.

Three hypotheses were examined relative to the influence of reading comprehension and time variables on group intelligence tests: (1) Timed group intelligence tests are a more valid indicator of ability for superior readers than for retarded readers. (2) The validity of timed group intelligence tests decreases more for retarded readers than for superior readers as the testing time decreases. (3) Partialing out reading comprehension increases the validity of group intelligence tests. The Iowa Silent Reading Comprehension Test and the Wonderlic Personnel Inventory were given with 10, 20, and 30 minute time limits to 271 undergraduate college students, the majority of whom were sophomores, enrolled in a regular general psychology course. The upper and lower twenty percent, as measured by the Iowa, were designated superior and retarded readers. This resulted in 48 superior and 40 retarded readers. They were given the Short-Form Wechsler Adult Intelligence Scale. The results indicated rejection of all three of the hypotheses previously stated.

A group of retarded males with a mean I.Q. of 68.45 and a group of normal males with a mean I.Q. of 99.36 were compared
by use of "t" tests on achievement in reading comprehension and performance tasks. The reading comprehension tasks included Utilization of Contest Clues, Interpretation of Figurative Language, Locating Factual Information, Selecting the Main Idea, Sequential Ordering and Classifying, and Indexing Ideas. The performance tasks were Object Assembly, Picture Arrangement, Picture Completion, Stencil Design Tests, Healy Picture Completion Test II, Analogous Progressive Series and Items designated Classifying Series by the writer. The normal group was significantly superior on the reading tasks but no significant differences were found between the two groups on the performance tasks. It was concluded that the reading tasks may involve psychological variables of production and evaluation which are influenced by extraneous information in retarded subjects.


The incidence and extent of reading disability among primary grades pupils who had been referred for school psychological services were investigated. The possibility that a multivariate analysis might identify Wechsler Intelligence Scale for Children (WISC) profile characteristics associated with retarded readers and profile differences between disabled and non-disabled readers in each of the first three grades separately was also investigated. The defining characteristics of these groups were based on configuration of scores on the WISC and the Bender Gestalt Test. The extent of a student's reading disability depended on the difference between his expected grade equivalent on the Word Recognition of the Wide Range Achievement Test and his actual score. It was concluded that pattern analysis of WISC profiles or the use of Bender Gestalt Test scores provides virtually no clues as to the nature or extent of correctable reading deficiencies in primary grade children. Even a fairly large difference in Verbal and Performance IQ only suggested reading retardation. This was particularly true when the similarities scaled score was the lowest of the verbal subtest. The Bender Gestalt scores were almost totally unrelated to the existence or amount of reading retardation. Additional results and conclusions are included.

306. Silvaroli, Nicholas Joseph. "Intellectual and Emotional Factors as Predictors of Children's Success in First Grade Reading," Ed.D., Syracuse University, 1963. Supervisor: William D. Sheldon, XXIV, No. 12, 5098. (Order No. 64-5673, Microfilm $2.75; Xerography $6.00, 121 pages.)

Auditory and visual discrimination measures were administered
to 600 kindergarten children in public elementary schools to
determine whether any combination of the factors of mental age,
auditory discrimination, visual discrimination, letter identi-
fication, social class status, and maternal n-achievement could
be used prior to formal reading instruction to predict probable
reading success. Tests administered were the Durrell Informal
Test of Upper and Lower Case Identification and the Otis Quick-
Scoring Mental Ability Test: Alpha Short Form. Social class
status was determined by the Warner Index of Status Character-
istics. Mothers of the children were given the McClelland n-
Achievement Test. The Gates Primary Reading Test served as the
criterion variable. From multiple correlations for various com-
bination of these six readiness factors, regression equations
were developed for both boys and girls. It appeared that the
single factor of letter identification could be used to predict
reading achievement as well as all or any combinations of the
readiness factors used in this study. There was no apparent
value in adding the other factors to predict reading achieve-
ment scores in the first grade.

307. Simmons, John Stephen. "Comparison of a Theoretically Sound
Reading Program With Current Practices of Secondary Schools in
the Upper Mid-West," Ph.D., University of Minnesota, 1962.
XXIV, No. 11, 4588. (Order No. 64-4083, Microfilm $4.05;
Xerography $14.20, 313 pages.)

Using standard texts and references, a theoretically sound
high school reading program was developed and revised, incorpor-
ating the suggestions of a panel of secondary reading authorities.
A 40-item questionnaire on high school reading principles and
practices was developed and sent to a random sample of schools
in a five-state midwestern area to obtain actual reading prac-
tices. More of the large and medium-sized schools returned
questionnaires than did the smaller schools. Reaction to indi-
vidual items was totaled and percentages calculated for each
response obtained from 127 returned questionnaires. The results
of the survey revealed that administrators rely either on the
English teacher or themselves to supervise the program, but in
most cases neither of these had a professional background in
teaching reading. More than one-third of the schools indicated
little need for organized reading instruction and many schools
had no formal programs. Organized reading instruction in the
Upper Midwest was found to be not only inadequate, but lacking
in many cases. Most high schools were not aware and would not
admit that many of their students were significantly retarded
in reading. In many instances schools which were aware of the
problem did little about it, and those programs about which in-
formation was gathered tended to be rigid and narrow and not
theoretically sound.

308. Simpson, Dorothy Margaret. "Perceptual Readiness and Beginning
Reading," Ph.D., Purdue University, 1960. XXI, No. 7, 1858.
The purpose of this study was to determine the contribution of perceptual ability (as measured by the Metropolitan Readiness Test and the Primary Mental Abilities Test) to first-grade reading achievement, and to assess the effectiveness of certain perceptual training activities in reading instruction. Correlations were computed between the perceptual sub-test scores and the Metropolitan Reading Tests total score for 312 first-graders. The perceptual sub-tests correlated relatively more highly with reading achievement than did the traditionally designated reading readiness subtests. Experimental and control groups were established of twenty-four pupils each. One group received training to increase perceptual skills. The group which received perceptual training attained a significantly greater reading achievement score than the control group (3.3 months greater on the average).


The effects of test anxiety and perceptual rigidity upon the acquisition of word recognition skill among 412 second-grade children were studied. Through the procedures utilized, the author identified 60 of 412 children as high anxious according to a score above the median on Sarason's Test Anxiety Scale for Children and teacher rating identifying the child as having exhibited overt symptoms of test anxiety. An additional 120 subjects were administered three tests: the Peabody Picture Vocabulary Test, the Wisconsin Card Sorting Test, and the author-prepared Word Recognition test. Subjects who scored above the median on the Wisconsin Card Sorting Test were designated as high in perceptual rigidity. In the statistical design, the author used a two-way, 2 x 2 analysis of covariance design. The author suggests that test anxiety appears to be an important variable in determining how readily children are able to acquire a word recognition vocabulary during beginning reading instruction. Although perceptual rigidity was not found to be independently associated with poor word recognition skill, there was some indication that this variable may affect word recognition skill through an interaction effect with test anxiety.

Parallel forms of an author-constructed informal reading inventory and the California Reading Test, the Gates Reading Survey, and the Metropolitan Reading Test were used in attempting to obtain objective evidence concerning the extent to which the level of reading achievement as measured by standardized tests differed from the instruction and frustration levels determined by the informal reading inventory. A subsidiary objective was to determine the extent to which standardized reading achievement test scores might be used as a basis for selecting suitable reading materials for individuals. The author concluded that it was impossible to generalize on the basis of the results obtained from 202 fourth-grade children whether standardized reading tests tend to place children at their instructional or frustration level. Absolute confidence cannot be placed in the instructional or frustrational levels determined by one informal reading inventory.


The effects of a program emphasizing rate of comprehension upon rate of reading, story comprehension, and study comprehension were evaluated. Eight classes and 234 children were randomly selected and assigned to either control or experimental groups. Eighty students from the experimental and 80 from the control group were selected randomly to constitute the study population. Measures of intelligence were obtained with the California Test of Mental Maturity, and reading performance was measured through use of the Diagnostic Reading Tests, Survey Section: Lower Level. In the experimental group, 45 lessons from Standard Test Lessons in Reading: Book K were administered over a period of 30 weeks. The prescribed developmental reading program was followed by the control classes. Exercises emphasizing rate of comprehension at the sixth-grade level tended to result in increases in rate of reading but not in increases in comprehension of expository material. Increases in comprehension of study-type material tended to be greater for pupils who did not participate in such a program.


The effect of improvement in auding ability on the reading achievement of eighth grade pupils was studied. Two groups of
average eighth-grade pupils were chosen. Standardized tests of reading achievement, auditory achievement, and intelligence were administered to both groups at the outset of the study for the purpose of equating the groups. Twenty-six pre-taped auditory training exercises were administered to the experimental group at the rate of three per week for a period of nine weeks. Other aspects of the school program were the same for both groups; neither group received any formal reading instruction. Pupils who received auditory training made significant gains over pupils in the control group when scores on the following were compared: auditory achievement, reading achievement, paragraph comprehension, and ability to alphabetize. No significant difference was found between the two groups when scores on the following were compared: growth in rate, rate-comprehension, directed reading, word meaning, sentence meaning, or use of index. Coefficients of correlation between reading achievement and auditory achievement and between reading achievement and intelligence showed the same relationship as those reported in the literature.

