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SE 006 180

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Descriptors- \*Bibliographies, \*College Science, \*Elementary School Science, Newsletters, \*Science Education, \*Secondary School Science

Identifiers- Educational Resources Information Center, Pacesetters in Innovation, Research in Education, Science Education Information Analysis Center

This newsletter lists references to research reports in science education. Of these, 49 were published in United States Office of Education Research Reports over the period 1956-1965, 160 in "Research in Education," and 104 in "Pacesetters in Innovation," for the fiscal year, 1966. Titles, pertinent descriptors, and cost of the document in both microfiche and hardcopy are listed. (GR)

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### CENTER COMMENTS

The ERIC Information Analysis Centers are placing increasing emphasis on collection and analysis of documents. Documents collected and analyzed by the Centers are announced in *Research in Education*. Information analysis products of this Center, including bibliographies and research reviews, are also announced in *Research in Education*. Usually these publications will be available through the ERIC Document Reproduction Service.

Beginning September 1, 1968, this Center will provide only prepackaged materials to users. A variety of information analysis products are being developed to provide information for many groups of users. These will be announced in the SEIAC Newsletter as they are available.

### BIBLIOGRAPHIES AVAILABLE

A limited supply of five bibliographies announcing the first 2,000 documents processed by this Center are available. These bibliographies will also be available on microfiche and hardcopy at a later date from the ERIC Document Reproduction Service. Bibliographies currently available are Bibliography 6, Teacher Resource Materials; Bibliography 7, Science and Society, History of Science Education, Science History, General Studies and Surveys; Bibliography 8, Legislative Acts and Reports, Administration and Supervision Science Facilities; Bibliography 9, Evaluation, Educational Objectives, Learning Theory and Processes, Research Methodology; and Bibliography 10, Teacher Characteristics, Student Characteristics, Guidance and Counseling.

### DOCUMENTS AVAILABLE THROUGH EDRS

The Center has received many requests for a list of documents related to science and mathematics education that are available through the ERIC Document Reproduction Service (EDRS). Information analysts have reviewed all issues of *Research in Education* through December, 1967, *U.S. Office of Education Research Reports, 1956-1965*, and *Pace-*

*setters in Innovation, Fiscal Year 1966*. This issue of the SEIAC Newsletter contains a listing of documents related to science education from these three sources. The documents are listed according to the publication in which they were announced.

Author, title, descriptor information and prices are provided for each document. Prices listed are current EDRS prices. When ordering documents, be certain to include the ERIC Document number of each document and indicate whether you desire microfiche (MF) or hard copy (HC). If your order does not exceed \$3.00, a 50¢ handling charge should be included. Requests for documents should be addressed to EDRS, The National Cash Register Company, 4936 Fairmont Avenue, Bethesda, Maryland 20014.

### OUTDOOR EDUCATION PROGRAM DESCRIPTIONS AVAILABLE

A limited supply of Newsletter 3 listing examples of various kinds of outdoor education programs in the United States is available. Each entry in the directory contains the name of the person to contact for additional information, the address of the project, and a brief description of each project. Single copies of the newsletter are available on request.

### NUMBER OF SCIENCE AND MATHEMATICS EDUCATION DOCUMENTS INCREASING IN RESEARCH IN EDUCATION

*Research in Education* (RIE), the publication that lists selected abstracts of documents processed by the ERIC Information Analysis Centers, continues to become larger and to contain more documents of interest to persons concerned about science and mathematics education. Each future issue of *Research in Education* will contain approximately 40 to 60 documents processed by the ERIC Information Analysis Center for Science Education. If you haven't subscribed to RIE you will miss announcements of many recent research reports, curriculum materials, and other selected documents.

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SE 006 180

# SCIENCE EDUCATION REPORTS

IN

## U.S. OFFICE OF EDUCATION RESEARCH REPORTS, 1956-1965

ED 002 864

IDENTIFICATION OF GIFTED ELEMENTARY SCHOOL CHILDREN WITH EXCEPTIONAL SCIENTIFIC TALENT. LESSER, GERALD S. DAVIS, FREDERICK B. CITY UNIVERSITY OF NEW YORK, HUNTER COLLEGE  
EDRS PRICE MF-\$0.50 HC-\$2.56 64P.

PUB DATE 1 SEPT 60

DESCRIPTORS- \*IDENTIFICATION, \*PREDICTIVE VALIDITY, \*SCIENCES, \*TALENTED STUDENTS, \*TEST CONSTRUCTION, ABILITY IDENTIFICATION, ELEMENTARY SCHOOL STUDENTS, GIFTED, GRADE 3, HUNTER SCIENCE APTITUDE TEST, NEW YORK, NEW YORK CITY, SUPERIOR STUDENTS.

ED 002 874

CAREER DEVELOPMENT OF SCIENTISTS, AN OVERLAPPING LONGITUDINAL STUDY.

COOLEY, WM. W.  
HARVARD UNIV.,  
CAMBRIDGE, MASS.  
GRAD. SCH. OF EDUC.

EDRS PRICE MF-\$0.75 HC-\$7.80 195P.

PUB DATE 63

DESCRIPTORS- \*CAREER PLANNING \*OCCUPATIONAL CHOICE, \*SCIENCE CAREERS, SCIENCE EDUCATION, ACADEMIC ABILITY, CAMBRIDGE, FACTOR ANALYSIS, MASSACHUSETTS, SOCIOECONOMIC STATUS, STUDENT EVALUATION, VOCATIONAL COUNSELING, VOCATIONAL INTERESTS.

ED 002 889

AN ANALYSIS OF THE FACTORS RELATED TO THE MOTIVATION AND ACHIEVEMENT OF STUDENTS IN SCIENCE COURSES IN THE JUNIOR AND SENIOR HIGH SCHOOL, FINAL REPORT.

MALLINSON, GEORGE G.  
WESTERN MICHIGAN UNIV., KALAMAZOO  
SCH. GRAD. STUDIES.

EDRS PRICE MF-\$1.00 HC-\$8.12 203P.

PUB DATE 63

DESCRIPTORS- \*ACADEMIC ACHIEVEMENT, \*HIGH SCHOOL STUDENTS, \*SCIENCE COURSES, \*STUDENT MOTIVATION, \*TESTING PROGRAMS, FACTOR ANALYSIS, INTELLIGENCE, INTERESTS, KALAMAZOO, MICHIGAN, PARENT INFLUENCE, READING ABILITY, STUDENT TEACHER RELATIONSHIP, TEACHING METHODS.

ED 002 914

FACILITIES AND EQUIPMENT AVAILABLE FOR TEACHING SCIENCE IN PUBLIC HIGH SCHOOLS, 1958-59. SOLBERG, ARCHIE N. KOELSCH, CHARLES L. TOLEDO UNIVERSITY, OHIO, RESEARCH FOUNDATION  
EDRS PRICE MF-\$0.50 HC-\$3.20 80P.

PUB DATE 59

DESCRIPTORS- \*FACILITIES, \*HIGH SCHOOLS, \*SCIENCE EDUCATION, \*SCIENCE EQUIPMENT, BUDGETING, EDUCATIONAL FACILITIES, EFFECTIVE TEACHING, EXPENDITURES, LABORATORIES, LABORATORY EQUIPMENT, OHIO, STATISTICAL SURVEYS, TOLEDO.

ED 002 915

PSYCHOLOGICAL PROBLEMS AND RESEARCH METHODS IN MATHEMATICS TRAINING.

DU BOIS, PHILIP M. FEIERABEND, ROSALIND L.  
WASHINGTON UNIV., ST. LOUIS, MO.

EDRS PRICE MF-\$1.00 HC-\$8.84 221P.

PUB DATE JUN 59

DESCRIPTORS- \*CURRICULUM GUIDES, \*LEARNING PROCESSES, \*MATHEMATICS INSTRUCTION, \*RESEARCH METHODOLOGY, CONFERENCES, MANUALS, MATHEMATICAL EXPERIENCE, MISSOURI, PSYCHOEDUCATIONAL PROCESSES, ST. LOUIS, SURVEYS, TEACHING TECHNIQUES.

ED 002 923

EVALUATION AND FOLLOWUP STUDY OF A SUMMER SCIENCE AND MATHEMATICS PROGRAM FOR TALENTED SECONDARY SCHOOL STUDENTS.

COOLEY, WM. W. BASSET, ROBT. D.  
HARVARD UNIV.,

CAMBRIDGE, MASS., GRAD. SCH. OF EDUC.

EDRS PRICE MF-\$0.50 HC-\$4.68 117P.

PUB DATE 30 JUN 60

DESCRIPTORS- \*MATHEMATICS CURRICULUM, \*SCIENCE COURSES, \*SECONDARY SCHOOL STUDENTS, \*SUMMER PROGRAMS, \*TALENTED STUDENTS, CAMBRIDGE, EDUCATIONAL IMPROVEMENT, RESEARCH SKILLS, SCIENCE CAREERS.

ED 002 936

WHY SUCCESSFUL STUDENTS OF THE NATURAL SCIENCES ABANDON CAREERS IN SCIENCE.

NORDSTRON, CARL FRIEDENBERG, EDGAR Z.  
UNIV., OF NEW YORK, BROOKLYN COLL.

EDRS PRICE MF-\$0.50 HC-\$4.24 106P.

PUB DATE JUN 61

DESCRIPTORS- \*CAREER PLANNING, \*CHANGING ATTITUDES, \*NATURAL SCIENCE, \*OCCUPATIONAL CHOICE, \*SCIENCE CAREERS, BROOKLYN, NEW YORK.

ED 003 043

USE OF BIOGRAPHICAL INFORMATION ON STUDENTS WHO DO AND DO NOT ACHIEVE IN HIGH SCHOOL SCIENCE COURSES.

CLINE, VICTOR B. AND OTHERS  
UTAH UNIV., SALT LAKE CITY

EDRS PRICE MF-\$0.50 HC-\$3.76 94P.

PUB DATE 63

DESCRIPTORS \*HIGH SCHOOLS, \*PREDICTIVE ABILITY (TESTING), \*SCIENCE COURSES, \*SELF EVALUATION, ABILITY IDENTIFICATION, ACADEMIC PERFORMANCE, ACHIEVEMENT RATINGS, BIOGRAPHICAL INFORMATION BLANK (BIB), BIOGRAPHIES, FACTOR ANALYSIS, MEASURING INSTRUMENTS, PREDICTIVE VALIDITY, SALT LAKE CITY, SCIENCE CAREERS, SECONDARY SCHOOL STUDENTS, UTAH.

ED 003 181

EFFECTS OF INSERTED QUESTIONS IN FILMS ON DEVELOPING AN UNDERSTANDING OF CONTROLLED EXPERIMENTATION.

VUKE, GEO. J.

INDIANA UNIV.,

BLOOMINGTON, SCH. OF EDUCATION.

EDRS PRICE MF-\$0.50 HC-\$2.56 64P.

PUB DATE FEB 62

DESCRIPTORS- \*GRADE 7, \*INSTRUCTIONAL FILMS, \*MEDIA RESEARCH, \*QUESTIONING TECHNIQUES, \*SCIENCE EDUCATION, \*STATISTICAL ANALYSIS, BLOOMINGTON, COMPARATIVE ANALYSIS, EDUCATIONAL RESEARCH, FILMS, INDIANA, JUNIOR HIGH SCHOOLS

ED 003 194

EFFECT OF VARIED PRESENTATIONS OF LABORATORY EXERCISES WITHIN PROGRAMED MATERIALS ON STUDENT ABILITY TO APPLY SCIENTIFIC PRINCIPLES TO PROBLEM SITUATIONS.

NASCA, DONALD

STATE UNIV. OF N.Y., BROCKPORT

EDRS PRICE MF-\$0.50 HC-\$3.48 87P.

PUB DATE 30 APR. 64

DESCRIPTORS- \*GRADE 8, \*LABORATORY EXPERIMENTS, \*SCIENCE INSTRUCTION, \*TEACHING METHODS, BROCKPORT, NEW YORK, PROGRAMED INSTRUCTION, SCIENTIFIC METHODOLOGY.

ED 003 200

THE INFLUENCE OF EXTERNAL PACING ON LEARNING FROM PROGRAMED INSTRUCTION, REPORT-STUDIES IN TELEVISED INSTRUCTION, INDIVIDUALIZING GROUP INSTRUCTION.

GROOPER, GEO. L. KRESS, GERARD C., JR.

METROPOLITAN PITTSBURGH EDUC. TV STATION, PA.

EDRS PRICE MF-\$0.50 HC-\$2.52 63P.

PUB DATE NOV 64

DESCRIPTORS- \*INDIVIDUALIZED PROGRAMS, \*PACING, \*PROGRAMED INSTRUCTION, \*SCIENCE EDUCATION, \*TELEVISED INSTRUCTION, ACADEMIC PERFORMANCE, BEHAVIOR PATTERNS, GRADE 8, HIGH ACHIEVERS, LEARNING PROCESSES, LOW ACHIEVERS, PENNSYLVANIA, PITTSBURGH, SELF PACING MACHINES, STUDENT TESTING, TIME FACTORS (LEARNING).

ED 003 201

ACCOMMODATING INDIVIDUAL DIFFERENCES DURING EXTERNALLY PACED PROGRAMED INSTRUCTION, REPORT 3-STUDIES IN TELEVISED INSTRUCTION.

GROPPER, GEORGE L. KRESS, GERARD C., JR.

METROPOLITAN PITTSBURGH EDUC. TV. STATION, PA.

EDRS PRICE MF-\$0.50 HC-\$3.00 75P.

PUB DATE NOV 64

DESCRIPTORS- \*FIXED SEQUENCE, \*INDIVIDUAL DIFFERENCES, \*PACING, \*PERFORMANCE, \*SCIENCE INSTRUCTION, \*TIME FACTORS (LEARNING), ACADEMIC PERFORMANCE, BEHAVIOR PATTERNS, GRADE 8, HIGH ACHIEVERS, INDIVIDUALIZED PROGRAMS, LEARNING PROCESSES, LOW ACHIEVERS, PENNSYLVANIA, PERFORMANCE FACTORS, PITTSBURGH, PROGRAMED INSTRUCTION, STUDENT TESTING, TELEVISED INSTRUCTION.

ED 003 202

A SUMMARY REPORT, REPORT 4-STUDIES IN TELEVISED INSTRUCTION, INDIVIDUALIZING GROUP INSTRUCTION.

GROPPER, GEO. L. KRESS, GERARD C., JR.

METROPOLITAN PITTSBURGH EDUC. TV STATION, PA.

EDRS PRICE MF-\$0.25 HC-\$1.00 25P.

PUB DATE NOV 64

DESCRIPTORS- \*INDIVIDUALIZED PROGRAMS, \*PACING, \*PERFORMANCE, \*PROGRAMED INSTRUCTION, \*SCIENCE EDUCATION, \*TELEVISED INSTRUCTION, ACADEMIC PERFORMANCE LEARNING PROCESSES, PENNSYLVANIA, PITTSBURGH, SELF PACING MACHINES, TIME FACTORS, LEARNING.

ED 003 205

ATOMIC PHYSICS, AN AUTOINSTRUCTIONAL PROGRAM, VOLUME 2, SUPPLEMENT.

KLAUS, DAVID J. DETERLINE, WM. A.

AMERICAN INST. FOR RESEARCH IN BEHAVIORAL SCIENCES.

EDRS PRICE MF-\$1.00 HC-\$8.04 201P.

PUB DATE 61

DESCRIPTORS- \*AUTOINSTRUCTIONAL AIDS, \*NUCLEAR PHYSICS, \*PHYSICS INSTRUCTION, \*PROGRAMED TEXTS, EXPERIMENTAL PROGRAMS, LEARNING PROCESSES, PENNSYLVANIA, PITTSBURGH.

ED 003 206

ATOMIC PHYSICS, AN AUTOINSTRUCTIONAL PROGRAM, VOLUME 3, SUPPLEMENT

KLAUS, DAVID J. DETERLINE, WILLIAM A.

AMERICAN INST. FOR RESEARCH IN BEHAVIORAL SCIENCES.

EDRS PRICE MF-\$1.00 HC-\$8.48 212P.

PUB DATE 61

DESCRIPTORS- \*AUTOINSTRUCTIONAL AIDS, \*NUCLEAR PHYSICS, \*PHYSICS INSTRUCTION, \*PROGRAMED TEXTS, EXPERIMENTAL PROGRAMS LEARNING PROCESSES, PITTSBURGH, PENNSYLVANIA

ED 003 207

ATOMIC PHYSICS, AN AUTOINSTRUCTIONAL PROGRAM, VOLUME 4, SUPPLEMENT.

KLAUSE, DAVID DETERLINE, WILLIAM A.

AMERICAN INST. FOR RESEARCH IN BEHAVIORAL SCIENCES.

EDRS PRICE MF-\$0.75 HC-\$7.28 182P.  
PUB DATE 61

DESCRIPTORS- \*AUTOINSTRUCTIONAL AIDS, \*NUCLEAR PHYSICS, \*PHYSICS INSTRUCTION, \*PROGRAMED TEXTS, EXPERIMENTAL PROGRAMS, LEARNING PROCESSES, PENNSYLVANIA, PITTSBURGH.

ED 003 214

ELEMENTARY ELECTRONICS LABORATORY DETERLINE, WM. A., KLAUS, DAVID J.  
AMERICAN INST. FOR RESEARCH IN BEHAVIORAL SCIENCES.

EDRS PRICE MF-\$0.50 HC-\$4.68 117P.  
PUB DATE 61

DESCRIPTORS- \*AUTOINSTRUCTIONAL AIDS, \*ELECTRONICS, \*INSTRUCTIONAL MATERIALS, \*ELECTRONIC EQUIPMENT, PENNSYLVANIA, PITTSBURGH, TASK PERFORMANCE.

ED 003 215

ELEMENTARY ELECTRONICS, AN AUTOINSTRUCTIONAL PROGRAM FOR JUNIOR HIGH SCHOOL STUDENTS.

DETERLINE, WM. A. KLAUS, DAVID J.  
AMERICAN INST. FOR RESEARCH IN BEHAVIORAL SCIENCES.

EDRS PRICE MF-\$0.75 HC-\$6.12 153P.  
PUB DATE 61

DESCRIPTORS- \*AUTOINSTRUCTIONAL AIDS, \*ELECTRONICS, \*INSTRUCTIONAL MATERIALS, \*PROGRAMED TEXTS, ELECTRICITY, PENNSYLVANIA, PITTSBURGH, PROGRAMED INSTRUCTION, RADIO.

ED 003 295

COMPUTER GRADING OF PHYSICS LABORATORY REPORTS.

WEAVER, HARRY T. CARR, HOWARD E.  
AUBURN UNIV., ALA.

EDRS PRICE MF-\$0.25 HC-\$1.28 32P.  
PUB DATE 62

DESCRIPTORS- \*COMPUTER PROGRAMS, \*COMPUTERS, GRADING, \*PHYSICS, ALABAMA, AUBURN, DIGITAL COMPUTERS, MEASUREMENT, PHYSICS EXPERIMENTS, SCORING.

ED 003 318

A COMPARISON OF THREE METHODS OF TEACHING ELEMENTARY SCHOOL SCIENCE INVOLVING PROGRAMED LEARNING.

HEDGES, WM. D. MACDOUGALL, MARY A.  
VIRGINIA UNIV., CHARLOTTESVILLE.

EDRS PRICE MF-\$0.75 HC-\$7.12 178P.  
PUB DATE 65

DESCRIPTORS- \*PROGRAMED INSTRUCTION, \*PROGRAMED MATERIALS, \*SCIENCE INSTRUCTION, CHARLOTTESVILLE, COMPARATIVE ANALYSIS, ELEMENTARY EDUCATION, GRADE 4, PERFORMANCE, VIRGINIA.

ED 003 335

METHODS OF PROGRAMED INSTRUCTION RELATED TO STUDENT CHARACTERISTICS.

WOODRUFF, A. BOND AND OTHERS  
NORTHERN ILL. UNIV., DE KALB  
EDRS PRICE MF-\$0.75 HC-\$6.64 166P.  
PUB DATE 65

DESCRIPTORS- \*ACHIEVEMENT GAINS, \*EVALUATION, GENERAL SCIENCE, \*GRADE 8, \*PROGRAMED INSTRUCTION, DE KALB, ILLINOIS, LEARNING PROCESSES, PERFORMANCE, STUDENT CHARACTERISTICS.

ED 003 456

TEACHING SCIENTIFIC THINKING AT THE HIGH SCHOOL LEVEL.

