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ABSTRACT

The annotated bibliography on research in the area of the gifted and talented contains approximately 100 abstracts and associated indexing information for documents selected from the computer file of the Council for Exceptional Children's Information Center and published from 1959 to 1973. It is explained that the abstracts are chosen according to criteria of availability of document to user, current applicability, information value, author reputation, and classical content. Preliminary information explains how to read the abstract (a sample abstract is included for identification of abstract parts), how to use the author and subject indexes, how to order documents through the Educational Resources Information Center Reproduction Service, and how to order "Exceptional Child Education Abstracts" in which the abstracts were originally published. Also provided are a list of terms searched to compile the bibliography and a list of journals from which articles were abstracted. References included treat aspects such as educational motivation, creativity, acceleration, identification, and psychological adjustment. (DB)

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GIFTED AND TALENTED RESEARCH

A Selective Bibliography

November, 1973

CEC Information Center on Exceptional Children
ERIC Clearinghouse on Handicapped and Gifted Children
The Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091

Exceptional Child Bibliography Series No. 639

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The *Exceptional Child Bibliography Series* was initiated by the CEC Information Center to answer the need for rapid responses to specific requests for information. The volume of information requests received by the Center is analyzed and used as a guide in preparing special topic bibliographies in the field of exceptional child education. Abstracts contained in the bibliographies are drawn from the computer file of abstracts which represents the CEC Information Center's complete holdings as of the date indicated on each bibliography.

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Each abstract contains three sections—bibliographic data, descriptors, and a summary of the document. The bibliographic section provides the document's identifying number (ED and/or EC), publication date, author, title, source, and availability. The descriptors indicate the subjects with which a document deals. The summary provides a comprehensive overview of the document's contents and in some cases document availability is announced here.

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Some bibliographies in *Exceptional Children Bibliography Series* contain author and/or subject indexes. In these bibliographies, readers seeking work on a specific aspect of the general topic may consult the subject index to be referred to specific abstract numbers. Abstracts dealing with several topics may be identified by finding the same abstract number under two or more subjects in the subject index.

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Documents with an ED number and EDRS availability indicated may be purchased from the ERIC Document Reproduction Service (EDRS). For your convenience an order form is provided on the back cover of this bibliography.

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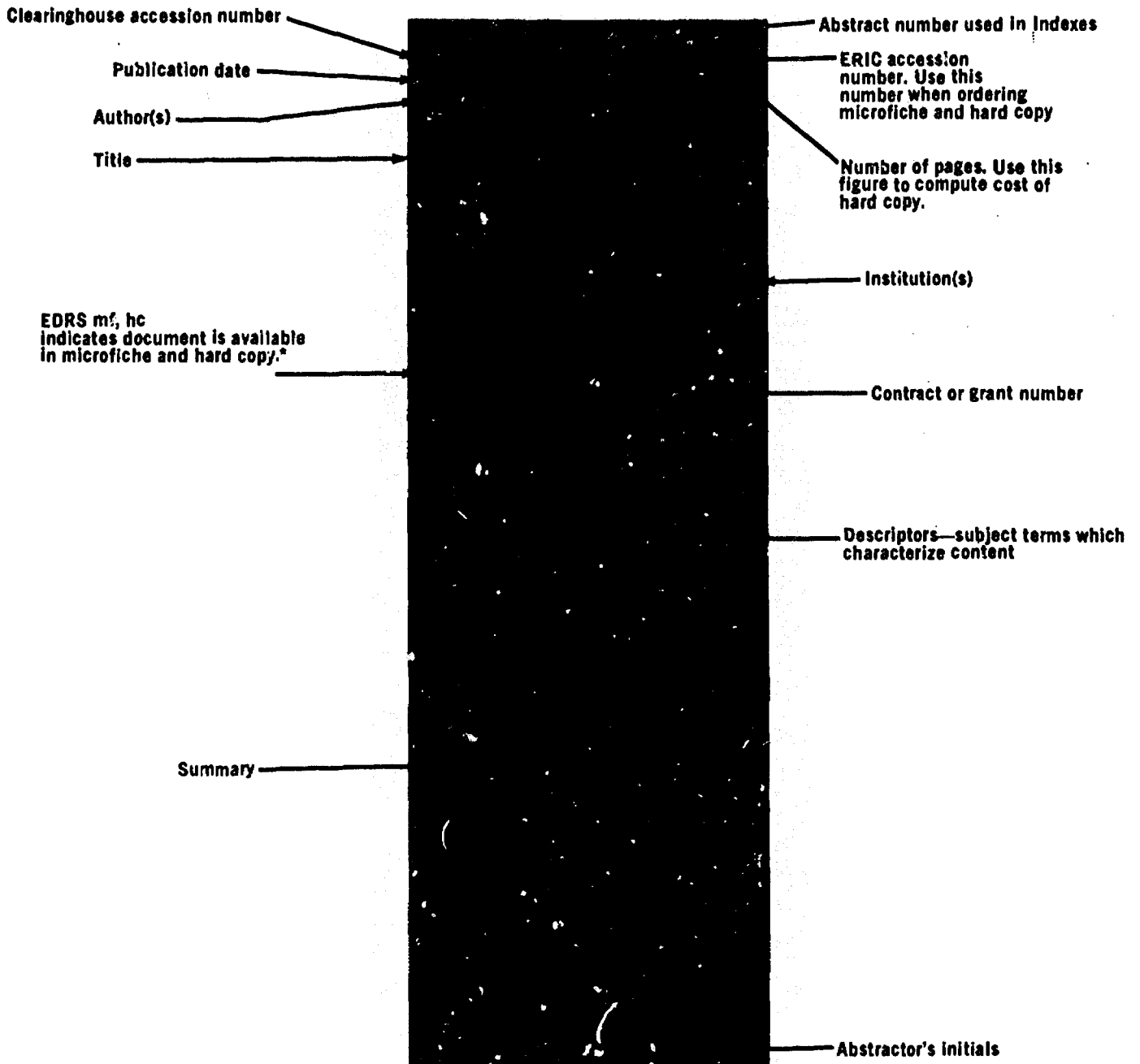
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Sample Abstract Entry



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INDEXING TERMS SEARCHED

Indexing terms used to retrieve information on *Gifted and and Talented Research* from the Center's computer file of abstracts are listed alphabetically below:

Able Students
Academically Gifted
Creative Ability
Creativity
Exceptional Child Research
Gifted
Gifted Children
High Achievers
Student Creativity
Superior Students
Talented Students

JOURNALS USED

Abstracts of articles from the following periodicals appear in this bibliography:

Educational and Psychological Measurement, Box 6907 College Station, Durham, N.C. 27708
Educational Researcher, 1126 -16th Street, N.W., Washington, D.C. 20036
Elementary School Journal, University of Chicago Press, 5801 Ellis Avenue, Chicago, Ill. 66037
Exceptional Children, 1920 Association Drive, Reston, Va. 22091
Gifted Child Quarterly, 8080 Spring Valley Dr., Cincinnati, Ohio 45236
Journal of Consulting & Clinical Psychology, 1200 17th St., N.W., Washington, D.C. 20036
Journal of Creative Behavior, 1300 Elmwood Ave., Buffalo, N.Y. 1422
Journal of Educational Psychology, American Psychological Association, Washington, D.C. 20036
Journal of Learning Disabilities, 5 North Wabash Ave., Chicago, Ill. 60602
Psychology in the Schools, 4 Conant Square, Brandon, Vt. 05733
Reading Teacher, IRA 6 Tyre Ave., Newark, Del. 19711
Review of Educational Research, 1126 16th St., N.W., Washington, D.C. 20036

The abstracts in this bibliography were selected from *Exceptional Child Education Abstracts*, Volumes I-V, No. 2.

ABSTRACTS

ABSTRACT 11241

EC 01 1241 ED 002 776
Publ. Date 61 35p.
Drevdahl, John E.
A Study of the Etiology and Development of the Creative Personality.
Miami University, Coral Gables, Florida
Office of Education (DHEW), Washington, D. C.
EDRS mf,hc
CRP-664

Descriptors: exceptional child research; creativity; personality; creativity research; creative studies; family background; environmental influences; educational background; social influences; adult programs; psychologists; adults; professional education

The backgrounds, motivations, and personalities of psychologists were investigated to determine the source and type of educational, environmental, and social conditions that are conducive to creative productivity. A sample of 30 psychologists was selected and was divided into the following groups: creative; noncreative, productive; and noncreative, non-productive. Each subject participated in an unstructured personal interview from which individual identification was made on a number of pertinent factors including motivation, personality, etiology, development, and education. The data were analyzed, and cross correlations among the subject groups were made of all factors. It was concluded that some revision of current professional training procedures could be of benefit in the encouragement of creativity, and that the family and emotional and educational environments are of considerably greater importance in fostering creativity than are the family socioeconomic circumstances. Also considered of influence upon creative potential were educational experiences and early family responsibility and opportunities for independent action. (JH)

ABSTRACT 11347

EC 01 1347 ED 002 815
Publ. Date 59 69p.
Pierce, James V.
The Educational Motivation Patterns of Superior Students Who Do and Do Not Achieve in High School.
Chicago University, Illinois
EDRS mf,hc
CRP-208

Descriptors: exceptional child research; gifted; achievement; motivation; academic achievement; talented students; self concept; social adjustment; peer relationship; grade point average; sex differences; grade 10; grade 12; low achievement factors; higher education; high achievers; low achievers; McClelland's Thematic Apperception Test; TAT; Chicago Primary Mental Abilities; California Mental Maturity

The motivational patterns and the educational achievement of talented students were identified and analyzed. The objectives were to determine the differences between achievers and nonachievers in the following areas: motivation toward academic achievement; self concept, developmental history and home background, social adjustment, peer relationships, and parents' social status; and continuation of study beyond high school. Also, the patterns of educational motivation of boys and girls were studied for possible differences. It was found that high achieving students tend to be more highly motivated as measured by the interview Measure of Motivation and, in the case of boys, by McClelland's Test. Value achievement was higher as measured by the Semantic-Differential and, in the case of girls, by Strodtbeck's and Decharms' instruments, and more adjusted as measured by the California Psychological Inventory, Who Are They, and Behavior Description Chart instruments. The girls were more active in extracurricular activities, had more leadership, were more responsible and independent, had somewhat higher social status, came from small families where they were the first-born or only child, had parents who were better educated and held high aspirations for them, saw their fathers as important in their lives, and had mothers who placed a high value on imagination. (JL)

ABSTRACT 11641

EC 01 1641 ED 003 440
Publ. Date 64 179p.
Walker, William J.
Creativity and High School Climate.
Syracuse University, New York
Office of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEC-4-10-079 CRP-S-004

Descriptors: exceptional child research; classroom environment; creativity; creative teaching; creativity research; environmental influences; high schools; high school students

The project studied the characteristics of a highly creative school as opposed to those of a traditional school. Four high schools of comparable socioeconomic and student ability level were involved, two of which were judged to be of the highly creative type. The students were given various tests, and classes were observed. The findings showed the following characteristics of creative schools: high aspiration level and intellectual climate; less authoritarian, but not less rational, teacher direction; and stimulating and original classroom behavior on the part of the teachers. Suggested aims for an extension of the present study include projects for comparison of creative student productivity as well as

further investigation into the nature of creativity and of the relationship of the school environment to the development of creativity. (PM)

ABSTRACT 11892

EC 01 1892 ED 028 558
Publ. Date Jul 64 46p.
Arends, Richard; Ford, Paul M.
Acceleration and Enrichment in the Junior High School; A Follow-up Study.
Washington State Office of Public Instruction, Olympia
EDRS mf,hc
RR-03-05

Descriptors: exceptional child research; gifted; acceleration; enrichment; program evaluation; junior high school students; academic achievement; average students; student attitudes; teacher attitudes; sciences; mathematics; reading; student evaluation; testing

To test the effectiveness of a program of acceleration and enrichment, five ninth grade classes of students (25 in each class, IQ's 120 or above) who had been in this program for 2 years were compared to two control (C) classes of academically talented students who had not had the program. All students were given a series of standardized achievement tests and were asked to complete a school attitude questionnaire. Two experimental (E) classes were significantly superior in all comparisons in mathematics, in two of three comparisons in reading, and in one of three comparisons in science (p equals .05). In schools systems A and B the E-groups were significantly superior in only two of six comparisons with C-groups. An analysis of the total performance of all the experimental classes revealed that they were significantly superior to the controls in only 10 of 21 cases (p equals .05). The performances of average E-groups from the same schools were significantly different from C's in only four of 30 comparisons. Responses from questionnaires did not indicate a significant difference in attitudes between the groups. Conclusions were that the acceleration and enrichment program did not hurt either academically talented or average students, that the special program could be improved, and that the program was more appealing to students and teachers than a more traditional approach. (RP)

ABSTRACT 11897

EC 01 1897 ED 028 577
Publ. Date Jul 67 62p.
Beaird, James H.
Dimensions of Creativity in Elementary School Children.
Oregon State System of Higher Education, Monmouth, Teaching Research Division
Office of Education (DHEW), Washington, D. C., Bureau of Research

EDRS mf,hc
OEC-5-10-030
BR-5-8091

Descriptors: exceptional child research; creativity; individual characteristics; factor analysis; composition (literary); manipulative materials; student developed materials; art products; cognitive processes; comparative analysis; personality

To identify the parameters of creativity exhibited in products of sixth grade children, 25 subjects (12 girls and 13 boys) were asked to produce written, art, and mechanical objects and to write a description of the product indicating its use. Ten judges graded the relative creativity of the objects by comparing their similarity to an object considered to be standard. The resulting development of a judgmental space for each class was factor analyzed to determine factors of the creativity of the products. Students were administered a battery of personality tests and tests of cognitive characteristics. All of the creativity factors identified contained both personality and cognitive correlates. Factors identified for written products were novelty, flexibility, and openness to expression; factors for definition of the creativity of artistic objects were inventiveness and novelty; and the creativity of manipulative objects was characterized by the factor of novelty. Indications were that individuals who produced creative stories had a set of characteristics distinct from those of persons who produced the more creative art objects which also were distinct from those who produced the more creative manipulative objects. (RJ)

ABSTRACT 12018

EC 01 2018 ED N.A.
Publ. Date Aug 67 7p.
Werts, Charles E.
The Many Faces of Intelligence.
EDRS not available
Journal of Educational Psychology; V58
N4 P198-204 Aug 1967

Descriptors: exceptional child research; talented students; college admission; talent identification; research methodology; admission criteria; grades (scholastic); academic achievement; cocurricular activities

To test the validity of the argument that selection by academic performance will miss a large number of people with the capability of real life performance, correlations of academic achievement tests with nonacademic accomplishments were computed for 127,125 students entering 248 4-year colleges and universities in the fall of 1961. Each student filled out an information form about high school grades and 18 talent items. Results showed that the percentage of achievers rose exponentially with rise in high school grades (HSG) for the three science and three literary items and that the percentage of achievement for the other items showed a general rise with HSG. The percentage of students who checked no achievement items decreased from the D to the A grade level of HSG. Indications were that if talent items were

used for selection, the majority of the low grade students would be eliminated. A multiple correlation of .38 for males and .37 for females was obtained between the 18 achievement items and HSG, but conclusions were that the low correlations should not be cited as evidence that use of academic performance criteria for college admission results in loss of persons who are capable of creative performance in real life. (LE)

ABSTRACT 12032

EC 01 2032 ED 002 871
Publ. Date 60 65p.
Hampton, Nellie D.
Effects of Special Training on the Achievement and Adjustment of Gifted Children.
Iowa State Department of Public Instruction, Des Moines
Office of Education (DHEW), Washington, D. C.
EDRS mf,hc
CRP-423

Descriptors: exceptional child research; achievement; adjustment (to environment); gifted; educational opportunities; academic achievement; student adjustment; rural education; program evaluation; experimental curriculum; summer programs; comparative analysis; rural youth