313. Skolnick, Sidney. "A Comparison of the Effects of Two Methods of Teaching Reading on the Reading Achievement of High and Low Anxious Children," Ph.D., The University of Connecticut, 1963. XXIV, No. 11, 4588. (Order No. 64-3564, Microfilm $2.75; Xerography $4.60, 87 pages.)

The effects of individualized reading instruction and three-ability group instruction were compared in high and low anxious children in the second and third grades over a six-month period. Pupils in six second grades and four third grades were matched as to number, intelligence, chronological age, reading group level, and socio-economic level. Teachers in the study were matched on percentile rank on the Minnesota Teacher Attitude Inventory, principal's ratings, and years of experience. Teachers in both groups received pre-study instruction and preparation. During the first two weeks of school all teachers in the study administered the informal reading inventory for instructional purposes. Anxiety was measured by the Test Anxiety Scale for Children. Reading ability was measured by the Gates Reading Tests administered as pre- and post-tests. Hawthorn effect was minimized by uniform class size, equal time on reading instruction, equal consultant assistance, and equal emphasis on reading in all classes. The individualized reading method was not found to result in greater achievement on reading tests scores than the three-ability group method. High and low anxious children made no greater gain in reading achievement in the individualized reading classes than they did in three-ability group classes, thereby furnishing no substantiation of the claims of beneficital effects of individualized reading instruction.

To test the validity of the theory that the effective or powerful reader will demonstrate flexibility of ocular motor reading behavior when reading for different specified purposes, selections were chosen from a freshman textbook in western civilization and adapted for one of four purposes: reading in the usual manner, reading to find the answer to a specific question, reading to find the main idea of a selection, and reading to find the bias of the author. Eye-movement measures considered in the study were number of fixations, number of regressions, average duration of fixation, span of recognition, and rate. Material was rated at a readability level of first year college. Subjects read materials as a camera photographed their eye movements. Personal history questionnaires indicated the more effective readers differed from the less effective readers in having higher grade point average in high school and as first quarter university students, receiving higher entrance examination scores, having a wider variety of reading interests, reading more books, and experiencing no difficulty in learning to read. Ocular motor behavior changed when students were reading for specific purposes measured by numbers of fixations and regressions, and rate of reading. When they were reading in their usual manner and reading for the main ideas, number of fixations and rate were not affected by the change in purpose. Duration of fixation and span of recognition were not affected when reading purposes were changed. Comparison of ocular motor behavior of the more effective and less effective reader groups showed change in purpose resulted in significantly different behavior for all eye-movement measures except duration of fixation.


For an experimental and control group of freshman college students, scores from the Cooperative English Test, academic achievement in first semester courses, drop-out rate, probationary status and disqualification records were used to determine the effect of a developmental reading program on the academic progress of students with low-level ability and the effectiveness of a developmental reading course. Significant gains in speed, comprehension, and total reading were made by the experimental group. Both experimental and control groups made significant gains on speed, comprehension, and total reading when compared. The experimental group had a lower drop-out rate, better academic achievement, and improved probationary status. The control group lost fewer students through disqualification. It was indicated that the experimental group made significant gains in one-half the time scheduled for the control group.
Six 500-word articles were prepared for fourth-, sixth-, and eighth-grade students to determine whether or not purpose statements and marginal notes are of value in aiding students to organize and comprehend material which they read. Criteria for the articles included good organization, suitable readability level, and interesting material. Twelve multiple-choice test items were constructed for each article to test understanding of main ideas, details and prediction, application and generalization. In each grade one group used materials containing no organizational helps, another group read material preceded by a purpose statement, and a third group read articles with marginal notes. Testing time was fifty to sixty minutes, and students were assigned to each technique to provide an equal range of ability. Final scores were available for 81 subjects in each procedure in Grade Four, 68 subjects in each procedure in Grade Six, and 87 subjects in each procedure in Grade Eight. The statistical analysis revealed that there was no significant interaction between ability level and type of comprehension aid and there was no interaction between type of comprehension aid and grade level. The author concluded that the study did not confirm the widely held view that the use of organizational devices is of value in comprehending material read. However, no systematic instruction and practice prior to testing was given in using the organizational aids evaluated.

The relationship between mobility and achievement in reading, arithmetic, and language was studied in a sixth-grade population of 483 students. The instruments used to determine achievement were the California Short-Form Test of Mental Maturity, Form S; the California Achievement Tests Complete Battery, Form W; and Personal Data Form and the Hollingshead Two Factor Index of Social Position. Analysis of variance was used to analyze the main scores derived when the categories of mobility, sex, socio-education, retention, and I.Q. were established in relation to achievement areas. The statistical findings showed that no significant differences existed among the compared groups in the six achievement areas and the mobility-variables except in the case of arithmetic fundamentals and number of moves. In this case, the differences favored those pupils who had moved the greatest number of times.

Abstract not available.


The relationship of self-image as a reader to reading achievement was investigated. Boys and girls in grades two through five in the Scarsdale Public Schools, New York, participated in the study. The pupils were screened with the Colvin Silhouette Test and rated high, average, or low self-image as a reader, as a physical education student, as a music student, and as a smart or independent child. Using these ratings as variables, pupils were assigned to motivational states. Thirty boys who had high, average, and low self-image as a reader and high self-image as a physical education student were told to do a reading task while thirty additional boys with the same self-image were told to do a gym task. In like manner, additional groups of children with high, average, and low self-image as a reader were assigned to groups and treatments using the above ratings. The Lorge-Thorndike Intelligence Test and the Stanford Reading Subtest were used to evaluate ability and reading achievement. These conclusions were offered: the variable called self-image affects reading achievement for boys; boys with high self-image as a reader have better reading achievement than boys with average or low self-image; for boys, a poor self-image in an academic area depresses performance to a greater degree than a good self-image improves performance; and the reading achievement of boys and girls were comparable.


The purpose of the study was to determine whether sixth and grade pupils could master the skills needed to record more rapidly with the electric typewriter than they could handwrite; whether the use of the electric typewriter would appreciably influence reading achievement; whether the reading speed was measurably accelerated by the use of a recording process faster than the handwriting; whether performance in selected language arts was significantly affected by the use of the electric typewriter; and whether typing performance affected eye movements during the reading process. Two groups each consisted of eight high achieving sub-
jents matched on the basis of intelligence and achievement as measured by the Stanford Achievement Test (SAT). The experimental group received instruction in typing and used the electric typewriters to prepare their lessons. The Gates Reading Survey (GRS) and the SAT were used to measure achievement. The experimental group learned to type on the average two and one-half times as fast as they could write by hand. Differences in gains between the two groups were not significant on the GRS or the subtests of the SAT. Differences between groups in handwriting gains were not significant and all subjects considered initiation of typing instruction desirable. Conclusions follow the findings.


The semester-by-semester achievement of students enrolling in and completing the X100 course in the Reading and Study Clinic at Indiana University was compared with the academic achievement of students who did not enroll in the program. Also compared was the drop-out rate throughout four years of college. A personal evaluation of the program by former students who had participated was secured. One hundred students were chosen as the experimental group, and one hundred students who had not taken the X100 course served as the control group. Students were matched on similar characteristics of general intelligence test scores and reading test scores obtained from freshmen orientation tests. College records provided academic achievement and drop-out rate data. A Student Evaluation Inventory furnished opinions concerning the reading program. On the basis of data provided, it was concluded that enrollment in X100 made no difference in a student's academic achievement or in the drop-out rate. Most of the students evaluated the course as favorable.


Smith and Carrigan advanced the view that perceptual efficiency in reading may be accounted for by reference to the interaction of two chemicals, acetylcholine and cholinesterase, located at the synaptic junction. In this study 200 retarded readers were selected from the population (701) studied by Smith and Carrigan to develop a diagnostic procedure called "profile analysis" for use in clinical work with retarded readers. Eight tests scores (from 15 tests) were available from the previous study. The Psychological Test Battery was also administered. Through a factor analytic technique six factors were extracted from the matrix. These were perceptual speed and closure inter-
interpreted in terms of unusual cholinesterase production, perceptual memory and accuracy interpreted in terms of unusual action of acetylcholine, and an anxiety and intellectual factor. One hundred twenty pupils, selected randomly from the 200, fell into six sub-groups developed through an obverse analysis. Standard diagnostic profiles were constructed for the groups. The profiles constructed for each group showed that reading disability cases can be identified on the basis of patterns of selected cases. By computing tau coefficients of profile similarity between a pupil’s scores on the test battery and the scores for each diagnostic profile it is possible to group pupils by syndromes.


The relationship between reading achievement and auditory discrimination was studied. Other goals of the study were to determine if schools selected for socio-economic extremes had significantly different correlations with the auditory test at the third, fifth, and eighth grade levels, and if there were differences in correlations between grade levels within School I and School II. Auditory discrimination data were secured by administering rhythm, pitch, and tonal memory tests to each class. Socio-economic data were obtained by using the Warner Index of Social Class and applying its criteria to the various socio-economic areas in the city of Phoenix. An upper-middle and an upper-lower school were chosen for comparison. Correlations between reading achievement and the rhythm test, pitch test, and the tonal sequence test, when considered for each grade level, were not significant except for a significant negative correlation in the fifth grade test of pitch in School I. The higher socio-economic school had slightly and consistently higher means in reading achievement, but differences were not significant.