SHOCKLEY, WM. MCDONALD, FREDERICK J.  
STANFORD UNIV., CALIF., SCHOOL OF EDUCATION.  
EDRS PRICE MF-\$0.75 HC-\$5.44 136P.  
PUB DATE OCT 64

DESCRIPTORS- \*MATHEMATICS INSTRUCTION, \*SCIENCE EDUCATION, \*SCIENTIFIC METHODOLOGY, \*TEACHING TECHNIQUES, CALIFORNIA, COGNITIVE DEVELOPMENT, JUNIOR HIGH SCHOOLS, SCIENCE INSTRUCTION, STANFORD, SUMMER PROGRAMS, TEAM TEACHING.

ED 003 503

THE DEVELOPMENT OF A MOBILE LABORATORY FOR THE IN-SERVICE EDUCATION OF TEACHERS OF SCIENCE AND MATHEMATICS.

RICHARDSON, JOHN S. DIEHL, T. HANDLEY  
OHIO STATE UNIV. COLUMBUS, RESEARCH FOUNDATION.

EDRS PRICE MF-\$0.75 HC-\$7.64 191P.  
PUB DATE MAY 61

DESCRIPTORS- \*CURRICULUM DEVELOPMENT, \*IN-SERVICE TEACHER EDUCATION, \*MOBILE LABORATORIES, \*SCIENCE INSTRUCTION, \*TEACHER IMPROVEMENT, COLUMBUS, INSTRUCTIONAL AIDS, INSTRUCTIONAL MATERIALS, MATHEMATICS INSTRUCTION, OHIO.

ED 003 504

REPORT OF RESEARCH ON THE INTEGRATION OF SCIENCE TEACHING BY TELEVISION INTO THE ELEMENTARY SCHOOL PROGRAM.

GARRY, RALPH J. AND OTHERS  
BOSTON UNIV., MASS., SCHOOL OF EDUCATION.  
EDRS PRICE MF-\$0.50 HC-\$3.48 87P.  
PUB DATE 31 JCT 60

DESCRIPTORS- \*ACHIEVEMENT GAINS, \*GRADE 5, \*SCIENCE COURSES, \*TELEvised INSTRUCTION, ATTITUDES, BOSTON, EDUCATIONAL TELEVISION, INTERESTS, MASSACHUSETTS, NATURAL SCIENCES, PROGRAM EVALUATION, STUDENT ATTITUDES, STUDENT INTERESTS.

ED 003 515

DEVELOPMENT OF PROBLEM SOLVING ABILITY AND LEARNING OF RELEVANT-IRRELEVANT INFORMA-

TION THROUGH FILM AND TV VERSIONS OF A STRENGTH OF MATERIALS TESTING LABORATORY, FINAL REPORT.

HARRIS, CHARLES O. AND OTHERS  
MICHIGAN ST. UNIV., EAST LANSING, COLL. OF EDUC.

EDRS PRICE MF-\$0.25 HC-\$1.56 39P.

PUB DATE 3 NOV 62

DESCRIPTORS- \*COLLEGE INSTRUCTION, \*ENGINEERING, \*INSTRUCTIONAL FILMS, \*INSTRUCTIONAL TELEVISION, \*LABORATORY EXPERIMENTS, COGNITIVE ABILITY, COLLEGE STUDENTS, COMPARATIVE TESTING, EAST LANSING, LEARNING PROCESSES, MICHIGAN, PROBLEMSOLVING, TEACHING METHODS.

ED 003 536

AN INVESTIGATION OF THE IMPROVEMENT OF EDUCATIONAL MOTION PICTURES AND A DERIVATION OF PRINCIPLES RELATING TO THE EFFECTIVENESS OF THESE MEDIA.

VANDERMEER, A.W. AND OTHERS  
PA. STATE UNIV., UNIVERSITY PARK.

EDRS PRICE MF-\$0.50 HC-\$3.80 95P.

PUB DATE APR 65

DESCRIPTORS- \*COMPARATIVE ANALYSIS, \*FILM PRODUCTION, \*INSTRUCTIONAL FILMS, \*MEDIA RESEARCH, \*SCIENCE INSTRUCTION, ATOMS AND MOLECULES, PENNSYLVANIA, TEACHING TECHNIQUES, TEST CONSTRUCTION, UNIVERSITY PARK, WHY FOODS SPOIL.

ED 003 541

TESTING THE EFFECTIVENESS OF TWO-PURPOSE TELEVISION PROGRAMS IN CONTRIBUTING TO BOTH TEACHER AND PUPIL LEARNING (ELEMENTARY SCIENCE).

FRAZIER, ALEXANDER EVANS, LEWIS O.  
OHIO STATE UNIVERSITY, COLUMBUS, RES. FOUNDATION.

EDRS PRICE MF-\$0.50 HC-\$3.40 85P.

DESCRIPTORS- \*ELEMENTARY EDUCATION, \*GENERAL SCIENCE, \*PROGRAM EVALUATION, \*TEACHER IMPROVEMENT, \*TELEVISED INSTRUCTION, ACHIEVEMENT TESTS, COLUMBUS, EVALUATION, LEARNING, OHIO, SCIENCE EDUCATION, TELEVISION.

ED 003 542

EFFECTIVENESS OF INSTRUCTION BY TELEVISION IN TEACHING HIGH SCHOOL CHEMISTRY IN ALABAMA SCHOOLS.

BROWN, ROBERT D. TOFFEL, GEORGE M.  
ALABAMA UNIVERSITY,

EDRS PRICE MF-\$0.25 HC-\$0.88 22P.

PUB DATE 60

DESCRIPTORS- \*CHEMISTRY, \*HIGH SCHOOL STUDENTS, \*OPEN CIRCUIT TELEVISION, \*SCIENCE INSTRUCTION, \*TELEVISED INSTRUCTION, ACADEMIC PERFORMANCE, ALABAMA, INSTRUCTIONAL TELEVISION, PERFORMANCE FACTORS, SCIENCE EDUCATION, TELEVISION, CURRICULUM.

ED 003 549

THE EFFECTIVENESS OF FILMED SCIENCE COURSES IN PUBLIC SECONDARY SCHOOLS.

POPHAM, W. JAMES SADNAVITCH, JOSEPH M.  
KANSAS STATE COLL. OF PITTSBURGH.

EDRS PRICE MF-\$0.50 HC-\$2.92 73P.

PUB DATE AUG 60

DESCRIPTORS- \*CHEMISTRY, \*HIGH SCHOOLS, \*INSTRUCTIONAL FILMS, \*PHYSICAL SCIENCES, \*PHYSICS INSTRUCTION, ACADEMIC ACHIEVEMENT, ACHIEVEMENT TESTS, COURSE ORGANIZATION, INSTRUCTIONAL IMPROVEMENT, KANSAS, MEDIA RESEARCH, PITTSBURGH, PROGRAM EVALUATION, SECONDARY EDUCATION.

ED 003 551

PREPARATION AND EVALUATION IN USE OF A SERIES OF BRIEF FILMS OF SELECTED DEMONSTRATIONS FROM THE INTRODUCTORY COLLEGE PHYSICS COURSE.

TENDAM, D.J. AND OTHERS

PURDUE RES. FOUNDATION, LAFAYETTE, IND.

EDRS PRICE MF-\$0.25 HC-\$2.00 50P.

PUB DATE 61

DESCRIPTORS- \*ACHIEVEMENT, \*COLLEGE STUDENTS, \*PERFORMANCE, \*PHYSICS, ACADEMIC PERFORMANCE, ACHIEVEMENT RATINGS, DEMONSTRATION PROGRAMS, INDIANA, INSTRUCTIONAL FILMS, LAFAYETTE, PHYSICS EXPERIMENTS, PHYSICS INSTRUCTION.

ED 003 560

THE EFFECT ON INSTRUCTION OF THE COMPLEMENTARY USE OF AUDIOVISUAL MEDIA WITH MODIFIED PATTERNS IN THE USE OF THE TEACHING STAFF.

FRITZ, JOHN O.

CHICAGO UNIV., GRAD, SCH. OF EDUC.

EDRS PRICE MF-\$0.75 HC-\$7.56 189P.

PUB DATE SEPT 63

DESCRIPTORS- \*AUDIOVISUAL INSTRUCTION, \*INSTRUCTIONAL INNOVATION, \*MEDIA RESEARCH, \*PHYSICS INSTRUCTION, CHICAGO, COMPARATIVE ANALYSIS, HIGH SCHOOLS, ILLINOIS, LEARNING PROCESSES, PHYSICAL SCIENCE STUDY COMMITTEE, TEACHING TECHNIQUES.

ED 003 565

THE RETENTION BY ELEMENTARY SCHOOL CHILDREN OF NATURAL SCIENCE MATERIAL TAUGHT BY TELEVISION.

AMIRIAN, GERARD T.

BOSTON UNIV., MASS.

EDRS PRICE MF-\$0.25 HC-\$1.48 37P.

PUB DATE 1 NOV 61

DESCRIPTORS- \*ATTITUDES, \*GRADE 5, \*SCIENCES, \*TEACHING PROGRAMS, \*TELEVISION, BOSTON, MASSACHUSETTS, NATURAL SCIENCES, RETENTION.

ED 003 568

A COMPARATIVE STUDY IN THE TEACHING OF HIGH SCHOOL CHEMISTRY AND PHYSICS

LYRAN, EDWARD E.

OKLA. STATE DEPT. OF EDUC., OKLAHOMA CITY.

EDRS PRICE MF-\$0.25 HC-\$2.20 55P.

PUB DATE SEP 61

DESCRIPTORS- \*CHEMISTRY, \*COMPARATIVE ANALYSIS, \*HIGH SCHOOL STUDENTS, \*PHYSICS INSTRUCTION, \*TELEVISED INSTRUCTION, OKLAHOMA, OKLAHOMA CITY, PROGRAM EVALUATION, TEACHING TECHNIQUES, TELEVISION RESEARCH.

ED 003 584

AN INVESTIGATION OF CONCEPT DEVELOPMENT IN ELEMENTARY SCHOOL SCIENCE TEACHING BY TELEVISION.

GARRY, RALPH AND OTHERS

BOSTON UNIV., MASS.

EDRS PRICE MF-\$0.25 HC-\$1.68 43P.

PUB DATE 1 DEC 63

DESCRIPTORS- \*CONCEPT FORMATION, \*PROBLEM SOLVING, \*SCIENCE INSTRUCTION, \*TELEVISED INSTRUCTION, \*TELEVISION RESEARCH, BOSTON, GRADE 5, MASSACHUSETTS, NATURAL SCIENCES, PROGRAM EVALUATION, TEACHING TECHNIQUES, TELEVISION TEACHERS.

ED 003 595

THE EFFECT OF SELECTED SPATIAL DESIGN FACTORS IN EDUCATIONAL DISPLAYS ON LEARNING AND RETENTION.

SAUL, EZRA V. ROCKETT, AGNES M.

TUFTS UNIV., BEDFORD, MASS.

EDRS PRICE MF-\$0.25 HC-\$1.00 25P.

PUB DATE 1 JUN 64

DESCRIPTORS- \*AUDIOVISUAL AIDS, \*BIOLOGY INSTRUCTION, \*CHARTS, \*GRADE 10, \*GRAPHIC ARTS, ABILITY IDENTIFICATION, INSTRUCTIONAL AIDS, LEARNING, MASSACHUSETTS, BEDFORD.

ED 003 598

THE USE OF MOTIVATIONAL FILMS TO FAVORABLY CHANGE THE ATTITUDES OF HIGH SCHOOL STUDENTS TOWARD SCIENCE AND SCIENTISTS.

WICKLINE, LEE E.

W. VA. STATE DEPT. OF EDUC., CHARLESTON.

EDRS PRICE MF-\$0.25 HC-\$1.48 37P.

PUB DATE JUL 62

DESCRIPTORS- \*FILMS, \*HIGH SCHOOL STUDENTS, \*SCIENTIFIC ATTITUDES, \*STUDENT ATTITUDES, \*TESTING, ALLEN ATTITUDE SCALE, ATTITUDES, CHARLESTON, FACTS ABOUT SCIENCE TEST, HORIZONS OF SCIENTIFIC FILMS, SCIENTIFIC CONCEPTS, WEST VIRGINIA.

ED 003 629

THE DEVELOPMENT AND EVALUATION OF A PROGRAMMING TECHNIQUE FOR RELATING FRAME DIFFICULTY TO THE ABILITY OF THE LEARNER. FINAL REPORT, PART II, APPENDICES

MOORE, J. WM. SMITH, WENDELL T.

BUCKNELL UNIV., LEWISBURG, PA.

EDRS PRICE MF-\$0.50 HC\$3.20 80P.

PUB DATE 65

DESCRIPTORS- \*BIOLOGY, \*CONCEPT TEACHING, \*HEALTH EDUCATION, \*PROGRAMED MATERIALS, \*SET THEORY, LEWISBURG, PENNSYLVANIA, PROGRAM EVALUATION, PROGRAMED TEXTS.

ED 003 652

AN EVALUATION OF TELEVISION PROCEDURES DESIGNED TO STIMULATE EXTRACURRICULAR SCIENCE ACTIVITIES. STUDIES IN TELEVISED INSTRUCTION, REPORT 6.

GROPPER, GEO. L. AND OTHERS

METROPOLITAN PITTSBURGH EDUC. TV STATION PA.

EDRS PRICE MF-\$0.50 HC\$2.60 65P.

PUB DATE MAY 61

DESCRIPTORS- \*COCURRICULAR ACTIVITIES, \*INSTRUCTIONAL TELEVISION, \*PROGRAMED INSTRUCTION, \*SCIENCE ACTIVITIES, \*TELEVISED INSTRUCTION, DEMONSTRATIONS (EDUCATIONAL), EDUCATIONAL TELEVISION, EXPERIMENTS, JUNIOR HIGH SCHOOL, PENNSYLVANIA, PITTSBURGH, SCIENCE EXPERIMENTS, STIMULUS BEHAVIOR, STIMULUS DEVICES, STUDENT EXPERIENCES, STUDENT PARTICIPATION, STUDENT REACTION.

ED 003 655

SELF-INSTRUCTIONAL SUPPLEMENTS FOR A TELEVISED PHYSICS COURSE, STUDY PLAN AND EXPERIMENTAL DESIGN.

KLAUS, DAVID J. LUMSDAINE, ARTHUR A.

AMERICAN INST. FOR RESEARCH IN BEHAVIORAL SCIENCES.

EDRS PRICE MF-\$0.25 HC-\$1.76 44P.

PUB DATE DEC 59

DESCRIPTORS- \*AUTOINSTRUCTIONAL AIDS, \*GROUP INSTRUCTION, \*PHYSICS INSTRUCTION, \*PROGRAMING, \*TELEVISED INSTRUCTION, COMPARATIVE ANALYSIS, HIGH SCHOOLS, PENNSYLVANIA, PITTSBURGH, RESEARCH METHODOLOGY, SUPPLEMENTARY EDUCATION, TEACHING TECHNIQUES.

ED 003 656

AN EXPERIMENTAL FIELD TEST OF THE VALUE OF SELF-TUTORING MATERIALS IN HIGH SCHOOL PHYSICS. INTERIM REPORT.

KLAUS, DAVID J. LUMSDAINE, ARTHUR A.

AMERICAN INST. FOR RESEARCH IN BEHAVIORAL SCIENCES.

EDRS PRICE MF-\$0.25 HC-\$0.88 22P.

PUB DATE APR 60

DESCRIPTORS- \*ACHIEVEMENT GAINS, \*AUTOINSTRUCTIONAL AIDS, \*MATERIAL DEVELOPMENT, \*PHYSICS INSTRUCTION, \*TELEVISED INSTRUCTION, ACADEMIC ACHIEVEMENT, COMPARATIVE ANALYSIS, HIGH SCHOOL STUDENTS, PENNSYLVANIA, PITTSBURGH, PROGRAMING, SUPPLEMENTARY EDUCATION, TEACHING TECHNIQUES.

ED 003 657

INTRODUCTION AND STATIC ELECTRICITY, VOLUME I.

KLAUS, DAVID J. AND OTHERS

AMERICAN INST. FOR RESEARCH IN BEHAVIORAL SCIENCES.

EDRS PRICE MF-\$2.50 HC-\$23.08 577P.  
 PUB DATE 60  
 DESCRIPTORS- \*AUTOINSTRUCTIONAL AIDS,  
 \*MATERIAL DEVELOPMENT, \*PHYSICS IN-  
 STRUCTION, \*PROGRAMED MATERIALS, \*TEXTBOOK  
 PREPARATION, EXPERIMENTAL PROGRAMS,  
 PENNSYLVANIA, PITTSBURGH, PROGRAMED IN-  
 STRUCTION.

ED 003 658  
 ATOMIC PHYSICS, AN AUTOINSTRUCTIONAL PRO-  
 GRAM, VOLUME I. SUPPLEMENT.  
 KLAUS, DAVID J. DETERLINE, WM. A.  
 AMERICAN INST. FOR RESEARCH IN BEHAVIORAL  
 SCIENCES.

EDRS PRICE MF-\$1.00 HC-\$8.16 204P.  
 PUB DATE 61  
 DESCRIPTORS- \*ATOMIC THEORY, \*AUTOINSTRUC-  
 TIONAL AIDS, \*MATERIAL DEVELOPMENT, \*NU-  
 CLEAR PHYSICS, \*PHYSICS INSTRUCTION,  
 EXPERIMENTAL PROGRAMS, PENNSYLVANIA,  
 PITTSBURGH, TEXTBOOK PREPARATION.

ED 003 659  
 REFLECTION AND REFRACTION, VOLUME 2  
 KLAUS, DAVID J. AND OTHERS  
 AMERICAN INST. FOR RESEARCH IN BEHAVIORAL  
 SCIENCES.

EDRS PRICE MF-\$3.00 HC-\$28.56 714P.  
 PUB DATE 60  
 DESCRIPTORS- \*AUTOINSTRUCTIONAL AIDS,  
 \*MATERIAL DEVELOPMENT, \*PHYSICS, INSTRU-  
 CTION, \*PROGRAMED MATERIALS, \*TEXTBOOK PREP-  
 ARATION, EXPERIMENTAL PROGRAMS,  
 PENNSYLVANIA, PITTSBURGH, PROGRAMED IN-  
 STRUCTION.

ED 003 700  
 EFFECTS OF INQUIRY TRAINING IN PHYSICAL SCI-  
 ENCE ON CREATIVITY AND COGNITIVE STYLES OF  
 ELEMENTARY SCHOOL CHILDREN.  
 SCOTT, NORVAL C., JR. SIGEL, I.E.  
 MERRILL PALMER INST.  
 DETROIT, MICHIGAN

EDRS PRICE MF-\$0.75 HC-\$5.44 136P.  
 PUB DATE 65  
 DESCRIPTORS- \*COGNITIVE DEVELOPMENT, \*CON-  
 CEPT TEACHING, \*CREATIVE THINKING, \*DISCOVERY  
 PROCESSES, \*SCIENCE INSTRUCTION, ACADEMIC  
 ACHIEVEMENT, ACHIEVEMENT GAINS, CURRICULUM  
 ENRICHMENT, DETROIT, ELEMENTARY SCHOOL STU-  
 DENTS, LEARNING PROCESSES, MICHIGAN, PHYSICAL  
 SCIENCES, SEX DIFFERENCES, TEACHING METHODS,  
 THOUGHT PROCESSES.

ED 003 704  
 RECOGNITION AND INTERPRETATION OF PICTORIAL  
 STIMULI FOUND WITHIN EDUCATIONAL STILL  
 PICTURES.  
 BERGESON, CLARENCE O.  
 PA. STATE UNIV., UNIVERSITY PARK.

EDRS PRICE MF-\$0.50 HC-\$3.40 85P.  
 PUB JUN 65  
 DESCRIPTORS- \*ILLUSTRATIONS, \*PHOTOGRAPHS,

\*SCIENTIFIC CONCEPTS, \*VISUAL DISCRIMINATION,  
 \*VISUAL STIMULI, AUDIOVISUAL AIDS, ELEMENTARY  
 SCHOOL STUDENTS, GRADE 11, GRADE 8, PENNSYL-  
 VANIA, UNIVERSITY PARK, VISUAL PERCEPTION.

ED 003 788  
 CUE (CULTURE, UNDERSTANDING, ENRICHMENT)-  
 SCIENCE.

BROWN, ROBT. M. AND OTHERS  
 N.Y. STATE EDUC. DEPT., ALBANY.

EDRS PRICE MF-\$1.00 HC-\$8.28 20P.  
 PUB DATE 64  
 DESCRIPTORS- \*AUDIOVISUAL AIDS, \*ENRICHMENT  
 PROGRAMS, \*GUIDES, \*SCIENCE INSTRUCTION,  
 \*TEACHING GUIDES, ALBANY, CULTURAL AWARE-  
 NESS, CULTURAL ENRICHMENT, CURRICULUM EN-  
 RICHMENT, EDUCATIONAL PROGRAMS, GRADE 9,  
 INSTRUCTIONAL AIDS, INSTRUCTIONAL IMPROVE-  
 MENT, NEW YORK PROJECT CUE, SCIENCE  
 CURRICULUM, SCIENCE PROGRAMS, SECONDARY  
 EDUCATION.