An experimental 8-week summer program for gifted children in rural areas and towns was tested for effectiveness. Three groups of 60 fifth-grade children, IQ 120 or above, were established: the third group was not compared in the results. An experimental group and a control group were pretested and organized; posttesting was delayed one academic year following the close of the special summer session. The two groups were not significantly different in academic achievement; the experimental group was significantly better, however, on library research (p equals .01) and critical thinking tests (p equals .05). No significant differences were found in adjustment or in interests. It was suggested that, with the possible development of other measuring devices tailored to the outcomes of experimental summer sessions, more pronounced differences between experimental and control groups might have been discovered. (JH)

ABSTRACT 12075

EC 01 2075 ED 010 766
Publ. Date 65 69p.
Sands, Theodore; Hicklin, Charles R.
The Development and Testing of Instructional Materials for Gifted Primary Pupils. Final Report.
Illinois State University, Normal
Illinois Office of Superintendent of Public Instruction, Normal
EDRS mf,hc

Descriptors: exceptional child research; gifted; programed instruction; sciences; instructional materials; elementary school students; elementary school science; parent attitudes; audiovisual instruction; mathematics; education; physical sciences; student evaluation

Self-instructional science materials for gifted primary students were developed and used with first- and second-grade students. Units on atomic structure, the nature of molecules, measurement, and mathematics were developed, used, evaluated, and revised over a 2-year period. Lessons were presented through the use of tape players, illustrative materials, and workbooks. Students were selected on the basis of IQ scores and assigned to two groups. Each group used the materials for one-half of the experimental period. All students were pretested, tested at the end of the fourth week, and post-tested for achievement with instruments developed for the study. Other data were obtained from teacher evaluation forms and questionnaires completed by teachers and parents. Significant gains, at the .05 level, were obtained for the units concerned with mathematics, atoms, and measurement. A majority of the parents favored the use of the materials and indicated that the children developed interest through their studies. (AG)

ABSTRACT 20022

EC 02 0022 ED 001 979
Publ. Date 64 183p.
Drews, Elizabeth H.
A Study of Non-Intellectual Factors in Superior (Average and Slow) High School Students. The Creative Intellectual Style in Gifted Adolescents. Motivation to Learning--Attitudes, Interests and Values.
Michigan State University, East Lansing
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEC-SAE-9101
BR-5-0460

Descriptors: exceptional child research; personality; gifted; individual differences; student attitudes; student interests; personal values; high school students; environment; student characteristics; slow learners; East Lansing

A final report was given of a three-part study that was made to determine differences in the attitudes, interests, and values of gifted high school students in relation to their total environment. A research design was developed to delineate the characteristics of these gifted students, especially those characteristics which differentiate the three profile types of creative intellectual, studious, and social leaders. Superior students from the 10th, 11th, and 12th grades were assigned to one of the three profile groups on the basis of self-classification. Comparative analysis was performed throughout the study by drawing a contrast between two 11th grade groups, one average in ability and the other superior. Formal and informal measures were used to acquire the results. It was concluded that the creative intellectuals showed strong, self-directed interest in learning and a great willingness to deal with both the subjective data of the self and the objective data of the larger world. The studious, while also showing a concern for ideas and a desire to learn, mainly

confined their efforts to completing teacher-directed assignments. The social leaders preferred to make their impact felt on people rather than in the realm of ideas. It was felt, that on the basis of these findings, new guidelines for educational strategies should be developed to take into account differences among the gifted. A related report is ED OC3 182. (GD)

ABSTRACT 20028

EC 02 0028 ED 019 801
Publ. Date Feb 68 78p.
Burgart, Herbert J.
The Development of a Visual-Verbal Measure of General Creativity: The Symbol Test of Originality. Final Report.
Richmond Professional Institute, Virginia

EDRS mf, hc
OEG-2-7-07169-1534

Descriptors: exceptional child research; gifted; tests; creativity; verbal tests; originality; testing; factor analysis; pictorial stimuli; intelligence; cognitive processes; learning processes; maturation; self concept; test validity; test construction; visual perception; Symbol Test of Originality; STO

The Symbol Test of Originality (STO) was studied and modified to substantiate its usefulness and to meet several criteria for test construction: freedom from intellectual bias, simplicity, objectivity, and direct relationship to a general creativity factor. From an original group of 4,500 persons ranging in age from 10 to 25 years, from fifth grade through college, a random sampling of 600 was drawn, based on grade level percentages within the general population. The final population numbered 478 with 12 subgroups. Three modified versions of the STO and the original version were selected along with items from Kiselbach's Test of Aesthetic Discrimination, Thurston's Hidden Figures and Mutilated Words Test, Guilford's Brick Uses Test, and modified forms of Taylor's Relationship Test and of a Self Concept Rating Scale. Biographical data were also gathered. The battery was given to the 4,500 sample, and its analysis yielded variables of general creativity, visual perception, maturation, process strategy, self concept, and biographical information. Four significant factors were observed: general creativity, intelligence, process strategy, and maturation. Conclusions were that general creativity could be isolated, although it is a composite of varying proportions of several primary creativity abilities, and that the criteria set for the measure were appropriately met. An appendix contains the STO, Variable Description, Variable Analysis 15-41, Symmetric Correlation Matrix, Rotated Matrix of Factor Loadings, and Project Test Battery. (AA/JP)

ABSTRACT 20031

EC 02 0031 ED N.A. |
Publ. Date 65 353p.
Torrance, E. Paul
Rewarding Creative Behavior; Experiment in Classroom Creativity.

Minnesota University, Minneapolis, College of Education
Office of Education (DHEW), Washington, D. C., Cooperative Research Branch

EDRS not available
CRP-725

Prentice-Hall, Inc., Englewood Cliffs, New Jersey 07632 (\$7.95).

Descriptors: exceptional child research; creativity; teaching methods; evaluation; reinforcement; tests; teacher attitudes; research reviews (publications); thought processes; sex differences; rewards; peer relationship; self concept; cultural differences; case studies (education); measurement techniques; effective teaching; originality; educational methods; experimental programs

The need for rewarding creative thinking is asserted; a plan is proposed for studying evaluation and creative behavior; and measurement of creative behavior is discussed. Three groups of studies are presented. The first set considers the ways the intermediate environment rewards creative behavior; aspects treated include applying principles for rewarding creative thinking, creative and critical evaluative attitudes of teachers, creative activities as rewards for creative thinking, and differential rewards for boys and girls. The second set investigates the following issues about the evaluative behavior of the classroom teacher: competition as external evaluation; unevaluated practice and creative behavior; critical and creative peer-evaluated practice; evaluative discussions about creative productions; peer pressures in homogeneous and heterogeneous groups; positive, negative, and trouble-shooting evaluation; and cultural differences in evaluating creative characteristics. The final study concerns helping children value their ideas. Practical applications of the studies are presented; appendixes are provided on the instruments used in the described studies and on developing creative thinking through language arts. (JD)

ABSTRACT 20042

EC 02 0042 ED 002 997
Publ. Date 62 47p.
Hampton, Nellie D.
Effects of Special Training on the Achievement and Adjustment of Gifted Children.
Iowa State College, Cedar Falls
EDRS mf, hc
CRP-923

Descriptors: exceptional child research; achievement; adjustment (to environment); gifted; intellectual experiences; emotional experiences; summer programs; student interests; student problems; student needs; social development; special programs; rural areas; achievement tests; interest tests; psychological tests; Institute of Child Study Security Test; SRA Junior Inventory Form S; Iowa Test of Basic Skills

An attempt was made to develop and evaluate an administratively practical educational program for intellectually gifted pupils in sparsely populated areas.

Three groups of approximately 60 fifth grade subjects each were identified for the study. The experimental group was transported daily to a central location for an 8-week summer session, which had a curriculum adapted to the special abilities of the children and to the kinds of schools they attended during the regular year. The two other groups, differing in their awareness of inclusion in the experiment, were set up for comparative control purposes. Posttesting was delayed approximately 1 academic year after the experimental group completed their special summer training. The test battery was designed to measure academic skills, and classroom reputation. Null hypotheses has been established on all these variables, stating that there would be no significant differences in the posttest results among the three groups. For the most part, these hypotheses were substantiated. Only in the academic areas did the results generally favor the experimental group. (JH)

ABSTRACT 20058

EC 02 0058 ED N.A.
Publ. Date Nov 67 7p.
Kurtzman, Kenneth A.
A Study of School Attitudes, Peer Acceptance, and Personality of Creative Adolescents.
EDRS not available
Exceptional Children; V34 N3 P157-62
Nov 1967

Descriptors: exceptional child research; creativity; creativity research; peer acceptance; personality; student attitudes; intelligence; self concept; originality; sex differences; testing

To investigate whether there were differences between students of higher, middle, and lower creative abilities considering the variables of peer acceptance, attitudes toward school, and personality characteristics, 80 boys and 71 girls in college-bound classes were tested. Three groups, higher, middle, and lower, were formed on the basis of a composite creativity score. Findings indicated that the higher the intelligence the more creative a person is likely to be. Also, creative individuals tend to be more adventurous, extroverted, self confident if male, more accepted by peers if male and less accepted if female, and tend to have an unfavorable attitude toward school. (JG)

ABSTRACT 20070

EC 02 0070 ED N.A.
Publ. Date Feb 67 10p.
Ringness, Thomas A.
Identification Patterns, Motivation, and School Achievement of Bright Junior High School Boys.
EDRS not available
Journal of Educational Psychology; V58 N2 P93-102 Feb 1967

Descriptors: exceptional child research; identification (psychological); motivation; values; junior high school students; low achievers; high achievers; success factors; peer acceptance; peer groups; conformity; parent child relationship; social adjustment; gifted; student attitudes

Interview and card sort data were obtained on 261 high-, average-, and low-achieving bright 8th-grade boys in an attempt to confirm or refute earlier findings concerning identification patterns, motivation, and values. Confirmation was generally found, the main exception being that in the present study most subjects identified with fathers whereas in the previous study high achievers were most likely to do so. Socioeconomic status bias may have influenced earlier data. Low achievers were found more motivated academically. Low achievers were more nonconforming, whereas high achievers were more independent. School was seen by most subjects as demanding conformity, and subjects accepted this role model. Scholarship was shown to have little relationship to peer popularity, and the perceived norm for school achievement was that of mediocrity. (Author)

ABSTRACT 20261

EC 02 0261 ED N.A.
Publ. Date Sep 67 4p.
Namy, Elmer
Intellectual and Academic Characteristics of Fourth Grade Gifted and Pseudogifted Students.
EDRS not available
Exceptional Children; V34 NI P15-8 Sept 1967

Descriptors: exceptional child research; gifted; cognitive processes; tests; intelligence tests; academic achievement; ability identification; teacher evaluation; student characteristics; overachievers; intelligence differences; Wechsler Intelligence Scale for Children; California Test of Mental Maturity

Differences in intellectual and academic characteristics between two groups of fourth grade students were studied. The first group was composed of gifted children (16 boys and 16 girls with a mean IQ of 126.49) who scored above the 90th percentile on the California Test of Mental Maturity (CTMM), and whose full scale IQ scores on the Wechsler Intelligence Scale for Children (WISC) were above 119. The second group (16 boys and 16 girls with a mean IQ of 110.28) included pseudogifted pupils who had been classified by their teacher as gifted but had IQ scores below 120 on the WISC and below the 90th percentile on the CTMM. Nine of 12 WISC subtests were administered by a certified school psychologist and results compared. There was no significant difference between the gifted and pseudogifted in performance on the WISC coding and arithmetic subtests but significant and uniform differences were found between means on the information, comprehension, similarities, vocabulary, picture completion, picture arrangement, and block design subtests (p less than .05). A significant difference in teacher grades favoring the gifted in the subject of English was observed but not found in other subjects. The gifted were better able to make abstract generalizations and seemed to rely more on the higher cognitive processes. (SN)

ABSTRACT 20372

EC 02 0372 ED N.A.
Publ. Date Spr 69 7p.
Sonntag, Joyce
Sensitivity Training with Gifted Children.
EDRS not available
Gifted Child Quarterly; V13 N1 P51-7 Spr 1969

Descriptors: exceptional child research; gifted; sensitivity training; interpersonal relationship; self evaluation; group therapy; physical activities; emotional development; groups; training techniques

Twenty-six gifted children (ages 9 and 10) volunteered for a 1-month summer workshop to experiment with the use of techniques derived from sensitivity training concerned with facilitating growth, venturing, and creativity. The techniques of Gestalt therapy, theater, encounter groups, imagination games, creative movement, and gymnastics were used. Objectives were to develop soft talent (responsiveness to environment in other than intellectual terms) by providing experiences in attending, receiving, responding, and valuing. No negative psychological experiences were known to have resulted from participation. Results were only suggestive due to the small number involved and the time limitation (48 hours of training), but it was found that the children did become involved, and there was evidence of increased self awareness and acceptance of self and others. It is suggested that teachers begin to use an adaptation of sensitivity training without waiting for definite research results. Six acknowledgements are made and six references cited. (FC)

ABSTRACT 20391

EC 02 0391 ED N.A.
Publ. Date Sep 69 7p.
Walberg, Herbert J.
A Portrait of the Artist and Scientist as Young Men.
EDRS not available
Exceptional Children; V36 NI P5-11 Sept 1969

Descriptors: exceptional child research; gifted; creativity; scientists; artists; individual characteristics; individual differences; aspiration; sex differences; self concept

From a large national sample of high school physics students, three groups were identified: those winning awards in science, those winning awards in the arts, and those winning awards in either of these fields. The groups were compared on 300 biographical items. In contrast to responses of those winning no awards, both artists and scientist responses were wholesome and indicative of high aspirations for social status. Comparisons of the award winning groups suggests that social communication of inner feelings is the preoccupation of the artists while scientists are more intent on the single minded conceptualization of external reality. (Author)

ABSTRACT 20396

EC 02 0396 ED N.A.
Publ. Date Dec 69 6p.
Radin, Norma
The Impact of a Kindergarten Home Counselling Program.
EDRS not available
Exceptional Children; V36 N4 P251-6 Dec 1969

Based on A Paper Presented at the Annual Meeting Of the Midwestern Psychological Association (41st, Chicago, Illinois, May, 1969).

Descriptors: exceptional child research; disadvantaged youth; kindergarten; preschool programs; parent counseling; intelligence level; able students; parent participation; supplementary education; Supplementary Kindergarten Intervention Program

Three matched groups of 12 disadvantaged, high ability students who had previously participated in a preschool program underwent differential kindergarten experiences. The variable producing both superior performance by the children on cognitive measures and a more stimulating home environment was found to be a parent counseling program. The youngsters showing the greatest gains on the Binet were those whose mothers had been intensely involved in the educative process at both the preschool and kindergarten level. (Author)

ABSTRACT 20835

EC 02 0835 ED 032 702
Publ. Date Jun 69 21p.
Youngs, Richard C.; Jones, William W.
The Appropriateness of Inquiry Development Materials for Gifted Seventh Grade Children. Final Report.
Illinois State University, Normal, Metcalf Laboratory School
Illinois State University, Normal, University Research Committee;
Illinois Office of the Superintendent of Public Instruction, Columbus, Department of Program Development
EDRS mf, hc

Descriptors: exceptional child research; gifted; teaching methods; inquiry training; instructional materials; sciences; academic achievement; critical thinking; questioning techniques; teacher behavior

To test the efficacy of inquiry development materials with the gifted, six 7th-graders with IQ's in the top 3% participated in an inquiry science class with specially selected materials twice a week for 40 minutes over 6 months; six children with like IQ's worked on science activities in another room. Pre- and post-tests in critical thinking and science achievement were administered; in addition, measures of inquiry and analyses of student questions and teacher interaction were made. Results indicated that the students in the inquiry class asked significantly more questions relating to experimentation and that the teacher, while in the inquiry class, was significantly more likely to clarify pupil questions and to respond to pupils seeking data than he was with the conventional class, to whom he provided data. Other results

were nonsignificant, thus failing to provide evidence for noticeable improvement in the area of inquiry. (JD)

ABSTRACT 21026

EC 02 1026 ED N.A.
Publ. Date 64 160p.