An eighty-item questionnaire was submitted to 42 specialists and/or administrators in elementary education schools, 30 reading instruction specialists, and 145 first-, second- and third-grade teachers to evaluate basal, individualized and unclassified reading instruction methods. Local and national educators comprised a jury to help develop a 35-item Reading Instruction Scale to classify instructional orientation of teachers of elementary reading. Item analysis revealed the scale discriminated between basal
and individualized reading methods. Each teacher received a basal and individualized score which was converted into an Index of Instructional Bias. Ten groups of pupils were identified by the instructional bias of their teachers and comparative analyses made on mental ability, socio-economic status, and reading achievement of the groups. The author concluded that the individualized method was significantly superior to the basal and unclassified method in promoting primary reading achievement. The individualized pattern provides for readiness to read and for the reading skills of word recognition, comprehension, and study skills. The individualized method can be taught by experienced but not necessarily superior teachers, with average numbers of children and materials available in school district libraries and curriculum offices. Systematic, controlled vocabulary introduction in teaching reading to first-grade children fails to take into account the wealth of communications surrounding today's children. A richer vocabulary is indicated.

325: Spicola, Rose Frances. "An Investigation into Seven Correlates of Reading Achievement Including the Self-Concept," Ph.D., Florida State University, 1960. XXI, No. 8, 2199. (L.C. Card No. Mic 60-550; Microfilm $2.75; Xerox $4.00, 74 pages.)

Scores from the Stanford Achievement Tests, California Test of Mental Maturity, the McGuire-White Inventory Sheet, the Classroom Social Distance Scale, and the Reeder Adaptation of the E.ownfain Categories Inventory for 381 sixth-grade boys were used to explore the relationship between reading achievement and chronological age, mental age, socio-economic index, self-concept, school entrance age, sociometric status and educational level of father and between self-concept and chronological age, mental age, socio-economic index, school entrance age and educational level of father. Correlation analysis of "t" tests revealed a significant correlation between reading achievement and all but school entrance age and sociometric status in the first problem and a significant relationship between self-concept and all but chronological age, school-entrance age and sociometric status in the second problem. A multiple-regression analysis to determine the relative importance of the seven measures in predicting reading achievement indicated that the seven variables accounted for fifty-seven percent of the variance in reading achievement and that mental age, chronological age, and school-entrance age were almost as predictive as all seven variables combined. Chi-square and analysis revealed significant differences between self-concept and intelligence concept, reading achievement in the self-concept and intelligence concept intervals, actual mental age and intelligence concept, and reading achievement in the actual mental age and intelligence concept intervals. The intelligence concept was found to be more discriminating regarding reading achievement than the self-concept.
The hypothesis that children who enter kindergarten at an early age are less successful in reading achievement than children who are older at the time of entrance was tested by analyzing the third-grade reading marks of 1650 pupils divided into three kindergarten entrance age groups. Group 1 entrance age was 4.10 to 5.1, Group 2 entrance age was 5.0 to 5.5 and Group 3 entrance age was 5.6 to 5.9. Chi square was used to compare the groups on above-average and below-average reading marks as assigned by teachers at the conclusion of grade three. A definite increase was found in the percentage of cases receiving above-average marks as one proceeded from one age group to the next older age group. The differences were significant, thus supporting the hypothesis. Because of the success in reading of a large number of children included in the younger-age group the author cautions that other variables such as emotional, social, and intellectual maturity should be thoroughly investigated to determine their effect on kindergarten entrance age policies.

Psycho-social variables and their relationship to level of reading achievement were studied. One hundred ten seventh-grade students were selected from three junior high schools in Oklahoma. The Bond and Tinker Reading Expectancy Formula was used to classify the pupils into retarded and accelerated readers. The reading achievement as measured by the Gates Reading Survey test ranged from 5.1 to 12.5; intelligence as measured by the Wechsler Intelligence Scale for Children ranged from 110 to 151. The variables examined were self-adjustment and social-adjustment as measured by the California Test of Personality, emotional reactions as measured by the Rohde Sentence Completions, and socio-economic status of family as measured by the Warner Revised Scale for Rating Occupations. The study concluded that self-adjustment and social-adjustment were not significantly related to level of reading achievement; that self-reliance and social skills may be related to reading achievement of able seventh-grade students; that emotional reactions may be related to level of reading of seventh-grade students; and that socio-economic status of family may be related to level of reading achievement in certain socio-economic groups.

The achievement of academically talented and non-academically talented students in reading comprehension, arithmetic concepts, and arithmetic problem solving over a three-year period in Grades Four, Five, and Six was compared. The subjects were sub-divided further for comparison into three groups: academically talented in special class (58 boys, 73 girls), academically talented in regular class (38 boys and 36 girls), and non-academically talented in regular class (63 boys and 47 girls). The test and other measuring instruments used in this study included the Iowa Tests of Basic Skills, Stanford-Binet Intelligence Scale, and the Otis Quick Scoring Mental Ability Tests, Beta Test. Comparisons of achievement were made utilizing analysis of variance and analysis of covariance techniques. Some conclusions derived from the findings of the investigation were summarized as follows: (1) Each of the three groups of boys and girls made regular and significant gains in achievement in each of the three basic skills over the duration of the study. (2) In each of the three basic skills, the achievement of academically talented students, in both regular and special classes, was significantly higher than the achievement of non-academically talented boys and girls in regular classes. (3) In reading comprehension and arithmetic concepts, the achievement of academically talented students in special classes was equal to or higher than that of academically talented students in regular classes. In the case of arithmetic concepts, the difference in favor of the academically talented in special classes was significant.


An analysis of growth patterns in reading skills was made among students with seven different types of physical disabilities to determine whether specific disabilities, age at onset of disabilities, or the extent of the disabilities were significantly related to the amount of growth achieved in specific reading skills. The population included 102 junior high school pupils receiving home-instruction during one school year. Information concerning their disabilities, IQ's, home environment, beginning level of achievement in reading skills, and ending level of achievement in reading skills was obtained by questionnaires filled out by home teachers and by intelligence tests and reading tests administered
by the teachers to their pupils. The analysis of variance, analysis of covariance, and correlations were the statistical methods used. The author states that there were no statistically significant differences in mean gains among the seven disability groups. The extent of the disability was not significantly related to the mean gains made by the different disability groups. There was no significant relationship between age at onset of disability and mean gains made by the several groups.


The effects of an experimental program for the correction of reading disability which combined educational group counseling with remedial reading instruction was investigated. The total number of students participating in the investigation was 36, with an equal division of elementary level and secondary level subjects. Among the test instruments and other methods used to measure the effects of the program were Gilmore Oral Reading Tests, Gates Reading Survey, a specially devised Sentence Completion Instrument and companion Picture Interpretation Test, observations and ratings by three independent judges of student and teacher counselor behavior in counseling groups, parent conferences, and post-program questionnaires, completed by the students and teacher counselors. The results supported the major hypothesis that there would be comparable gains in the reading performance of the two treatment groups and that the counseled group would show significantly greater improvement than the non-counseled group in regard to the acquisition of more positive school and social attitudes. An examination of the comparative findings for the two school levels revealed that the elementary level retarded readers demonstrated a greater ability to benefit from remedial treatment, whether of a specialized reading or of a counseling nature than did the secondary retarded readers. The author concluded that, within the limitations of this study, it appears that educational group counseling can effect improved school and social attitudes among retarded readers.


The effect of auditory assistance on intermediate grade children's ability to take an arithmetic verbal-problems test was investigated. The subjects were 838 fourth-, fifth-, and sixth-grade children located in five central Pennsylvania school districts. In each district, one class of each intermediate grade
received auditory reading assistance; an equivalent class at each grade level received no assistance during the same verbal-problems test. The auditory assistance in this case consisted of tapes of each problem played to the children while they read silently. The test administered to the groups was the RASP Test developed by C. G. Corle and M. L. Coulter as part of their reading and arithmetic program. Two- and three-factor analysis of variance techniques were the statistics used. The author states that in only one instance did the provision of auditory reading assistance work effectively to produce higher scores on a verbal problem test. The exception occurred on the sub-test which measured ability to recognize missing and unavailable information. Also, there were sex differences in scores on sub-tests: (1) knowledge of quantitative relationship requiring social understandings, (2) ability to recognize missing and unavailable information, and (3) ability to read precisely, refusing to be misled by distractors.


The effectiveness of predicting reading readiness and achievement by use of a home reading material availability scale, and the relationship to the subjects' socio-economic data was studied. An analysis of the predictiveness of selected reading readiness and achievement instruments between matched groups of Negro and Caucasian subjects was also undertaken. The subjects were 189 Negroes and 323 Caucasians from seven elementary schools, selected from 19 elementary schools with regard to their geographical location and socio-economic homogeneity, in an east Texas city of approximately 58,005 population. A Home Reading Materials Availability Scale (HRMAS) was constructed and sent to the home of each subject to obtain information about availability of home reading material and socio-economic data. The subjects were given the Metropolitan Readiness Test during a preschool clinic and the Metropolitan Reading Achievement Test in March of the same school year. The results indicate that the HRMAS did not possess sufficient predictive properties to be useful as a single predictor, but had value when used in conjunction with other instruments. A high positive relationship existed between socio-economic levels and levels of reading readiness of first grade pupils. It was also indicated that socio-economic level did not determine the amount of reading materials in the home of first-grade children. Race was not a factor regarding reading readiness or reading achievement when other factors were equated. Recommendations for further research are included.