ED 003 826  
 A PROJECT TO STUDY THE NATURE OF EFFECTIVE  
 PHYSICS TEACHING.  
 SNIDER, RAY M.

CORNELL UNIV., ITHACA, N.Y.  
 EDRS PRICE MF-\$1.50 HC-\$13.64 341P

PUB DATE 65  
 DESCRIPTORS- \*ACADEMIC ACHIEVEMENT, \*CLASS-  
 ROOM RESEARCH, \*EFFECTIVE TEACHING, \*PHYSICS  
 INSTRUCTION, \*STUDENT TEACHER RELATIONSHIP,  
 FLANDERS METHOD, HIGH SCHOOLS, ITHACA, NEW  
 YORK, PHYSICS, PHYSICS CURRICULUM, VERBAL  
 COMMUNICATION.

ED 003 849  
 DEVELOPMENT OF INSTRUCTIONAL MATERIALS FOR  
 A PROCESS-ORIENTED CURRICULUM IN SCIENCE  
 FOR GRADES K-6.  
 BUTTS, DAVID P.  
 TEXAS UNIV., AUSTIN, SCIENCE EDUCATION CENTER.

EDRS PRICE MF-\$0.25 HC\$0.72 18P.  
 PUB DATE 64  
 DESCRIPTORS- \*ELEMENTARY SCHOOL TEACHERS,  
 \*ELEMENTARY SCIENCE, \*INSERVICE TEACHER ED-  
 UCATION, \*MATERIAL DEVELOPMENT, \*SCIENCE  
 INSTRUCTION, AUSTIN, CONSULTANTS, CURRICULUM  
 DEVELOPMENT, INSTRUCTIONAL MATERIALS,  
 TEXAS.

ED 003 900  
 SPANISH-BIOLOGY, FINAL REPORT.  
 DORAN, THOMAS A.  
 FOLSOM, UNIFIED SCHOOL DISTRICT, CALIF.

EDRS PRICE MF-\$0.25 HC-\$1.28 32P.  
 PUB DATE 1 JAN 65  
 DESCRIPTORS- \*ACHIEVEMENT GAINS, \*BIOLOGY.  
 MATERIAL DEVELOPMENT, \*SPANISH, \*TEACHING  
 TECHNIQUES, CALIFORNIA, CLASSROOM INTEGRA-  
 TION, COURSE ORGANIZATION, FOLSOM DISTRICT.

# SCIENCE EDUCATION REPORTS

IN

## PACESETTERS IN INNOVATION, FISCAL YEAR 1966

ES 000 032

SARASOTA COUNTY EDUCATIONAL ENRICHMENT CENTERS. FLA., SARASOTA, COUNTY BOARD OF PUBLIC INSTRUCTION.  
EDRS PRICE MF-\$0.25 HC-\$2.08 52P.

DESCRIPTORS- \*DROPOUTS, \*GRADES 1-6, \*GRADES 7-12, \*LOW INCOME GROUPS, \*MOBILE LABORATORIES, \*NATURAL RESOURCES, \*SCIENCES, ADULT EDUCATION HOME ECONOMICS, LEARNING DIFFICULTIES, OCEANOLOGY, PHYSICAL EDUCATION, SCIENCE LABORATORIES STUDENT TEACHERS.

ES 000 043

PROGRAM OF OUTDOOR EDUCATION. IDAHO, COEUR D'ALENE, SCHOOL DISTRICT 271.  
EDRS PRICE MF-\$9.25 HC-\$0.56 14P.

DESCRIPTORS- \*COUNSELING, \*CULTURAL EDUCATION, \*GRADE 7, \*GRADES 7-12, \*HEALTH PROGRAM, \*OUTDOOR PROGRAMS, \*RECREATIONAL ACTIVITIES, SUMMER PROGRAMS, DISADVANTAGED YOUTH, HANDICAPPED CHILDREN, NATURAL RESOURCES, RURAL AREAS, SCIENCES, SOCIAL EXPERIENCES.

ES 000 044

SANDUSKY AREA SUPPLEMENTARY EDUCATION CENTER. OHIO, SANDUSKY, CITY SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$1.88 47P.

DESCRIPTORS- \*CULTURAL CENTERS, \*GRADES 7-12, \*INSTRUCTIONAL MATERIALS CENTERS, \*LIBRARY FACILITIES, \*PLANETARIUMS, \*SPACE SCIENCES, ART, ASTRONOMY, AUDIOVISUAL AIDS, DRAMATICS, INDEPENDENT STUDY, MUSIC.

ES 000 047

TRAINING CENTER IN EXEMPLARY INSTRUCTIONAL SYSTEMS. TEX., HOUSTON, SPRING BRANCH IND. SCH. DIST.  
EDRS PRICE MF-\$0.25 HC-\$1.28 32P.

DESCRIPTORS- \*AUDIOVISUAL AIDS, \*INSERVICE TEACHER EDUCATION, \*PHOTOGRAPHY, \*PROGRAMMING, INSTRUCTIONAL TECHNOLOGY, SKILL DEVELOPMENT, WORKSHOPS.

ES 000 053

REGIONAL OUTDOOR EDUCATION PROGRAM. OREG., PORTLAND, MULTNOMAH COUNTY INT. ED. DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$1.32 33P.

DESCRIPTORS- \*CONSERVATION, \*GRADE 6, \*GRADES 1-6, \*NATURAL RESOURCES, \*OUTDOOR PROGRAMS, CAMPING.

ES 000 054

PROJECT PROMETHEUS. OREG., MEDFORD, JACKSON COUNTY INT. ED. DIST.  
EDRS PRICE MF-\$0.25 HC-\$1.52 38P.

DESCRIPTORS- \*ABLE STUDENTS, \*BIOLOGICAL SCIENCES, \*CULTURAL ENRICHMENT, \*GRADES 7-12, \*HUMANITIES, \*SOCIAL SCIENCES, \*SUMMER SCHOOLS.

ES 000 056

PILOT SUPPLEMENTARY ELEMENTARY SCIENCE INTERPRETIVE PROGRAM. N.J., MIDDLETOWN, BD. OF ED. OF TOWNSHIP SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$1.48 37P.

DESCRIPTORS- \*COMMUNITY INVOLVEMENT, \*GRADE 4, \*GRADES 1-6, \*NATURAL SCIENCES, \*OCEANOLOGY, \*OUTDOOR PROGRAMS, GEOLOGY, INSERVICE TEACHER EDUCATION.

ES 000 057

SUPPLEMENTARY EDUCATIONAL CENTER. OHIO, CLEVELAND, BOARD OF EDUCATION  
EDRS PRICE MF-\$0.50 HC-\$2.88 72P.

DESCRIPTORS- \*FINE ARTS, \*GRADES 1-6, \*GRADES 7-12, \*LANGUAGE ARTS, \*MATHEMATICS, \*SCIENCES, \*SOCIAL SCIENCES, CITIZENSHIP, EDUCATIONAL TELEVISION, GOVERNMENT, READING, REMEDIAL INSTRUCTION, URBAN AREAS.

ES 000 060

UPPER SUSQUEHANNA REGIONAL SUPPLEMENTARY EDUCATIONAL SERVICE. N.Y., BINGHAMTON, BROOME COUNTY BD/COOP EDUCATIONAL SERVICES  
EDRS PRICE MF-\$0.25 HC-\$1.96 49P.

DESCRIPTORS- \*EDUCATIONAL TELEVISION, \*EXHIBITS, \*FINE ARTS, \*HISTORY, \*PLANETARIUMS, \*SCIENCES, \*WORLD AFFAIRS, INSERVICE TEACHER EDUCATION, TEACHER SEMINARS, VOCATIONAL EDUCATION, WORKSHOPS.

ES 000 063

HIGH ROCK NATURE CONSERVATION CENTER. N.Y., BROOKLYN, BD. OF EDUC., CITY OF NEW YORK  
EDRS PRICE MF-\$0.25 HC-\$1.00 25P.

DESCRIPTORS- \*CONSERVATION, ECOLOGY, \*GRADES 1-6, \*NATURAL RESOURCES, \*OUTDOOR PROGRAMS, \*YEAR ROUND PROGRAMS, NATURAL SCIENCES.

ES 000 070

SUMMER INSTITUTE IN FIELD ECOLOGY AND FIELD GEOLOGY FOR HIGH SCHOOL STUDENTS. MONT., DEER LODGE, POWELL COUNTY HIGH SCHOOL  
EDRS PRICE MF-\$0.25 HC-\$1.24 31P.

DESCRIPTORS- \*CHEMISTRY, \*GRADES 7-12, \*NATURAL SCIENCES, \*OUTDOOR PROGRAMS, \*SUMMER PROGRAMS, BIOLOGY, CHEMISTRY. CURRICULUM ENRICHMENT, GEOLOGY, HIGH SCHOOL STUDENTS, MOTIVATION TECHNIQUES, PHYSICAL SCIENCES, TEAM TEACHING.

ES 000 090

PLANNING FOR A PROGRAM OF EXEMPLARY EDUCATIONAL SERVICES FOR THE AMHERST SCHOOL DISTRICT. N.Y., BUFFALO, AMHERST CENTRAL H.S. DISTRICT 1  
EDRS PRICE MF-\$0.25 HC-\$1.16 29P.

DESCRIPTORS- \*FAMILY PROGRAMS, \*GRADES 1-6, \*GRADES 7-12, \*READING PROGRAMS, \*SCIENCE LABORATORIES, SPECIALISTS.

ES 000 116

3-D SCHOOL. N.J., BORDENTOWN, TOWNSHIP BD. GF EDUCATION  
EDRS PRICE MF-\$0.25 HC-\$1.04 26P.

DESCRIPTORS- \*GRADE 7, \*GRADE 8, \*GRADES 7-12, \*NATURAL SCIENCES, \*OUTDOOR PROGRAMS BIOLOGICAL SCIENCES, CAMPING, CULTURAL ENRICHMENT, ECOLOGY.

ES 000 118

CENTER OF SCIENCE AND INDUSTRY. OHIO, CINCINNATI, BD. OF EDUC., CITY SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$1.04 26P.

DESCRIPTORS- \*ENRICHMENT PROGRAMS, \*GRADES 1-6, \*GRADES 7-12, \*PHYSICAL SCIENCES, \*SCIENCE CENTERS, ADVANCED PROGRAMS, COMMUNITY INVOLVEMENT, HOBBIES, INSERVICE TEACHER EDUCATION, MOBILE LABORATORIES, RECREATIONAL ACTIVITIES.

ES 000 126

PLANNING GRANT APPLICATION FOR SUPPLEMENTARY EDUCATIONAL CENTER. CALIF., SAN DIEGO, DEPT. OF ED. SAN DIEGO COUNTY.  
EDRS PRICE MF-\$0.25 HC-\$1.28 32P.

DESCRIPTORS- \*COMMUNITY RESOURCES, \*ENGLISH AS A SECOND LANGUAGE, \*GRADES 1-6, \*GRADES 7-12, \*SAFETY PROGRAMS, \*SCIENCE PROGRAMS, MEXICAN AMERICAN, SPECIALISTS.

ES 000 132

ARTS AND SCIENCE CENTER. WASH., SEATTLE, SCHOOL DISTRICT I  
EDRS PRICE MF-\$0.50 HC-\$3.92 98P.

DESCRIPTORS- \*ARTS CENTERS, \*GRADES 1-6, \*GRADES 7-12, \*HUMANITIES, \*SCIENCES, COMMUNITY RESOURCES, CULTURAL EDUCATION, INSERVICE TEACHER EDUCATION, TALENT UTILIZATION.

ES 000 136

HARRIS COUNTY CENTER FOR INSTRUCTIONAL IMPROVEMENT. TEX., HOUSTON, HARRIS COUNTY DEPT. OF ED.  
EDRS PRICE MF-\$0.25 HC-\$1.16 29P.

DESCRIPTORS- \*COMMUNITY RESOURCES, \*DEMONSTRATION CENTERS, \*EXCEPTIONAL CHILDREN, \*GRADES 1-6, \*GRADES 7-12, \*INSERVICE TEACHER EDUCATION, \*INSTRUCTIONAL MATERIALS CENTERS, \*OUTDOOR PROGRAMS, \*TESTING PROGRAMS, INSTRUCTIONAL AIDS, PROGRAMED INSTRUCTION, TEACHER ORIENTATION, TEAM TEACHING, TELEVISED INSTRUCTION.

ES 000 142

FLORENCE AREA EDUCATIONAL SERVICES CENTER. S.C., FLORENCE, SCHOOL DISTRICT 1  
EDRS PRICE MF-\$0.25 HC-\$0.76 19P.

DESCRIPTORS- \*AUDIOVISUAL AIDS, \*CULTURAL PROGRAMS, \*INSERVICE TEACHER EDUCATION, \*PSYCHOLOGICAL SERVICES, \*SCIENCE PROGRAMS, ADULT EDUCATION, ADVANCED PROGRAMS, COUNSELING, DISADVANTAGED YOUTH, EDUCATIONAL TELEVISION, GIFTED, MATHEMATICS, PRESCHOOL EDUCATION, REMEDIAL INSTRUCTION, RETARDED CHILDREN.

ES 000 161

NASSAU COUNTY PLANNING PROPOSAL. N.Y., JERICHO, U.F.S. DISTRICT 15  
EDRS PRICE MF-\$0.25 HC-\$1.44 36P.

DESCRIPTORS- \*COMPUTER ORIENTED PROGRAMS, \*COUNSELING, \*CULTURAL ENRICHMENT, \*CURRICULUM DEVELOPMENT, \*GRADES 1-6, \*GRADES 7-12, INSERVICE TEACHER EDUCATION, \*LIBRARY SERVICES, \*SCIENCE PROGRAMS, TEACHING METHODS.

ES 000 163

TEXAS GULF COAST SCIENCE EDUCATIONAL RESOURCES CENTER. TEX., HOUSTON, INDEPENDENT SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$0.80 20P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*SCIENCE CENTERS, COMPUTER ORIENTED PROGRAMS, EXHIBITS, FIELD TRIPS, INSERVICE TEACHER EDUCATION, LIBRARY SERVICES, MUSEUMS, RADIO, SCIENCE LABORATORIES, SPACE SCIENCES, SPECIALISTS, TELEVISION.

ES 000 168

APPROACH TO INTER-SUBURBAN PLANNING FOR HUMANIZING EMERGING CURRICULUM CONCEPTS AND EDUCATIONAL SERVICES. VA., ARLINGTON, ARLINGTON COUNTY PUBLIC SCHOOLS  
EDRS PRICE MF-\$0.25 HC-\$1.44 36P.

DESCRIPTORS- \*AUDIOVISUAL AIDS, \*FINE ARTS, \*GRADES 1-6, \*GRADES 7-12, \*HANDICAPPED CHILDREN, \*KINDERGARTEN, \*LANGUAGE LABORATORIES, \*SCIENCE CENTERS, \*YEAR ROUND PROGRAMS, INSERVICE TEACHER EDUCATION, PLANETARIUMS, SCIENCE LABORATORIES.

ES 000 169

PLANNING GRANT TO SET UP A PLANNING COMMITTEE TO EXPLORE THE POSSIBILITIES OF A CURRICULUM/CULTURAL RESEARCH CENTER. MD., CUMBERLAND, ALLEGHENY, COUNTY BOARD OF EDUCATION.  
EDRS PRICE MF-\$0.25 HC-\$0.68 17P.

DESCRIPTORS- \*AUDIOVISUAL CENTERS, CULTURAL CENTERS, \*CURRICULUM, \*GRADES 1-6, \*GRADES 7-12, \*KINDERGARTEN, \*LIBRARIES, \*SCIENCE CENTERS, INSERVICE TEACHER EDUCATION.

ES 000 172

REGIONAL ACADEMIC MARINE PROGRAM. MAINE, KITTERY, JOINT COMM. R.W. TRAIPI ACADEMY  
EDRS PRICE MF-\$0.25 HC-\$0.72 19P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*OCEANOLOGY, \*SCIENCE CENTERS, ADVANCED PROGRAMS, MOBILE LABORATORIES, TEACHER WORKSHOPS.

ES 000 175

SUPPLEMENTARY EDUCATIONAL FACILITIES. MASS., MEDFORD, PUBLIC SCHOOLS  
EDRS PRICE MF-\$0.25 HC-\$0.96 24P.

DESCRIPTORS- \*ARTS CENTERS, \*GRADES 1-6, \*LABORATORIES, \*SCIENCE CENTERS, AUDIOVISUAL MATERIALS, CULTURAL ENRICHMENT, PARENT PARTICIPATION.

ES 000 176

REQUEST FOR A PLANNING GRANT TO DETERMINE THE EDUCATIONAL AND CULTURAL NEEDS OF THE CHILDREN AND ADULTS OF THE BALTIMORE COUNTY REGION AND TO DESIGN A PROGRAM AND APPROPRIATE FACILITIES TO MEET THESE NEEDS. MD., TOWSON, BD. OF ED., BALTIMORE COUNTY  
EDRS PRICE MF-\$0.50 HC-\$3.00 75P.

DESCRIPTORS- \*CONCERTS, \*GRADES 1-6, \*GRADES 7-12, \*GUIDANCE COUNSELORS, \*PROBLEM CHILDREN, \*SCIENCE PROGRAMS, \*THEATER ARTS, BEHAVIOR PROBLEMS, EXPERIMENTS, INSERVICE TEACHER EDUCATION, LEARNING PROBLEMS.

ES 000 180

INTERDISCIPLINARY OUTDOOR EDUCATION PROGRAM. WASH., SEATTLE, (SHORELINE SCHOOL DISTRICT 412  
EDRS PRICE MF-\$0.25 HC-\$0.60 15P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*NATURAL RESOURCES, \*NATURAL SCIENCES, \*OUTDOOR PROGRAMS, CURRICULUM PLANNING.

ES 000 189

MID-HUDSON REGIONAL SUPPLEMENTARY EDUCATIONAL CENTER'S - (PINE) PROJECTS IN IMAGINATIVE NATURE EDUCATION. N.Y., NEW PALTZ, ULSTER COUNTY BD. COOP. ED. SVCS.  
EDRS PRICE MF-\$0.25 HC-\$1.76 44P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*NATURAL RESOURCES, \*NATURAL SCIENCES, \*OUTDOOR PROGRAMS, \*PRESCHOOL CHILDREN, CONSERVATION.

ES 000 190

MID-HUDSON REGIONAL SUPPLEMENTARY EDUCATIONAL CENTER'S - (PEC) PROJECT EXEMPLARY CONSORTIA OF NATURAL SCIENCE, HISTORICAL MUSEUMS, AND SCHOOLS. N.Y., NEW PALTZ, ULSTER COUNTY BD. COOP. ED. SVCS.  
EDRS PRICE MF-\$0.25 HC-\$0.96 24P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*MUSEUMS, \*SCIENCES, \*SOCIAL STUDIES, HISTORY, INSERVICE TEACHER EDUCATION, TALENTED STUDENTS.

ES 000 192

PLANNING PROJECT FOR A PILOT STUDY IN CONSERVATION EDUCATION. MONT., GREAT FALLS, SCHOOL DISTRICT 1.  
EDRS PRICE MF-\$0.25 HC-\$0.76 19P.

DESCRIPTORS- \*CONSERVATION, \*GRADES 1-6, \*GRADES 7-12, \*OUTDOOR PROGRAMS, CAMPING, CONSULTANTS, EDUCATIONAL TELEVISION, INSERVICE TEACHER EDUCATION, MOBILE UNITS, NATURAL SCIENCES, RURAL AREAS.

ES 000 193

OUTDOOR EDUCATION-CONSERVATION AND RURAL LIFE REGIONAL CENTER. MICH, CHARLOTTE, EATON COUNTY INT BD. OF EDUC.  
EDRS PRICE MF-\$0.25 HC-\$1.00 25P.

DESCRIPTORS- \*CONSERVATION, \*GRADES 1-6, \*GRADES 7-12, KINDERGARTEN, \*OUTDOOR PROGRAMS, HANDICAPPED CHILDREN, INSERVICE TEACHER EDUCATION, NATURAL RESOURCES, NATURAL SCIENCES, PRESERVICE EDUCATION.

ES 000 194

ELEMENTARY SCIENCE CENTER. MASS., NEEDHAM, PUBLIC SCHOOLS  
EDRS PRICE MF-\$0.25 HC-\$0.60 15P.