Drews, Elizabeth Monroe
The Creative Intellectual Style in Gifted Adolescents; Motivation to Learn; Attitudes, Interests and Values.
Michigan State University, East Lansing, Cooperative Research Program Office of Education (DHEW), Washington, D. C.

EDRS not available
OEC-SAE-9101-5-0460-2-1
2-1

Michigan State University Press, Box 550, East Lansing, Michigan 48824.

Descriptors: exceptional child research; gifted; student attitudes; student interests; individual differences; personal values; creative ability; social values; student leadership; ability identification; academic achievement; creativity; individual characteristics

To determine differences in the attitudes, interests, and values of gifted high school students in relation to their total environment and to delineate the characteristics of these gifted students, especially those characteristics which differentiate the three profile types of creative intellectual, studious, and social leaders, superior students from the tenth, eleventh, and twelfth grades were assigned to one of the three profile groups on the basis of self-classification. Comparative analysis was performed throughout the study by drawing a contrast between two eleventh grade groups, one average in ability and the other superior. It was concluded that the creative intellectuals showed strong, self-directed interest in learning and a great willingness to deal with both the subjective data of the self and the objective data of the larger world. The studious, while also showing a concern for ideas and a desire to learn, mainly confined their efforts to completing teacher-directed assignments. The social leaders preferred to make their impact felt on people rather than in the realm of ideas. It was felt, that on the basis of these findings, new guidelines for educational strategies should be developed to take into account differences among the gifted. Extensive tables present results. (Author/GD)

ABSTRACT 21108

EC 02 1108 ED 025 810
Publ. Date Aug 68 36p.

Lodato, Francis and Others
Final Report on an Independent Study Program for the Academically Able.
Manhattan College, Bronx, New York
New York State Education Department, Albany
EDRS mf.hc

Descriptors: exceptional child research; academic achievement; independent study; individualized curriculum; individual reading; individual study; secondary students; student grouping; stu-

dent projects; superior students; gifted; released time

Released time from classes for independent study by academically able high school juniors and seniors is evaluated here after a 4 year study. Concern was centered on the effects of this program on high school functioning and, later, on college records. Major hypotheses of the study were that independent reading groups would show greater gains in school satisfaction, study habits, and library skills, certain cognitive and affective measures would not be useful in predicting success in independent studies and achievement in areas other than the independently studied areas would differ little from that of control groups. These hypotheses were largely supported. Absences from class had no adverse effects, and trends indicated favorable effects of independent study. Significantly more experimental students chose majors in their freshman year in college than did matched controls. Tendencies that did not reach statistical significance favored experimental groups in other areas of the college investigation as well. (BP)

ABSTRACT 21121

EC 02 1121 ED N.A.
Publ. Date Feb 70 11p.

Schaefer, Charles E.
A Psychological Study of 10 Exceptionally Creative Adolescent Girls.
EDRS not available
Exceptional Children; V36 N6 P431-41
Feb 1970

Descriptors: exceptional child research; gifted; creativity; adolescents; family background; educational background; self concept; personality assessment; leisure time; student interests

Ten high school girls were identified as exceptionally creative on the basis of teacher nominations and test scores. Historical, personality, and projective data were collected by means of tests and interviews. Particular emphasis was placed on life history antecedents of creative achievement. The highly creative girls were found to possess a number of common characteristics, particularly in the areas of familial and educational history, leisure time activity, fantasy experience, and self concept. (Author)

ABSTRACT 21142

EC 02 1142 ED N.A.
Publ. Date 69 4p.

Torrance, E. Paul
Curiosity of Gifted Children and Performance on Timed and Untimed Tests of Creativity.
EDRS not available
Gifted Child Quarterly; V13 N3 P155-8
Fall 1969

Descriptors: exceptional child research; gifted; creative ability; curiosity; ability tests; timed tests; performance tests; divergent thinking

To examine the issue of timed versus untimed tests of creativity, the Torrance Tests of Creative Thinking were administered by four methods: the standard,

timed testing procedures described in the test manual; a procedure designed to produce incubation prior to administration according to standard procedures; administration as a take home test to be returned four days later; and administration with a relaxed, playful, game-like set. Among the gifted (Stanford-Binet IQ 130 or higher) preadolescents tested, teacher ratings indicated high and low curiosity levels. The results showed that curiosity levels indicated different patterns of performance on the creativity test, and that the measures obtained through the untimed condition appeared to have satisfactory validity while those of the timed conditions did not. (RD)

ABSTRACT 21145

EC 02 1143 ED N.A.
Publ. Date 69 6p.

Granzin, Kent L.; Granzin, Wilma J.
Peer Group Choice as a Device for Screening Intellectually Gifted Children.
EDRS not available
Gifted Child Quarterly; V31 N3 P189-94
Fall 1969

Descriptors: exceptional child research; gifted; screening tests; peer relationship; socioeconomic techniques; teacher attitudes; ability identification; self concept

A test consisting of 30 randomly ordered characteristics describing both average and gifted children was administered to 88 fourth grade students, and administered again 1 month later. Pupils were ranked on the basis of teacher judgment, group IQ score, number of times mentioned by gifted classroom peers, and number of mentions by all classroom peers. Results showed that both gifted and nongifted pupils were able to distinguish traits of giftedness, with the gifted performing significantly better, and that peer-group choice of gifted pupils agreed significantly with teacher rankings. (RD)

ABSTRACT 21193

EC 02 1193 ED 031 747
Publ. Date Mar 69 8p.

Groth, Norma Jean
Vocational Development for Gifted Girls--A Comparison of Maslovian Needs of Gifted Males and Females Between the Ages of Ten and Seventy Years.

American Personnel and Guidance Association, Washington, D. C.;
Oxnard School District, California
EDRS mf.hc
Paper Was Presented at the American Personnel and Guidance Convention, Las Vegas, Nevada, Mar 30-Apr 3, 1969.

Descriptors: exceptional child research; cognitive ability; females; gifted; goal orientation; psychological needs; vocational counseling; sex differences; individual needs

Gifted girls and women have the unique aspect of attempting to fulfill needs in both the affective and the cognitive domains. Using Maslow's hierarchy of needs, this study was designed to formulate some guidelines for the vocational counseling of gifted girls and women by ascertaining their developmental need

levels. Need levels were compared with those of gifted boys and men. A cross-sectional study was used to determine the developmental needs from 10 to 70 years. Data was collected from 361 gifted males and females. This data consisted of three wishes made by each subject. The wishes were used projectively to reflect the needs and valences of the individuals. Results are given in terms of valences: maturity, fantasy, physiological, safety, love, self-esteem and self-actualization. Conclusions and implications are that the years 14 and 40 are apparently traumatic for gifted women. By 40, love needs have been satiated and the suppressed cognitive needs come to the surface. At 40, many women find resistance in fulfilling these goals due to age, fear, or other external factors. References and data tables are included. (Author-SJ)

ABSTRACT 21276

EC 02 1276 ED 003 842
Publ. Date Aug 65 312p.
Jewell, R. E. and Others
Team Teaching English Across Grade Lines Using Selected Ability Groups and a Theme-Oriented Curriculum. Bend Senior High School, Oregon
Office of Education (DHEW), Washington, D. C.
EDRS mf,hc
CRP-S-158

Descriptors: exceptional child research; gifted; curriculum; teaching methods; honors curriculum; English curriculum; reading; writing; high school students; senior high schools; student opinion; student reaction; high achievers; ability grouping; parent reaction; curriculum evaluation

An evaluation of an honors English team teaching program is reported. The program, designated as a spiral curriculum, was administered to senior high school high ability students. Results were evaluated in terms of student achievement in reading and writing, changes in student attitudes and participation in group discussions, student reaction, parent awareness and reaction, teaching staff impressions, and functional effectiveness of the program. Tables of statistical data collected and findings are appended with information on measuring devices, a student opinion poll, a structured parent interview, and a 158-page supplementary text containing 24 literature selections for the honors program. (WN)

ABSTRACT 21285

EC 02 1285 ED N.A.
Publ. Date Dec 65 214p.
Birch, Jack W. and Others
A Field Demonstration of the Effectiveness and Feasibility of Early Admission to School for the Mentally Advanced Children. Pittsburgh University, Pennsylvania.
School of Education
Office of Education, Washington, D. C.
EDRS mf,hc
OEC-2-10-974 CRP-D-010

Descriptors: exceptional child research; gifted; demonstration programs; early

admission; early childhood education; kindergarten; academic achievement; social adjustment; personal adjustment

A 4-year study demonstrated the feasibility and effectiveness of early admission to school for mentally advanced children. Approximately 800 children were screened to locate the 36 children who entered kindergarten before the usual time. Criteria for early admission included an IQ of 130 or higher, social maturity at least 1 year advanced, absence of health problems, satisfactory emotional development, approval by kindergarten teachers after observation of a kindergarten visit, and parental approval. Data were collected on the attitudes, costs, and modifications required in activities of professional staff, and on the achievement of pupils. Children admitted early to school on the bases of mental, physical, social, and emotional readiness did as well in academic work as their older classmates of like ability in kindergarten and first and second grades. On sociometric measures there was no evident difference between early admitted children and others. The process of demonstration was analyzed in terms of innovation and change. Information about the demonstration was disseminated widely through public information media. (JM)

ABSTRACT 21289

EC 02 1289 ED 028 027
Publ. Date Apr 68 16p.
Stemmler, Anne O.
Reading of Highly Creative Versus Highly Intelligent Secondary Students.

EDRS mf,hc
Paper Presented at International Reading Association Conference (Boston, Massachusetts, April 24-27, 1968).

Descriptors: exceptional child research; creative reading; creativity; functional reading; gifted; imagination; intelligence; interpretive reading; reading processes; reading skills; secondary school students; cognitive processes

The purpose of this study was to explore the similarities and differences in the reading behaviors of highly creative (HC) and highly intelligent (HI) secondary students. An intensive analysis of the oral introspective and retrospective responses of 36 subjects to two written passages was made. An experimental classification framework was developed to analyze the data. Results include the following: the HC group exceeded the HI group in responses for selected content elements and cognitive patterns in both free and controlled reading situations; there was no difference between groups in the recall of directly stated information; the HC group exceeded the HI group in reading for nonliteral meanings; and the HC group exceeded the HI group in variation of thinking methods. It was concluded that these two groups had different reading styles. The HC group possessed imaginative characteristics and read from within. The HI group possessed intellectual characteristics and read without. The implications of this

study for the areas of understanding giftedness, understanding the reading process, and curriculum planning are discussed. Sample interviews are included. (BS)

ABSTRACT 21290

EC 02 1290 ED 027 939
Publ. Date 68 115p.
Cawley, John F. and Others
An Appraisal of Head Start Participants and Non-Participants: Expanded Considerations on Learning Disabilities Among Disadvantaged Children. Connecticut University, Storrs, School of Education
Office of Economic Opportunity, Washington, D. C.
EDRS mf,hc
OEO-4177

Descriptors: exceptional child research; academic performance; comparative analysis; compensatory education programs; culturally disadvantaged; individual differences; program evaluation; factor analysis; intervention; kindergarten; longitudinal studies; mental development; program effectiveness; student characteristics; test reliability; preschool programs; Detroit Tests of Learning Aptitude; Head Start; Illinois Test of Psycholinguistic Abilities; Peabody Picture Vocabulary Test; Stanford Binet

First grade children from two Head Start (HS) groups and one non-Head Start (NHS) group were administered a battery of tests for the purposes of comparing the developmental status of HS and NHS subjects, examining patterns of specific learning disabilities among HS and NHS children, determining the stability coefficients of selected instruments, and analyzing the predictive capabilities and factorial structure of selected evaluative instruments. Group one, the primary Head Start sample, was composed of 54 disadvantaged children who had attended a year-long preschool program and had been tested during that time. Group two, a secondary Head Start sample, consisted of 77 disadvantaged children who had also attended a year-long program but had not had testing experience. The comparison group consisted of 78 non-Head Start disadvantaged children. Available data indicated that HS and NHS children demonstrated no significant differences in developmental characteristics in kindergarten. The comprehensive testing in the first grade showed the same trend: there were no significant differences between children having participated in HS and not having participated in HS in learning ability. The first grade data also showed that all of the subjects in this study labored under serious learning disabilities. (WD)

ABSTRACT 21295

EC 02 1295 ED 027 965
Publ. Date Mar 64 20p.
MacKinnor, Donald W.
Identification and Development of Creative Abilities. California University, Berkeley, Institute of Personality Assessment and Research
EDRS mf,hc

Paper Presented to Conference on Creativity and The Mentally Gifted (Fresno State College, Fresno, California, March 14, 1964).

Descriptors: exceptional child research; gifted; intelligence; creativity; creativity research; divergent thinking; educational methods; educational practice; individual characteristics; individual psychology; intelligence; originality; personality assessment; psychological characteristics; self concept; student teacher relationship; Terman Concept Mastery Test

An assessment was made of representatives of artistic creativity (poets, novelists, and essayists), representatives of scientific creativity (engineers, research scientists, and inventors) and representatives of creativity which is both scientific and artistic (mathematicians and architects). Characteristics of all groups emphasized the following: a certain amount of intelligence is required for creativity, but beyond that point, being more or less intelligent does not determine creativity; creative persons are original; they are independent in thought and action; they are especially open to experience both of the inner self and of the outer world; creative persons are intuitive; they have strong theoretical and aesthetic interests; and they have a strong sense of destiny which includes a degree of resoluteness and almost inevitably a measure of egotism. It was concluded that it is important for parents and teachers to recognize, stimulate, and develop creativity in children. (dO)

ABSTRACT 21299

EC 02 1299 ED 028 818
Publ. Date Feb 69 10p.
Aliotti, Nicholas C.; Blanton, William E.

Some Dimensions of Creative Thinking Ability Achievement, and Intelligence in First Grade.

Georgia University, Athens
EDRS mf,hc

Paper Presented at the American Educational Research Association (Los Angeles, California, February 5-8, 1969).

Descriptors: exceptional child research; academic achievement; creative thinking; creativity research; factor analysis; grade 1; intelligence; perception tests; pictorial stimuli; test interpretation; verbal ability; creative ability; California Tests; of Mental Maturity; Metropolitan Achievement Tests; Metropolitan Readiness Tests; Picture Interpretation Test; Torrance Tests of Creative Thinking

The Picture Interpretation Test (Torrance and Grossman, 1967) was used in a battery of creative tests as part of a construct validity test. The test was administered to 46 boys and 37 girls in five first grade classrooms in a Clayton County, Georgia, elementary school. The purpose of the test was to measure the child's ability to interpret a picture. A subject was presented a novel stimulus and asked to agree or disagree with statements concerning the picture. When a factor analysis was performed on the four factors emerged: some mea-

sure of general intelligence, a general index of academic achievement, figural measures of creative thinking, and verbal creativity measures. The factors were then correlated with the following results: verbal creative thinking was independent of general intelligence, academic achievement, and figural creativity; and figural creativity shared common variance with general intelligence and academic achievement. The independence of the verbal creative thinking factor was incongruous, since many other studies reported at least a low correlation between verbal creative thinking and academic achievement or general intelligence. The results suggest that a replication be conducted with particular attention to perceptual sensitivity tasks. (JS)

ABSTRACT 21305

EC 02 1305 ED 031 757
Publ. Date Jun 69 28p.
Check, John F.

An Analysis of Differences in Creative Ability Between White and Negro Students, Public and Parochial, Three Different Grade Levels, and Males and Females. Final Report.