The general problem of this study was to evaluate a seventh-grade developmental reading program. Statistical comparisons, utilizing a 2 x 3 x 2 analysis of covariance, were made on reading achievement scores from the Gates Reading Survey Test to determine the effectiveness of two modes of scheduling; effectiveness of the program among three different levels of intellectual ability; effectiveness of the program on males and females; interaction effects of scheduling, intellectual ability, and sex; the effects of a developmental reading program on retention; and the effect of the reading program on the regular classroom teacher's ability to teach a developmental sequence. The author concluded:

1. In general, a school could offer developmental reading in a massed semester scheduling, or a distributed whole year scheduling at the seventh-grade level and expect the same level of achievement under either plan.

2. When comparing the achievement of the high (mean IQ 131), middle (mean IQ 118), and low (mean IQ 105) intellectual ability level students, the middle group consistently achieved the greatest gains with the low and high groups following in that order. However, because of lack of range at the upper levels on the measuring instruments used, the gain of the high group was perhaps inadequately measured.

3. In almost every comparison analyzed, the females made significantly greater gains in reading achievement than the males.

4. An almost complete lack of significant interaction between the possible combination of scheduling, intellectual ability level, and sex was observed.

5. The retention analysis revealed that, in general, the portion of the total population followed up one semester after treatment not only maintained their end of treatment vocabulary and level of comprehension scores but increased these scores significantly.

6. Using the criteria of growth in the skills measured by the standardized test as a measure of teacher effectiveness, the question concerning teacher effectiveness has to be answered with an overwhelming affirmative.

The effect of a concentrated program of initial phonetic elements and a regular remedial reading program on remedial reading pupils' reading achievement was studied. Two groups of fourth-grade remedial reading students were selected and given eight weeks of instruction. Tests administered to the group included The California Achievement Test, The California Test of Mental Maturity, and The San Jose State College Test of Phonetics.
statistical measurements employed were the t-test and coefficients of correlations. The author concluded: (1) There is a significant relationship between a concentrated program of initial phonetic elements and growth in reading achievement. (2) No significant differences appeared in reading achievement growth between the concentrated program of initial phonetic elements and a regular remedial reading program. (3) There is only slight, almost negligible, correlation between pupil intelligence quotient and reading achievement growth.
The effectiveness of intensive English language instruction on the reading achievement levels and on the mental maturity levels of a group of bilingual children was examined. One hundred twenty-three fourth and sixth-grade children from four elementary schools in Albuquerque, New Mexico, were subjects for the six-month study. The experimental group consisted of sixty children; the control group was made up of the remaining 63. It was hypothesized that intensive English language instruction, including the teaching of oral English as a second language, and guidance in reading and writing English, study of concepts and vocabulary, multiple meanings of words, idioms, and other figures of speech, would result in a gain in reading achievement for an experimental group of bilingual children; that there would be significantly higher gain in mental maturity for the experimental group; and that increments in mental growth and reading ability anticipated for the experimental children would be of greater amplitude for the fourth-grade subjects than for those pupils on the sixth grade level. Teacher-constructed tests of idioms and multiple meanings, the California Test of Mental Maturity, and the California Reading Achievement Test were administered to the subjects. The findings indicated that the experimental group made a statistically significant gain in reading achievement and in mental maturity compared with those gains made by the control group. However, the sixth graders in the experimental group made greater gains in reading achievement and in mental maturity than did the fourth graders in the experimental group.

One group each of fourth-, fifth-, and sixth-graders was taught reading by the use of bivelvel materials. The bivelvel method consists of using materials for reading written at two levels of difficulty, one text for pupils who are on or above grade level and a simplified text for pupils approximately two years below grade level. An additional three classes of fourth-, fifth-, and sixth-grade students were taught reading using a single basal text. Measures were obtained for height, weight, grip strength, reading level, mental age, and attitude toward school. Sociometric techniques were used to determine the social cohesion of each class. Permissive teachers using the bivelvel material achieved significantly greater gains in reading than did tradition-
al teachers using the single text approach. The bilevel method was more effective with the rapid growers but not significantly more effective than the single text method was with the slow growers. The students taught by permissive teachers using bilevel materials showed significant improvement in attitude towards school. The reverse was true for the traditional teachers using the single text.

337. Tanyzer, Harold Joseph. "The Relationship of Change in Reading Achievement to Change in Intelligence Among Retarded Readers," Ph.D., University of Connecticut, 1962. XXIII, No. 5, 1612-1613. (Order No. 62-4399, Microfilm $2.75; Xerox $5.60, 114 pages.)

Two hypotheses were tested: (1) The average gain per month in reading achievement will be significantly related to I.Q. change on the Full Scale Wechsler Intelligence Scale for Children, and (2) The retest mean I.Q. score for the group will be significantly greater than the initial mean score. Case studies were used of fifty retarded readers of average intelligence or above who were one or more years below their mental age, derived from the WISC, Grades Four through Eight. The majority of students had received remedial reading instruction in a reading clinic. The WISC and the Gates Survey were used initially and repeated after a period ranging from twelve to twenty months. The significant general conclusions drawn from the study were (1) Significant gains in reading achievement made by retarded readers had little effect on change in intelligence as measured by the WISC; (2) The WISC Full Scale score, although subject to a statistically significant increase, was relatively stable for retarded readers over a period ranging from twelve to twenty months.


A follow-up study of former clients of the Syracuse University Reading Center was completed to determine the current reading status of former clients, and the value to the clients and their parents of the reading diagnostic evaluation. Questionnaires for the clients, their parents, and the schools of their current enrollment were mailed to 131 former clients, who were, at the time of diagnosis, between 6 and 17 years old and in Grades One through Nine. Questionnaires were returned by 70 parent-child-school combinations, by 8 more parent-child pairs, by 28 more schools or parents, or clients. The author suggests that children with observed reading difficulties can profit from early diagnostic evaluation to locate the points of trouble. Chances of overcoming the problem are further improved by immediate remedial instruction. Definite instructions to parents as to their roles in reading re-
habilitation of their children should be part of the diagnostic report. Clear communication between a clinic and the child's teachers is suggested so that the child's problem may be clearly understood and practical remedial steps within the classroom planned.


The performance of pupils taught by an Individualized Reading (IR) approach was compared with pupils who used a Basal Reading (BR) approach on Torrance creativity tests, Covington problem-solving tests, and the number of books read in a school year. Fifteen teachers were divided into a randomly assigned (RA) group and a teacher preference (TP) group. RA teachers were paired according to rated competence and years of experience and were randomly assigned to the IR or BR variable. Each TP teacher taught one class by each of the two methods. All teachers participated in pre- and in-service training and used a mobile professional library. The fifth grade IR pupils in both the RA and TP groups read significantly more books than the BR students. However, the sixth grade difference was not significant. The null hypothesis about creativity and problem solving test performance was sustained. Girls in grade five read significantly more books than boys. In grade six, girls did not read significantly more than the boys. It was concluded that by grade five the child's reactions to his reading experiences appear to be well established, and it may be unrealistic to expect dramatic changes in one year with a method new to both teachers and students.

340. Thompson, Bertha Boys. "The Relation of Auditory Discrimination and Intelligence Test Scores to Success in Primary Reading," Ed.D., Indiana University, 1961. XXII, No. 3, 785-786. (Order No. 61-3228, Microfilm $2.75; Xerox $7.00, 147 pages.)

One hundred and five first-grade entrants were administered the WISC, Word Recognition and Paragraph Reading section of the Gates Primary, and several tests of auditory discrimination including: A Test for Auditory Discrimination by Wepman, The Boston University Speech Sound Discrimination Picture Test, and the Auditory Discrimination and Orientation subtest of the SRA Reading Analysis. Two groups of readers were established. Criteria I readers consisted of the extreme scores on the composite reading distribution. Criteria II readers were students with MA greater than RA and RA greater than MA. The auditory discrimination and intelligence tests correlated highly with the reading measures. Pre- and post-test means indicated a significant improvement in
auditory discrimination from first to second grade. One-half of those deficient in auditory discrimination were also poor readers. Mean differences in auditory discrimination between good and poor readers of Criteria I were significant. Differences for the good and poor readers of Criteria II were not significant. Mean WISC sub-test scores of the good readers on Criteria I were significantly higher than the poor readers except on Coding. The poor readers of Criteria II scored significantly higher than the good readers on Similarities and Picture Arrangement.


Subjects were first-grade children from three classrooms in each of two communities who had not previously failed, were available for testing, and passed vision and hearing screening tests. Thirty girls and thirty boys from each school met these standards. A phonics test was administered in January and May consisting of 190 multiple choice items which required the children to pick the response which started with the initial letter which matched the initial sound of the tape recorded oral nonsense syllable. Nineteen single letter consonants were used with twenty-one initial consonant sounds. Each consonant was presented with each of the long and short vowel sounds. Performance was compared with the sequence of presentation of initial consonants, the number of difficult words beginning with each consonant, and the frequency of all words beginning with each consonant introduced in the Ginn and Row-Peterson basic readers used by the subjects. The ascending order of difficulty (parenthesis indicates only slight differences) after one-half year of schooling was: (Z,S), R, W, M, T, K, F, H, L, B, (J, C(K), V, G(G)), (P, N), G(J), C(S), Y. After one year of schooling the order was: (S,Z), W, R, M, (D, J), (N, L, P), (G(G), T, K), (H, F, G(J), Y, C(K), V, B, C(S).