DESCRIPTORS- \*AFTER SCHOOL PROGRAMS, \*ELEMENTARY SCIENCE, \*GRADES 1-6, \*INSERVICE TEACHER EDUCATION, \*KINDERGARTEN, \*SCIENCE CENTERS, \*TALENTED STUDENTS, DEMONSTRATION PROGRAMS, ELECTRONIC EQUIPMENT, PARENT PARTICIPATION, RESOURCE CENTERS, WORKSHOPS.

ES 000 199  
PLANNING PROJECT UNDER TITLE III, P.L. 89-10. CALIF., SAN FRANCISCO, UNIFIED SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$1.64 41P.

DESCRIPTORS- \*CULTURAL ENRICHMENT, \*GRADES 1-6, \*GRADES 7-12, \*KINDERGARTEN, \*SCIENCE PROGRAMS, \*SOCIAL STUDIES, COMMUNITY RESOURCES, INSERVICE TEACHER EDUCATION.

ES 000 203  
UTILIZATION OF COMPUTER ASSISTED INSTRUCTION TO IMPROVE STUDENT ACHIEVEMENT AND FACULTY INSTRUCTION IN SECONDARY SCHOOL MATHEMATICS AND SCIENCE. PA., ALTOONA, CITY SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$1.24 31P.

DESCRIPTORS- \*COMPUTER ORIENTED PROGRAMS, \*GRADES 7-12, \*HIGH SCHOOLS, \*MATHEMATICS, \*SCIENCES, INSERVICE TEACHER EDUCATION, PROGRAMED INSTRUCTION.

ES 000 211  
SCIENCE CENTER. PA., ABINGTON, TOWNSHIP SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$0.68 17P.

DESCRIPTORS- \*CONSERVATION, \*NATURAL SCIENCES, \*SCIENCE CENTERS.

ES 000 223  
APPLICATION FOR A PLANNING GRANT. TENN., OAK RIDGE, BOARD OF EDUCATION  
EDRS PRICE MF-\$0.25 HC-\$1.12 28P.

DESCRIPTORS- \*SCIENCE CENTERS, CURRICULUM PLANNING, ECOLOGY, EDUCATIONALLY DISADVANTAGED, INSERVICE TEACHER EDUCATION, INSTRUCTIONAL MATERIALS CENTERS, LABORATORIES.

ES 000 227  
SUPPLEMENTARY EDUCATIONAL CENTER. N.C., SALISBURY, CITY BOARD OF EDUCATION  
EDRS PRICE MF-\$0.25 HC-\$0.76 19P.

DESCRIPTORS- \*AMERICAN HISTORY, \*FINE ARTS, \*GRADES 1-6, \*GRADES 7-12, \*NATURAL SCIENCES, \*PLANETARIUMS, ASTRONOMY, COLLEGES, EXHIBITS, INDEPENDENT STUDY, SPECIALISTS, WORKSHOPS, ZOOS.

ES 000 228  
CLASSROOM OF TODAY'S WORLD. N.J., OLD BRIDGE, MADISON TOWNSHIP PUBLIC SCHOOLS  
EDRS PRICE MF-\$0.25 HC-\$1.44 36P.

DESCRIPTORS- \*FINE ARTS, \*GRADES 1-6, \*GRADES 7-12, \*MOBILE LABORATORIES, \*SCIENCES, \*SOCIAL STUDIES, COMMUNITY STUDIES, CONTROL GROUPS, FIELD TRIPS.

ES 000 229  
LINCOLN TITLE III PROJECT DESIGNED TO DEVELOP AND ENRICH ELEMENTARY CURRICULUM IN THE AREA OF AEROSPACE. NEBR., LINCOLN, CITY SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$1.24 31P.

DESCRIPTORS- \*CORE CURRICULUM, \*CURRICULUM PLANNING, \*GRADES 1-6, \*INSTRUCTIONAL MATERIALS CENTERS, \*SPACE SCIENCES, SCHOOL LIBRARIES, SUMMER WORKSHOPS.

ES 000 239  
PROPOSAL FOR THE USE OF A MOBILE LABORATORY TO ENRICH AND EXPAND THE SCIENCE PROGRAM IN THE SCHOOLS OF DISTRICT 241. FREEBORN COUNTY, MINN., ALBERT LEA, INDEP. SCHOOL DISTRICT 241  
EDRS PRICE MF-\$0.25 HC-\$1.80 45P.

DESCRIPTORS- \*GEOLOGY, \*GRADES 1-6, \*GRADES 7-12, \*KINDERGARTEN, \*MOBILE LABORATORIES, \*YEAR ROUND PROGRAMS, INSERVICE TEACHER EDUCATION, TALENTED STUDENTS, TEAM TEACHING.

ES 000 246  
RESOURCE-USE OUTDOOR EDUCATION CENTER. FLA., PERRY, TAYLOR COUNTY BD. OF PUBLIC INSTRUCTION  
EDRS PRICE MF-\$0.25 HC-\$0.92 23P.

DESCRIPTORS- \*CONSERVATION, \*NATURAL RESOURCES, \*RESOURCE CENTERS, \*YEAR ROUND PROGRAMS, CAMPING, INSERVICE TEACHER EDUCATION, NATURAL SCIENCES.

ES 000 279  
OUTDOOR EDUCATIONAL CENTER. N. MEX., ALBUQUERQUE, PUBLIC SCHOOLS  
EDRS PRICE MF-\$0.25 HC-\$0.64 16P.

DESCRIPTORS- \*CAMPING, \*NATURAL SCIENCES, \*OUTDOOR PROGRAMS, ART, BOTANY, CONSERVATION, HEALTH PROGRAMS, MATHEMATICS, PARENT PARTICIPATION, SAFETY, ZOOLOGY.

ES 000 282  
SAN ANGELO AREA ASTRO-SCIENCE CENTER. TEX., SAN ANGELO, INDEPENDENT SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$0.80 20P.

DESCRIPTORS- \*ASTRONOMY, \*GRADES 7-12, \*SPACE SCIENCES, \*ACCELERATED PROGRAMS, AUDIO-VISUAL AIDS, COLLEGES, INDIVIDUAL INSTRUCTION, INSERVICE TEACHER EDUCATION, MUSEUMS, PLANETARIUMS, SCIENCE CENTERS, SCIENCE LABORATORIES, SPECIALISTS, STUDENT RESEARCH.

ES 000 284

SCIENCE LABORATORY-PLANETARIUM. WYO., CASPER, NATRONA COUNTY HIGH SCH. DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$0.92 23P.

DESCRIPTORS- \*ASTRONOMY, \*GRADES 1-6, \*GRADES 7-12, \*PLANETARIUMS, \*SCIENCE LABORATORIES, \*YEAR ROUND PROGRAMS, COMMUNITY INVOLVEMENT, DEMONSTRATION CENTERS, INSERVICE TEACHER EDUCATION, LECTURE.

ES 000 291

CENTER FOR ACADEMIC EXCELLENCE. MINN., MINNEAPOLIS, PUB. SCH. SPECIAL SCH. DIST. 1  
EDRS PRICE MF-\$0.25 HC-\$0.56 14P.

DESCRIPTORS- \*GIFTED, \*GRADES 7-12, \*LANGUAGES, \*MATHEMATICS, \*SCIENCES, ABILITY IDENTIFICATION, CLASS SIZE, CURRICULUM DEVELOPMENT, FLEXIBLE SCHEDULING, INDIVIDUAL INSTRUCTION, NONGRADED CLASSES, PROGRAMED INSTRUCTION, TEACHER SELECTION, TEAM TEACHING.

ES 000 303

PROJECT LIGHTHOUSE. MASS., SCITUATE, SCHOOL DEPARTMENT  
EDRS PRICE MF-\$0.25 HC-\$0.76 19P.

DESCRIPTORS- \*CULTURAL BACKGROUND, \*GRADES 1-6, \*GRADES 7-12, \*HANDICAPPED, \*HISTORY, \*OCEANOLOGY, \*OUTDOOR PROGRAMS, AUDIO-VISUAL AIDS, CURRICULUM DEVELOPMENT, DRAMATICS, INSERVICE TEACHER EDUCATION, NATURAL RESOURCES, PILOT PROJECTS, SCIENCE LABORATORIES.

ES 000 307

NORTHWEST EDUCATIONAL COMPLEMENTAL CENTER. MO., HAZELWOOD, PATTONVILLE R-3 SCH. DIST.  
EDRS PRICE MF-\$0.25 HC\$1.32 33P.

DESCRIPTORS- \*CULTURAL PROGRAMS, \*GUIDANCE SERVICES, \*PLANETARIUMS, \*READING CLINICS, \*RECREATIONAL PROGRAMS, \*RESOURCE CENTERS, \*SPACE SCIENCES, REMEDIAL READING CLINICS.

ES 000 317

NEWTOWN OUTDOOR EDUCATION PROJECT. N.J., NEWTOWN, BOARD OF EDUCATION  
EDRS PRICE MF-\$0.50 HC-\$0.44 61P.

DESCRIPTORS- \*CAMPING, \*CONSERVATION, \*FIELD TRIPS, \*GRADES 1-6, \*GRADES 7-12, \*INSERVICE

TEACHER EDUCATION, \*OUTDOOR PROGRAMS, \*RECREATIONAL PROGRAMS, \*YEAR ROUND PROGRAMS, ADULT EDUCATION, CULTURAL EXCHANGE, DEMONSTRATION CENTERS, NATURAL RESOURCES, PRESCHOOL CHILDREN, SCIENCES, VOCATIONAL EDUCATION.

ES 000 326

STUDY TOWARD EXEMPLARY PROGRAM. N.H. SALEM, CITY SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$1.12 25P.

DESCRIPTORS- \*AUDIOVISUAL AIDS, \*CURRICULUM DEVELOPMENT, \*GRADES 1-6, \*GRADES 7-12, \*MATHEMATICS, \*SOCIAL STUDIES, ADULT EDUCATION, CHILDREN, COMMUNITY STUDY, WORKSHOPS.

ES 000 329

CULTURAL DEVELOPMENT FOR PRESCHOOL CHILDREN, STUDENTS, AND ADULTS BY INSTRUCTIONAL TELEVISION. MISS., TUPELO, MUNICIPAL SEPARATE SCHOOL DIST.  
EDRS PRICE MF-\$0.25 HC-\$1.08 27P.

DESCRIPTORS, \*ELEMENTARY SCIENCE, \*FINE ARTS, \*GRADES 1-6, \*INSTRUCTIONAL TELEVISION, \*LITERATURE PROGRAMS, \*PRESCHOOL CHILDREN, ADULT EDUCATION, CULTURAL ENRICHMENT, LECTURE.

ES 000 340

CONSERVATION, RECREATION AND OUTDOOR SCIENCE SCHOOL (PROJECT CROSS). CALIF., SAN ANDREAS, COUNTY SUPT. OF SCHOOLS  
EDRS PRICE MF-\$0.25 HC-\$1.24 31P.

DESCRIPTORS- \*GRADE 11, \*GRADE 12, \*GRADES 7-12, \*OUTDOOR PROGRAMS, \*WORK EXPERIENCE PROGRAMS, COLLEGE PREPARATION, CONSERVATION, DROPOUTS, NATURAL RESOURCES, NATURAL SCIENCES, RECREATION, VOCATIONAL EDUCATION.

ES 000 342

ALAMEDA COUNTY SUPPLEMENTAL SERVICES CENTER FOR ASSURANCE OF CREATIVITY CALIF., HAYWARD, ALAMEDA COUNTY SUPT. OF SCHOOLS  
EDRS PRICE MF-\$0.25 HC-\$1.40 35P.

DESCRIPTORS- \*ECOLOGY, \*ENGLISH, \*FINE ARTS, \*GRADES 1-6, \*GRADES 7-12, \*INSERVICE TEACHER EDUCATION, \*KINDERGARTEN, \*LABORATORIES, CORE CURRICULUM, INFORMATION DISSEMINATION, SPECIALISTS.

ES 000 355

OCEANOGRAPHIC EDUCATION CENTER. MASS., FALMOUTH, TOWN SCHOOL COMMITTEE  
EDRS PRICE MF-\$0.25 HC-\$0.76 19P.

DESCRIPTORS, \*INSERVICE TEACHER EDUCATION, \*OCEANOLOGY, \*SCIENCE CENTERS, CONSERVATION, CURRICULUM DEVELOPMENT, MATERIAL DEVELOPMENT, NATURAL SCIENCES, TEACHER WORKSHOPS, TUTORING.

ES 000 357

SUMMER TEACHER-STUDENT SCIENCE PROJECT. MASS., BOLTON, NASHOBA REGIONAL SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$0.84 21P.

DESCRIPTORS- \*BIOLOGY, \*GRADES 7-12, \*INSERVICE TEACHER EDUCATION, \*SUMMER PROGRAMS, TALENTED STUDENTS, OUTDOOR PROGRAMS, \*TALENTED STUDENTS, OUTDOOR PROGRAMS, RESEARCH.

ES 000 358

INDOOR-OUTDOOR SCIENCE CENTER. MD., OAKLAND, GARRETT COUNTY BOARD OF EDUCATION  
EDRS PRICE MF-\$0.25 HC-\$0.92 23P.

DESCRIPTORS- \*GRADES 7-12, \*GRADES 1-6, \*NATURAL SCIENCES, \*OUTDOOR PROGRAMS, \*SCIENCE CENTERS, ASTRONOMY, CAMPING, LABORATORIES, LIBRARIES, PLANETARIUMS, STUDY CENTERS.

ES 000 365

LOUISIANA ARTS AND SCIENCE CENTER. LA., BATON ROUGE, EAST PARISH SCHOOL BOARD  
EDRS PRICE MF-\$0.25 HC-\$0.36 9P.

DESCRIPTORS- \*ARTS CENTERS, EXHIBITS, \*GRADES 1-6, \*GRADES 7-12, \*SCIENCE CENTERS, BUILDING DESIGN.

ES 000 366

LOUISIANA ARTS AND SCIENCE CENTER. LA., BATON ROUGE, EAST PARISH SCHOOL BOARD  
EDRS PRICE MF-\$0.25 HC-\$1.60 40P.

DESCRIPTORS- \*SCIENCE CENTERS, ADVANCED PROGRAMS, ARCHAEOLOGY, EDUCATIONAL TELEVISION, EXHIBITS, LIBRARIES, MOBILE UNITS, UNITS, MUSEUMS, PLANETARIUMS.

ES 000 368

OWENSBORO AREA NATURAL SCIENCE MOBILE PROJECTS. KY., OWENSBORO, PUBLIC SCHOOLS  
EDRS PRICE MF-\$0.25 HC-\$1.04 26P.

DESCRIPTORS- \*EXHIBITS, \*GRADES 1-6, \*GRADES 7-12, \*MOBILE UNITS, \*MUSEUMS, \*NATURAL SCIENCES, EDUCATIONALLY DISADVANTAGED, LECTURE.

ES 000 375

PILOT MODEL, MOBILE ELECTRONICS LABORATORY. IDAHO, RUPERT, MINIDOKA COUNTY JOINT SCHOOL DISTRICT 331  
EDRS PRICE MF-\$0.25 HC-\$1.04 26P.

DESCRIPTORS- \*ELECTRONICS, \*GRADES 1-6, \*GRADES 7-12, \*MOBILE LABORATORIES.

ES 000 376

PROGRAM OF OUTDOOR EDUCATION. IDAHO, AMERICAN FALLS, SCHOOL DISTRICT 361  
EDRS PRICE MF-\$0.25 HC-\$0.68 17P.

DESCRIPTORS- \*COUNSELING, \*GRADE 7, \*GRADES 7-12, \*OUTDOOR PROGRAMS, \*RECREATIONAL PROGRAMS, \*SUMMER PROGRAMS, JUNIOR HIGH SCHOOLS, PILOT PROJECTS, TRANSFER STUDENTS.

ES 000 380

FERNBANK SCIENCE CENTER. GA., DECATUR, DEKALB COUNTY BD. OF EDUCATION  
EDRS PRICE MF-\$0.25 HC-\$1.28 32P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*MUSEUMS, \*OUTDOOR PROGRAMS, PLANETARIUMS, \*SCIENCE CENTERS, ADVANCED PROGRAMS, NATURAL SCIENCES, PHYSICAL SCIENCES.

ES 000 381

PLANETERIUM, OBSERVATORY, AND EXHIBITION CENTER FOR BREVARD COUNTY. FLA., TITUSVILLE, BREVARD COUNTY BD. OF PUB. INST.  
EDRS PRICE MF-\$0.25 HC-\$0.88 22P.

DESCRIPTORS- \*ASTRONOMY, \*GRADES 1-6, \*GRADES 7-12, \*PLANETARIUMS, \*SCIENCE CENTERS, \*SPACE SCIENCES, COMMUNITY COOPERATION, EXHIBITS.

ES 000 388

TALCOTT RIDGE SCIENCE CENTER FOR STUDENT INVOLVEMENT. CONN., AVON, BOARD OF EDUCATION  
EDRS PRICE MF-\$0.25 HC-\$0.88 22P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*SCIENCE CENTERS, ASTRONOMY, CONCEPT TEACHING, GEOLOGY, INSERVICE PROGRAMS, INTERDISCIPLINARY APPROACH, PHYSICAL SCIENCES, PLANETARIUMS, SPACE SCIENCES, TALENTED STUDENTS.

ES 000 391

DEVELOPING CREATIVE AND CRITICAL THINKING THROUGH AN ELEMENTARY SCHOOL SCIENCE PROGRAM. COLO., BOULDER, BOULDER VALLEY SCHOOL DIST. RE. 2  
EDRS PRICE MF-\$0.25 HC-\$1.28 32P.

DESCRIPTORS- \*CREATIVE THINKING, \*CRITICAL THINKING, \*ELEMENTARY SCIENCE, \*GRADES 1-6.

ES 000 393  
NORTHERN SAN JOAQUIN VALLEY COUNTIES SUPPLEMENTARY EDUCATION CENTER. CALIF., STOCKTON, SAN JOAQUIN COUNTY SUPT. OF SCH.  
EDRS PRICE MF-\$0.25 HC-\$1.56 39P.

DESCRIPTORS- \*CULTURAL ENRICHMENT, \*GRADES 1-6, \*GRADES 7-12, \*SCIENCE PROGRAMS, \*SOCIAL SCIENCES, CONSERVATION, EDUCATIONAL TELEVISION, FINE ARTS, INSERVICE PROGRAMS, LABORATORIES.

ES 000 394  
PLANNING GRANT FOR AN ORANGE COUNTY SUPPLEMENTARY EDUCATIONAL CENTER. CALIF., SANTA ANA, ORANGE COUNTY SUPT. OF SCHOOLS  
EDRS PRICE MF-\$0.25 HC-\$1.32 33P.

DESCRIPTORS- \*CULTURAL CENTERS, \*GRADES 1-6, \*GRADES 7-12, \*SCIENCE CENTERS, ADULT EDUCATION, CULTURAL ENRICHMENT, CURRICULUM IMPROVEMENT, DROPOUTS, GIFTED, LOW INCOME, NON-ENGLISH SPEAKING, POPULATION GROWTH, PRESCHOOL PROGRAMS.

ES 000 399  
CENTRAL CALIFORNIA LABORATORY FOR LEARNING. CALIF., FRESNO, COUNTY SCHOOLS  
EDRS PRICE MF-\$0.25 HC\$2.32 58P.

DESCRIPTORS- \*GRADE 6, \*GRADES 1-6, \*GRADES 7-12., \*OUTDOOR PROGRAMS, \*SCIENCE PROGRAMS, \*SUMMER PROGRAMS, COMMUNITY RESOURCES, ECOLOGY, FINE ARTS, INSERVICE PROGRAMS, NATURAL RESOURCES, PILOT PROJECTS, SOCIAL SCIENCES.

ES 000 407  
PLANNING STUDY--SIX SCHOOL DISTRICTS. R.I., MIDDLETOWN, THE SCHOOL COMMITTEE  
EDRS PRICE MF-\$0.25 HC-\$0.80 20P.

DESCRIPTORS-\*FINE ARTS, \*GRADES 1-6, \*GRADES 7-12, \*HUMANITIES, \*KINDERGARTEN, \*SCIENCES, ENRICHMENT PROGRAMS.

ES 000 419  
REGIONAL ELEMENTARY SCHOOL TEACHER UPGRADING PROJECT. CONN., WATERTOWN BOARD OF EDUCATION.  
EDRS PRICE MF-\$0.25 HC-\$1.24 31P.

DESCRIPTORS- \*ELEMENTARY SCIENCE, \*GRADES 1-6, \*INSERVICE TEACHER EDUCATION, \*MODERN MATHEMATICS, \*SUMMER SCHOOLS, DEMONSTRATION PROGRAMS, SPECIALISTS, TEACHER IMPROVEMENT.