Wisconsin State University, Oshkosh
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEG-0-8-080117-3725-010
BR-8-E-117

Descriptors: exceptional child research; Caucasian students; creative ability; creative development; creativity; creativity research; grade 4; grade 7; grade 12; Negro students; parochial schools; student characteristics; student evaluation; teacher attitudes; public schools; sex differences; age differences

The purposes of this investigation were to determine whether differences in creative ability exist between white and Negro students, between public and parochial school students, between students of different grade levels, and between sexes. A corollary purpose of this study was to determine how well teachers can identify the creative students in their classes by personal contact and by observation. A total of 600 students in grades four, seven and twelve were given the California Test of Mental Maturity and the Torrance Tests of Creative Thinking. The teachers involved with these students were asked to select the five most and the five least creative students in their classes. Significant differences were shown between grades four and twelve, favoring the higher grades. Public school students were more creative than parochial students. No significant differences were found between Negro and white students, between grades seven and twelve, or between the sexes. Results indicate teachers are not able to identify creative students. (Author/KJ)

ABSTRACT 21588

EC 02 1588 ED N.A.
Publ. Date 69 7p.
Torrance, E. Paul
Prediction of Adult Creative Achievement Among High School Seniors.

EDRS not available
Gifted Child Quarterly; V13 N4 P223-9
Win 1969

Descriptors: exceptional child research; gifted; creativity; creative activities; predictive validity; predictive ability (testing); test reliability; ability identification; high school students; Torrance Tests of Creative Thinking

To determine the reliability of the Torrance Tests of Creative Thinking in predicting creativity, a long range follow-up was conducted from 1959 to 1966. Data was obtained on 46 subjects whose creative achievements were judged for quality by five judges on a 10 point scale. At a level of significance of .05, 11 of the coefficients of correlation for the creativity predictors are significant. Twenty-five of the group were pursuing their doctorates, and those who originally scored highest on creativity had produced the greatest creative work. The conclusion is that creativity can and should be tested and encouraged among those who score high on the tests. Tables of results are included. (JM)

ABSTRACT 21590

EC 02 1590 ED N.A.
Publ. Date 69 5p.
Callaway, Webster R.
A Holistic Conception of Creativity and Its Relationship to Intelligence.
EDRS not available
Gifted Child Quarterly; V13 N4 P237-41
Win 1969

Descriptors: exceptional child research; gifted; creativity; intelligence level; cognitive processes; individual characteristics; intelligence differences; personality; intelligence factors; creativity research

To test the relationship between personality characteristics indicating creativity and intelligence, 59 eleventh grade students with IQ's above 130, and 60 with IQ's below 115 were compared (mean IQ's 137 and 112). It was found that the high IQ girls were significantly higher (.05) in creative personality characteristics and verbal IQ than the lower IQ girls, but that the comparison of boys' groups showed only a slight significance. One table of results is included. The study was part of the author's dissertation and does not include all data. The author feels that the personality dimensions of originality, social maturity, complexity, estheticism, theoretical orientation, and thinking introversion can be predictive of creativity. (JM)

ABSTRACT 21591

EC 02 1591 ED N.A.
Publ. Date 69 5p.
Purkey, William W.
Project Self Discovery: Its Effect on Bright but Underachieving High School Students.
EDRS not available
Gifted Child Quarterly; V13 N4 P242-6
Win 1969

Descriptors: exceptional child research; gifted; underachievers; enrichment programs; self concept; student attitudes; social adjustment; high school students;

program effectiveness; Project Self Discovery

To determine the effectiveness of Project Self Discovery on underachievers when used in an independent study, correspondence style format, 84 subjects were tested. The tenth and eleventh grade students were introduced to the Project and completed a total of 293 self discovery exercises. When the control and experimental groups were compared, there was evidence that posttest scores were slightly higher for the experimental group especially on the psychological mindedness scale and that approximately half of the experimental subjects had completed the exercises although there was no extrinsic reward. The author's conclusion is that although high positive results were not obtained, enough evidence exists for continued research into the Project. (JM)

ABSTRACT 21074

EC 02 1674 ED 021 257
Publ. Date Dec 67 56p.
Welsh, George S.
Relationships of Intelligence Test Scores to Measures of Anxiety, Impulsiveness, and Verbal Interests in Gifted Adolescents. Final Report.
North Carolina University, Chapel Hill
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEO-1-7-0009-3471
BR-7-C-009

Descriptors: exceptional child research; anxiety; correlation; gifted; group intelligence testing; individual characteristics; intelligence tests; personality; self concept; self control; verbal ability; vocabulary

The degree to which potentially useful group intelligence tests were affected by personality characteristics such as anxiety, impulsiveness or caution, and verbal interests was investigated by a battery of intelligence, interest, and personality tests administered to 1,163 gifted adolescents in special summer programs. Intelligence was measured by the D-48 (non-verbal) and the Terman Concept Mastery Test (CMT-Verbal), anxiety by the Minnesota Multiphasic Personality Inventory (MMPI) A-scale, impulsivity by the MMPI Pd- and Ma-scales, verbal interest by the Strong Vocational Interest Blank (SVIB) Lawyer and Author-Journalist (men's) scales, self-concept by Gough's Adjective Check List, and carelessness by errors on easy intelligence items. Significant negative correlations were found between anxiety and intelligence, impulsivity and intelligence, and carelessness and intelligence. Positive correlations were found between verbal interest and verbal intelligence, non-verbal and verbal intelligence, and counseling readiness and intelligence. Wider use and revision of the D-48, restricted use of the CMT, part and total score-reporting of the CMT, and additional correlational analyses between the MMPI scales and Adjective Check List, and between the SVIB scales and the two intelligence tests are recommended. (WR)

ABSTRACT 21688

EC 02 1688 ED N.A.
Publ. Date Feb 68 91p.
Ojen, Melita H.
The Fulfillment of Promise: 40-Year Follow-Up of the Terman Gifted Group.
Stanford University, California, Department of Psychology
EDRS not available
Genetic Psychology Monographs; V77
First Half P3-93 Feb 1968

Descriptors: exceptional child research; gifted; achievement; personal adjustment; individual characteristics; followup studies; success factors; adult characteristics; psychological characteristics; political attitudes; social values; social characteristics; personality; professional recognition; educational background; family background

As followup, a seventh survey was done in 1960-61 of the 1338 subjects studied by Terman in 1921-22 (857 boys and 671 girls, aged 3 to 19, all scoring in top 1% on intelligence tests). Data were obtained by mail questionnaire for 87% of the 1398 subjects still living (median age 49). Conclusions were as follow: the subjects had become gifted adults, maintained intellectual ability, had lower mortality rates, and good physical and mental health, manifested minimal crime, ranked high in educational and vocational achievements, were active in community affairs, and held moderate political and social views. Two-thirds felt they had lived up to their intellectual ability. To assess correlates of vocational achievement, the 100 most and 100 least successful men were compared. Results indicated that the most successful men came from families having higher socioeconomic status and giving more encouragement to succeed; ranked higher as adolescents in volitional, intellectual, moral, and social traits; and had more self confidence, perseverance, and integration toward goals. In addition, although scholastic achievement had been similar in grade school, half as many of the least successful men had graduated from college; they were also more prone to emotional and social difficulties. (DS)

ABSTRACT 21867

EC 02 1867 ED N.A.
Publ. Date 70 10p.
Taylor, Irving A.
Creative Production in Gifted Young (Almost) Adults Through Simultaneous Sensory Stimulation.
EDRS not available
Gifted Child Quarterly; V14 N1 P46-55
Spr 1970

Descriptors: exceptional child research; gifted; creativity; young adults; sensory experience; stimuli

To induce creative openness and to determine the effects of intensive simultaneous sensory stimulation on drawing production, 27 gifted (IQ mean of 158, age 17 years) were tested before and after stimulation and their drawings judged with the AC Test of Creative Ability. The size and the openness of the drawings increased significantly after stimula-

tion over a 5 week period, and their esthetic quality was judged higher. The results were interpreted to indicate that openness is an essential part of creativity and that simultaneous sensory stimulation may practically induce openness. (JM)

ABSTRACT 22006

EC 02 2006 ED 036 019
Publ. Date Nov 69 23p.
Davis, Gary A. and Others
A Program for Training Creative Thinking: I. Preliminary Field Test.
Wisconsin University, Madison, Wisconsin Research And Development Center for Cognitive Learning
Office of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEC-5-10-154 TR-104

Descriptors: exceptional child research; creativity; creative ability; creative thinking; creative development; testing; comparative analysis; student attitudes; questionnaires

A program designed to develop the creative potential of sixth, seventh and eighth grade students, incorporates ideas from a three-part model which conceptualizes the components of creativity as appropriate creative attitudes, various cognitive abilities, and idea-generating techniques. It attempts to increase students' awareness of, and appreciation for, change and innovation; provide exercise for creative abilities which facilitate the fluent production of original ideas; teach techniques for the systematic production of new idea combinations; and, through humor, to create a free atmosphere encouraging spontaneity and imagination. In a preliminary field test, responses to an attitude questionnaire and three divergent production tasks (such as thinking of changes and improvements for a doorknob) showed the program to be effective. Twenty-three subjects (21 seventh and two eighth grade students) who studied the program in a 10-week creative thinking course produced 65% more ideas on the divergent thinking tasks (ideas which were rated as significantly more creative) than 32 seventh grade control Ss enrolled in a creative writing course. There also was good indication that the trained Ss acquired more creative attitudes, including confidence in their own creative ability, than the control Ss. (Author/RJ)

ABSTRACT 22112

EC 02 2112 ED 023 484
Publ. Date Dec 66 20p.
Fowler, William
The Concept of Developmental Learning.
Yeshiva University, New York, New York
EDRS mf,hc
Paper Presented at the 133rd Meeting of the American Association for the Advancement of Science (Washington, D. C., December 30, 1966).

Descriptors: exceptional child research; gifted; child development; cognitive development; early experience; educational

experience; educational strategies; environmental influences; learning readiness; learning theories; parent influence; research proposals; research reviews (publications)

Cognitive developmental learning is a concept expressing the hypothesis that learning has a continuing, cumulative, and transformational function in the development of intelligence. Two important questions are, How much do we know about methods? and What classes of knowledge and abilities should we develop? An analysis of past investigations, including animal research, group educational projects, studies of sociopsychological variables, IQ tests, stimulation and measurement experiments, and methodological studies, indicated they are of limited use in exploring the sphere of cognitive developmental learning. Current research is aided by the advanced state of knowledge, convergence of learning and developmental theories, and intensive study of cognitive processes, but much of it concentrates on socially disadvantaged children. A systematic research utilizing dimensions for designing developmental stimulation programs could concentrate on the gifted child. Early and intensive stimulation and pervasive environmental arrangements provided by parents are factors of the gifted child's intelligence. Stimulation control over bright children is a compelling illustration of the proposition of the developmental learning hypothesis. Further research is needed. (DO)

ABSTRACT 22114

EC 02 2114 ED 023 611
Publ. Date Jun 68 52p.
Saslaw, Milton S.
Evaluation of a Program to Promote Scientific Careers in Gifted Students at the Secondary Level. Final Report.
Miami University, Coral Gables, Florida, Graduate School
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEC-6-10-317
BR-5-0648

Descriptors: exceptional child research; gifted; achievement; career choice; careers; course evaluation; course organization; curriculum development; interest tests; motivation; program evaluation; science careers; secondary school science; student science interests; Biological Sciences Curriculum Study; Chemical Education Materials Study; Physical Science Study Committee; Wechsler Intelligence Scale for Children

In the program, Motivation in Depth for Gifted High School Science Students initiated in 1964, specially selected seventh grade students took in successive summers Biological Sciences Curriculum Study (BSCS), Chemical Education Materials Study, (CHEMS), and Physical Science Study Committee (PSSC) courses; a newly designed course, Laboratory Orientation and Instrumentation; and two academic years in the Laboratory Research Program. Evaluation was to determine program feasibility, collect selected

data, and analyze differences between the experimental students and matched control students on the California Occupational Interest Inventory (COII). Feasibility was demonstrated by the following observations: 91.7% of all class performances met school requirements; participating students in BSCS and PSSC obtained scores on national tests more favorable than national controls; and participants performed satisfactorily compared with controls who took the regular academic program in tenth, eleventh and twelfth grades. Data have been collected over the duration of the program by the Wechsler Intelligence Scale for Children and specially constructed structured interviews, and by group Rorschach, Bell Personality Inventory and COII. Analysis of the COII revealed a significant increase in the difference between experimental and matched control students in the personal-social factor. (OR)

ABSTRACT 22225

EC 02 2225 ED 037 877
Publ. Date 69 32p.
Duncan, Ann Dell Warren
Behavior Rates of Gifted and Regular Elementary School Children. National Association for Gifted Children Monograph.
Kansas University, Lawrence, Bureau of Child Research
Office of Education (DHEW), Washington, D. C.;
National Institute of Neurological Diseases and Blindness (DHEW), Washington, D. C.;
National Institute of Child Health and Human Development, Bethesda, Maryland
EDRS mf,hc

Descriptors: exceptional child research; gifted; task performance; timed tests; reaction time; behavior; elementary school students; cognitive processes; performance tests; behavior rates

To determine whether gifted children are faster than average students on all behaviors sampled or only on academic subjects, 46 gifted and 30 average children were tested. The time rates for tapping, walking, reading, answering, and calculating were determined. All children were from grades 4 through 6; median IQ of the gifted was 138, and for the average 110. The results were that some gifted rates were similar to the average performance, but generally the gifted performed significantly faster on both academic and non-academic behaviors. Also the higher the grade level the faster the behavior, and the correlations between academic rates and achievement scores, non-academic rates, and intelligence test scores are all beyond the .005 level of significance. The conclusion is that study should be made to determine whether accelerating behavior rates could increase abilities and giftedness. (JM)

ABSTRACT 22537

EC 02 2537 ED 038 807
Publ. Date 69 78p.
House, Ernest R. and Others
The Visibility and Clarity of Demonstrations.