The practice of grouping children within grade levels on the basis of reading was evaluated. The Marshfield Plan of Grouping in grades one through six was studied over an eight-year period. This period included a heterogeneous control year, a transition year, and six experimental years during which children of each grade were
grouped each year into classes on the basis of reading ability. The population was divided into thirds on the basis of intelligence in order to compute achievement means for upper, middle, and lower thirds. Each grade maintained stability in mean intelligence within the eight-year period. Findings indicated significant, positive, and upward trends in general achievement and reading achievement for the total population. Significant trends of increased reading and general achievement for the upper, middle and lower thirds of the population in terms of intelligence were noted. An upward trend in general achievement was significant in all grades except grade three. Linear trends in reading achievement were significant in grades one, two, and six. In grade three in general achievement and in grades three, four, and five in reading, the positive linear trend was negated by erratic growth or leveling in the later experimental years. Comparisons of means in general achievement revealed that those of the experimental years were generally higher than those of the control year.

343. Toussaint, Isabella Hastie. "Interrelationships of Reading, Listening, Arithmetic and Intelligence and Their Implications," Ph.D., University of Pittsburgh, 1961. XXII, No. 3, 819. (Order No. 66-3289, Microfilm $2.75; Xerox $5.40, 106 pages.)

Measures of reading achievement, listening comprehension, arithmetic computation and intelligence were administered to 172 pupils in Grades Four, Five and Six to determine the best predictors of reading achievement. Correlations and the Doolittle method were used to establish the optimum weights to be assigned to the best combination of independent predictive variables. Findings revealed that the Stanford Binet and the Primary Mental Abilities showed approximately the same relationship with reading achievement. As measured by the Gates Survey, STEP Listening showed a closer relationship with reading achievement than the Durrell-Sullivan Reading Capacity Test. The combined STEP Listening and PMA yielded a higher estimate of reading potential than any other combination of two measures. The combined STEP Listening, American School Achievement, Arithmetic Computation and PMA yielded a higher estimate of reading potential than any other combination of three measures. The author concludes that estimating an intermediate pupil's reading potential from a combination of selected measures of listening comprehension, arithmetic computation and intelligence is more accurate than from any one test alone.

The Diagnostic Reading Tests, the Gates Reading Survey, and investigator-prepared questionnaires, and twenty-four personal interviews were used to determine the grade-level achievement of Indian students in Grades Eleven and Twelve, the practices of teachers in teaching reading, and to collect suggestions for changes needed to improve the teaching of reading. Comparison of reading achievement with national norms showed that approximately half of the eleventh- and twelfth-graders scored below the tenth percentile. Forty-seven per cent achieved below a grade level of 6.8 in reading comprehension, below 7.8 in reading vocabulary, and below 7.2 in speed and accuracy. Ninety-eight per cent of the questionnaires revealed a need for remedial action in current teaching methods. This finding was substantiated by the personal interviews. Eighty per cent of the teacher respondents had had no professional training in the teaching of reading.


Two hundred and ten pupils in Grades Two, Four and Six were given the Gilmore Oral Reading Test, California Reading Test, Informal Reading Inventory and an informal phonics test and classified into inferior, average and superior readers. The 139 teachers of the students were questioned regarding practices in assigning reading materials. All assigned textbooks were graded by readability formulas. For inferior readers significant differences were found in pupil placements when assigned reading texts were compared with both the oral and informal inventory scores. For average readers significant differences were found between readability levels of reading texts and pupil scores on the silent reading tests. For superior readers levels of reading texts were significantly lower than pupil scores on any of the tests used. Assigned reading texts were read orally by inferior readers with an average of 14 errors in 100 words, by average readers with an average of 4 errors and by superior readers with an average of 1 error. Inferior readers scored higher in comprehension of oral reading than either of the other two groups. Published placements for most books matched the school grades in which pupils were enrolled. Mean readability levels of basal texts were not significantly different from the recommended publishers mean grade placement, but individual books differed in placement by more than two school years. Some pupils were assigned texts in content areas more than two years above the level of their reading texts. One-half the teachers included stated that difficulty levels were not suitable for individual pupils. Oral reading was frequently mentioned as an important diagnostic aid by the teachers but standards for it differed.
Two-thirds of the teachers disagreed with the criteria of the Informal Inventory for the instructional level of pupils.


The intensive use of the Science Research Association Reading Laboratory by seventh graders was evaluated for its effect on reading achievement. The experimental group was composed of all seventh grade students enrolled in regular double-period language arts classes in one junior high school; the control group was its counterpart in another junior high school in the same city. Students were classed as high, medium, and low reading ability groups and separated as to sex and method for statistical analyses. Both the experimental and control groups received similar instruction throughout the six and one-half months of the experiment, except for the six weeks intensive use of the SRA Reading Laboratory by the experimental group. Three forms of the Iowa Silent Reading Test, New Edition: Elementary Test for Grades Four to Eight were used as pre-test, post-test, and final test. The SRA Reading Laboratory did not produce significantly different results as compared to a whole-class basal text method utilizing supplementary readers. There were significant differences in reading achievement gain by ability levels for the pre-test to post-test period, but no meaningful pattern was identified. A retention check indicated no difference in post-test from final test scores for experimental and control groups or among ability levels for the period. No sex difference in reading achievement gain was found for the pre-test to post-test period. There was a consistent trend of greater variance in the data for the experimental groups.

347. Valusek, John Emiel. "The Effect of Drugs on Retarded Readers in a State Mental Hospital," Ph.D., The University of Michigan, 1963. XXV, No. 3, 1762-1763. (Order No. 64-8219, Microfilm $2.75; Xerography $3.80, 68 pages.)

The effect of drugs on reading disability cases in a mental institution and the differences in hospitalized and non-hospitalized readers on a battery of psychological tests were investigated. The sample population was 43 children, nine to 18 years old, all retarded two or more years below chronological age-grade placement. The population was divided into medication and placebo groups. Initial and final tests were administered. Those included silent and oral reading, and a battery of psychological diagnostic measures used by the University of Michigan Reading Service. Some of the drugs administered to the group included Thorazine, Cytomel,
Dexedrine, and Mecholyl. From an analysis of the results, the author states that there were "no significant differences in oral and silent reading or psychological test performance between the medication and placebo groups. The comparison of psychological test performance of hospitalized and non-hospitalized retarded readers indicates that the former differ significantly in mean scores and standard deviations from the latter."


The effect of certain factors on the reading achievement of 126 children in the fifth and sixth grades was investigated. Tests administered to the study population included the S.R.A. Primary Mental Abilities Test, the Achievement Test battery, and the WISC. Also included in the study procedures were planned interviews with pupils and their parents. During the interview, a guide and record form developed for the study was used. The total population was divided into quartile groups and the first and fourth quartile children were selected as the sample for this study in order to give contrasting groups. The author states that, compared with quartile children, the children of Quartile Four (1) scored much higher than Quartile One children in all subtests of the Wechsler Test; (2) had more realistic educational and vocational aspirations in line with their intellectual capabilities and scholastic achievements; (3) had superior parental interest and guidance in educational pursuits and related activities, had a good setting and guidance for study and homework, developed good work-study habits, participated in many cultural educational activities, and did many things together as a family group; (4) enjoyed more educational visitations and family vacations, engaged in more hobby and interest activities, were participants in more club and group activities, did four times as much reading and spent more than twice as much time on homework and study; (5) lived in homes with more settled conditions, had parents who cooperated with them in a democratic manner, and had good identifications and a realistic self concept.

349. Verry, Dana Hedrick. "The Effect of a Twenty-Hour Reading Program with the Controlled Reader on Selected Office Practice Skills," Ph.D., University of Pittsburgh, 1962. XXIV, No. 5, 1947. (Order No. 63-6384, Microfilm $2.75; Xerography $6.60, 137 pages.)

Twenty lessons in reading using the controlled reader and films of the Educational Development Laboratories were given during English class to three homogeneous Secretarial classes and two General Business classes in a girls' high school. Students were divided into control and experimental groups. All students were given the
United Business Education Association, National Business Entrance Tests, Series 1900, and the LePaul Commerce Reading Comprehension Test as pre-tests. Records already contained scores from the Otis Intelligence Test, Higher Form, and visual tests. Following the reading instruction, all students received the United Business Education Association, National Business Entrance Test, Form 2100, and the Diagnostic Reading Tests, Form B. Pre- and post-tests scores, first semester, second semester, and final grades were treated statistically. In measure of central location and sums, the experimental group took precedence over the control group.

Twenty hours of reading instruction in the English classes increased the students' ability to file, to manipulate the ten-key calculator, to check numbers and recognize names, and to improve spelling ability. The experimental group improved reading speed, maintained comprehension, and showed superior accomplishment in their first, second, and final semester grades.

Vilacek, Elaine Catherine. "An Analysis of the Effects of Mental Age Levels and Socio-Economic Levels on Reading Achievement in First Grade," Ph.D., University of Pittsburgh, 1964. Vol. XXVI, No. 2, 913-914. (Order No. 65-7947, Microfilm $3.00; Xerography $10.15, 225 pages.)