ES 000 431  
MARINE SCIENCE STATION. FLA., INVERNESS, CITRUS COUNTY BD. OF PUB. INST.  
EDRS PRICE MF-\$0.25 HC-\$0.52 13P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*OCEANOLOGY, \*SCIENCE CENTERS, ADVANCED PROGRAMS, EDUCATIONAL TELEVISION, FIELD TRIPS, NATURAL SCIENCES, RADIO.

ES 000 436  
CONSERVATION CENTER OF CREATIVE THINKING. WYO., LANDER, SCHOOL DISTRICT 1  
EDRS PRICE MF-\$0.25 HC-\$0.80 20P.

DESCRIPTORS- \*CONSERVATION, \*GEOLOGY, \*GRADES 1-6, \*GRADES 7-12, NATURAL SCIENCES, SCIENCE CENTERS.

ES 000 437  
WESTERN WYOMING HERITAGE. WYO., GREEN RIVER SCHOOL DISTRICT 2  
EDRS PRICE MF-\$0.25 HC-\$0.84 21P.

DESCRIPTORS- \*CONSERVATION, \*CULTURAL BACKGROUND, \*EXCHANGE PROGRAMS, \*INSTRUCTIONAL MATERIALS CENTERS, \*NATURAL RESOURCES, MUSEUMS, NATURAL SCIENCES, OUTDOOR PROGRAMS.

ES 000 453  
CREATIVE APPLICATION OF TECHNOLOGY TO EDUCATION (CATE). TEX., CORPUS CHRISTI, INDEP. SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$1.64 41P.

DESCRIPTORS- \*CURRICULUM PLANNING, \*INSERVICE PROGRAMS, \*SCIENCE PROGRAMS, ELEMENTARY SCIENCE, INSTRUCTIONAL MATERIALS CENTERS, MUSEUMS, OCEANOLOGY PILOT PROJECTS, SPACE SCIENCES, STUDENT TEACHERS.

ES 000 454  
DEVELOPMENT OF A COMPREHENSIVE CURRICULUM FOR ASTRONOMY, SPACE SCIENCE AND RELATED AREAS. PA., WEST CHESTER, JOINT HIGH SCHOOL BOARD  
EDRS PRICE MF-\$0.25 HC-\$1.08 27P.

DESCRIPTORS- \*ASTRONOMY, \*GRADES 1-6, \*GRADES 7-12, \*SEQUENTIAL PROGRAMS, \*SPACE SCIENCES, ADVANCED PLACEMENT, CULTURAL BACKGROUND, CURRICULUM PLANNING, INSERVICE TEACHER EDUCATION, PLANETARIUMS, VOCATIONAL EDUCATION.

ES 000 462  
WEST BABYLON EDUCATIONAL CENTER. N.Y., WEST BABYLON, CITY SCHOOLS  
EDRS PRICE MF-\$0.25 HC-\$0.60 15P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*HORTICULTURE, \*OCEANOLOGY, \*PLANETARIUMS, GIFTED, SCIENCE CENTERS, SEQUENTIAL PROGRAMS, SPACE SCIENCES.

ES 000 464

DEVELOPMENT OF A UNIQUE EDUCATIONAL AND CULTURAL MARINE SCIENCE CENTER. N.C., BEAUFORT, CARTERET COUNTY BOARD OF ED.

EDRS PRICE MF-\$0.25 HC-\$0.76 19P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*OCEANOLOGY \*SCIENCE CENTERS, ADVANCED PROGRAMS, DEMONSTRATIONS, EXHIBITS, LECTURE, RADIO, TEACHER WORKSHOPS, TELEVISION.

ES 000 465

JUNIOR EXPLORERS-LEARNING CENTERS (SUMMER CREATIVE LEARNING CENTERS FOR ELEMENTARY SCHOOL PUPILS). OHIO, AKRON, BOARD OF EDUCATION

EDRS PRICE MF-\$0.25 HC-\$1.64 41P.

DESCRIPTORS- \*CREATIVITY, \*GRADE 4, \*GRADE 5, \*GRADE 6, \*GRADES 1-6, \*NATURAL SCIENCES, \*OUTDOOR PROGRAMS, \*SUMMER PROGRAMS, ART, COMMUNICATION SKILLS, CONSERVATION, INDEPENDENT STUDY, INSERVICE TEACHER EDUCATION, MUSIC, PHYSICAL EDUCATION, STUDENT GROUPING, TEAM TEACHING.

ES 000 470

MOHICAN SCHOOL IN THE OUT-OF-DOORS. OHIO, ONTARIO, SPRINGFIELD LOCAL BOARD OF ED.

EDRS PRICE MF-\$0.25 HC-\$1.00 23P.

DESCRIPTORS- \*CAMPING, \*DEMOCRATIC VALUES, \*GRADE 6, \*GRADES 1-6, \*NATURAL SCIENCES, \*OUTDOOR PROGRAMS, ASTRONOMY, CONSERVATION, MUSEUMS, TEAM TEACHING.

ES 000 474

TEACHER-STUDENT WORKSHOP IN NUCLEAR SCIENCE. PA., BETHLEHEM, AREA SCHOOL DISTRICT

EDRS PRICE MF-\$0.25 HC-\$1.40 35P.

DESCRIPTORS- \*ATOMIC THEORY, \*GRADE 11, \*GRADES 7-12, \*WEEKEND PROGRAMS, \*WORKSHOPS, BIOLOGY, CHEMISTRY, FIELD TRIPS, INDUSTRIAL EDUCATION, INSERVICE PROGRAMS, LABORATORY EXPERIMENTS, PHYSICS.

ES 000 475

REGIONAL SUPPLEMENTARY EDUCATIONAL CENTER. PA., CALIFORNIA, JOINT BOARD OF TRI-COUNTY SCH. DIR.

EDRS PRICE NF-\$0.25 HC-\$1.48 37P.

DESCRIPTORS- \*AUDIOVISUAL AIDS, \*CURRICULUM DEVELOPMENT, \*GRADES 1-6, \*GRADES 7-12, INSERVICE PROGRAMS, \*SCIENCES.

ES 000 482

STUDY TO DETERMINE THE EDUCATIONAL POTENTIAL OF THE TYLER ARBORETUM AND THE JEFFORDS STATE PARK. PA., LIMA, ROSE TREE UNION SCHOOL DISTRICT

EDRS PRICE MF-\$0.25 HC-\$1.52 38P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*KINDERGARTEN, \*NATURAL SCIENCES, \*OUTDOOR PROGRAMS, \*PARKS, CONSERVATION, CURRICULUM PLANNING, FIELD TRIPS, HORTICULTURE, INSERVICE PROGRAMS, MATERIAL DEVELOPMENT.

ES 000 489

REGIONAL CENTER FOR STUDY AND IMPROVEMENT OF ELEMENTARY SCIENCE EDUCATION. N.Y., SCOTTSVILLE, WHEATLAND-CHILI CENTRAL SCH.

EDRS PRICE MF-\$0.25 HC\$1.24 31P.

DESCRIPTORS- \*CURRICULUM PLANNING, \*ELEMENTARY SCIENCE, \*GRADES 1-6, \*RESOURCE CENTERS, DEMONSTRATION PROGRAMS, INSERVICE TEACHER EDUCATION, PRESERVICE EDUCATION.

ES 000 494

INSERVICE TEACHER EDUCATION COURSES IN ART AND SCIENCE FOR NEW HAMPSHIRE ELEMENTARY CLASSROOM TEACHERS. N.H., HAMPTON, SUPERVISORY UNION 21

EDRS PRICE MF-\$0.25 HC-\$1.72 43P.

DESCRIPTORS- \*ART, \*ELEMENTARY SCHOOL TEACHERS, \*INSERVICE TEACHER EDUCATION, \*INSTRUCTIONAL TELEVISION, \*SCIENCES, TEACHER IMPROVEMENT.

ES 000 501

OUTDOOR EDUCATION. N.J., LINDEN, BOARD OF EDUCATION

EDRS PRICE MF-\$0.25 HC-\$2.08 52P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*OUTDOOR PROGRAMS, \*YEAR ROUND PROGRAMS, BUILDING IMPROVEMENT, CAMPING, CURRICULUM ENRICHMENT, INSERVICE PROGRAMS, INTERDISCIPLINARY APPROACH, SCIENCES.

ES 000 509

ONONDAGA COUNTY EDUCATIONAL AND CULTURAL CENTER. N.Y., CAMILLUS, CENTRAL SCHOOL DISTRICT 1

EDRS PRICE MF-\$0.25 HC-\$1.32 33P.

DESCRIPTORS- \*ADVANCED PROGRAMS, \*LIBRARY SERVICES \*MUSEUMS, \*OUTDOOR PROGRAMS, \*PSYCHOLOGICAL SERVICES, \*REMEDIATION INSTRUCTION, \*SUMMER PROGRAMS, ADULT EDUCATION, ARITHMETIC, EDUCATIONAL TELEVISION, INSERVICE TEACHER EDUCATION, INSTRUCTIONAL MATERIALS, LANGUAGE DEVELOPMENT, RADIO, READING, VOLUNTEERS.

ES 000 516  
NORTHWEST OKLAHOMA EDUCATIONAL MATERIALS  
CENTER, OKLAHOMA, ENID, BD. OF ED. DISTRICT 57  
EDRS PRICE MF-\$0.25 HC-\$0.76 19P.

DESCRIPTORS- \*AUDIOVISUAL AIDS, \*FINE ARTS,  
\*INSTRUCTIONAL MATERIALS CENTERS, \*INTER-  
CULTURAL PROGRAMS, \*SCIENCE CENTERS,  
CULTURAL EXCHANGE, MEDIA SPECIALISTS,  
MINORITY GROUPS, PLANETARIUMS.

ES 000 519  
MULTI-MEDIA INSTRUCTIONAL CENTER. ARK., EL  
DORADO, SCHOOL DISTRICT 15  
EDRS PRICE MF-\$0.25 HC-\$1.28 32P.

DESCRIPTORS- \*AUDIOVISUAL AIDS, \*CLOSED  
CIRCUIT TELEVISION, \*GRADES 1-6, \*GRADES  
7-12, \*INSTRUCTIONAL MATERIALS CENTER, \*OUT-  
DOOR PROGRAMS, INSERVICE TEACHER EDUCATION,  
LABORATORIES.

ES 000 527  
LOUISIANA ARTS AND SCIENCE CENTER. LA., BATON  
ROUGE, EAST PARISH SCHOOL BOARD  
EDRS PRICE MF-\$0.25 HC-\$1.72 43P.

DESCRIPTORS- \*EXHIBITS, \*GRADES 1-6,  
\*GRADES 7-12, \*PLANETARIUMS, INSERVICE PRO-  
GRAMS, SCIENCE CENTERS, VOLUNTEERS.

ES 000 528  
REGIONAL CULTURAL RESOURCES CENTER. ARIZ.,  
TUSCON, PIMA COUNTY SCHOOL DISTRICT 1  
EDRS PRICE MF-\$0.25 HC-\$0.76 19P.

DESCRIPTORS- \*ARTS, \*RESOURCE CENTERS,  
\*SCIENCES, \*SENSORY EXPERIENCE, MATH-  
EMATICS.

ES 000 532  
SURVEY OF EDUCATIONAL AND CULTURAL RE-  
SOURCES OF BEDFORD, BLAIR, CAMBRIA, SOMER-  
SET COUNTIES WITH SPECIAL EMPHASIS ON NEEDS OF  
EXCEPTIONAL CHILDREN, NEEDS OF INSTRU-  
TIONAL MATERIALS, NEEDS OF CULTURALLY DE-  
PRIVED. PA., DUNCANSVILLE, ELEMENTARY SCHOOL  
EDRS PRICE MF-\$0.25 HC-\$0.92 23P.

DESCRIPTORS- \*COUNSELING, \*CULTURAL ACTIVI-  
TIES, \*GRADES 1-6, \*GRADES 7-12, \*INSTRUCTIONAL  
MATERIALS, \*OUTDOOR PROGRAMS, \*SPECIAL ED-  
UCATION, \*VOCATIONAL EDUCATION, CAMPING,  
EXCEPTIONAL CHILDREN, MOBILE UNITS, PHYSICAL  
EDUCATION, RECREATIONAL PROGRAMS, RURAL  
SCHOOLS.

ES 000 551  
PILOT NATURE CENTER PROGRAM. DEL., GREEN-  
WOOD, SCHOOL NO. 91  
EDRS PRICE MF-\$0.25 HC-\$1.20 30P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12,  
\*NATURAL SCIENCES, \*OUTDOOR PROGRAMS, CUR-  
RICULUM DEVELOPMENT, SCIENCE ACTIVITIES, SCI-  
ENCE EXPERIMENTS.

ES 000 553  
CENTER OF SCIENCE AND INDUSTRY. OHIO, CIN-  
CINNATI, BD. OF ED., CITY SCHOOL DIST.  
EDRS PRICE MF-\$0.50 HC-\$3.96 99P.

DESCRIPTORS- \*EXHIBITS, \*GRADES 1-6, \*GRADES  
7-12, \*INSERVICE TEACHER EDUCATION, \*KINDER-  
GARTEN, \*MOBILE LABORATORIES, \*SCIENCE CEN-  
TERS, \*SCIENCE PROGRAMS, CAREER PLANNING,  
COLLEGE STUDENTS, COMMUNITY RESOURCES,  
DEMONSTRATIONS, (EDUCATIONAL), ENGINEERING,  
ENRICHMENT PROGRAMS, GIFTED, HOBBIES,  
SEMINARS.

ES 000 556  
MID-SOUTH REGIONAL SCIENCE CENTER. TENN.,  
MEMPHIS, CITY SCHOOLS  
EDRS PRICE MF-\$0.25 HC-\$1.92 48P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12,  
\*INSERVICE PROGRAMS, \*LIBRARIES, \*PLANE-  
TARIUMS, \*SCIENCE CENTERS, \*SUMMER PRO-  
GRAMS, CLOSED CIRCUIT TELEVISION, COLLEGE  
STUDENTS, DEMONSTRATION PROGRAMS, FIELD  
TRIPS, INSTRUCTIONAL MATERIALS, MOBILE  
UNITS, MUSEUMS, NATURAL SCIENCES, SCIENCE  
LABORATORIES, SPACE SCIENCES.

ES 000 560  
CENTRAL PENNSYLVANIA OUTDOOR EDUCATION  
PROJECT. PA., BELLFONTE, CENTRE COUNTY  
BOARD OF ED.  
EDRS PRICE MF-\$0.50 HC-\$3.24 81P.

DESCRIPTORS- \*GRADES 1-6, \*INSERVICE TEACH-  
ER EDUCATION \*KINDERGARTEN, \*OUTDOOR  
PROGRAMS, ENVIRONMENT, SUMMER WORKSHOPS,

ES 000 564  
CONSERVATION AND ENVIRONMENTAL SCIENCE IN  
SOUTHERN NEW JERSEY. N.J., GLASBORO, BOROUGH  
BOARD OF EDUCATION.  
EDRS PRICE MF-\$0.25 HC-\$1.44 36P.

DESCRIPTORS- \*CONSERVATION, \*GRADES 1-6,  
\*GRADES 7-12, \*KINDERGARTEN, \*NATURAL RE-  
SOURCES, \*OUTDOOR PROGRAMS, YEAR ROUND  
PROGRAMS, DROPOUTS, ENVIRONMENTAL IN-  
FLUENCES, HANDICAPPED, INSERVICE PROGRAMS,  
STUDENT TEACHERS.

ES 000 572  
TRI-COUNTY EDUCATIONAL RESEARCH FOUNDATION  
CENTER. ILL., PEORIA, COUNTY SUPT. OF SCHOOLS  
EDRS PRICE MF-\$0.25 HC-\$1.04 26P.

DESCRIPTORS- \*AUDIOVISUAL AIDS, \*MUSIC ACTIVITIES, \*PLANETARIUMS, \*REMEDIAL PROGRAMS, CULTURAL ENRICHMENT, EXHIBITS, MUSEUMS, SPACE SCIENCES.

ES 000 577  
INTEGRATING OUTDOOR EDUCATION WITH A FLEXIBLE ACADEMIC-VOCATIONAL CURRICULUM. MICH., GRAND HAVEN, BOARD OF EDUCATION  
EDRS PRICE MF-\$0.25 HC-\$1.48 37P.

DESCRIPTORS- \*DROPOUTS, \*GRADES 1-6, \*GRADES 7-12, \*INTEGRATED CURRICULUM, \*KINDERGARTEN, \*OUTDOOR PROGRAMS, \*TERMINAL STUDENTS, \*VOCATIONAL EDUCATION, FLEXIBLE SCHEDULING, MATHEMATICS, POTENTIAL DROPOUTS, SCIENCES, WORK EXPERIENCE PROGRAMS.

ES 000 584  
INTERDISCIPLINARY OUTDOOR EDUCATION PROGRAM. WASH., SEATTLE, SHORELINE SCHOOL DISTRICT 412  
EDRS PRICE MF-\$0.25 HC-\$2.04 51P.

DESCRIPTORS- \*CONSERVATION, \*GRADES 1-6, \*GRADES 7-12, \*INTERDISCIPLINARY APPROACH, \*OUTDOOR PROGRAMS, ART, BIOLOGY, CREATIVE WRITING, ECOLOGY, ENGLISH, FIELD TRIPS, NATURAL RESOURCES, SCIENCES.

ES 000 586  
COMPUTER USES IN EDUCATION, CALIF., SANTA BARBARA, ELEM-HIGH SCHOOL DIST.  
EDRS PRICE MF-\$0.25 HC-\$1.32 33P.

DESCRIPTORS- \*COMPUTER ORIENTED PROGRAMS, \*CONTROL GROUPS, \*EXPERIMENTAL PROGRAMS, \*GRADES 7-12, \*MATHEMATICS, \*PHYSICS.

ES 000 591  
NATURAL HISTORY MUSEUM AND RESEARCH CENTER. CALIF., SAN LORENZO, UNIFIED SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$1.08 27P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*KINDERGARTEN, \*MUSEUMS, \*NATURAL RESOURCES, \*STUDENT RESEARCH, ECOLOGY, EXHIBITS, FIELD TRIPS, GEOLOGY, INSERVICE PROGRAMS.

ES 000 592  
EXPLORING NATURE'S CLASSROOM. MICH., COLDWATER CITY SCHOOL DISTRICT  
EDRS PRICE MF-\$0.50 HC-\$3.72 93P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*KINDERGARTEN, \*NATURAL SCIENCES, \*OUTDOOR PROGRAMS, \*SCIENCE CENTERS, \*YEAR ROUND PROGRAMS, AGRICULTURE, ASTRONOMY, CONSERVATION, GEOLOGY, INSERVICE PROGRAMS.

ES 000 595  
MATHEMATICS AND SCIENCE CENTER. VA., RICHMOND, CITY SCHOOL DISTRICT  
EDRS PRICE MF-\$0.50 HC-\$3.72 93P.

DESCRIPTORS- \*COMPUTER PROGRAMS, \*GRADES 1-6, \*GRADES 7-12, \*MATHEMATICS, \*PLANETARIUMS, \*SCIENCE CENTERS, EXPERIMENTS, MUSEUMS, PHYSICAL SCIENCES, PROGRAMING, TALENTED STUDENTS.

ES 000 604  
CAMPING SCHOOL. N.J., KEARNY, BOARD OF EDUCATION  
EDRS PRICE MF-\$0.25 HC-\$1.56 39P.

DESCRIPTORS- \*CAMPING, \*GRADE 6, \*OUTDOOR PROGRAMS, \*SCIENCES, \*STUDENT TEACHER RELATIONSHIP, ART, CONSERVATION, DRAMATICS, MUSIC.

ES 000 611  
PLANNING FOR OUTDOOR EDUCATION. KANS., TOPEKA, UNIFIED SCHOOL DISTRICT 345  
EDRS PRICE MF-\$0.25 HC-\$1.08 27P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*NATURAL SCIENCES, \*OUTDOOR PROGRAMS, \*YEAR ROUND PROGRAMS, FINE ARTS, HISTORY, RE-CREATION.

ES 000 620  
KERSHAW AREA SUPPLEMENTARY EDUCATIONAL SERVICES CENTER. S.C., CAMDEN, KERSHAW COUNTY SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$1.80 45P.

DESCRIPTORS- \*COMMUNICATIONS, \*CULTURAL ACTIVITIES, \*PSYCHOLOGICAL SERVICES, \*SCIENCE PROGRAMS, ADULT EDUCATION, AUDIOVISUAL AIDS, CULTURALLY DISADVANTAGED, GIFTED, HANDICAPPED, PRESCHOOL PROGRAMS, REMEDIAL INSTRUCTION, RETARDATION, RURAL AREAS, SCIENCE CENTERS, TEACHING TECHNIQUES, VOCATIONAL EDUCATION.