Cooperative Educational Research Laboratory, Inc., Northfield, Illinois
Illinois State Office of the Superintendent of Public Instruction, Springfield, Department of Program Development for Gifted Children
EDRS mf,hc

Descriptors: exceptional child research; gifted; demonstration centers; demonstrations (educational); program evaluation; state programs; educational programs; evaluation techniques; measurement instruments; educational innovation; educational practice; observation; Illinois Gifted Program; Illinois

A state system of about 20 demonstration centers was developed in Illinois to exhibit a variety of model programs for gifted children, ranging from kindergarten to high school. Subjects ranged from foreign language to dance and dramatics. Evaluation indicated low quality in too many centers. The centers performed best on the awareness function, less well on the acceptance function. Demonstrations were found to lack intelligibility and to fail to illustrate both positive and negative features, thereby facilitating valid professional judgment. However, they ranked well for fidelity. Recommendations are made; a separate volume provides appendixes listing observed programs, describing a typical day in a center, and detailing procedures, the instrument used, and the obtrusiveness of measures. (Author/JD)

ABSTRACT 22626

EC 02 2626 ED N.A.
Publ. Date Feb 70 4p.
Frager, Stanley; Stern, Carolyn
Learning by Teaching.
EDRS not available
Reading Teacher; V23 N5 P403-5, 17 Feb 1970

Descriptors: exceptional child research; tutoring; cross age teaching; grade 6; kindergarten children; high achievers; low achievers

To discover which of two types of tutor-instruction produced most growth in tutors and tutees, 48 sixth grade students (two equal groups of high and low achievers) participated in a tutoring program. Half were trained traditionally, while the other half were taught to define goals and obstacles, specify alternatives and define consequences, and select alternatives; they were also taught basic principles of learning. Tutors used a language readiness program to work with kindergarten children in need of remedial work. Children who received tutoring from both groups of tutors were superior to children not tutored (p less than .001). Tutors showed high morale, good attendance, and adjustment to school setting. This was true for high achievers in both experimental and control groups. For low achieving tutors, there were significant differences between experimentals and controls in changes in school morale, attitudes, attendance, and feelings about selves. Achievement level of the tutor seems to make little difference in the

amount of tutee learning, but there are significant differences in tutor gains. (MS)

ABSTRACT 22711

EC 02 2711 ED 039 653
Publ. Date Dec 67 57p.
Goldman, Ronald J.; Torrance, E. Paul
Creative Development in a Segregated Negro School in the South.
Georgia University, Athens, College of Education
Office of Education (DHEW), Washington, D. C., Cooperative Research Program
EDRS mf, hc

Descriptors: exceptional child research; creative development; Negro students; cultural factors; creative ability; Negro education; Negro culture; elementary school students; culturally disadvantaged; testing

Designed to examine the cultural influences on creative development, the study analyzed imaginative stories by students from a segregated Negro school in Georgia and from a middle class white school in Minnesota. The stories were evaluated in terms of originality, interest, style, and pressures of divergency and conformity. The students were further compared by teacher ratings and by performances on the Verbal Creative Thinking Task. Statistical data is provided for the results showing poorer creative ability among the Negro students, and implications regarding cultural causation are indicated. (RD)

ABSTRACT 22732

EC 02 2732 ED 039 674
Publ. Date Jun 63 62p.
Winston, Carl M.
Meeting Needs of Gifted: A Non-Structured Summer Program, 1962-1963 School Year.
State University of New York, Albany, State Education Department
EDRS mf, hc

Descriptors: exceptional child research; gifted; enrichment programs; personal adjustment; academic achievement; sciences; language arts; problem solving; psychological needs; success factors; student motivation

A 6-week summer program provided 51 gifted 4th and 5th graders with nonstructured experience in problem solving in science and language arts and in satisfying of operant needs. Fifty-one matched children served as controls. Divided into four groups, the children worked with four teachers acting primarily as resource consultants. Testing demonstrated no significant differences between subjects and controls in problem solving in either science or language arts; however, children in the program manifested a reduced total need operancy. Changes in problem solving ability and operant need level were related only in the area of language arts; selection factors were related to success only in so far as subjects from grade 4 or with lower arithmetic reasoning did better. (JD)

ABSTRACT 22867

EC 02 2867 ED 040 519
Publ. Date 69 208p.
Bent, Leo G. and Others
Grouping of the Gifted: An Experimental Approach.
Bradley University, Peoria, Illinois
Illinois State Office of the Superintendent of Public Instruction, Springfield
EDRS mf, hc

Descriptors: exceptional child research; gifted; grouping (instructional purposes); student development; enrichment programs; enrichment activities; program descriptions; program evaluation; experimental programs

While in 3rd grade, 487 students were selected for placement in special classes for the gifted from grades 4 through 8. Teachers of the special classes were chosen by school administrators. Their teaching experience averaged 9 years, and eight held advanced degrees. Sixteen attended special summer programs on the gifted and were given inservice assistance. Results indicated that the program children equalled or surpassed the controls in academic achievement as measured by standardized tests despite the fact that their supplementary enriching activities reduced by about one half the time spent on regular classroom activities. Further results indicated skill in foreign language, research, and critical thinking as well as growth in social awareness and concern, leadership, creativity, interests, and self reliance in school activities. Approval of the program by both teachers and parents was noted. (Author/JD)

ABSTRACT 22892

EC 02 2892 ED 040 544
Publ. Date Nov 69 172p.
Bahke, Susan J. and Others
Component I: Evaluation of Creativity Instructional Materials. Final Report.
Purdue University, Lafayette, Indiana
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf, hc
OEG-0-8-070205-3473
BR-7-E-205

A Doctoral Thesis Prepared By the Author and Presented to the Faculty of Purdue University.

Descriptors: exceptional child research; material development; creativity; creative thinking; language development; problem solving; language ability; audiovisual aids; learning activities; intermode differences; instructional materials

Instructional materials designed to increase creative thinking abilities and language achievement were used in nine training conditions with children in grades 4, 5, and 6. Results indicated that treatment conditions were most effective at the 4th grade level, where at least one treatment was effective for all variables. At the 5th grade, two variables, verbal fluency and verbal originality, were unaffected. The materials were least effective at the 6th grade, where gains occurred on only three variables: nonverbal fluency, nonverbal flexibility, and verbal origi-

nality. At all grade levels, treatment conditions were generally more effective when involving either exercise or single component conditions. (Author/JD)

ABSTRACT 23052

EC 02 3052 ED N.A.
Publ. Date Aug 70 8p.
Skubic, Vera; Anderson, Marian
The Interrelationship of Perceptual-Motor Achievement, Academic Achievement and Intelligence of Fourth Grade Children.
EDRS not available
Journal of Learning Disabilities; V3 N8
P413-20 Aug 1970

Descriptors: exceptional child research; low achievers; intelligence factors; perceptual motor coordination; academic achievement; intelligence quotient; elementary school students; high achievers; Stanford Achievement Test; California Test of Mental Maturity

The relationship of perceptual-motor achievement, academic achievement, and intelligence was investigated. Eighty-six fourth grade boys and girls of normal intelligence were studied. On the basis of performance on the Stanford Achievement Test (SAT), 41 pupils were designated as low achievers and 45 were designated as high achievers. The California Test of Mental Maturity (CTMM) and a perceptual-motor battery consisting of 11 tests were also administered to the children. Scores on the perceptual-motor battery for all children correlated significantly with their CTMM and SAT scores. The combined group of male and female high achievers performed significantly better than the low achiever group on all subtests of the CTMM including IQ. They also scored significantly better on six of the 11 perceptual-motor tests. On the remaining five tests, no differences were noted. (Author)

ABSTRACT 23186

EC 02 3186 ED 003 182
Publ. Date 65 402p.
Drews, Elizabeth M.
Being and Becoming: A Cosmic Approach to Counseling and Curriculum, Part 2: The Creative Intellectual Style in Gifted Adolescents.
Michigan State University, East Lansing
Office of Education (DHEW), Washington, D. C.
EDRS mf, hc
OEG-7-32-0410-140
NDEA-VIIA-647-NO-2

Descriptors: exceptional child research; personality; gifted; grade 9; creativity research; critical thinking; critical reading; growth patterns; changing attitudes; student attitudes; student interests; values; audiovisual aids; testing

A study was made to describe and to discover possible ways of influencing intellectual and personality development in ninth grade, gifted youth. The report, second in a three-part study, reviewed the results of an experimental program designed especially to produce changes in attitudes, interests, and values toward creative intellectual norms. The investigation centered on two distinctive pat-

terns: the creative intellectual style and the feminine dimension. Formal and informal measures of creative intellectual attitudes were administered to both experimental and control groups. The experimental group was found to be higher than the control group at posttesting in originality, complexity, aestheticism, theoretical orientation, and philosophical contemplation. It was concluded that attitude change could be brought about through special efforts. (GD)

ABSTRACT 23187

EC 02 3187 ED 003 253
Publ. Date 65 215p.
Wallach, Michael A.; Kogan, Nathan
Cognitive Originality, Physiognomic Sensitivity, and Defensiveness in Children. Final Report.
Duke University, Durham, North Carolina
Office of Education (DHEW), Washington, D. C.
EDRS mf, hc
CRP-1316-B

Descriptors: exceptional child research; creativity; cognitive processes; test construction; observation; personality; cognitive ability; originality; creativity research; sex differences; intelligence level; psychological characteristics; individual differences

An examination was conducted to determine if a child's ability to create (cognitive originality) is independently associated with his general level of intelligence, and if so, to study psychological correlates that distinguish individual differences on the creativity and intelligence dimensions when considered jointly. Instruments, covering both verbal and visual formats, were developed and administered to over 150 fifth grade children in a gamelike context without time pressure. These required the children to generate various kinds of associates with given task requirements. Each child determined uses for particular objects, ways in which particular objects were similar, and things that particular patterns represented to them. Intelligence information was obtained through the use of a standard test battery. Correlations between the creativity and intelligence measures were found to be extremely low. The subjects were then isolated by sex into one of four groups: high creativity, high intelligence; high creativity, low intelligence; low creativity, high intelligence; and low creativity, low intelligence. Differences among these groups were studied in four areas of cognitive functioning: behavior as observed in school and play settings; activities in categorizing and conceptualizing; sensitivity to physiognomic properties of environment; and personality dispositions, indicated through self description and through fantasy. Abundant and unique associations were found to exist. The research indicated the importance of jointly studying variations in creativity and general intelligence, if understanding of creativity is to be furthered. (JH)

ABSTRACT 23188

EC 02 3188 ED 003 829
Publ. Date 65 139p.
Ringness, Thomas A.
Nonintellective Variables Related to Academic Achievement of Bright Junior High School Boys.
Wisconsin University, Madison
Office of Education (DHEW), Washington, D. C.
EDRS mf, hc
CRP-S-035

Descriptors: exceptional child research; gifted; personality; achievement; tests; males; low achievers; students; high achievers; psychological patterns; adjustment (to environment); student problems; student research; student motivation; student interests; junior high schools; motivation

In previous studies, personality variables, such as adjustment, motive to achieve, motive to affiliate, acceptance of self and others, and acceptance of adult values, have been studied to determine their relationships to school achievement. Interrelationships among these variables were examined in this study. The California Test of Mental Maturity was used to select boys from grade 8, and the Wechsler Intelligence Scale for Children was used to confirm selection. The 264 students were interviewed and tested with the California Psychological Inventory, Bills Index of Adjustment and Values, and a card sort. Grade point averages were obtained and the Iowa Test of Basic Skills was administered. The high and low thirds of the group were tested using Dunn's Visual Discrimination Task, Thematic Apperception Test, and McClelland's Projective Test. Results showed that low achievers do not have as close ties with home nor do they accept conventional values as much as do high achievers. The various measures tended to confirm each other in measurement of variables. Findings confirmed many findings of earlier studies of nonintellective characteristics of high and low achieving bright pupils. This confirmation suggests that future research should attempt to modify certain student characteristics both in the laboratory and in the field. (AL)

ABSTRACT 23241

EC 02 3241 ED 010 998
Publ. Date 66 50p.
Sands, Theodore and Others
Concept Development Materials for Gifted Elementary Pupils. Final Report of Field Testing.
Illinois State University, Normal
EDRS mf, hc

Descriptors: exceptional child research; gifted; instructional materials; sciences; elementary school students; science materials; ungraded programs; concept formation; elementary school science; independent study; science tests; evaluation

An analysis of a field test of science learning materials for able elementary students is reported. The learning materials field tested and evaluated were ungraded independent study kits, designed

for maximum suitability regardless of teacher or school circumstances. The learning materials involved concept formation in the topics of atoms, molecules, and measurement. A total of 259 students from 31 different Illinois schools used the materials. Students in the study were selected by their teachers and administrators. Methods of using the materials were established by the teachers. Pretests and posttests were administered to the students. Results are reported for each test item and each grade level, and the authors conclude that the learning materials tested can be used effectively, with greater success predicted for grades 2 and 3 than for grades 1 and 4. (RS)

ABSTRACT 23247

EC 02 3247 ED 011 070
Publ. Date Mar 67 190p.
McClain, John D.; Kovacs, Frank W.
Programed Instruction for Superior Students in Small High Schools.
Clarion State College, Pennsylvania
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf, hc
OEC-4-16-026 NDEA-V11B-451-1
BR-5-0706-1

Descriptors: exceptional child research; gifted; programed instruction; program evaluation; measurement techniques; innovation; rural schools; rural environment; high schools; demonstration projects; newsletters; information dissemination; secondary school students; parent school relationship; community support; Attitude toward Programed Instruction Inventory; Semantic Differential Scale

Superior students in rural high schools were given programed instruction in selected subject areas to determine whether a nondirective method of diffusing an innovation, like programed instruction, was appropriate for dissemination in a rural environment. The effects of the cooperative demonstration project on students, parents, teachers, and high school administrators were measured by the Attitude toward Programed Instruction Inventory and the Semantic Differential Scale. Results showed that predisposition of the individual to either adoption or rejection will affect the rate of a final decision regarding the acceptance or rejection of the innovation. It was recommended that premeasures should be employed to determine the predisposition of the target population, and it was concluded that the nondirective method of diffusing an innovation was appropriate for the dissemination of programed instruction in a rural environment. Since the use of newsletters proved to be an important contribution to the success of the project, the use of similar means of communication with the target audience is advised when dissemination is an objective. (GD)

ABSTRACT 23298

EC 02 3298 ED 036 155
Publ. Date Feb 68 156p.
(The Effect of Individually Prescribed Instruction on the Independent Behav-

**lor of Gifted Children in Two Schools
in the Elk Grove School District.)**

Research for Better Schools, Inc., Philadelphia, Pennsylvania
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEC-1-7-062867-3053
BR-6-2867

Descriptors: exceptional child research; gifted; individualized instruction; independent study; parent attitudes; student attitudes; teacher attitudes; Individually Prescribed Instruction

In addition to rating the independent behavior of gifted children in the Individually Prescribed Instruction (IPI) program, this study also attempts to measure the attitude of children, parents, and teachers toward the IPI program. The report discusses the rationale behind IPI, the school population in the study and control schools, and the research methodology of the study. The conclusions reached are summarized and some recommendations are offered. Appendixes include the materials used to conduct the study. (JY)

ABSTRACT 23453

EC 02 3453 ED 041 417
Publ. Date Mar 69 67p.
Dallenbach, Jan F.; DeYoung, Kenneth N.

**Special Education for the Gifted
through Television.**

Educational Research and Development Council of Northeast Minnesota. Duluth Office of Education (DHEW). Washington, D. C., Bureau of Elementary and Secondary Education
EDRS mf,hc
OEG-3-7-703-260-4955
BR-67-3260

Descriptors: exceptional child research; gifted; televised instruction; teaching methods; educational television; audiovisual instruction; achievement; elementary school students; ability identification; rural education

A project was undertaken to study the effects of in-school television programs on gifted 5th and 6th grade students in rural northeastern Minnesota. Ten inservice training workshops on the education of the gifted were held, and T.V. programs were developed (one series for the students on content, another stimulating thought processes). A battery of pre and posttests were administered to 1556 gifted students, and statistical analyses of comparisons between the pre and posttest results and between the control and experimental groups are included. Numerous descriptive, inferential, and cluster analyses were made. On four posttests, certain subgroups of students exposed to the T.V. programs showed greater average gains than the control students, while in five instances, certain categories of the experimental students made smaller average gains. Schools' reactions were also surveyed by questionnaire, and the resulting conclusions and extrapolated recommendations are presented. (KW)

ABSTRACT 30089

EC 03 0089 ED N.A.
Publ. Date 70 5p.
Torrance, E. Paul; Khatena, Joe
**What Kind of Person are You? A Brief
Screening Device for Identifying
Creatively Gifted Adolescents and Adults.**
EDRS not available
Gifted Child Quarterly; V14 N2 P71-5
Sum 1970

Descriptors: exceptional child research; gifted; identification; creative ability; talent identification; test validity; adolescents; adults; screening tests

The brief screening test described consists of 50 paired characteristics in a forced choice format, one of each pair being more central or essential to creative functioning. Test-retest reliability and validity studies are reported. The validity evidence appears to justify the use of the test as a coarse screening device for identifying creative adolescents and adults and for use in teaching and experimental group situations. (KW)

AJSTRACT 30728

EC 03 0728 ED N.A.
Publ. Date Aug 70 4p.
Domino, George

**Identification of Potentially Creative
Persons From the Adjective Check
List.**

EDRS not available
Journal of Consulting and Clinical Psychology; V35 N1 Part 1 P48-51 Aug 1970

Descriptors: exceptional child research; testing; test validity; longitudinal studies; creative ability; creativity; identification; college students; check lists; Adjective Check List

The initial development and cross-validation of a Creativity (Cr) scale for the Adjective Check List (ACL) was presented. ACL teacher ratings for 59 creative college students, who had been nominated and observed over a three-year period, were compared with those of a control group, individually matched on age, intelligence, adjustment ratings, and academic major. A Cr scale of 59 items more frequently ascribed to creatives was developed, and then cross-validated on 400 adolescents creative in science, art, or literature and 400 appropriate controls. The Cr scale significantly differentiated creatives from controls in every field of endeavor, but was not influenced by sex or type of creativity. It was noted that the Cr scale appeared to possess both rational and empirical validity, was applicable to both sexes, and was not influenced by specificity of creative achievement. (APA)