Whether mental age levels and socio-economic levels are powerful independent variables affecting first grade reading achievement was investigated. The study re-examined some of the hypotheses and conclusions of Morphett and Washburne by determining whether 75 or more percent of the pupils at three different mental age levels and two socio-economic levels could attain first grade national norms on standardized reading tests. The 402 pupils received basal reading instruction during the eight-month study. Pupils were assigned to six groups on the basis of family socio-economic status and pupil mental age. Standardized tests and inventories were used to evaluate pupil intelligence, reading readiness, physiological-social-emotional maturity, family index of social position, and final reading achievement. The findings indicated the following: significant differences in achievement in word knowledge, word discrimination, silent reading, and oral reading were evident between pupils in the three mental age groups; significant differences on the five variables were evident between socio-economic levels; there were no significant interactions between mental age and socio-economic levels on the five criterion variables; 75 percent of the pupils in the upper mental age levels attained first grade national norms in silent reading achievement; and 75 or more percent of the three mental age levels and two socio-economic levels did not achieve up to first grade national norms on the Gray Oral Reading Test. It was concluded that mental age levels and socio-economic levels are powerful independent variables affecting first-grade reading success.
The test constructed consists of ten problems. High-scoring teachers are those who are skillful in selecting books of the proper difficulty level, placing children into homogeneous reading groups, judging the amount of reading gains that pupils achieved after classroom instruction, diagnosing specific reading skill deficiencies, diagnosing and correcting phonics and syllabication errors, organizing into meaningful instructional categories a child's word-perception errors and recognizing the goals of various kinds of reading workbook exercises. Six problems are tape recordings of children reading from various books and four are of the paper and pencil type. It was reasoned that test performance should increase as a function of years of classroom experience. This was tested by comparing the performance of college undergraduates in education, practice teachers with sixteen weeks of experience, and a sample of employed teachers in grades two through five. It was also predicted that those teachers with scores in the highest quartile should produce significantly greater reading achievement gains in their pupils than those scoring in the lower quartile. The analysis of results revealed that the employed teachers outscored the practice teachers who in turn outscored the undergraduate students. The prediction on pupil achievement was also verified; the achievement effects the teachers produced were related to performance on the test. The item and subtest analysis indicate that the test is suitable for use without further revision.

Identification and classification of administrative factors which contribute to the success of remedial reading programs were undertaken. A checklist was developed and submitted to the administrators of remedial reading programs in certain public school systems of the Washington-Maryland-Virginia area to develop instrument validity. The instrument was then sent to 563 public and diocesan school systems which provide remedial reading programs. Returns were secured from 426 school systems. The number of instructional groups, classrooms, pupil enrollment, and number of pupils per remedial reading instructional group are reported. The
school systems with significantly better overall operational programs make use of the following administrative practices: centralization of resources, extension of the program throughout the calendar or school year, a statement of philosophy and objectives, explanation of the program to parents, specifically designed program administrators and their professional preparation, supervisory procedures, designated financial practices, comprehensive admission policy, a carefully outlined testing program, good instructional grouping and use of materials, and inclusive health services. Administrative problems are discussed.


Research is not conclusive on behavioral changes resulting from the vicarious experiences found in good reading, but it is logical to assume that the vicarious experiences found in good books or selections, such as those presented in basal readers, will modify to some extent a child's thinking, feelings, and actions. From explanatory paragraphs as to the stated values in the Educational Policies Commission report, concepts were drawn in the form of statements which conveyed the intended meaning of the values of supreme importance of human personality, moral responsibility, institutions as the servants of men, common consent, devotion to truth, respect for excellence, moral equality, brotherhood, the pursuit of happiness, and spiritual enrichment. One hundred fifteen randomly chosen selections from five authoritatively-established upper-grade basal readers were read, analyzed, summarized, and evaluated. Of these, 55 selections contained one or more of the above ten listed values; 60 selections were found to contain none of these values. This percentage of approximately one-half also held true when selections were tabulated according to grade level. "Spiritual enrichment" and "human personality" occurred most frequently, in that order. The values of "common consent" and "devotion to truth" were not found in this analysis.


The effectiveness of the State University of Iowa Reading Clinic training program was compared with that of its diagnostic services in regards to the subsequent reading development of retarded readers. Two groups of retarded readers seen at the
clinic were chosen. The diagnostic group of 35 subjects was given
diagnostic reading and intelligence tests at the Clinic which
furnished information on intelligence, reading level, and specific
remedial suggestions. The clinic group of 20 subjects received,
in addition to diagnostic testing, clinic instruction from
university laboratory students for one hour, three to five times
per week. This instruction was essentially the same developmental
reading program as is given in the public schools with adaptations
for subject's reading level, needs, and interests. Subjects
selected had I.Q.'s between 89 and 123; had contacted the clinic
during a specified period at which time they were in the fourth,
fifth, or sixth grades; and had obtainable reading scores on the
Iowa Tests of Basic Skills for the period preceding or following
clinic contact and the year following. Reading development
measures were obtained from the Reading Comprehension sub-test
scores of the Iowa Tests of Basic Skills administered by the
public schools as part of their regular testing program. Only
clinic boys and diagnostic boys and girls made significant gains
during the first year. On the second year no sex difference was
found as to the clinic girls' gains. No clinic and diagnostic
differences were found to be associated with other variables
of age, degree of retardation, grade level, and I.Q. There was
a significant difference between the high and low I.Q. groups in
the expected direction; however, during the second and third years,
high I.Q. subjects were significantly higher in reading achievement.
Initial degree of retardation was unrelated to amount of reading
progress on a year's follow-up test. Younger retarded readers
reached older retarded readers in achievement by two years past
clinic contact, sixth-grade subjects gained less than the fourth
and fifth graders during the first years, but by the end of the
second year, no differences were associated with grade levels.

Walker, William Ray. "Factors Influencing Retention of Read
Supervisor: Chester W. Harris, Vol. XXV, No. 6, 3410-3411.
(Order No. 64-13,392, Microfilm $2.75; Xerography $5.00, 97
pages.)

The effect of the frequency of appearance of words, their
part of speech, and the number of associations they stimulate on
retention was studied. The methods included the selection of
concrete nouns, abstract nouns, and verbs from three levels of
frequency of appearance in the English language—a total of 18
words. The words were given to 72 high school freshman boys
in a serial retention task and one month later in an associational
fluency test. Analysis of variance indicated that frequency of
usage had a significant but uneven effect upon ease of retention
and number of associations. Similarly, concrete nouns appeared
much easier to recall and stimulated more associations than
abstract nouns or verbs. No distinction between the latter two
was apparent. There was a great deal of difference between the number of responses stimulated by the respective words in both tests, however. The serial position of the words had no noticeable effect in the fluency measure but the effect was noted and controlled in the retention task.


The assumption that character may be shaped by stories which children read formed the basis for a study of the good life as found in elementary school reading texts. Stories in seven modern reader series were analyzed by 74 questions arranged under the headings of race, occupations, family relations, child-child relations, social problems and group relations, housing, animal life, emotions experienced by characters, education, urban-rural living, and general. Variations among modern reader series was noted, and a series of the McGuffey readers was compared with modern texts. Child life portrayed was serene and free from disagreements, hurts and reconciliations. Harmonious, ideal family life was free from stresses encountered in real life. Few babies appeared, and there were no marriages or deaths. The world outside the home was without war, drunkenness, or violence. Characters followed a predetermined course eventually ending in success. It was largely a white man's world, no Negro appearing in story plots. Manual labor was favored. Religious dogma was all but gone, and few stories explicitly stated a moral. To improve the presentation of the good life concept, it was suggested that stories include Negro characters pictured with whites at school and work, contrasts of proper and improper child-child relationships be presented, identification of story characters with frequent and greater intensity of sorrow be used, and the moral tone of stories be enhanced by more frequent use of the words kind, love, beauty, and friend.


An analysis of nine selected factors relating good and poor readers in the sixth grade to dropping out before the completion of high school was completed. The selected factors were socio-economic status, school absence, family mobility, starting school age, home stability, number of siblings, academic success, sex, and intelligence. The population was the two most recent classes to complete high school at North High School in Evansville, Indiana. The classes were reassembled as they were in the sixth grade and divided
into four operational groups: (1) good reading graduates, (2) poor reading dropouts, (3) poor reading graduates, and (4) poor reading dropouts. Data were collected on the nine variables and analyzed using the chi-square technique. In his conclusions, the author states that dropout and graduate comparisons are more definitive when reading grade level is accounted for. Identification of potential dropouts is possible in the elementary school, on the basis of the nine selected factors. The most difficult factors to analyze are family stability, academic success, and intelligence, because they are related to many other factors. School absence and school starting age may be valuable in the early identification of good readers who are potential dropouts.


The effect of a commercial reading readiness program and an informal reading readiness program was studied. The total population of 158 children was divided into control and experimental groups. Four classes used the Scott Foresman reading readiness workbook We Read Pictures for a nine-week period at the end of the school year. Four classes held to an informal program using no commercially prepared materials. Experimental and control groups were tested in readiness factors at the close of the nine-week period using the Murphy-Durrell Diagnostic Reading Readiness Test. Statistical comparisons were made using the t-test of significance. The author concluded that the workbook program, as used within the limitations of this study, was less effective in developing visual discrimination than was the informal program. Use of the workbook did not enhance the development of auditory discrimination and learning rate. Chronological age and maturity appear to be closely associated with readiness as tested. Anxiety and tension were not unduly increased by the use of a structured reading readiness program in kindergarten.