ES 000 624  
WISCONSIN REGIONAL SPACE CENTER. WIS., MILWAUKEE, BOARD OF SCHOOL DIRECTORS  
EDRS PRICE MF-\$0.25 HC-\$1.24 31P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*INTERDISCIPLINARY APPROACH, \*SCIENCE CENTERS, \*SIMULATION, \*SPACE SCIENCES, HUMANITIES, INSERVICE PROGRAMS, PLANETARIUMS, SCIENCES.

ES 000 637  
SOUTHWEST MISSOURI EDUCATIONAL IMPROVEMENT CENTER MO., WEBB CITY, R-7 SCHOOL

## DISTRICT

EDRS PRICE MF-\$0.25 HC-\$1.36 34P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*LANGUAGE ARTS, \*MATHEMATICS, DEVELOPMENTAL READING, ENGLISH, INITIAL TEACHING ALPHABET, INSERVICE PROGRAMS, MODERN MATHEMATICS, PROGRAMED INSTRUCTION, REMEDIAL READING, SPELLING.

ES 000 654

NORTHWEST LOUISIANA SUPPLEMENTARY EDUCATIONAL CENTER AND SERVICES—CURRICULUM IMPROVEMENT IN SCIENCE FOR EXCEPTIONAL CHILDREN. LA., BENTON, BOSSIER PARISH SCHOOL BOARD

EDRS PRICE MF-\$0.50 HC-\$3.96 99P.

DESCRIPTORS- \*EXCEPTIONAL CHILDREN, \*GRADES 1-6, \*GRADES 7-12, \*INSERVICE TEACHER EDUCATION, \*KINDERGARTEN, \*RESOURCE CENTERS, \*SCIENCE PROGRAMS, GIFTED, HANDICAPPED, INDEPENDENT STUDY, LABORATORIES, NATURAL SCIENCES, PLANETARIUMS, SPACE SCIENCES.

ES 000 655

REGIONAL NATURAL RESOURCE EDUCATION AND DEMONSTRATION CENTER. ILL., SYCAMORE, DEKALB COUNTY SUPT. OF SCHOOLS

EDRS PRICE MF-\$0.25 HC-\$1.40 35P.

DESCRIPTORS- \*CONSERVATION, \*NATURAL RESOURCES, SCIENCE CENTERS, SCIENCES, SOCIAL STUDIES.

ES 000 663

SOUTH BRONX MULTI-PURPOSE SUPPLEMENTARY EDUCATIONAL CENTER. N.Y., BROOKLYN, BD. OF ED., CITY OF NEW YORK.

EDRS PRICE MF-\$0.50 HC-\$2.88 72P.

DESCRIPTORS- \*CULTURAL BACKGROUND, \*FINE ARTS, \*LANGUAGE ARTS, \*MATHEMATICS, \*PARENT PARTICIPATION, ART, CULTURAL ENRICHMENT, MUSIC, NEGRO, PROGRAMED INSTRUCTION, PUERTO RICAN, SPACE SCIENCES, TEACHER AIDES.

ES 000 670

NAPA EXPERIMENTAL FOREST. CALIF., NAPA, NAPA VALLEY UNIFIED SCHOOL DIST.

EDRS PRICE MF-\$0.25 HC-\$2.04 51P.

DESCRIPTORS- \*CURRICULUM DEVELOPMENT, \*DELINQUENCY PREVENTION, \*DROPOUT PREVENTION, \*GRADES 1-6, \*GRADES 7-12, \*SCIENCE PROGRAMS, CONSERVATION, NATURAL SCIENCES, WORK STUDY PROGRAMS.

ES 000 676

MODERN SCIENCE SEMINAR. N.H., HENNIKER, SCHOOL DISTRICT.

EDRS PRICE MF-\$0.25 HC-\$2.20 55P.

DESCRIPTORS- \*GRADES 7-12, \*SCIENCE PROGRAMS, \*SEMINARS, \*STUDENT RESEARCH, \*TALENTED STUDENTS, \*WEEKEND PROGRAMS, BIOLOGY, CHEMISTRY, COLLEGE COOPERATION, ELECTRONICS, MATHEMATICS.

ES 000 678

OUTDOOR SCHOOL IN CONSERVATION. MONT., ALBERTON, JOINT SCHOOL DISTRICT 2.

EDRS PRICE MF-\$0.25 HC-\$1.44 36P.

DESCRIPTORS- \*CONSERVATION, \*GRADE 6, \*GRADE 7, \*OUTDOOR PROGRAMS.

ES 000 681

AVAILABILITY OF SUPPLEMENTAL EDUCATIONAL RESOURCES THROUGH THE USE OF A PLANETARIUM. NEBR., GRAND ISLAND, SCHOOL DISTRICT

EDRS PRICE MF-\$0.25 HC-\$1.52 38P.

DESCRIPTORS- \*AUDIOVISUAL CENTERS, \*GRADES 1-6, \*GRADES 7-12, \*KINDERGARTEN \*PLANETARIUMS, \*SPACE SCIENCES, CURRICULUM PLANNING, INSERVICE TEACHER EDUCATION, VIDEO TAPE RECORDINGS.

ES 000 700

WEST MET. MASS., WELLESLEY, SCHOOL DEPARTMENT

EDRS PRICE MF-\$0.25 HC-\$2.08 52P.

DESCRIPTORS- \*ADVANCED PLACEMENT, \*CULTURAL ACTIVITIES, \*CURRICULUM DEVELOPMENT, \*HANDICAPPED, \*SCIENCE PROGRAMS.

ES 000 705

BIOLOGICAL AND SOIL CONSERVATION LABORATORY. MO., EDINA, KNOX COUNTY R-1 SCHOOL DISTRICT

EDRS PRICE MF-\$0.25 HC-\$1.08 27P.

DESCRIPTORS- \*BIOLOGY, \*CONSERVATION, \*GRADES 1-6, \*GRADES 7-12, \*NATURAL SCIENCES, DEMONSTRATION CENTERS, INSERVICE TEACHER EDUCATION.

ES 000 709

SUPPLEMENTARY CENTER FOR OUTDOOR EDUCATION AND CONSERVATION EDUCATION. N.Y., GREAT NECK, PUBLIC SCHOOLS

EDRS PRICE MF-\$0.25 HC-\$1.76 44P.

DESCRIPTORS- \*CAMPING, \*CONSERVATION, \*CURRICULUM GUIDES, \*GRADES 1-6, \*GRADES 7-12, \*OUTDOOR PROGRAMS, AUDIOVISUAL AIDS, RECREATION, REFERENCE MATERIALS.

ES 000 712

COOPERATIVE WORK-LEARN CONSERVATION AND RESOURCE-USE PROGRAM. WIS., PORTAGE, COOP. EDUCATIONAL AGENCY 12

EDRS PRICE MF-\$0.25 HC-\$1.56 39P.

DESCRIPTORS- \*CONSERVATION, \*GRADES 1-6, \*GRADES 7-12, \*OUTDOOR PROGRAMS, \*SUMMER PROGRAMS, \*WORK STUDY PROGRAMS, NATURAL RESOURCES.

ES 000 715  
PROPOSAL TO ESTABLISH AND MAINTAIN A CONSERVATION AND WILDLIFE STUDY AREA. MONT., MISSOULA, COUNTY H.S. BOARD OF TRUSTEES  
EDRS PRICE MF-\$0.25 HC-\$1.32 33P.

DESCRIPTORS- \*CONSERVATION, \*GRADES 7-12, \*OUTDOOR PROGRAMS, BIOLOGY, INSERVICE TEACHER EDUCATION, NATURAL SCIENCES.

ES 000 717  
REGIONAL OUTDOOR EDUCATION PROGRAM. OREG., PORTLAND, MULTNOMAH COUNTY INT. ED. DIST.  
EDRS PRICE MF-\$0.25 HC-\$0.92 23P.

DESCRIPTORS- \*CONSERVATION, \*GRADE 6, \*NATURAL RESOURCES, \*OUTDOOR PROGRAMS.

ES 000 724  
SUPPLEMENTARY EDUCATIONAL CENTERS AND SERVICES FOR CURRICULUM ENRICHMENT IN NORTHEASTERN VERMONT. VT., ST. JOHNSBURY, SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$2.04 51P.

DESCRIPTORS- \*EDUCATIONAL DEMONSTRATIONS, \*GRADES 1-6, \*GRADES 7-12, \*LECTURE, \*MUSEUMS, \*SCIENCE PROGRAMS, CONSULTANTS, CURRICULUM ENRICHMENT, GIFTED, INSERVICE TEACHER EDUCATION, RURAL YOUTH.

ES 000 739  
COOPERATIVE PROJECT TO PROVIDE SUPPLEMENTAL SERVICES TO A GROUP OF ELEMENTARY AND SECONDARY SCHOOLS OF NEW MEXICO. N. MEX., BAYARD, COBRE PUBLIC SCHOOL DISTRICT.  
EDRS PRICE MF-\$0.25 HC-\$1.68 42P.

DESCRIPTORS- \*BIOLOGY, \*CONSULTATION PROGRAMS, \*GRADES 1-6, \*GRADES 7-12, \*INSTRUCTIONAL MATERIALS, \*MATERIAL DEVELOPMENT, \*MOBILE UNITS, \*REMEDIATION READING, EXHIBITS, GUIDANCE, INSERVICE PROGRAMS.

ES 000 747  
DEEP RIVER OUTDOOR EDUCATION CENTER. IND., GARY, COMMUNITY SCHOOL CORPORATION.  
EDRS PRICE MF-\$0.25 HC-\$1.16 29P.

DESCRIPTORS- \*CAMPING, \*ENRICHMENT PROGRAMS, \*OUTDOOR PROGRAMS.

ES 000 749  
AREA PLANNING FOR OUTDOOR EDUCATION. MINN., GRANITE FALLS, INDEP. SCHOOL DIST. 894  
EDRS PRICE MF-\$0.25 HC-\$0.60 19P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*OUTDOOR PROGRAMS, INSERVICE TEACHER EDUCATION, MENTALLY HANDICAPPED.

ES 000 752  
ASTRONOMY AND RELATED SPACE SCIENCES LABORATORY. W. VA., CHARLESTON, KANAWHA COUNTY BD. OF ED.  
EDRS PRICE MF-\$0.25 HC-\$1.24 31P.

DESCRIPTORS- \*ASTRONOMY, \*SPACE SCIENCES, ABLE STUDENTS, HANDICAPPED CHILDREN, INSERVICE PROGRAMS, PLANETARIUMS, SCIENCE PROGRAMS.

ES 000 759  
INDOOR-OUTDOOR EDUCATIONAL-RECREATIONAL PLANNING PROGRAM. OHIO, MENTOR, EXEMPTED VILLAGE SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$0.84 21P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*OUTDOOR PROGRAMS, \*RECREATIONAL PROGRAMS, COMMUNITY SUPPORT, HANDICAPPED CHILDREN.

ES 000 768  
MARINE PILOT PROGRAM. CALIF., SANTA ANA, ORANGE COUNTY SUPT. OF SCHOOLS  
EDRS PRICE MF-\$0.25 HC-\$1.40 35P.

DESCRIPTORS- \*BIOLOGY, \*GRADES 7-12, \*OCEANOLOGY, AUDIOVISUAL AIDS, ECOLOGY, GEOLOGY, MOBILE LABORATORIES, NATURAL RESOURCES.

ES 000 770  
COMPUTER-ASSISTED INSTRUCTION LABORATORY IN MATHEMATICS AND SCIENCE. MO., KANSAS CITY, BOARD OF EDUCATION  
EDRS PRICE MF-\$0.25 HC-\$1.00 25P.

DESCRIPTORS- \*COMPUTER ASSISTED INSTRUCTION, \*GRADE 7, \*GRADE 8, \*MATHEMATICS, GROUP INSTRUCTION, INDIVIDUAL INSTRUCTION, SCIENCES, SELF PACING MACHINES, SIMULATION.

ES 000 774  
ACCELERATING DIFFUSION OF INNOVATIVE SCIENCE PROGRAMS. CALIF., RIVERSIDE, OFFICE OF COUNTY SUPT. OF SCHOOLS  
EDRS PRICE MF-\$0.25 HC-\$2.28 57P.

DESCRIPTORS- \*CURRICULUM DEVELOPMENT, \*DEMONSTRATION PROJECTS, \*GRADES 1-6, \*GRADES 7-12, \*SCIENCE EDUCATION, INSERVICE TEACHER EDUCATION, TEACHER ATTITUDES.

ES 000 778  
SUPERIOR CALIFORNIA EDUCATIONAL RESOURCES AGENCY. CALIF., SACRAMENTO, SACRAMENTO COUNTY DEPT. OF ED.  
EDRS PRICE MF-\$0.25 HC-\$1.28 32P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*INSERVICE PROGRAMS, \*INSTRUCTIONAL MATERIALS CENTERS, \*SCIENCE CENTERS, AUDIO-VISUAL AIDS, CONSULTANTS, MATERIALS PRODUCTION, MOBILE LABORATORIES, MUSEUMS.

ES 000 785

SCIENCE CENTER (PINELLAS COUNTY, FLORIDA). FLA., CLEARWATER, PINELLAS COUNTY BD. OF PUB. INST.

EDRS PRICE MF-\$0.50 HC-\$3.68 92P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, INDIVIDUALIZED PROGRAMS, \*SCIENCE PROGRAMS, \*STUDENT RESEARCH, \*TALENTED STUDENTS, \*YEAR ROUND PROGRAMS, SCIENCE CENTERS, VOLUNTEERS, WORKSHOPS.

ES 000 797

YOUTH MUSEUM SERVICES FOR THE IMPROVEMENT OF UNDERSTANDING OF SCIENTIFIC CHANGES IN THE MODERN WORLD.

EDRS PRICE MF-\$0.25 HC-\$2.08 52P.

DESCRIPTORS \*GRADES 1-6, \*GRADES 7-12, \*MUSEUMS, \*SCIENCE PROGRAMS, ASTRONOMY, EXHIBITS, FIELD TRIPS, INDUSTRY, NATURAL SCIENCES, OCEANOLOGY, SCIENTIFIC CONCEPTS.

ES 000 799

PLANNING FOR THE DEVELOPMENT AND OPERATION OF A FARM-OUTDOOR EDUCATION RESOURCE CENTER IN COOPERATION WITH THE FOREST PRESERVE DISTRICT, COOK COUNTY, ILLINOIS, TO PROVIDE STUDENTS FROM THE PUBLIC AND NON-PUBLIC SCHOOLS WITH DIRECT LEARNING EXPERIENCES. ILL., PALATINE, COMMUNITY CONSOLIDATED SCH. DIST. 15

EDRS PRICE MF-\$0.25 HC-\$0.64 16P.

DESCRIPTORS- \*AGRICULTURE, \*CULTURAL RESOURCES, \*OUTDOOR PROGRAMS, ECOLOGY, ECONOMICS, FOOD, HUMANITIES, MATHEMATICS, NATURAL SCIENCES, SOIL CONSERVATION.

ES 000 802

BOOTSTRAP. ILL., NILES, EAST MAINE SCHOOL DISTRICT 63

EDRS PRICE MF-\$0.25 HC-\$0.96 24P.

DESCRIPTORS- \*CURRICULUM DEVELOPMENT, \*GRADES 1-6, \*GRADES 7-12, \*INSERVICE PROGRAMS, \*MATHEMATICS, \*READING, \*SCIENCES, \*SOCIAL STUDIES, GROUPING PROCEDURES, INDIVIDUAL INSTRUCTION, PROGRAMED INSTRUCTION, SEQUENTIAL PROGRAMS, TEAM TEACHING.

ES 000 815

KINGSBURY OBSERVATORY AND ASTRONOMICAL EDUCATIONAL CENTER. CALIF., KINGSBURG., JOINT UNION HIGH SCHOOL DIST.

EDRS PRICE MF-\$0.25 HC-\$1.52 38P.

DESCRIPTORS- \*ASTRONOMY, \*GRADES 1-6, \*GRADES 7-12, \*SCIENCE CENTERS, ADVANCED STUDENTS, CURRICULUM PLANNING, LECTURE, SPACE SCIENCES.

ES 000 818

DEVELOPMENT OF INSTRUCTIONAL OBJECTIVES FOR RADIATION SCIENCE PROGRAM. CALIF., CULVER CITY, UNIFIED SCHOOL DISTRICT

EDRS PRICE MF-\$0.25 HC-\$1.36 34P.

DESCRIPTORS- \*ATOMIC THEORY, \*GRADES 7-12, CURRICULUM DEVELOPMENT, SCIENCES, SEQUENTIAL PROGRAMS, SOCIAL SCIENCES, SYSTEMS APPROACH.

ES 000 829

PLANNING A SPACE LEARNING PROGRAM. CALIF., NEWPORT BEACH, NEWPORT-MESA UNIF. SCH. DIST.

EDRS PRICE MF-\$0.25 HC-\$1.32 33P.

DESCRIPTORS- \*CURRICULUM DEVELOPMENT, \*GRADES 1-6, \*GRADES 7-12, \*SCIENCE PROGRAMS, \*SPACE SCIENCES, INSERVICE TEACHER EDUCATION.

ES 000 839

INSTRUCTIONAL, RESEARCH, AND DEMONSTRATION LABORATORY IN THE BIOLOGICAL SCIENCES FOR ELEMENTARY AND SECONDARY SCHOOL PUPILS. MINN., MINNEAPOLIS, INDEPENDENT SCHOOL DIST. 275.

EDRS PRICE MF-\$0.25 HC-\$1.36 34P.

DESCRIPTORS- \*BIOLOGICAL SCIENCES, \*GRADES 1-6, \*GRADES 7-12, \*INDEPENDENT STUDY, \*INSERVICE TEACHER EDUCATION, \*LABORATORIES, \*STUDENT RESEARCH, CURRICULUM DEVELOPMENT, DEMONSTRATION PROGRAMS.

ES 000 850

SOUTHWEST IOWA LEARNING RESOURCES CENTER. IOWA, RED OAK, COMMUNITY SCHOOL DISTRICT

EDRS PRICE MF-\$0.25 HC-\$1.08 27P.

DESCRIPTORS- \*COUNSELING SERVICES, \*INSTRUCTIONAL MATERIALS CENTERS, \*LEARNING LABORATORIES, PLANETARIUMS, DROPOUTS, INSERVICE TEACHER EDUCATION, MATERIAL DEVELOPMENT, SCIENCES, VOCATIONAL COUNSELING.

ES 000 864

OUTDOOR NATURAL SCIENCE LABORATORY IN UNIVERSITY CITY, MISSOURI. MO., UNIVERSITY CITY SCHOOL DISTRICT.

EDRS PRICE MF-\$0.25 HC-\$0.92 23P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*LABORATORIES, \*NATURAL SCIENCES, OUTDOOR PROGRAMS.

ES 000 868

COASTAL BEND EDUCATIONAL PROJECT—OUTDOOR EDUCATION AND HUMAN DEVELOPMENT. TEX., CORPUS CHRISTI, FLOUR BLUFF IND. SCH. DIST. EDRS PRICE MF-\$0.25 HC-\$1.00 25P.

DESCRIPTORS- \*CONSERVATION, \*GRADES 1-6, \*GRADES 7-12, \*NATURAL SCIENCES, \*OUTDOOR PROGRAMS, \*PHYSICAL FITNESS, FIELD TRIPS, LABORATORIES, SOCIAL STUDIES.

ES 000 873

PLANETARIUM-ATMOSPHERIUM-OCEANARIUM UNIT OF A SUPPLEMENTARY EDUCATIONAL CENTER. MASS., WORCESTER, PUBLIC SCHOOLS. EDRS PRICE MF-\$0.25 HC-\$0.60 15P.

DESCRIPTORS- \*ASTRONOMY, \*GRADES 1-6, \*GRADES 7-12, \*OCEANOLOGY, \*PLANETARIUMS, \*PROJECTION EQUIPMENT, SCIENCE CENTERS.

ES 000 877

EARTH-SPACE SCIENCE LABORATORY. MINN., ROBBINSDALE, IND. SCH. DISTRICT 281 EDRS PRICE MF-\$0.25 HC-\$0.92 23P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*LABORATORIES, \*PLANETARIUMS, \*SCIENCE CENTERS, \*SIMULATION, ASTRONOMY, BIOLOGY, CHEMISTRY, EXPERIMENTS, PHYSICS, SPACE SCIENCES.

ES 000 880

OUTDOOR EDUCATIONAL CENTER. LA., ST. MARTIN-VILLE, ST. MARTIN PARISH SCH. BD. EDRS PRICE MF-\$0.25 HC-\$1.44 36P.