ABSTRACT 30760

EC 03 0760 ED N.A.
Publ. Date 68 6p.
Hoepfner, Ralph; O'Sullivan, Maureen
Social Intelligence and IQ.
EDRS not available
Educational and Psychological Measurement; V28 N2 P339-44 Sum 1968

Descriptors: exceptional child research; gifted; intelligence quotient; interpersonal

al competence; correlation; comparative statistics; diagnostic tests

The paper discusses social intelligence and IQ, pointing out that giftedness may be used to describe not only the verbal skills measured by IQ tests, but also special aptitudes such as creativity and social intelligence (SI). Correlations reported between IQ and SI are noted. The best test for each of six behavioral-cognition factors was selected to represent its respective SI factor. This SI test battery, along with IQ tests, was administered to 229 high school juniors. Correlations of each SI test with IQ scores are reported (corrected mean correlation was .40). The value of the SI tests in identifying persons gifted in social perception, but with relatively low IQ, is discussed. (KW)

ABSTRACT 30874

EC 03 0874 ED N.A.
Publ. Date Nov 70 33p.
House, Ernest R. and Others
**Development of Educational Programs:
Advocacy in a Non-Rational
System.**

Illinois University, Urbana, Center for Instructional Research and Curriculum Evaluation
Illinois State Office of the Superintendent of Public Instruction, Springfield, Department of Program Development for Gifted Children
EDRS mf,hc

Descriptors: exceptional child research; gifted; program development; program evaluation; educational quality; educational programs; Illinois

During the evaluation of the Illinois Gifted Program, the process of program development was also studied. The purpose of the study was to determine the sequence of events necessary to program development, and, based on the judgments of quality about the individual programs, to separate the different patterns of development leading to high and low quality programs. Subjects were 34 school districts (10% of a sample of 340) in Illinois receiving money from the state for gifted programs. Over 25 kinds of data were collected by various methods (director, teacher, and student interviews, class activities questionnaire, classroom observation, documents), on which judgments of program quality were made. Program case histories were also collected. Fifty-five independent variables were identified and quantified. Some variables associated with gifted program quality were found to be larger-sized districts, unit (K-12) districts, recognized need, a teacher or staff administrator (rather than line administrator) as director, high director involvement, consultant services, selection of change-minded teachers, and large budget. (KW)

ABSTRACT 31291

EC 03 1291 ED N.A.
Publ. Date 70 171p.
Pringle, M. L. Kellmer
**Able Misfits: A Study of Educational
and Behaviour Difficulties of 103 Very
Intelligent Children (IQs 120-200).**

EDRS not available
Humanities Press, 303 Park Avenue
South, New York, New York 10010
(\$6.00).

Descriptors: exceptional child research;
gifted; behavior problems; underachievers;
learning difficulties; parent attitudes;
academic achievement; personal adjustment;
psychological needs; identification

A descriptive account of intelligent children whose behavior difficulties were severe enough to cause their teachers or parents to seek psychological advice is presented. Illustrative case histories are cited. Statistical information on the 103 children describes how they came to be examined, characteristics, home background, parental attitudes, recommendations made, and subsequent developments. A more theoretical section, concerning the psychology of learning and adjustment, discusses basic psychological needs, learning and emotion, maladjustment, underachievement, and the findings of previous research. Questions of prevention and remedial action are considered in an analysis of practical implications which emphasizes early recognition of giftedness. (KW)

ABSTRACT 31386

EC 03 1386 ED N.A.
Publ. Date 70 4p.

Krippner, Stanley; Blickenstaff, Ralph
The Development of Self-Concept as
Part of an Arts Workshop for the Gifted.

EDRS not available
Gifted Child Quarterly; V15 N3 P163-6
Fall 1970

Descriptors: exceptional child research;
gifted; vocational interests; sex differences;
role perception; self concept; sciences; art

To determine whether the vocational interests of gifted children were determined by sociocultural influences (i.e., sex stereotypes) as well as by intellectual potential, 27 gifted boys and 13 gifted girls, ages 8-14 years, were tested and interviewed. Vocational preferences were determined and classified as scientific (traditionally considered a masculine field) or artistic (a feminine field). Careers in science were selected by 24 boys and 2 girls, while artistic careers interested 11 girls and 3 boys. Tests of emotional stability, visual-motor skills, neurological organization, and intelligence showed no statistically significant differences between boys and girls, indicating that sex rather than one of these factors was the important variable. A 1-day arts workshop, held to expand the experiential basis for occupational interests, attempted to stimulate originality and self expression while breaking down stereotyped role definitions and expanding self concepts. (KW)

ABSTRACT 31740

EC 03 1740 ED 047 471
Publ. Date 70 6p.

Mary Ann Hession

Cognitive, Behavioral, and Affective Activities in the Classrooms of Gifted Secondary Students.

EDRS mf, hc

Author's Masters Thesis Submitted to
the University Of Southern California.

Descriptors: exceptional child research;
gifted; student attitudes; teacher attitudes;
high school students; cluster grouping;
advanced placement programs

To compare and evaluate the perception of cognitive, behavioral and affective activities in the classroom as determined by gifted students and their teachers, gifted students in two high schools were studied. Two programs, the Advanced Placement Program and the Cluster Grouping Program were selected for the study. It was concluded that the Advanced Placement Program resulted in significantly greater emphasis on cognitive levels occurring in the classroom (higher thought processes), a more active student role, and a more relaxed, open atmosphere. The Cluster Grouping Program (enrichment for gifted students in the normal classroom setting) was felt to be unsuccessful, with classes remaining teacher centered with a passive student role. (CD)

ABSTRACT 32341

EC 03 2341 ED N.A.
Publ. Date Apr 71 3p.

Jacobs, Jon C.

Effectiveness of Teacher and Parent
Identification of Gifted Children as a
Function of School Level.

EDRS not available

Psychology in the Schools; V8 N2 P140-2
Apr 1971

Descriptors: exceptional child research;
gifted; early childhood; identification;
teacher role; parent role; evaluation criteria;
student evaluation; kindergarten children

Teacher nomination of the gifted, which was noted as being 50% effective at the secondary level, was investigated to see if it was equally effective at earlier grade levels. Of the 654 kindergarten students evaluated, 19 were considered to be gifted. After 6 months of school the kindergarten teachers were asked to nominate those children in their classes who might possibly be gifted. A total of 46 students, none of whom were the previously located 19 gifted children, were nominated by the teachers. The parents nominated a total of 26 children, 16 of whom were from the original 19 children identified as gifted. Results indicated that teacher identification effectiveness dropped from 50% at the secondary level to 10% at the kindergarten level. It was felt that at the early school level, parents were better able to accurately identify their children as gifted than were teachers. Individual assessment of the children was recommended as more just and possibly more economical than inaccurate identification in the classroom. (CD)

ABSTRACT 32750

EC 03 2750 ED N.A.
Publ. Date 71 6p.

Gowan, John Curtis

Why Some Gifted Children Become Creative.

EDRS not available

Gifted Child Quarterly; V15 N1 P13-8
Spr 1971

Descriptors: gifted; creativity; family influence; exceptional child research;
personality; research reviews (publications)

The article discusses the variance of creativity in gifted children. Literature and research reviews consider some of the reasons (personality or environment) for the difference. Personality aspects of highly creative gifted children emphasizing preconscious, playful, and phallic explanations are discussed. The author notes that so far as family and environmental stimulation are concerned, it appears that whatever stimulates the three personality components (preconscious, playful, phallic) such as parental encouragement of playfulness, independence, impulsiveness, and sensitivity, is valuable. A study conducted by the author is briefly described in which questionnaires were sent to parents of gifted children. The questionnaire provided data on highly creative as opposed to low creative gifted boys and girls. Tentative conclusions and implications note that high creative children and families show a freer style of family life and higher socioeconomic status, more inclination toward the arts, and more liberal political and social views. The author concludes that the family environment has important effects upon the development of creative propensities in children. (CD)

ABSTRACT 32752

EC 03 2752 ED N.A.
Publ. Date 71 4p.

Jacobs, Jon C.

Evaluation of Mother Teaching Style
In High Ability Families.

EDRS not available

Gifted Child Quarterly; V15 N1 P32-5
Spr 1971

Descriptors: exceptional child research;
gifted; mothers; cognitive development;
teaching methods; cognitive measurement;
problem solving; evaluation

Investigation of mother child communication interaction (expansive or restrictive) in high ability families was made using a block sorting task that defined the level and mode of abstraction displayed by the mother. Twenty gifted children, aged 4 and 5 were located. The mothers were taught to do a block sorting task which they were later asked to teach to their children. The 20 mothers of gifted children were felt to be varied in their teaching style. Eight of the mothers were noted as being restrictive, nine mothers were expansive, and three too varied in their teaching style to classify. It was concluded that, unlike implications in the literature suggesting expansive teaching styles for such mothers, varying styles were found. The block sorting task was judged to be a reliable instrument in that discrimination in teaching style for high ability families was ascertained just as it was for low

ability, low socioeconomic families. Coping with difficulties in the cognitive environment was felt to exist among all children regardless of ability. (CD)

ABSTRACT 32753

EC 03 2753 ED N.A.
Publ. Date 71 6p.
Thomas, Susan J. Bahlke; Feldhusen, John F.

To Spark an Interest; Think Creatively.

EDRS not available

Gifted Child Quarterly; V15 N1 P36-41
Spr 1971

Descriptors: exceptional child research; gifted; creative thinking; elementary school students; program effectiveness; Purdue Creative Thinking Program

An evaluation of the effectiveness of the components on the Purdue Creative Thinking Program was made. Forty-eight classes were selected randomly from approximately 100 classes of fourth, fifth, and sixth graders in a small urban school system. Each of the three parts of the program (presentations, stories, and exercises) were presented separately, in pairs, and all together for a total of seven different groupings. The Program was felt to be most effective for the fourth graders and least effective for sixth graders. Exercises were noted as being the most effective component of the Program. It was concluded that the Program helped children develop thinking abilities, and that having the children write down their creative ideas was the most effective part of the Program. (CD)

ABSTRACT 32837

EC 03 2837 ED N.A.
Publ. Date 71 11p.
Guilford, J. P.

Some Misconceptions Regarding Measurement of Creative Talents.

EDRS not available

Journal of Creative Behavior; V5 N2
P77-87 Second Quarter 1971

Descriptors: exceptional child research; gifted; creativity research; creative ability; test construction; test validity; divergent thinking; research reviews (publications)

The author examines the recent history of creative ability testing to show that creative ability is not a single, comprehensive variable distinct from but parallel to general intelligence, and that tests of divergent thinking abilities have validity. The works of R.L. Thorndike (1966), and M.A. Wallach and N. Kogan (1965) receive primary attention. S.A. Mednick (1961), M. Dellas and E.L. Gaier (1970), W.L. Brittain and K.R. Beissel (1961), C.A. Jones (1960), J.M. Elliott (1964), R. Hoepfner, J.P. Guilford, and P.A. Bradley (1970), and P.R. Merrifield, S.F. Gardner, and A.B. Cox (1964) receive secondary attention. According to the author, various works lack proper test criteria and result validations, raising the need for factor analysis and multiple-regression procedures. Due to the complexity both of creative talent and of creative performance criteria, no one test of creative ability correlates highly with the criteria. (CB)

ABSTRACT 32878

EC 03 2878 ED 053 500
Publ. Date Apr 71 9p.

Lazar, Alfred I., and Others

Sex Differences in Attitudes of Young Male and Female Gifted Youngsters Toward Handicapped Individuals.
California State College, Long Beach
EDRS mf.hc

Paper Presented at the Annual Meeting of the California Education Research Association (49th, San Diego, California, April 29, 1971).

Descriptors: exceptional child research; gifted; attitudes; handicapped; sex differences; attitude tests; Attitude Toward Disabled Persons Scale

Fifteen males and 15 females (ages 8.0 to 8.8) who had been identified as gifted were studied to compare their attitudes toward handicapped individuals as measured by the Attitude Toward Disabled Persons Scale (ATDP). Form O of the ATDP Scale was used and a one-way analysis of variance showed a significant difference between males and females, supporting other studies which have found females to be more positive. The adequacy and promise of the ATDP are considered. (RJ)

ABSTRACT 40045

EC 04 0045 ED N.A.
Publ. Date Oct 71 6p.
Walberg, Herbert J.

Varieties of Adolescent Creativity and the High School Environment.

EDRS not available

Exceptional Children; V38 N2 P111-6
Oct 1971

Descriptors: exceptional child research; creative ability; prediction; senior high school students; social adjustment; intelligence level

To test the hypothesis that creativity is associated with social alienation, self reported creativity in the visual arts, science, performing arts, music, and writing (with the criterion of prize and award winning) and in group leadership was predicted from biographical questionnaire items and intelligence, using simple, multiple, and canonical correlations. The analyses, conducted on national random samples of 2,225 boys and 741 girls, directly contradicted the hypothesis by suggesting that adolescent creativity is associated, although weakly, with involvement in school activities, stimulating home environments, perseverance in spite of difficulties, and intellectual motivation but not intelligence. (Author)

ABSTRACT 40452

EC 04 0452 ED N.A.
Publ. Date 71 9p.

Torrance, E. Paul

Identity: The Gifted Child's Major Problem.

EDRS not available

Gifted Child Quarterly; V15 N3 P147-55
Fall 1971

Paper Prepared for the 18th Annual Meeting of the National Association for Gifted Children, Chicago, Illinois, May 6, 1971.

Descriptors: exceptional child research; gifted; creative ability; behavior patterns; case studies; self actualization; creativity research

Three response patterns of conformity, rebellion, and creative individuality that were found to characterize gifted children's resolve of the search for their identity were illustrated by brief case studies of six gifted young people. The gifted young persons were viewed first, during the seventh to 12th grade period and second, during the ages of 25 and 30. It was found that gifted children needed freedom to wander, to experiment, to risk, and to discover their individual limits, which ultimately enabled them to find their identity. Lives of the six young people described were said to reveal the duality of the unique and universal. Each was said to seek his unique identity and yet, seeking identity was characterized as a universal phenomenon. The author concluded by advocating that gifted children receive supporting adult guidance in the quests for their identity. (CB)

ABSTRACT 40455

EC 04 0455 ED N.A.
Publ. Date 71 6p.

Jacobs, John C.

Rorschach Studies Reveal Possible Misinterpretations of Personality Traits of the Gifted.

EDRS not available

Gifted Child Quarterly; V15 N3 P195-200
Fall 1971

Paper Prepared for the 18th Annual Meeting of the National Association for Gifted Children, Chicago, Illinois, May 6, 1971.

Descriptors: exceptional child research; gifted; creative ability; personality assessment; student teacher relationship; creative development; creativity research

Possible misinterpretations of personality traits of gifted children were studied by administering the Rorschach inkblot test to 20 children both during the preschool testing period and at the end of the kindergarten year. By comparison of preschool tests results with those of 20 non-gifted children, the gifted children showed greater moral reliance on self, less reliance on adult approval, greater probability for emotional reaction to environment, greater sensitivity to individual environment relationship, and greater sensitivity to emotional pressures of environment. Posttest results indicated that the gifted were no longer differentiated from the control group. It was suggested that the original differentiating personality traits might have been possible causes for a negative interaction between teacher and student, due to the teacher's lack of understanding of the nature of the child's behavior. The teacher might have felt that the gifted child was stubborn and immature, which ultimately harmed the child's creative development. (CB)

ABSTRACT 40456

EC 04 0456
Publ. Date 71

ED N.A.
4p.

Adolescents and the Meeting of Time Deadlines in the Production of Original Verbal Images.

EDRS not available
Gifted Child Quarterly; V15 N3 P201-4 Fall 1971

Paper Prepared for the 18th Annual Meeting of the National Association for Gifted Children, Chicago, Illinois, May 6, 1971.