It was postulated that eye-movement responses, especially varying interfixation-movements, are mediated by learned molecular habits related to linguistic characteristics of textual stimuli, and that these responses can be analyzed on a moment-to-moment or phrase-by-phrase basis. Eight word sections were alternated in passages of 144 words. For half of the design, the first and last four-word
sections within each eight-word section were reversed in position. The subjects, all males, were identified as average to excellent readers. The apparatus was a 35 mm. eye-movement camera, the Ophthalmograph, modified to hold rigidly a ½ inch dowel which the subjects were to bite firmly while reading the passages aloud. A five factor analysis of variance, mixed design, was employed. The relationship of the variables was stated in terms of the degree of syntactic constraint. It was hypothesized that learned molecular habits related to syntax would mediate decreasing eye-fixations with increasing syntactic constraint, reversing the inequalities for prediction of significant differences for frequency of fixations. Additional controls were suggested for further experimentation.


The Reading Comprehension section of the Iowa Tests of Basic Skills, the California Test of Personality, the Lipsitt and Castaneda Self Concept Scale, achievement and citizenship marks in English, mathematics, and social studies, and dean's merit point records were used for thirty matched pairs of seventh-, eighth-, and ninth-grade students divided into experimental and control groups to determine the influence of an intensive remedial reading program on students aggressively maladjusted and retarded in reading. The findings indicated that remedial reading treatment has value for aggressively maladjusted retarded readers; however, the merits of programs for such pupils should be assessed in terms of improvement in behavior and academic achievement as well as in reading. The author recommends combining remedial reading and group therapy for aggressively maladjusted pupils with reading difficulties, individual psychological examinations for suspected retarded readers, inclusion of methods of group therapy in training programs for reading specialists, and addition of remedial reading instruction with group therapy in juvenile correctional programs.


Three schools representing extremes in the socio-economic continuum in the Phoenix, Arizona, Elementary School District were selected to determine to what extent the influence of instant responses to capital letters can be trained, the effect that training of instant responses to capital letters will have on the student's ability to discern similarities and differences in letter and word forms, the student's ability to perform on a learning task
believed to approximate learning to read, and the effect reinforcement of a discrimination task will have when it is presented vertically and horizontally. All kindergarten children in the district were administered the visual discrimination sub-tests of the Lee-Clark Reading Readiness Test and Letter-Form-Training Criterion Test before and after training. Ninety subjects were randomly divided between the experimental and control groups. Within the experimental group, sub-groups designated as "horizontal" and "vertical" were arbitrarily assigned. The children in the experimental group were given training to establish instant responses of recognition to capital letters in addition to regular kindergarten activities. After training, a task of learning 10 basic sight words was imposed on both groups. The children were tested for knowledge of the words after a period of time. The findings indicated that kindergarten children were capable of learning to make these responses, that the groups were significantly different in their ability to discern similarities and differences, and that the groups were significantly different in their ability to learn 10 sight words. However, the effectiveness of the two methods of reinforcing visual discrimination could not be proven unequal.


This study was designed to discover which problems involved in improving student reading tastes were considered by the English teachers in the secondary schools of Indianapolis to be most important, to determine which techniques were used by English teachers in improving student tastes, and to ascertain which techniques were believed by the teachers and the senior students to be most effective. Two questionnaires were constructed and administered to 201 English teachers and 653 senior high school students. The author found that the teachers of English believed that the most important problems in improving student reading tastes were stimulating the desire to read, guiding the student to select books which broaden his horizons, and instilling habits within the student to choose worthwhile books. The majority of English teachers believed that the improvement of student reading tastes was an all-school objective, that a balanced and varied reading program was in operation in their schools, and that the literature represented a selection of tastes illustrating human values. Among the students, it was found that although the greater percentage of senior students liked to read, only 16 percent claimed that they read the same kind of literature inside and outside of school. One half of the students indicated that they did not have enough time for personal reading after school hours. More importantly, the students believed
that the literature read in school was instrumental in improving their reading tastes. Finally, the majority of English teachers and senior students agreed in their appraisal of 29 of the 39 techniques used in improving student reading tastes. Decided differences of opinion appeared in response to the study of mass media, to the value of browsing in the library, to the use of thematic units, and to the availability of individualized reading programs. In summary, both teachers and senior students thought that the reading program in the secondary schools of Indianapolis, Indiana, was somewhat effective in improving student reading tastes.


The effect of rewritten science materials on sixth-grade pupils' reading comprehension and reading rate was investigated. The sample population consisted of 417 pupils who were randomly assigned to form control or experimental groups. In addition, three achievement levels were used. The analysis of variance was the statistical technique used. From an analysis of the findings, the author concluded that rewriting sixth-grade science textbook selections through simplification of style and vocabulary helped sixth-grade pupils to significantly increase their reading rate and reading comprehension.


A basal reading program, utilizing the state-adopted reader was compared with a developmental reading program which used SRA Reading Laboratories, pacing machines, controlled readers, and the state adopted basal reader. The two-year study involved 206 eighth grade students the first year and 222 the second year. During the first semester of each year the developmental program was used by half of the students and the basal program by the other half. At the beginning of each second semester, the proceedings were reversed. Alternate forms of the Iowa Silent Reading Test were administered to the groups in September and May of each year. The following conclusions were indicated: the developmental reading program may be interchanged by semesters without significantly affecting achievement; students at lower levels of reading proficiency derived more benefits from the developmental program than children of higher reading proficiency; and certain teachers may have aptitudes which lend themselves to increased efficiency in the teaching of the developmental reading program. Other conclusions are included.
Seventy-three subjects in the fourth, fifth, and sixth grades in one school building were administered the California Reading Test, the Gates Reading Survey, the Metropolitan Reading Test, and the California Short-Form Test of Mental Maturity. The reading inventory was given individually to each subject by the investigator. Each teacher re-tested five subjects from the class to check reliability of the inventory and its administration. A high degree of relationship was indicated in each case. The two levels of the reading inventories used were the instructional, which required 90 percent accuracy in word recognition and 70 percent in comprehension and interpretation; and the independent, which required 99 percent accuracy in word recognition and 90 percent accuracy in comprehension and interpretation. Findings showed that significantly different levels of placement often were provided by tests from those provided by inventories. The Metropolitan and Gates Survey tests placed students relatively near their instructional level of reading performance on an inventory based on a familiar basal reader series. Disabled readers showed more test vs. inventory variance at the instructional reading level than did normal readers in a given grade. There was a tendency for students to gain higher scores on an inventory based on familiar basal reader series than on unfamiliar series materials. Placement in one basal reader series may not mean equal placement in another series. Materials should be used for placement purposes which the student will be expected to use.

The Kinesthetic Work Learning Test designed to measure the effect of visual, visual-auditory, visual-kinesthetic, and visual-auditory-kinesthetic methods of teaching upon learning new words was used to determine the effect kinesthetic ability has upon success in reading. The test was administered during the first four weeks of the school year and the population of 290 students divided into three levels of kinesthetic ability. At the end of the school year comparisons were made between the levels of kinesthetic ability, scores on an Associative Learning Test and the Stanford Achievement Paragraph and Word Meaning Tests. The general hypothesis stated there would be no significant differences between the three levels of kinesthetic ability and the Associative Learning scores, reading achievement scores, and interactions of the three variables. The findings indicated that levels of kinesthetic ability had little
effect upon reading progress in first grade as reading was taught in the community considered. Auditory stimuli had a positive effect on learning while visual stimuli had a negative effect.


Thirty-two reading authorities were polled to ascertain their opinions regarding the role of specialized reading services in public schools. Questionnaires from thirty-six selected public school systems were analyzed to determine provisions being made for specialized reading services in school systems comparable in size to Topeka. Pupils in Grades Four, Five and Six of the Topeka system whose reading achievement was one or more years below their reading-grade expectancy were identified to establish the need for specialized reading services. Recommendations from reading authorities indicated that schools should provide opportunities for each child to realize his full reading potential; specialized services strengthen and give support to the regular developmental program; specialized services should function as a coordinated part of the regular program; specialized services include identification, diagnosis, prescription, treatment, consultative services, and in-service training for classroom teachers; a well-organized reading clinic and laboratory are essential to a good program of special services; instruction should be decentralized while clinical facilities for diagnosis and treatment should be centralized. The survey of school systems indicated that the majority of systems comparable in size to Topeka provide specialized reading services. The incidence of disability warranted establishment of specialized services for Topeka.


The relationship of reading achievement, patterns of eye movement, and emotional and personality adjustment was investigated. Selected sixth grade children were classified into four groups as follows: low reading - low adjustment, low reading - high adjustment, high reading - low adjustment, and high reading - high adjustment. Data about the 198 pupils included the results on teachers' rating on the Personality and Behavior Rating Scale, California Reading Test, and the California Test of Personality. Patterns of eye movements of every third child were photographed during the reading
process to determine how they are related to reading characteristics and emotional adjustment. The importance of emotional and personality adjustment to reading success was most apparent in relative reading efficiency measures where it was found that children with low adjustment displayed a consistent pattern of visual inefficiency in reading. Children with high adjustment did not maintain a consistent pattern of relative reading efficiency. Additional findings are included.