DESCRIPTORS- \*BIOLOGY, \*GRADES 1-6, \*GRADES 7-12, \*OUTDOOR PROGRAMS, \*SCIENCE CENTERS, \*STUDENT RESEARCH, \*YEAR ROUND PROGRAMS, LABORATORIES, NATURAL SCIENCES.

ES 000 881

FLINT HILLS ELEMENTARY SCIENCE. KANSAS., HAMILTON, UNIFIED SCHOOL DISTRICT 390. EDRS PRICE MF-\$0.25 HC-\$1.84 46P.

DESCRIPTORS- \*CURRICULUM DEVELOPMENT, \*GRADE 6, \*GRADE 7, \*GRADE 8, \*SCIENCES, \*TEACHER WORKSHOPS, SUMMER SCHOOLS, TEACHER IMPROVEMENT.

ES 000 912

PLANNING FOR THE UTILIZATION OF THE FULL POTENTIAL OF THE CENTER OF SCIENCE AND INDUSTRY AS A SUPPLEMENTARY EDUCATIONAL CENTER. OHIO, COLUMBUS, CITY SCHOOL DISTRICT EDRS PRICE MF-\$0.25 HC-\$0.84 21P.

DESCRIPTORS- \*CAREER PLANNING, \*ENRICHMENT ACTIVITIES, \*SCIENCE CENTERS, ABLESTU-

DENTS, DISADVANTAGED YOUTH, EXHIBITS, HISTORY, INSERVICE TEACHER EDUCATION, SCIENCE LABORATORIES.

ES 000 920

OUTDOOR EDUCATION LABORATORY. MICH., CONSTANTINE, PUBLIC SCHOOLS EDRS PRICE MF-\$0.25 HC-\$0.64 16P.

DESCRIPTORS- \*BIOLOGY, \*CONSERVATION, \*ECOLOGY, \*GRADES 1-6, \*GRADES 7-12, \*LABORATORIES, \*OUTDOOR PROGRAMS, NATURAL RESOURCES.

ES 000 922

LOWELL ENVIRONMENTAL ARTS AND SCIENCE CENTER. MASS., LOWELL, PUBLIC SCHOOLS. EDRS PRICE MF-\$0.25 HC-\$1.36 34P.

DESCRIPTORS- \*ELEMENTARY SCHOOL STUDENTS, OUTDOOR PROGRAMS, \*SCIENCE CENTERS, \*STUDENT TEACHERS, CONSERVATION, CURRICULUM DEVELOPMENT, FACILITY EXPANSION, TEACHER EDUCATION.

ES 000 948

COOPERATIVE SUMMER SCHOOL CAMP. COLO., ALAMOSA, SAN LUIS VALLEY BD. OF COOP. SVCS. EDRS PRICE MF-\$0.25 HC-\$1.44 36P.

DESCRIPTORS- \*CAMPING, \*CLINICAL DIAGNOSIS, \*DISADVANTAGED YOUTH, \*GIFTED, \*SUMMER SCHOOLS, FINE ARTS, HUMANITIES, OUTDOOR PROGRAMS, SCIENCE PROGRAMS.

ES 000 950

EDUCATIONAL PROJECT FOR NATURAL RESOURCES CONSERVATION. TEX., NEW BRAUNFELS, COMAL COUNTY SCHOOLS. EDRS PRICE MF-\$0.25 HC-\$1.12 28P.

DESCRIPTORS- \*CONSERVATION, \*EDUCATIONAL DEMONSTRATIONS, \*NATURAL RESOURCES, AUDIOVISUAL AIDS, EXHIBITS, FIELD TRIPS, LECTURE, MOBILE UNITS, TEACHING GUIDES.

ES 000 960

BEYOND FOUR WALLS. WASH., KIRKLAND, LAKE WASHINGTON SCH. DIST. 414 EDRS PRICE MF-\$0.25 HC-\$1.04 26P.

DESCRIPTORS- \*CONSERVATION, \*GRADES 1-6, \*GRADES 7-12, \*OUTDOOR PROGRAMS, ECOLOGY, ECONOMICS, EXCEPTIONAL CHILDREN, FACILITIES, INSERVICE PROGRAMS.

ES 000 979

FOSTERING CREATIVITY AND CULTURAL AWARENESS. OKLA., ADA, IND. SCH. DIST. 16, PONTOTOC COUNTY EDRS PRICE MF-\$0.50 HC-\$3.24 81P.

DESCRIPTORS- \*CULTURAL ENRICHMENT, \*DRAMATICS, \*FIELD TRIPS, \*GRADES 1-6, \*GRADES 7-12, \*LIBRARIES, \*MUSIC, \*SCIENCES, CREATIVITY.

ES 001 002

OUTDOOR EDUCATIONAL CAMP. UTAH, AMERICAN FOLK, ALPINE SCHOOL DISTRICT  
EDRS PRICE MF-\$0.25 HC-\$1.36 34P.

DESCRIPTORS- \*CAMPING, \*CONSERVATION EDUCATION, \*GRADE 5, \*NATURAL SCIENCES, CURRICULUM PLANNING.

ES 001 006

NATURE STUDY CENTER. N.H., KEENE, MONADNOCK REGIONAL SCHOOL DISTRICT.  
EDRS PRICE MF-\$0.25 HC-\$2.20 55P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, OUTDOOR PROGRAMS, AGRICULTURE, ART, BIOLOGY, CONSERVATION EDUCATION, NATURAL SCIENCES, PHOTOGRAPHY.

ES 001 017

SEATTLE ARTS AND SCIENCE CENTER—SCIENCE AND MATHEMATICS COMPONENT. WASH., SEATTLE, SCHOOL DISTRICT 1  
EDRS PRICE MF-\$0.54 HC-\$2.64 66P.

DESCRIPTORS- \*ASTRONOMY, \*INSERVICE PROGRAMS, \*MATHEMATICS, \*SCIENCE LABORATORIES, SCIENCE CENTERS, TALENTED STUDENTS.

ES 001 018

DEVELOPING AND UTILIZING CULTURAL RESOURCES. OKLA., OKLAHOMA CITY, IND. SCHOOL DISTRICT 89.  
EDRS PRICE MF-\$0.25 HC-\$2.18 54P.

DESCRIPTORS- \*FIELD TRIPS, \*GRADES 1-6, \*GRADES 7-12, \*MUSIC ACTIVITIES, \*SCIENCE PROGRAMS, \*STORY TELLING, \*THEATER ARTS, CONCERTS, CULTURAL ENRICHMENT, MUSIC TECHNIQUES.

ES 001 045

DETERMINATION OF NEEDS AND REQUIREMENTS FOR A CONSERVATION EDUCATION AND OUTDOOR EDUCATION LABORATORY IN THE NORTHERN SUBURBAN FRINGE OF THE STANDARD COLUMBUS METROPOLITAN AREA. OHIO, WORTHINGTON, EXEMPTED VILLAGE SCHOOL DIST.  
EDRS PRICE MF-\$0.25 HC-\$0.88 22P.

DESCRIPTORS- \*CONSERVATION EDUCATION, \*GRADES 1-6, \*GRADES 7-12, \*LABORATORIES, \*OUTDOOR PROGRAMS, ADVANCED PLACEMENT, CAMPING, CURRICULUM ENRICHMENT, INSERVICE PROGRAMS.

ES 001 051

PLANETARIUM AND MUSEUM OF ARTS AND SCIENCES. IDAHO, TWIN FALLS, SCHOOL DISTRICT 411.  
EDRS PRICE MF-\$0.25 HC-\$0.84 21P.

DESCRIPTORS- \*GRADES 1-6, \*GRADES 7-12, \*MUSEUMS, \*PLANETARIUMS, \*SCIENCE CENTERS, FACILITY EXPANSION.

ES 001 059

OUTDOOR LABORATORY. DEL., NEWARK, SPECIAL SCHOOL DISTRICT.  
EDRS PRICE MF-\$0.25 HC-\$2.00 50P.

DESCRIPTORS- \*CONSERVATION EDUCATION, \*GRADES 1-6, \*GRADES 7-12, \*LABORATORIES, \*NATURAL SCIENCES, \*OUTDOOR PROGRAMS, CURRICULUM GUIDES, ECOLOGY, FIELD TRIPS, TEACHER WORKSHOPS.

ES 001 065

REGIONAL INSTRUCTIONAL MEDIA CENTER AND MUSEUM. WYO., GREYBULL, SCH. DIST. 41 AND H.S. DIST. 1  
EDRS PRICE MF-\$0.25 HC-\$1.56 39P.

DESCRIPTORS- \*EXPERIMENTS, \*FIELD TRIPS, \*GEOLOGY, \*GRADES 1-6, \*GRADES 7-12, \*INSTRUCTIONAL MATERIALS CENTERS, \*MUSEUMS, HISTORY, INSERVICE PROGRAMS.

ES 001 072

CONCRETE ROOTS. N.Y., BROOKLYN, BD. OF ED. CITY OF NEW YORK.  
EDRS PRICE MF-\$0.25 HC-\$1.04 26P.

DESCRIPTORS- \*COMMUNICATION SKILLS, \*CULTURAL BACKGROUND, \*FINE ARTS, \*GRADES 1-6, \*GRADES 7-12, \*MATHEMATICS, \*SCHOOL COMMUNITY COOPERATION, \*SPACE SCIENCES, ART, LANGUAGE ARTS, LANGUAGE HANDICAPS, MINORITY GROUPS, MUSIC, PARENT PARTICIPATION, SELF CONCEPT.

# SCIENCE EDUCATION REPORTS

IN

## RESEARCH IN EDUCATION

ED 010 002

SCIENTIFIC LITERACY IN THE AEROSPACE AGE.  
PELLA, MILTON O. AND OTHERS  
UNIV. OF WISCONSIN, MADISON.  
EDRS PRICE MF-\$0.75 HC-\$7.56 189P.  
PUB DATE JAN 66

DESCRIPTORS- \*CITIZENSHIP RESPONSIBILITY,  
\*LITERACY, \*SCIENCE EDUCATION, \*SCIENTIFIC  
ATTITUDES, \*SCIENTIFIC CONCEPTS, COLLEGES,  
ELEMENTARY SCHOOLS, LITERATURE GUIDES,  
MADISON, SECONDARY SCHOOLS, WISCONSIN.

ED 010 025

THE REPRESENTATIONAL ROLE OF DEMONSTRATIONS  
IN TEACHING CONCEPTS AND PRINCIPLES  
IN SCIENCE, STUDIES IN TELEVISED INSTRUCTION,  
AND DIMENSIONS OF VISUAL REPRESENTATION.  
GROPPER, GEORGE L. AND OTHERS  
METROPOLITAN PITTSBURGH EDUCATIONAL TV.  
STATION.

EDRS PRICE MF-\$0.75 HC-\$6.60 165P.  
DESCRIPTORS- \*CONCEPT TEACHING, \*DEMON-  
STRATION PROGRAMS, \*INSTRUCTIONAL IMPROVE-  
MENT, \*SCIENCE INSTRUCTION, \*TELEVISED  
INSTRUCTION, PENNSYLVANIA, PERCEPTION,  
PITTSBURGH, TEACHING TECHNIQUES.

ED 010 081

AN EXPERIMENTAL STUDY IN THE USE OF PRO-  
GRAMMED MATERIALS FOR SEVENTH-GRADE OPEN-  
ENDED LABORATORY EXPERIENCES.

CARNES, PHYLLIS E.  
UNIV. OF GEORGIA, ATHENS.  
EDRS PRICE MF-\$0.00 HC-\$8.48 227P.  
PUB DATE 66

DESCRIPTORS- \*EFFECTIVE TEACHING, GENERAL  
SCIENCE, \*PROBLEM SOLVING, \*PROGRAMED IN-  
STRUCTION, \*SCIENCE LABORATORY, ATHENS, ED-  
UCATIONAL EXPERIENCES, GEORGIA, INSTRUC-  
TIONAL TECHNOLOGY, GRADE 7.

ED 010 089

INFLUENCES ON STUDENTS UNDERSTANDING OF  
SCIENCE.

CRUMB, GLENN H. ABEGG, GERALD L.  
KANSAS STATE TEACHERS COLLEGE, EMPORIA.  
EDRS PRICE MF-\$0.50 HC-\$3.52 88P.  
PUB DATE 31 MAY 66

DESCRIPTORS- \*CHEMISTRY, \*PHYSICS INSTRU-  
TION, \*SCIENCE CURRICULUM, \*SCIENCE INSTRU-  
TION, \*TEACHING METHODS. EMPORIA, IOWA,  
IOWA, TEST OF EDUCATIONAL DEVELOPMENT  
SCIENCE TEST, KANSAS, MISSOURI, NEBRASKA,  
OTIS QUICK SCORING MENTAL ABILITIES TEST,  
PHYSICS. CURRICULUM, SCIENCE COURSES, SCI-  
ENCE EDUCATION, TEACHER EVALUATION, THE  
TEST ON UNDERSTANDING SCIENCE (TOUS).

ED 010 099

TECHNIQUES FOR EVALUATING THE LEARNING PRO-  
CESS IN ENGINEERING EDUCATION.  
KORN, HAROLD A. WISE, LAURESS L.  
STANFORD UNIV., CALIFORNIA.  
EDRS PRICE MF-\$0.50 HC-\$3.04 76P.  
PUB DATE 66

DESCRIPTORS - \*ACADEMIC APTITUDE, \*ACADEMIC  
PERFORMANCE, \*ENGINEERING, \*GRADE POINT  
AVERAGE, \*GRADING, CALIFORNIA, CURRICULUM  
PLANNING, HIGHER EDUCATION, INNOVATIONS,  
LEARNING PROCESSES, STANFORD.

ED 010 292

EFFECT OF VARIED PRESENTATIONS OF LABORA-  
TORY EXERCISES WITHIN PROGRAMED MATERIALS  
ON SPECIFIC INTELLECTUAL FACTORS OF SCIENCE  
PROBLEM SOLVING BEHAVIOR.

NASCA, DONALD  
STATE UNIV. OF NEW YORK  
EDRS PRICE MF-\$0.50 HC-\$2.92 73P.  
PUB DATE 31 DEC 65

DESCRIPTORS- \*MOTIVATION, \*PROBLEM SOLVING,  
\*PROGRAMED INSTRUCTION, \*SCIENCE EDUCATION,  
\*TEST CONSTRUCTION, BROCKPORT, JUNIOR HIGH  
SCHOOLS, LEARNING LABORATORIES, LINEAR PRO-  
GRAMING, NEW YORK, PRODUCTIVE THINKING, SCI-  
ENCE LABORATORIES, STIMULUS BEHAVIOR,  
STRUCTURE OF INTELLECT (SI).

ED 010 338

AN INVENTORY OF SCIENCE METHODS.

BUTTS, DAVID P.  
UNIV. OF TEXAS, AUSTIN.  
EDRS PRICE MF-\$0.50 HC-\$3.24 81P.  
PUB DATE AUG 26

DESCRIPTORS- \*ELEMENTARY SCHOOL STUDENTS,  
\*PROBLEM SOLVING, \*SCIENCE EDUCATION, \*STU-  
DENT BEHAVIOR, AUSTIN, MEASUREMENT IN-  
STRUMENTS, PSYCHOMETRICS, QUESTIONING TECH-  
NIQUES, TAB SCIENCE TEST, TEXAS.

ED 010 377

INDIVIDUAL DIFFERENCES IN LEARNING FROM  
VISUAL AND VERBAL PRESENTATIONS AND THE  
USE OF VISUAL EXAMPLES IN REVIEW.

GAGNE, ROBERT M. AND OTHERS  
AMERICAN INSTITUTES FOR RES. IN BEHAVIORAL  
SCIENCES.  
EDRS PRICE MF-\$0.50 HC-\$4.96 124P.  
PUB DATE DEC 65

DESCRIPTORS- \*INSTRUCTIONAL MATERIALS,  
\*LEARNING PROCESSES, \*SCIENCE INSTRUCTION,  
\*VERBAL LEARNING, \*VISUAL LEARNING, APTITUDE,  
AUDIOVISUAL AIDS, GRADE 8, INDIVIDUAL  
DIFFERENCES, INSTRUCTIONAL FILMS, PENNSYL-  
VANIA, PITTSBURGH, TEACHING METHODS.

ED 010 421  
 MOTIVATION AND LEARNING--A COMPARATIVE  
 STUDY OF PROGRAMS PRESENTED BY VIDEO TAPE  
 WITH AND WITHOUT MOTIVATING MATERIALS.  
 ALDRIDGE, BILL G.  
 ST. LOUIS JR. COLL. DIST. FLORISSANT VALLEY  
 COMM. COLL.  
 EDRS PRICE MF-\$0.25 HC-\$2.16 54P.

PUB DATE NOV 66

DESCRIPTORS- \*ACHIEVEMENT RATING, \*LEARN-  
 ING MOTIVATION, \*MOTIVATION TECHNIQUES,  
 \*PHYSICS INSTRUCTION, \*TELEVISED INSTRU-  
 CTION, LEARNING ACTIVITIES, MISSOURI, PRO-  
 GRAMED MATERIALS, ST. LOUIS, TELECOURSES,  
 VIDEO TAPE RECORDINGS.

ED 010 433  
 AN EIGHT WEEK SUMMER INSTITUTE TRAINING  
 PROGRAM TO TRAIN INSTRUCTORS OF INSTRUMEN-  
 TATION TECHNOLOGY.  
 ZIOL, FRANK J.  
 PASADENA CITY COLL., CALIF.  
 EDRS PRICE MF-\$0.25 HC-\$1.44 36P.

PUB DATE 1 DEC 66

DESCRIPTORS- \*INSTITUTE TYPE COURSES, \*IN-  
 STRUMENTATION, \*SCIENCE PROGRAMS, \*TEACHER  
 EDUCATION, \*VOCATIONAL EDUCATION, CALIF-  
 ORNIA, INSTRUCTIONAL IMPROVEMENT, PASADENA,  
 SUMMER PROGRAMS, TRAINING.

ED 010 565  
 THE ORGANIZATION OF A BIOLOGY COURSE FOR  
 INDIVIDUAL PROGRESS AT THEODORE HIGH SCHOOL  
 AN INTRODUCTION.  
 BRATTEN, JACK E.  
 SYSTEM DEVELOPMENT CORP., SANTA MONICA,  
 CALIF.  
 EDRS PRICE MF-\$0.25 HC-\$0.52 13P.

PUB DATE 7 DEC 65

DESCRIPTORS- \*BIOLOGY INSTRUCTION, \*HIGH  
 SCHOOL ORGANIZATION, \*INDIVIDUALIZED PRO-  
 GRAMS, \*INSTRUCTIONAL INNOVATION, \*SIMULA-  
 TION, \*SYSTEMS ANALYSIS, ALABAMA, CALIFORNIA,  
 HIGH SCHOOLS, PROGRAMED INSTRUCTION, SANTA  
 MONICA.

ED 010 566  
 THE ORGANIZATION OF A BIOLOGY COURSE FOR  
 INDIVIDUAL PROGRESS AT THEODORE HIGH SCHOOL-  
 DESCRIPTIVE ANALYSIS.  
 BRATTEN J. E.  
 SYSTEM DEVELOPMENT CORP., SANTA MONICA,  
 CALIFORNIA.  
 EDRS PRICE MF-\$0.25 HC-\$0.84 21P.

PUB DATE 9 DEC 65

DESCRIPTORS- \*BIOLOGY INSTRUCTION, \*IN-  
 DIVIDUALIZED PROGRAMS, \*INSTRUCTIONAL IN-  
 NOVATION, \*PROGRAMED INSTRUCTION, \*SYSTEMS  
 ANALYSIS, ALABAMA, CALIFORNIA, HIGH SCHOOLS,  
 SIMULATION.

ED 010 567  
 THE ORGANIZATION OF A COURSE FOR INDIVIDUAL  
 PROGRESS AT THEODORE HIGH SCHOOL-SYSTEM

ANALYSIS AND SIMULATION.  
 BRATTEN, JACK E.  
 SYSTEM DEVELOPMENT CORP., SANTA MONICA,  
 CALIFORNIA.  
 EDRS PRICE MF-\$0.25 HC-\$1.68 43P.

PUB DATE 15 MAR 66

DESCRIPTORS- \*BIOLOGY INSTRUCTION, \*COURSE  
 ORGANIZATION, \*HIGH SCHOOL ORGANIZATION, \*IN-  
 DIVIDUAL INSTRUCTION, \*SIMULATION, \*SYSTEMS  
 ANALYSIS, CALIFORNIA, COMPUTER ORIENTED  
 PROGRAMS, INSTRUCTIONAL MATERIALS, LAB-  
 ORATORY SCHOOLS, SANTA MONICA, TEACHING  
 METHODS.