Descriptors: exceptional child research; gifted; creative thinking; interval pacing; reactive behavior; time factors (learning); creative ability; adolescents; creativity research

Studied were effects of varying time intervals in presentation of word stimuli as deadlines to be met in production of original verbal images by 142 adolescents rated as having low, average, or high creative ability. Results indicated that the mean originality scores of all three groups showed a rise with increase in time interval. Whereas high and average creative students showed higher scores with increase of time interval from 10 seconds to unlimited time, the low creative students showed negligible improvement beyond the 30 second interval. Deviation from mean originality scores resulting from varying time intervals was found to be greatest for the low creative students. It was concluded that interactive effects between creative levels and time intervals was significant. (CB)

ABSTRACT 40483

EC 04 0483
Publ. Date Feb 71

ED 056 442
16p.

**House, Ernest R. and Others
Patterns of Cognitive and Affective Emphasis in Gifted and Average Classes.**

Illinois University, Urbana, Center for Instructional Research and Curriculum Evaluation

EDRS mf,hc

Paper Presented at the American Educational Research Association (New York, New York, February 7, 1971).

Descriptors: exceptional child research; gifted; program evaluation; state programs; educational programs; behavior patterns; cognitive development; thought processes; Illinois

Data from a Class Activities Questionnaire was used in the evaluation of the state gifted program in Illinois to determine patterns of cognitive and affective emphasis in gifted and average classes. Significant differences were found in the degree of emphasis on higher thought processes, classroom focus, and classroom climate. Significant differences were also found between average and gifted classes on two statistical factors: application, synthesis; enthusiasm, and independence; and memory and test/grade stress. Differences were: average classes emphasized two or less thought processes, while gifted classes emphasized three or more; average classes emphasized only one higher thought

process, while gifted classes emphasized two or more; average classes emphasized three of seven levels of thinking, while gifted classes emphasized six of seven; average classes had a higher amount of teacher talk; average classes had little chance for discussion, while gifted classes had much; test/grade stress was characteristic of average classes and not characteristic of gifted classes; average classes revealed an absence of enthusiasm, while gifted classes revealed an abundance; and average classes allowed independence in a fourth of the classes, while gifted classes allowed independence most of the time. (CB)

ABSTRACT 40509

EC 04 0509
Publ. Date 71

ED N.A.
9p.

**Davis, Gary A.; Belcher, Terence L.
How Shall Creativity Be Measured?
Torrance Tests, RAT, Alpha Biographical, and IQ.**

EDRS not available

Journal of Creative Behavior; V5 N3 P153-61 Third Quarter 1971

Descriptors: exceptional child research; creative ability; testing; test interpretation; creativity research; creativity; measurement; secondary school students; Alpha Biographical Inventory; Remote Associates Test; Torrance Tests of Creative Thinking

The study compared interrelationship among scores and subscores on the Alpha Biographical Inventory (ABI), the Remote Associates Test (RAT), the verbal Torrance Tests of Creative Thinking, and the Henmon-Nelson intelligence test. The subjects were 22 males and 29 females in a senior class of high school. The students were administered the first three tests using standardized instructions, while IQ scores from school records were used. Findings indicated strong relationships among scores on the RAT, IQ test, and ABI for both male and female students. For male students, neither the RAT, IQ test, nor the ABI was found to correlate significantly with ABI creativity or Torrance creativity. Correlation between ABI creativity and Torrance creativity for males was a near zero. For females, some intelligence scores correlated with creativity scores; the ABI creativity was found to correlate significantly with Torrance originality and creativity. It was concluded that for males and females, the strongest predictor of the Validating Criterion score was the ABI Creativity. (CB)

ABSTRACT 40569

EC 04 0569
Publ. Date Aug 71
Marland, S. P., Jr.

ED 056 243
127p.

**Education of the Gifted and Talented
—Volume 1: Report to the Congress
of the United States.**

Office of Education (DHEW), Washington, D. C.
EDRS mf,hc

Descriptors: exceptional child research; gifted; national surveys; educational needs; government role; identification; incidence; federal aid; educational pro-

grams; state surveys; state programs; financial support

In response to a mandate from the Congress (Public Law 91-230, Section 806), a study was conducted on the gifted and talented which consisted of five major activities: review of research, analysis of educational data bases and the development of a major data base, public hearings to interpret regional needs, studies of programs in representative states, and review and analysis of the system for delivery of Office of Education programs to benefit gifted and talented children. Recommendations and details of the study are found in the text and in Volume 2 (EC 040 570). Major findings include: a conservative estimate of the number of gifted and talented from the total elementary and secondary school population of 51.6 million is 1.5 to 2.5 million; existing services for the gifted serve only a small percentage of the total; differentiated education for the gifted and talented is perceived as low priority at Federal, State, and most local levels of government; 21 states have legislation to provide services but in many cases this merely represents intent; services for the gifted can and do produce significant outcomes. Ten major activities to be initiated in 1971 are outlined. (RJ)

ABSTRACT 40570

EC 04 0570
Publ. Date Aug 71
Marland, S. P., Jr.

ED 056 244
390p.

**Education of the Gifted and Talented
—Volume 2: Background Papers
(Appendixes).**

Office of Education (DHEW), Washington, D. C.
EDRS mf,hc

Descriptors: exceptional child research; gifted; educational needs; government role; state legislation; state programs; program descriptions; teacher education; financial support; state surveys; incidence; national surveys

Background papers prepared in conjunction with the national survey of the gifted and talented are presented as appendixes to the study reported in EC 040 569. Papers in Appendix A consider the characteristics of the gifted and talented, the question of why we should be concerned with them (are special programs undemocratic, will regular children be deprived, what benefits will be derived), the problem of identification, the benefits of special programs (including administrative arrangements, early childhood programs, and current public school structure), the necessary components of a good program, preparation of teachers and other personnel, the cost of programs for the gifted, and the educational implications of research. Appendix B presents an analysis of problems and priorities—advocate survey and statistics sources (results from a survey sent to 239 experts). An analysis of hearings held at the regional level, state laws for the education of the gifted, comparisons of gifted and average students in the Project TALENT populations, and case studies from California, Connecticut, Illi-

nois, and Georgia are reported. The results of structured interviews conducted with OE staff and with others are presented in Appendix G, the assessment of present U.S. Office of Education delivery system to gifted and talented children and youth. (RJ)

ABSTRACT 40763

EC 04 0763 ED 057 529
Publ. Date Apr 71 274p.
Plantec, Peter M. and Others
Analytical Studies of Selected Educational Data.
Operations Research, Inc., Silver Spring, Maryland
Office of Education (DHEW), Washington, D. C., Office for Development
EDRS mf,hc
OEC-0-71-0690 TR-661

Descriptors: exceptional child research; gifted; national surveys; statistical data; educational programs; educational needs; Project TALENT

Analytical studies were made of three research efforts (an Advocate Survey, the School Staffing Survey, and Project TALENT) for the purpose of determining educational needs of gifted and talented children and youth. The Advocate Survey involved a questionnaire sent to 239 experts in special education for the gifted to determine current opinions in the field on educating the gifted. The School Staffing Survey, which included a representative sample of elementary and secondary public schools, provided statistical data on staffing and school services or programs available in the schools surveyed. It thus defined the actual state of education for the gifted. Project TALENT data were used to identify social and academic needs of the gifted. Data from Project TALENT, a longitudinal study of 400,000 students who were in high school in 1960, were derived from a 1960 questionnaire and from followup studies 1 and 5 years after graduation. The report contains a rationale for the analysis plan (define gifted, identify special needs, evaluate current programs, develop model program and implementation plans) and findings from the surveys and Project TALENT comparisons. A companion volume (EC 040 765) contains consultants' interpretations of findings. (KW)

ABSTRACT 40784

EC 04 0764 ED 057 530
Publ. Date Apr 71 23p.
Plantec, Peter M. and Others
Analytical Studies of Selected Educational Data. Supplement: Consultant Interpretation of Findings.
Operations Research, Inc., Silver Spring, Maryland
Office of Education (DHEW), Washington, D. C., Office for Development
EDRS mf,hc
OEC-0-71-0690 TR-661

Descriptors: exceptional child research; gifted; national surveys; educational programs; statistical data; research methodology; evaluation

Three papers by experts in the field of education for gifted children present in-

terpretive comments on one of three research efforts (a School Staffing Survey) whose data were analytically studied in a companion volume (EC 040 763). The School Staffing Survey, which included a representative sample of elementary and secondary schools, gathered principals' responses to questionnaires on staffing patterns and instructional programs. Data analyzed concerned the actual state of education for the gifted in the schools surveyed. Louis Fiegler's commentary on the survey notes in summary that separate classes are the predominant instructional approach at the secondary level and that data indicate that American education is far from the goal of educating each child to his optimum level. Sol Tannenbaum comments on data showing failure of the schools to identify giftedness or program for it and recommends specific further statistical explorations of the available data. Virgil S. Ward's paper treats survey problems, research methodology, and analysis of data from specific items on the survey. (KW)

ABSTRACT 40913

EC 04 0913 ED N.A.
Publ. Date Feb 72 2p.
Lazar, Alfred L. and Others
Attitudes of Young Gifted Boys and Girls Toward Handicapped Individuals.
EDRS not available
Exceptional Children; V38 N6 P489-90
Feb 1972

Descriptors: exceptional child research; gifted; handicapped; attitudes; sex differences; student attitudes; elementary school students

The study investigated whether there was a difference between young gifted boys and girls in their attitudes toward handicapped persons as measured by the Attitude Toward Disabled Persons Scale (ATDP). Data on the gifted was also compared to normative data as to mean ATDP scores. Subjects were 15 gifted boys (mean CA 8-5, mean IQ 140.1) and 15 gifted girls (mean CA 8-4, mean IQ 136.7). On a 0 to 120 scale, with the high score reflecting the maximum possible positive attitude, mean ATDP scores were 72.13 for boys and 79.86 for girls. The sex difference, which was significant at the .05 level of significance, supported other studies in which the difference had favored girls as more accepting or tolerant. Comparison of these data with the normative data provided by the authors of the ATDP for nondisabled samples showed that young gifted boys closely approximated their normative counterparts, while the young gifted girls scored higher (indicating greater tolerance) than their counterparts, although not significantly so. (KW)

ABSTRACT 40915

EC 04 0915 ED N.A.
Publ. Date Feb 72 2p.
Feldman, David H.; Bratton, Joseph C.
Relativity and Giftedness: Implications for Equality of Educational Opportunity.
EDRS not available

Exceptional Children; V38 N6 P491-2
Feb 1972

Descriptors: exceptional child research; gifted; identification; talent identification; admission criteria; individual characteristics

Tested was the extent to which an increase in the number of acceptable criteria for giftedness would affect the composition of a hypothetical special program for gifted students. Selected were 18 different criteria, all of which have been used as criteria for giftedness. The 18 measures were applied to two fifth grade classes. The top five students on each measure were hypothetically selected for the gifted program. Results showed that seven students were selected on the basis of a single criterion; none were selected on all criteria (only four were selected on more than half of the criteria); 92% were selected on one or more criteria. All but five of the students in the classes were selected on at least one criterion. Thus, depending on the criteria chosen, all but five could have been included in the special program for the gifted. Questions are raised concerning the equality of educational opportunity when the criteria for outstanding abilities are so varied that they could include nearly all children. (KW)

ABSTRACT 41014

EC 04 1014 ED 054 239
Publ. Date Apr 71 193p.
Smilansky, M. and Others
Secondary Boarding Schools for Gifted Students from Disadvantaged Strata. Technical Report No. 2, the Socio-Economic Background of the Students and Their Success in Secondary School. A Follow-Up Study.
National Institute for Research in the Behavioral Sciences, Jerusalem, Israel; Tel-Aviv University, Israel. Research and Development Lab for the Study of the Disadvantaged
Office of Education (DHEW), Washington, D. C.
EDRS mf,hc

Descriptors: exceptional child research; disadvantaged youth; culturally disadvantaged; comparative education; foreign countries; socioeconomic background; academic achievement; cultural factors; gifted; secondary school students; Israel

The report is one of a series on the results of studies conducted with the aim of understanding and assisting culturally disadvantaged pupils in the Israeli school system. A brief educational history of the country and of the theoretical basis of the research introduces this report. A detailed description of the socioeconomic background of students is given through data analysis, as is an analysis of student success in secondary schools. Findings indicate that Israel has remained consistent in striving toward defined goals by absorbing a culturally disadvantaged population, using the criteria of ethnic origin and social characteristics. (Author/DM)

ABSTRACT 41344

EC 04 1344 ED 059 562
Publ. Date 72 7p.

Skipper, Charles E.

A Longitudinal Study of Creative Abilities in Adolescents.

Miami University, Coral Gables, Florida
EDRS mf,hc

Paper Presented at the AERA Convention (Chicago, Illinois, April 7, 1972).

Descriptors: exceptional child research; creative ability; adolescents; longitudinal studies; creative development; creativity research; creativity; community resources

Reported was the 3-year longitudinal study on the influence of a living arts center of a public school system on the development of creative behavior in adolescents. Both experimental and control groups (adolescents in grades seven through 10) of 188 each were divided into high, middle, and low creative groups based on test scores from a creativity test. Attrition after 3 years reduced the experimental group to 35 adolescents. After a normal school day, the students participated in programs on the various arts. An expression of creative values by students, their families, nationally recognized artists, federal government, local community, and governmental agencies was said to characterize the program. Although the students concentrated in a specific chosen area, they were encouraged to explore other art areas. Several testing techniques were used to measure the creativity of the students. In general, participants were found to gain in ideational, fluency, flexibility, originality, elaboration and inventive level compared to pretest scores. The participants experienced significantly more community cultural programs than did the control group. An interesting result was said to be the finding that the male subjects became more sensitive to the aesthetics in life. (CB)

ABSTRACT 41345

EC 04 1345 ED 059 563
Publ. Date 72 6p.

Roweton, William E.; Spencer, Herbert L., Jr.

Facilitative Effects of Practice Upon Nonverbal Creativity.

Indiana State University, Terre Haute

EDRS mf,hc

Paper Presented at the AERA Convention (Chicago, Illinois, April 7, 1972).

Descriptors: exceptional child research; creative ability; intermediate grades; creative expression; nonverbal learning; creativity research

Numerous studies of verbal creativity indicate that idea originality increases progressively as more ideas are produced. The present study tested the effects of practice upon nonverbal creativity. Thirty-two fifth grade children were administered Form A and/or Form B of Torrance's picture completion task for 3 consecutive days. Figural originality increased with practice only on certain task items and, overall, only on Form A. Results were traceable to differences inherent in the alternate forms of the test, peculiarities of task items, amount of practice, and so on. Apparently, effort did not indiscriminately

enhance figural originality in nonverbal creative problem solving. (Author)

ABSTRACT 41535

EC 04 1535 ED N.A.
Publ. Date 72 19p.

Croxkenberg, Susan B.

Creativity Tests: A Boon or Boondoggle for Education?

EDRS not available

Review of Educational Research: V42
NI P27-45 Win 1972

Descriptors: exceptional child research; research reviews (publications); creative ability; creativity research; testing; test evaluation; test validity; Torrance Tests of Creative Thinking; Wallach and Kogan Creativity Battery

Reviewed was selected research on test evaluation and validity for the Torrance Tests of Creative Thinking and the Wallach and Kogan Creativity Battery. The Torrance Tests of Creative Thinking are described to consist of seven verbal and three figural tests that are all scored for fluency, flexibility, originality, and elaboration. Testing procedure involves test administration in a test-like atmosphere in which each test is timed. Trait consistency and the IQ threshold for creativity were examined with the finding that a reasonably high IQ score is usually necessary for good creativity test performance. Test reliability and validity were then reviewed. The Wallach and Kogan Creativity Test is described to focus on the number of associational responses that a person generates and the originality of the responses. The test atmosphere is free from time pressure and includes both verbal and visual content that is scored for fluency and uniqueness. Research cited in connection with test validity indicated that the test was not conclusive and that one could score high on the test without a comparable high IQ score. It was concluded that the Wallach and Kogan test measured fluency more than creativity. Due to the uncertainty of the validity for both creativity tests, educators are advised to use the tests with discretion. (CB)

ABSTRACT 41667

EC 04 1667 ED N.A.
Publ. Date 72 8p.