The effectiveness of automated, adjunct auto-instructional, and non-automated procedures for teaching sight word recognition to first-grade pupils was investigated. The subjects were four classes of children enrolled in a school district in Alabama. The subjects were randomly assigned to four treatments: automated instruction, non-automated instruction, adjunct auto-instruction, and control. The learning task was 48 sight words contained in both the Buckinghan-Dolch Combined Word List and Gates Primary Vocabulary for Primary Grades. Hypotheses were constructed which compared the effect of treatments, of ability levels, and interaction effects of treatments and ability levels. The hypotheses were tested on the results of both an immediate and 24-day post-test. The analysis of variance was the statistical technique used. An analysis of the immediate post-tests showed the following results: (1) Subjects in the automated, non-automated, and adjunct auto-instructional groups achieved significantly higher scores than those in the control group. (2) There were no statistically significantly differences in achievement among subjects who received automated, non-automated, and adjunct auto-instruction. (3) Subjects in the high ability levels of all groups achieved significantly higher scores than those in the low ability levels. Analysis of the 24-day delayed post-test scores yielded the following results: (1) There were no significant differences among the four methods of instruction. (2) There were no significant differences in achievement that could be attributed to ability level. (3) There were no statistically significant differences in achievement due to interaction between ability level and treatment.

The auditory discrimination ability of bright, average, and dull children in four chronological age groups, 6.0 to 9.11 years old was investigated. The subjects were 120 children, 10 on each of the following three levels of intellectual functioning: 117-136, 90-109, and 63-82. Thirty subjects were in each age category. The random sample was drawn from 950 children in kindergarten through fourth grade in three schools, and from pupils in or referred to special day classes for educable mentally retarded children. The following tests were administered as measures of auditory discrimination: the Wepman Auditory Discrimination Test, the Templin Sound Discrimination Test, and the Wilson Environmental Sound Test. It was concluded that IQ and chronological age were factors in auditory discrimination, but that they were of vital importance primarily among the more retarded and younger of the children in the age and IQ ranges studied. Previous research, which indicated that a maturational factor influences auditory discrimination among children of these ages, was supported by the results. It was indicated that factors other than age and IQ apparently operate in determining discrimination ability.


School grades, standardized test scores, teachers' and parents' evaluations and children's self-evaluations were used to evaluate the scholastic performance of successful remedial students. From the Pittsburgh Reading Laboratory thirty-nine students were selected who had been successful in a remedial reading program while in elementary grades. Information was compiled in case study form from all available sources. The data collected revealed that students who are successful in a remedial program do improve in scholastic performance, they seem to retain skills learned in the program and continue to refine these, and their general attitude toward reading and books compares favorably with reading performance.

372. Winn, Evangeline V. "The Influence of Play Therapy on Personality Change and the Consequent Effect on Reading Performance," Ed.D., Michigan State University, 1959. XXII, No. 12, 4278-4279. (Order No. 62-490, Microfilm $2.75; Xerox $5.20, 104 pages.)

This study attempted to determine the function of play therapy in alleviating personality difficulties and the subsequent effect on reading performance. Measures used included the California Test of Mental Maturity, the California Achievement Tests, and the Rogers Test of Personality Adjustment. Twenty-six children were divided randomly into equal experimental and control groups. Both groups were pre- and post-tested with the measuring instruments.
The experimental group was given individual play therapy for sixteen weeks. The analysis indicated that the experimental group showed a significantly greater improvement in personality than the control group, but did not show significantly greater improvement in reading over the control group. Change in personality scores did not affect a change in reading achievement scores.

This study was designed to determine if there is a significant difference between formal and informal kindergarten instruction as measured by a test of reading readiness prior to first grade instruction, and if there is a significant difference between the two types of kindergarten instruction as measured by a reading achievement test prior to second grade instruction. The kindergarten classes of the Des Moines, Iowa, Public School System were sampled randomly to select 308 subjects to serve as comparative group A (control) and 312 subjects to serve as comparative group B (experimental). A more formal instructional program with emphasis upon learning specific skills basic to beginning reading was offered the experimental group. A more informal instructional program, with no specific emphasis upon reading readiness, was given to the control group. Each child was tested at the conclusion of kindergarten with the Metropolitan Reading Readiness Test. The California Reading Achievement Test was administered after completing first grade work. The Otis Group Mental Ability test was also used. Between comparative group A and comparative group B, pupils with superior mental ability and all subjects six years of age and older had coefficients of correlation which differed significantly. A significant difference was identified between the two comparative groups when measured by the Metropolitan Reading Readiness Test and the California Reading Achievement Test.

A jury-constructed inventory was used to determine the developmental value of twelve fifth-grade and twelve sixth-grade reader stories and the relationship between children's general and expressed interest in certain stories and the developmental value of the stories. Correlations were computed for 1,500 Fifth- and Sixth-graders between the rank of the children's interest ratings and the written expression of interests and the ranks of the developmental task value of the stories. The author concluded that a) the stories...
appeared to concentrate on situations thought by adults to be important for children and reflected middle-class attitudes toward the development of independence, honesty, loyalty, affection for adults, bravery, courage, and leadership; b) the importance of the male role was much more strongly emphasized than the female role; c) factors other than developmental value determine the general reading interest of middle-grade children in stories (however, children stated they preferred story situations in which characters were solving developmental tasks); d) boys and girls and children of average and accelerated reading ability identified in a similar way with story characters that were portrayed as working on developmental tasks.


Three hundred male and female College of Agriculture, Forestry and Home Economics students were randomly divided into experimental and control groups, according to curriculums followed, and the experimental group given a standard course in improvement of reading. Analysis of variance was used to test the significance of the differences in reading gains. Analysis of covariance was used to assess the influence of ACE and initial reading standing on response to reading training. Experimental students made greater gains in reading than did control students. Experimental students did not achieve significantly higher grade-point averages in quantitative type courses but while under certain conditions of grouping and stratification they did achieve significantly greater grade-point averages in verbal-type courses. ACE level appeared to be slightly more important in response to training than did reading ability. The experimental treatment had no observable effect on persistence in college.


The usage, spelling, capitalization, punctuation, vocabulary and sentence structure of four written compositions, questionnaire reports concerning the amount of reading done, and records of the Kansas Reading Program for Children were used to explore the relationship between amount of voluntary reading and ability in six facets of writing for high, middle and low intellectual ability sixth-graders. Rank order correlations between scores revealed no significant relationship between the variables of reading and
writing. There appeared to be a direct relationship between intelligence and achievement on five of the six writing facets. A high degree of proficiency in one language area did not signify a high degree of proficiency in another area. Subjects who read well did not necessarily write well and vice-versa.


Training utilizing the Leavell Language Development Service was studied to determine its effects on the silent reading achievement of elementary school subjects with mixed dominance. Experimental and control groups of mixed dominant subjects were equated so that each contained 38 boys from Grades Three, Four, Five and Six. The mean reading retardation (months of difference between reading capacity and reading achievement as determined by the Durrell-Sullivan Reading Capacity Test and the Durrell-Sullivan Reading Achievement Test) was approximately the same. In addition to the Word Meaning and Paragraph Meaning subtests of the Durrell-Sullivan Tests, each group was also given the Morrison-McCall Spelling Scale, the Word Recognition and Visual Memory of Words Subtests of the Durrell Analysis of Reading Difficulty, and Coding B Test of the Wechsler Intelligence Scale for Children. The experimental group was given training 20 minutes a day five days each week for 10 weeks. Test data were analyzed separately for the experimental and control groups by use of the "single-group method" to determine whether or not differences between the means of the initial and final test scores were significant. The "median test", a non-parametric procedure, was then used to determine whether these were significant differences between the two groups with respect to final reading capacity scores, final reading achievement scores, and resulting reading retardation estimates. Analysis of the data revealed that the experimental groups made significant gains in the following reading and language skills: reading achievement-total; reading achievement-paragraph meaning; word recognition; hand and eye coordination; and visual memory of words. The control group made significant gains in only word recognition and visual memory of words. When the "median test" was applied, however, there were no significant differences found between the two groups in reading capacity, reading achievement, or reading retardation. The only area in which the experimental group showed particular advantage was in hand and eye coordination.

The goals of this study were to identify the basic reading skills and reading-study skills which can be emphasized in subject matter classes, to help teachers formulate ways to assist pupils develop their skills in English, history, geography, and science in regular classes, to show how a curriculum director can work with junior high school teachers in an in-service program, and, to learn if such a program will bring about more than normal reading. In September, silent reading tests, work-study skills tests, and social studies and science achievement tests were administered to all seventh grade pupils in Hanover, Pennsylvania. These pupils were tested again at the end of eighth grade. Monthly planning sessions with the seventh and eighth grade cooperating teachers were concerned with examination, discussion, and study of basic reading skills and reading-study skills, together with techniques and procedures for teaching these skills. The results of the pre- and post-tests were compared on the basis of changes in decile rank. Gains were reported as percent of pupils who gained in silent reading skills, regressed, or showed no change. Data are reported for silent reading skills, word-study skills, social studies achievement, and science achievement. Suggestions for application are made.


The possible existence of a relationship between inner speech and reading achievement was investigated. The question of whether inhibitory measures should be taken to suppress articulatory counterparts accompanying pupils' silent reading was investigated. The reading comprehension subtest score of the Iowa Tests of Basic Skills was used as a criterion for high and low reading achievement categories of 36 fourth grade pupils. Pupils with scores above 5.8 were designated as high achievers and those with scores below 3.8 were designated as low achievers. Only pupils within an IQ range of 90 to 110 were included. The McGuire Index of Status Characteristics was used in arriving at the socio-economic status of the subjects. The incidence of inner speech was determined by inspection of electromyograms from skin lip electrodes during a routine silent reading of both easy and difficult material. It was indicated that inner speech occurs more in the reading of low achievers than in the reading of high achievers. However, the good readers engage in increased amounts of inner speech when the reading material becomes more demanding in terms of reading power. Additional findings and conclusions are included.