Torrance, E. Paul

Training Teachers and Leaders to Recognize and Acknowledge Creative Behavior Among Disadvantaged Children.

EDRS not available

Gifted Child Quarterly; V16 NI P3-10
Spr 1972

Descriptors: exceptional child research; disadvantaged youth; creative ability; teacher role; creative development

Reported were the results of a workshop designed to train teachers and leaders to recognize, acknowledge, and develop talent or creative behavior among disadvantaged children and to encourage positive group behavior in small, racially integrated groups. Ninety-one children (age range 6 to 13 years), involving 51 blacks and 40 whites, participated in a 3-week creativity workshop and were tested per-

iodically for their creativity levels. Results of the Torrance Tests of Creative Thinking indicated that the children made significant gains in their ability to produce original ideas on a standardized test of creative thinking. The children's general creative behavior and the teachers' role in recognizing and developing the children's creative behavior were also found to improve. (CB)

ABSTRACT 41689

EC 04 1669 ED N.A.
Publ. Date 72 4p.

Jacobs, Jon C.

Teacher Attitude Toward Gifted Children.

EDRS not available

Gifted Child Quarterly; V16 NI P23-6
Spr 1972

Descriptors: exceptional child research; gifted; teacher attitudes; elementary school children

A specially designed test (included in the article) was administered to both the staff of a private school for gifted children and to a group of high school drop-outs in order to develop a measure of teacher attitude toward the gifted child and to determine if the attitude is positive or negative. Results indicated that the measured attitude of kindergarten and first grade teachers was negative. (CB)

ABSTRACT 42133

EC 04 2133 ED 063 698
Publ. Date (64) 17p.

Gifted Underachievers: A Follow-Up Study of Four Types of Treatment.

Toronto Board of Education, Ontario, Canada, Research Dept.
EDRS mf,hc

Descriptors: exceptional child research; gifted; underachievers; group discussion; academic achievement; intermediate grades; followup studies; personal adjustment

Four groups of gifted, underachieving students in intermediate grades were given different treatments for 6 months during the school year 1961-62. Results were based on 36 students, 10 in the human relations group, 11 in the academic group, 8 in the individually counselled group, and 7 in the control or maturation group. Following the treatment and 1 year after treatment, the students were tested for psychological adjustment and academic achievement. All groups were found to improve academically, but the human relations group and the academic group showed greater gains than the remaining two groups. The human relations group also showed significant gains in psychological adjustment, both personal and social, over the years 1961-63; the academic groups showed a significant gain in personal adjustment only during the treatment period. It was concluded that discussion groups, whether they are oriented toward group member feelings and interpersonal problems or toward academic matters, promote psychological adjustment and academic achievement. (For the initial study, see EC 042 134.) (CB)

ABSTRACT 42134

EC 04 2134 ED 063 699
 Publ. Date (63) 30p.
 Mallinson, Thomas J.
A Comparative Study of Four Types of Treatment in Improving Adjustment and School Achievement of Gifted Underachievers.
 Toronto Board of Education, Ontario, Canada, Research Dept.
 EDRS mf,hc

Descriptors: exceptional child research; gifted; underachievers; group discussion; academic achievement; intermediate grades; personal adjustment

Four groups of gifted, underachieving students in the intermediate grades were established for purposes of providing varied treatment to improve personal adjustment and academic achievement. The four groups were the human relations group, which was oriented to group discussion of feelings and interpersonal dynamics, the academic group, which focused on the presentation and discussion of scientific and other related subjects in group discussion, individual counseling oriented to the discussion of feelings and interpersonal dynamics, and control group. The human relations group and the academic group participated in weekly 1 and 1/2 hour discussions throughout the 1961-62 school year. There was no specific counseling procedure. Results of posttesting showed that although all four groups improved in areas of adjustment, the human relations group and the academic group only made significantly positive gains. Treatment groups made no greater academic gains than did the control group. It was concluded that participation in small group discussions did improve adjustment, but that this participation did not necessarily improve academic achievement. (For a followup study, see EC 042 133.) (CB)

ABSTRACT 42165

EC 04 2165 ED N.A.
 Publ. Date 71 26p.
 Kohn, Martin; Rosman, Bernice I.
Therapeutic Intervention with Disturbed Children in Day Care: Implications of the Deprivation Hypothesis.
 EDRS not available
 Childcare Quarterly; V1 N1 P21-46 Fall 1971

Descriptors: exceptional child research; emotionally disturbed; preschool children; intervention; child care centers; parent child relationship; behavior theories; behavior patterns

Presented are findings and theoretical conceptions derived from a program of therapeutic intervention for emotionally disturbed preschool children in day care centers. Individualized teaching with therapeutic aims involved modification of the teacher's normal role to serve therapeutic purposes. A basic assumption of the approach was the deprivation hypothesis. It was hypothesized that the major source of social-emotional difficulties in young children from underprivileged backgrounds is insufficiency and deprivation of maternal care. The hy-

pothesis was found to be incorrect. Two major patterns of disturbance were found: Apathy-Withdrawal and Anger-Defiance. The individualized teaching with therapeutic aims procedures was found to be a more promising approach for the high Apathy-Withdrawal children. The learning model, proposed to replace the deprivation hypothesis, involves the concept that given the mother's approach to the child, the child unwittingly learns the reciprocal behavior pattern. Thus, deprivation of maternal care led to the Anger-Defiance syndrome rather than to Apathy-Withdrawal as expected. (KW)

ABSTRACT 42366

EC 04 2366 ED N.A.
 Publ. Date 72 30p.
 Torrance, E. Paul
Can We Teach Children to Think Creatively?
 EDRS not available
 Journal of Creative Behavior; V6 N2 P114-43 Second Quarter 1972

Descriptors: exceptional child research; gifted; creative thinking; research reviews (publications); effective teaching; teaching methods; success factors

The review of the status of knowledge about teaching children to think creatively covers 142 studies of teaching children to think creatively which involve qualification and presentation of evidence. Studies with college students and adults are not included. Tables summarize the nature of the studies and their degree of success. Studies are classified into nine categories of ways of teaching creative thinking: training programs using the Osborn-Parnes Creative Problem Solving procedures, other disciplined procedures, packages of materials, creative arts, media and reading programs, curricular and administrative arrangements, teacher-classroom and class environment variables, motivation and competition, and facilitating testing conditions. The first table summarizes frequency and estimate of success attained in the studies in each category. Tables for each of the categories then present summary data on individual studies: investigator, grade level, nature of treatment, and significant (.05) differences. (KW)

ABSTRACT 42917

EC 04 2917 ED N.A.
 Publ. Date Sep 72 5p.
 Keating, Daniel P.; Stanley, Julian C.
Extreme Measures for the Exceptionally Gifted in Mathematics and Science.
 EDRS not available
 Educational Researcher; V1 N9 P3-7 Sep 1972

Descriptors: exceptional child research; gifted; junior high school students; educational needs; mathematics; sciences; educational opportunities; advanced placement; case studies; undergraduate study

Reported was a research project on the educational needs of children exceptionally gifted in mathematics and science. A contest was organized to discover outstanding seventh, eighth and 13 year old

ninth graders in which 396 students took the College Board's Standard Achievement Test-Mathematics and its Math Level I achievement test, and 192 students took the Sequential Tests of Educational Progress, Series II (Step II) Science, Forms IA and IB. It was found that a significant number of students already knew much of the math and science they supposedly would be taught in high school. Case studies of a 12 year old and a 13 year old who were sent to college on the basis of their test scores were examined. Each student evidenced superior academic adjustment without any major emotional or social difficulties. Released time, evening, and summer courses were suggested as ways of meeting the educational needs of advanced students. A minimum estimate of the percentage of highly mathematically or scientifically precocious youths was reported to be .03%. Striking sex differences in high level achievement were noted.

ABSTRACT 50542

EC 05 0542 ED N.A.
 Publ. Date Dec 72 7p.
 Feldhusen, John F.; Hobson, Sandra K.
Freedom and Play: Catalysts for Creativity.
 EDRS not available
 Elementary School Journal; V73 N3 P149-55 Dec 1972

Descriptors: exceptional child research; gifted; creative ability; childhood; program descriptions; play; creative thinking; affective behavior; interpersonal relationship; permissive environment

Described and evaluated was a 6 week creativity training program for 16 fifth and seventh grade children which stressed affective activities in a climate said to be characterized by freedom, playfulness, and warm interpersonal relations. Cited was research in support of the idea that freedom from threat of evaluation and from inhibiting sets or directions is vital to creative thinking. Playfulness, defined as social and cognitive spontaneity, manifest joy, and humor was reported to be correlated with divergent thinking. Also cited was research finding warm interpersonal relations to be one of the most important conditions for creative growth. Group activities and role playing were some of the methods used. Evaluation by means of a video tape, an anecdotal record, and reactions of parents and children found children's reactions to be highly positive, while parents were hesitant or non-supportive of freedom and openness. (DB)

ABSTRACT 50644

EC 05 0644 ED N.A.
 Publ. Date Jan 73 2p.
 Jensen, Julie M.
Do Gifted Children Speak an Intellectual Dialect?
 EDRS not available
 Exceptional Children; V39 N4 P337-38 Jan 1973

Descriptors: exceptional child research; gifted; language ability; language patterns; elementary school students

Eighty average or superior fifth grade boys and girls were compared on measures of casual and careful oral language fluency, grammatical control, and grammatical function. Language quantity, lexical diversity, lexical uniqueness, and freedom from mazes served as measures of fluency. Grammatical control was defined by structural complexity measures, the occurrence and frequency of basic syntactic patterns, and mastery of standard English usage. The categories of expressing tentativeness, questioning, issuing commands, disagreeing, and relating personal experiences were used to examine language function. Data indicated that all of the basic structural patterns of English occurred within the typescripts of both ability subgroups, that Standard English usage characterized the speech of both ability subgroups, and that the language differential between the ability subgroups was not statistically significant on most comparisons. (GW)

ABSTRACT 50671

EC 05 0671 ED N.A.
 Publ. Date Fall 72 6p.
 Sisk, Dorothy
Relationship Between Self-Concept and Creativity: Theory Into Practice.
 EDRS not available
 Gifted Child Quarterly; V16 N3 P229-34
 Fall 1972

Descriptors: exceptional child research; gifted; self concept; creativity; self esteem; childhood; adolescence; academic achievement

The relation between a realistic, positive self concept and creativity was investigated with 45 children (aged 7 to 15 years) who were described as having an IQ range of 132 to 148 and as exhibiting at least three of the following characteristics: needs urging, waits for instructions, withdraws, seeks to terminate, shy, difficult to establish rapport, and praise needed. The children's creativity was assessed by means of the Franck Drawing Completion Test, open-ended stimulus questions posed in small group discussions, and teacher reports. Students were placed in class groupings of 15 and were instructed in terms of four principles which emphasized positive aspects of the self and the learning process. Conscious efforts were made to praise children in classes that were engineered for success and to provide opportunities for writing and reacting to pictures, poetry, music, social situations and literature. After the program, 75% of the regular classroom teachers of the low creatives reported that the children were responding at a higher level in their school work. (GW)

ABSTRACT 50672

EC 05 0672 ED N.A.
 Publ. Date Fall 72 5p.
 Dunn, Barbara J.
The El Monte Project for High Risk Talent Retrieval.
 EDRS not available
 Gifted Child Quarterly; V16 N3 P235-39
 Fall 1972

Descriptors: exceptional child research; gifted; adolescents; college preparation; educational programs; program descriptions; educational needs; open education

Reported was a project which aimed at familiarizing gifted students (sixth, seventh, and eighth graders) and their parents with higher educational facilities through campus visits to university facilities and through informative sessions on admissions procedures and scholarships. Students' evaluations indicated that they resented the extended day nature of the program. Project directors reported that the major contribution of the program was its assessment of the need for gifted students to be involved at their level of achievement and interest during the regular school day. It was suggested that the open education model be investigated as an appropriate model for making ceilingless learning possible. (GW)

ABSTRACT 50890

EC 05 0890 ED N.A.
 Publ. Date Jan 73 6p.
 Phillips, Victor K.
Creativity; Performance, Profiles, and Perceptions.
 EDRS not available
 Journal of Psychology; V83 N1 P25-30
 Jan 1973

Descriptors: exceptional child research; gifted; creative ability; college students; personality assessment; performance factors; self concept; self evaluation

Investigated were the relationships among creative performance, personality profiles, and self-descriptions of 100 undergraduate college students. The subjects were divided into high and low creative groups by performance on the Torrance Tests of Creative Thinking and were compared in terms of personality patterns and self perception variables. Results showed that both high and low creativity groups tended to manifest the appropriate high creative personality profile or low creative personality profile and also to describe their own creative or noncreative behavior with a significant degree of accuracy. (DB)

ABSTRACT 50943

EC 05 0943 ED N.A.
 Publ. Date 4th Qtr 7 17p.
 Torrance, E. Paul
Predictive Validity of the Torrance Tests of Creative Thinking.
 EDRS not available
 Journal of Creative Behavior; V6 N4 P236-52 4th Quarter 1972

Descriptors: exceptional child research; gifted; research reviews (publications); creativity; test validity; prediction; creative thinking; creativity research; Torrance Test of Creative Thinking

The author reviewed major long-range predictive validity studies of the Torrance Tests of Creative Thinking, and reported the main findings of a 12-year followup of a predictive validity study with high school students initiated in 1959. The behaviors predicted in short-range studies occurred during a

period ranging from a few days to 1 year following administration of tests of creative thinking, and ranged from ideas and questions produced in standardized situations (creative writing, science questions, curriculum tasks) to teaching behavior extending over a period of several months. Results of the 12-year predictive validity study indicated that creativity tests administered during high school years can predict adult creative achievements, although it was noted that 55 of the study were fairly advantaged and had ample opportunities and freedom to develop their creative abilities. (QW)

ABSTRACT 50963

EC 05 0963 ED 072 573
 Publ. Date 72 82p.
The Effingham Program for the Improvement of (Pre-College English) Final Evaluation Report.
 Illinois Univ., Urbana. Center for Instructional Research and Curriculum Evaluation
 EDRS mf, hc

Descriptors: exceptional child research; gifted; English; writing skills; senior high school students; demonstration projects; college preparation; program evaluation; logical thinking; inductive methods

The report presents results of the evaluation of the Effingham Program for the Improvement of Pre-College English, an advanced course in pre-college rhetoric offered to gifted students in several classes over a period of several years. The project attempted to improve both intellectual content and methods of instruction for gifted students in the areas of writing and dialogue in the English language. Major program features are explained: inductive teaching, student grading of themes, daily practice in purposeful and disciplined writing, use of specially prepared symbolic logic materials, and the Hawthorne effect (as the result of being a demonstration project). Data from students and visitors showed that both groups perceived unique aspects of the instruction. Other data showed that students who took the course received improved grades in freshman English classes at three universities, and that during one school year the writing ability of the students in the course improved decidedly. (KW)

ABSTRACT 51283

EC 05 1283 ED N.A.
 Publ. Date Feb 73 5p.
 Siegelman, Marvin
Parent Behavior Correlates of Personality Traits Related to Creativity in Sons and Daughters.
 EDRS not available
 Journal of Consulting and Clinical Psychology; V40 N1 P43-7 Feb 1973

Descriptors: exceptional child research; gifted; college students; males; females; creativity; parent child relationship; correlation; parent influence; personality development

One hundred forty-four male and 274 female college sophomores and juniors were questioned to determine whether

their creative potential was significantly related to basic dimensions of parent-child relationships. Male and female students having personality traits frequently

associated with creativity tended to describe both parents as more rejecting than loving. Casual versus demanding

parent behavior was not found to be related to creativity potential. Protective fathers were recalled only by females with low creative potential. (Author/DW)

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