ED 010 608  
 TO DEVELOP A SYSTEM FOR ANALYSING THE REAC-  
 TIONS OF TEACHERS AND STUDENTS IN BIOLOGY  
 CLASSES.  
 PARAKH, JAL S.  
 CORNELL UNIVERSITY, ITHACA, NEW YORK.  
 EDRS PRICE MF-\$1.00 HC-\$8.00 200P.

PUB DATE 65

DESCRIPTORS- \*BIOLOGY, \*BIGLOGY INSTRUCTION,  
 \*INTERACTION, \*INTERACTION PROCESS ANALYSIS,  
 \*SCIENCE INSTRUCTION, ITHACA, NEW YORK, SCI-  
 ENCE EDUCATION, SYSTEMS ANALYSIS, SYSTEMS  
 APPROACH, SYSTEMS DEVELOPMENT.

ED 010 632  
 A COMPARISON OF VARIOUS TECHNIQUES FOR THE  
 DISSEMINATION OF A NEW SCIENCE CURRICULUM  
 IN FLORIDA.  
 WESTMEYER, PAUL AND OTHERS  
 FLORIDA STATE UNIV., TALLAHASSEE.  
 EDRS PRICE MF-\$0.75 HC-\$6.00 150P.

PUB DATE MAR 67

DESCRIPTORS- \*EFFECTIVE TEACHING, \*INSERVICE  
 COURSES, \*PRIMARY EDUCATION, \*SCIENCE CURRI-  
 CULUM, \*TEACHER EDUCATION, AMERICAN ASSO-  
 CIATION FOR THE ADVANCEMENT OF SCIENCE,  
 TALLAHASSEE, AUTOINSTRUCTIONAL METHODS,  
 COMPARATIVE ANALYSIS, FLORIDA, INFORMATION  
 DISSEMINATION, INSERVICE TEACHER EDUCATION,  
 INSTITUTE TYPE COURSES, KINDERGARTEN, SCI-  
 ENCE INSTRUCTION.

ED 010 645  
 STUDY OF CHARACTERISTICS CONTRIBUTING TO THE  
 EFFECTIVENESS OF VISUAL DEMONSTRATIONS.  
 BOGUSLAVSKY, GEORGE W.  
 RENNSSELAER POLYTECHNIC INST., TROY, NEW  
 YORK.  
 EDRS PRICE MF-\$0.25 HC-\$1.12 28P.

PUB DATE 4 APR 67

DESCRIPTORS- \*AUDIOVISUAL AIDS, \*GRAPHIC  
 ARTS, \*ILLUSTRATIONS, \*SCIENCE INSTRUCTION,  
 \*VISUAL LEARNING, AUDIOVISUAL INSTRUCTION,  
 COLLEGE STUDENTS, FILMS, HIGH SCHOOL STU-  
 DENTS, NEW YORK, SCIENCE COURSES, TROY, VISUAL  
 PERCEPTION.

ED 010 748  
 ENGLISH AS A SECOND LANGUAGE AND A TECH-  
 NIQUE FOR TEACHING SCIENCE.  
 SMITH, PHILIP D. MAREAN, JOHN H.

NEVADA STATE DEPT. OF EDUCATION, CARSON CITY.

EDRS PRICE MF-\$0.25 HC-\$0.84 21P.

PUB DATE 66

DESCRIPTORS- \*AMERICAN INDIANS, \*ENGLISH (SECOND LANGUAGE), \*SCIENCE EDUCATION, \*VOCABULARY DEVELOPMENT, CARSON CITY, LANGUAGE FLUENCY, LEARNING THEORIES, PHONOLOGY.

ED 010 756

THE READABILITY OF SCIENCE TEXTBOOKS FOR ELEMENTARY SCHOOL.

NEWPORT, JOHN F.

EDRS PRICE MF-\$0.25 HC-\$0.24 6P.

PUB DATE OCT 65

DESCRIPTORS- \*ELEMENTARY SCIENCE, \*READABILITY, \*READING DIFFICULTY, \*TEXTBOOK EVALUATION, INSTRUCTIONAL MATERIALS, SPACE FORMULA, YOAKAM FORMULA.

ED 010 761

REPORT OF THE INTERNATIONAL CLEARINGHOUSE ON SCIENCE AND MATHEMATICS CURRICULAR DEVELOPMENTS 1966.

LOCKARD, J. DAVID

MARYLAND UNIV., COLLEGE PARK, AMERICAN ASSN. FOR THE ADVANCEMENT OF SCIENCE.

EDRS PRICE MF-\$1.25 HC-\$12.48 312P.

PUB DATE 66

DESCRIPTORS- \*COLLEGE SCIENCE, \*CURRICULUM DEVELOPMENT, \*ELEMENTARY SCHOOL SCIENCE, \*MATHEMATICS EDUCATION, \*SCIENCE EDUCATION, \*SECONDARY SCHOOL SCIENCE, BIBLIOGRAPHIES, COLLEGE PARK, DISTRICT OF COLUMBIA, NATIONAL SCIENCE FOUNDATION.

ED 010 762

THE STATUS OF PHYSICS TEACHING IN NORTH CAROLINA.

ANDERSON, NORMAN D. GOODE, JOHN M.

NORTH CAROLINA UNIV., RALEIGH, N.C. STATE UNIV., NORTH CAROLINA STATE BOARD OF EDUCATION, RALEIGH.

EDRS PRICE MF-\$0.25 HC-\$0.48 12P.

PUB DATE 28 DEC 65

DESCRIPTORS- \*PHYSICS, \*PHYSICS TEACHERS, \*SECONDARY SCHOOL SCIENCE, \*TEACHER EDUCATION, \*TEACHER QUALIFICATIONS, CHAPEL HILL, COLLEGE SCIENCE, RALEIGH.

ED 010 763

A STUDY OF LARGE GROUP-SMALL GROUP INSTRUCTION IN REGENTS CHEMISTRY COMPARED TO CONVENTIONAL INSTRUCTION.

WINTER, STEPHEN S. AND OTHERS

STATE UNIV., N.Y.

EDRS PRICE MF-\$0.50 HC-\$5.12 128P.

PUB DATE APR 65

DESCRIPTORS- \*CHEMISTRY, \*LARGE GROUP INSTRUCTION, \*SECONDARY SCHOOL SCIENCE, \*SMALL GROUP INSTRUCTION, ACHIEVEMENT, BUFFALO, CONVENTIONAL INSTRUCTION, ROCHESTER.

ED 010 764

THE COMPUTER IN PHYSICS INSTRUCTION, REPORT OF THE CONFERENCE ON USES OF THE COMPUTER IN UNDER-GRADUATE PHYSICS INSTRUCTION (UNIV. OF CALIF., IRVINE, NOVEMBER 4-6, 1966). COMMISSION ON COLLEGE PHYSICS, ANN ARBOR, MICHIGAN.

EDRS PRICE MF-\$0.50 HC-\$3.88 97P.

PUB DATE 65

DESCRIPTORS- \*COLLEGE SCIENCE, \*COMPUTER ASSISTED INSTRUCTION, \*PHYSICS, ANN ARBOR, CONFERENCES, INSTRUCTION, IRVINE, LEARNING.

ED 010 765

INTEGRATED EXPERIENCE APPROACH TO LEARNING.

POSTLETHWAIT, S.N. AND OTHERS

PURDUE UNIV., LAFAYETTE, IND.

EDRS PRICE MF-\$0.50 HC-\$4.96 124P.

PUB DATE 64

DESCRIPTORS- \*AUTOINSTRUCTIONAL AIDS, \*BOTANY, \*COLLEGE SCIENCE, \*INSTRUCTION, \*LEARNING, AUDIOVISUAL AIDS, BIOLOGY, INSTRUCTIONAL MATERIALS, LAFAYETTE, PROGRAMED INSTRUCTION.

ED 010 766

THE DEVELOPMENT AND TESTING OF INSTRUCTIONAL MATERIALS FOR GIFTED PRIMARY PUPILS, FINAL REPORT.

SANDS, THEODORE HICKLIN, CHARLES R.

ILLINOIS STATE UNIVERSITY, NORMAL

EDRS PRICE MF-\$0.50 HC-\$2.76 69P.

PUB DATE 65

DESCRIPTORS- \*ELEMENTARY SCHOOL SCIENCE, \*INDIVIDUAL INSTRUCTION, \*INSTRUCTION, \*PROGRAMED INSTRUCTION, ABLE STUDENTS, AUDIOVISUAL INSTRUCTION, MATHEMATICS EDUCATION, NORMAL, PHYSICAL SCIENCES, PRIMARY EDUCATION.

ED 010 767

VIEWPOINTS ON UNDERGRADUATE COLLEGE SCIENCE PROGRAMS.

EISS, ALBERT F.

NATIONAL SCIENCE TEACHERS ASSN., WASHINGTON, D.C.

EDRS PRICE MF-\$0.50 HC-\$3.36 84P.

PUB DATE 66

DESCRIPTORS- \*BIOLOGY, \*CHEMISTRY, \*COLLEGE SCIENCE, \*HIGHER EDUCATION, \*PHYSICAL SCIENCES, \*TEACHER EDUCATION, DISTRICT OF COLUMBIA, GENERAL EDUCATION, SHELL COMPANIES FOUNDATION, SPEECHES.

ED 010 768

THE STATUS OF SCIENCE IN THE PUBLIC SCHOOLS OF IOWA. PART III, SENIOR HIGH SCHOOLS

PORTER, T.R. AND OTHERS

IOWA UNIV., IOWA CITY

EDRS PRICE MF-\$0.25 HC-\$2.16 54P.

PUB DATE 66

DESCRIPTORS- \*COURSE CONTENT, \*EVALUATION, \*SECONDARY SCHOOL SCIENCE, BIOLOGICAL SCI-

ENCES CURRICULUM STUDY, BIOLOGY, CHEMICAL BOND APPROACH, CHEMICAL EDUCATION MATERIALS STUDY, CHEMISTRY, CURRICULUM DEVELOPMENT, DES MOINES, EARTH SCIENCE, GENERAL SCIENCE, INSERVICE TEACHER EDUCATION, IOWA CITY, PHYSICAL SCIENCE STUDY COMMITTEE, PHYSICS, TEACHER QUALIFICATIONS, TEACHING PROCEDURES.

ED 010 769

THE STATUS OF SCIENCE IN THE PUBLIC SCHOOLS OF IOWA. PART II, JUNIOR HIGH SCHOOL.

PORTER, T. R. AND OTHERS

IOWA UNIV., IOWA CITY

EDRS PRICE MF-\$0.25 HC-\$1.72 43P.

PUB DATE 65

DESCRIPTORS- \*COURSE CONTENT, \*CURRICULUM DEVELOPMENT, \*EVALUATION, \*SECONDARY SCHOOL SCIENCE, BIOLOGY, DES MOINES, GENERAL SCIENCE, GRADE 7, GRADE 8, GRADE 9, INSERVICE TEACHER EDUCATION, IOWA CITY, PHYSICAL SCIENCES, TEACHER QUALIFICATIONS, TEACHING PROCEDURES.

ED 010 770

THE STATUS OF SCIENCE IN THE PUBLIC SCHOOLS OF IOWA, PART I, ELEMENTARY SCHOOL.

PORTER, T.R. AND OTHERS

IOWA UNIV., IOWA CITY,

EDRS PRICE MF-\$0.25 HC-\$1.48 37P.

PUB DATE 64

DESCRIPTORS- \*COURSE CONTENT, \*CURRICULUM DEVELOPMENT, \*ELEMENTARY SCHOOL SCIENCE, \*EVALUATION, DES MOINES, INSERVICE TEACHER EDUCATION, IOWA CITY, TEACHER QUALIFICATIONS, TEACHING PROCEDURES.

ED 010 802

ELEMENTARY QUANTITATIVE CHEMISTRY, A LABORATORY TEXT.

GILREATH, ESMARCH S. AND OTHERS

WASHINGTON AND LEE UNIV., LEXINGTON, VA.

EDRS PRICE MF\$0.75 HC-\$5.60 140P.

PUB DATE 66

DESCRIPTORS- \*CHEMISTRY, \*INSTRUCTIONAL MATERIALS, \*LABORATORY EXPERIMENTS, \*MANUALS, \*TEXTBOOK EVALUATION, ACADEMIC PERFORMANCE, COLLEGE STUDENTS, COURSE ORGANIZATION, INNOVATION, LEXINGTON, SCIENCE LABORATORIES, TEXTBOOK PREPARATION.

ED 010 819

TWENTIETH CENTURY LYRICS. SCIENCE AND POETRY. LITERATURE CURRICULUM IV, STUDENT VERSION.

KITZHABER, ALBERT R.

OREGON UNIV., EUGENE.

EDRS PRICE MF-\$0.50 HC-\$2.36 59P.

DESCRIPTORS- \*CURRICULUM GUIDES, \*LITERATURE GUIDES, \*POETRY, \*SCIENCE, \*STUDY GUIDES, COMPOSITION (LITERARY), CURRICULUM RESEARCH, ENGLISH CURRICULUM, EUGENE, GRADE

10, INSTRUCTIONAL MATERIALS, LITERATURE, NEW GRAMMAR, PROJECT ENGLISH, SECONDARY EDUCATION.

ED 010 990

THE USE OF INSERVICE PROGRAMS TO DIAGNOSE SOURCES OF RESISTANCE TO INNOVATION.

ROWE, MARY BUDD HURD, PAUL DEHART.

EDRS PRICE MF-\$0.25 HC-\$0.68 17P.

PUB DATE 66

DESCRIPTORS- \*CURRICULUM DEVELOPMENT, \*ELEMENTARY SCHOOL SCIENCE, \*INSERVICE TEACHER EDUCATION, \*BIOLOGY, INNOVATION, INSERVICE PROGRAMS, PHYSICAL SCIENCES.

ED 010 991

BIOLOGICAL EDUCATION IN AMERICAN SECONDARY SCHOOLS 1890-1960.

HURD, PAUL DEHART

AMERICAN INST. OF BIOLOGICAL SCIENCES.

EDRS PRICE MF-\$1.25 HC-\$10.76 269P.

PUB DATE 1 FEB 61

DESCRIPTORS- \*BIOLOGY, \*SCIENCE EDUCATION, \*SECONDARY SCHOOL SCIENCE, AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES, CURRICULUM STUDY, COURSE CONTENT, CURRICULUM, DISTRICT OF COLUMBIA, EDUCATIONAL OBJECTIVES, HISTORY, NATIONAL SCIENCE FOUNDATION, TEACHING METHODS, TEXTBOOKS, BIOLOGICAL SCIENCES.

ED 010 993

COOPERATIVE DEVELOPMENT OF LOCALLY ORIENTED ACHIEVEMENT TESTS IN CHEMISTRY.

SCHMITT, J.A. AND OTHERS

EDRS PRICE MF-\$0.25 HC-\$0.44 11P.

PUB DATE 66

DESCRIPTORS- \*ACHIEVEMENT TESTS, \*CHEMISTRY, \*COGNITIVE DEVELOPMENT, \*SECONDARY SCHOOL SCIENCE, \*STUDENT EVALUATION, CHEMISTRY REGENTS EXAMINATION, EVALUATION, NEW YORK, TEST CONSTRUCTION.

ED 010 994

A STUDY OF SMALL GROUP DYNAMICS AND PRODUCTIVITY IN THE BSCS LABORATORY BLOCK PROGRAM.

HURD, PAUL DEHART ROWE, MARY BUDD

EDRS PRICE MF-\$0.25 HC-\$0.44 11P.

PUB DATE 66

DESCRIPTORS- \*BIOLOGY, \*GROUP DYNAMICS, \*SECONDARY SCHOOL SCIENCE, \*SMALL GROUP INSTRUCTION, ACADEMIC ACHIEVEMENT, BIOLOGICAL SCIENCES CURRICULUM STUDY, BIOLOGICAL SCIENCES CURRICULUM STUDY LABORATORY BLOCKS.

ED 010 995

INQUIRY TRAINING AND PROBLEM SOLVING IN ELEMENTARY SCHOOL CHILDREN.

BUTTS, DAVID P. JONES, HOWARD L.

EDRS PRICE MF-\$0.25 HC-\$0.48 12P.

PUB DATE 66

DESCRIPTORS- \*CONCEPT FORMATION, \*ELEMENTARY SCHOOL SCIENCE, \*INSTRUCTION, \*PHYSICAL SCIENCES, \*PROBLEM SOLVING, COGNITIVE DEVELOPMENT, QUESTIONING TECHNIQUES.

ED 010 996  
RIGIDITY IN CHILDREN'S PROBLEM SOLVING.  
CUNNINGHAM, JOHN D.  
EDRS PRICE MF-\$0.25 HC-\$0.68 17P.

PUB DATE APR. 66

DESCRIPTORS- \*COGNITIVE DEVELOPMENT, \*ELEMENTARY SCHOOL SCIENCE, \*MENTAL RIGIDITY, NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING, SCIENCE CURRICULUM IMPROVEMENT STUDY.

ED 010 997  
BIBLIOGRAPHY OF SCIENCE COURSES OF STUDY AND TEXTBOOKS FOR GRADES 7-12.  
NATIONAL SCIENCE TEACHERS ASSN., WASHINGTON, D.C.  
EDRS PRICE MF-\$0.25 HC-\$1.80 45P.

PUB DATE 66

DESCRIPTORS- \*BIBLIOGRAPHIES, \*COURSES, \*SECONDARY SCHOOL SCIENCE, \*TEXTBOOKS, BIOLOGY, CHEMISTRY, DISTRICT OF COLUMBIA, GENERAL SCIENCE, NATIONAL EDUCATION ASSOCIATION, NATIONAL SCIENCE TEACHERS ASSOCIATION, NATURAL SCIENCES, PHYSICAL SCIENCES, PHYSICS.

ED 010 998  
CONCEPT DEVELOPMENT MATERIALS FOR GIFTED ELEMENTARY PUPILS-FINAL REPORT OF FIELD TESTING.  
SANDS, THEODORE AND OTHERS  
ILLINOIS STATE UNIV., NORMAL.  
EDRS PRICE MF-\$0.25 HC-\$2.00 50P.

PUB DATE 66

DESCRIPTORS- \*ABLE STUDENTS, \*CONCEPT FORMATION, \*ELEMENTARY SCHOOL SCIENCE, CURRICULUM DEVELOPMENT, GRADE PLACEMENT, INDEPENDENT STUDY, READING ABILITY, RESEARCH REPORTS.

ED 010 999  
SCIENCE EDUCATION IN THE JUNIOR COLLEGE, PROBLEMS AND PRACTICES.  
EISS, ALBERT F.  
NATIONAL SCIENCE TEACHERS ASSN., WASHINGTON, D.C.  
EDRS PRICE MF-\$0.50 HC-\$2.52 63P.

PUB DATE 66

DESCRIPTORS- \*COLLEGE SCIENCE, \*CONFERENCES, \*GENERAL EDUCATION SCIENCE, \*SCIENCE EDUCATION, \*SCIENCE INSTRUCTION, \*VOCATIONAL EDUCATION, BIOLOGY, COMMISSION ON THE EDUCATION OF TEACHERS OF SCIENCE, DISTRICT OF COLUMBIA, JUNIOR COLLEGES, NATIONAL SCIENCE TEACHERS ASSOCIATION, PHYSICAL SCIENCES, REPORTS, SPACE SCIENCE, TEACHER RESOURCE MATERIALS.

ED 011 000  
THEORY INTO ACTION . . . IN SCIENCE CURRI-

CULUM DEVELOPMENT.  
NATIONAL SCIENCE TEACHERS ASSN., WASHINGTON, D.C.  
EDRS PRICE MF-\$0.25 HC-\$2.08 52P.

PUB DATE 64

DESCRIPTORS- \*CONCEPTUAL SCHEMES, \*CURRICULUM DEVELOPMENT, \*ELEMENTARY SCHOOL SCIENCE, SCIENTIFIC LITERACY, \*SCIENTIFIC METHODOLOGY, \*SECONDARY SCHOOL SCIENCE, CONCEPT FORMATION, DISTRICT OF COLUMBIA, TEACHING METHODS.

ED 011 001  
GUIDELINES FOR DEVELOPMENT OF PROGRAMS IN SCIENCE INSTRUCTION, REPORT OF A STUDY, MAKING SPECIFIC REFERENCE TO THE TEACHING FUNCTION OF THE LABORATORY IN SECONDARY SCHOOL SCIENCE PROGRAM.  
NATIONAL ACADEMY OF SCIENCES-NATIONAL RES. COUNCIL.  
EDRS PRICE MF-\$0.50 HC-\$3.16 79P.

PUB DATE MAY 63

DESCRIPTORS- \*CURRICULUM DEVELOPMENT, \*LABORATORY ACTIVITIES, \*LEARNING THEORIES, \*SECONDARY SCHOOL SCIENCE, \*TEACHER EDUCATION, BIOLOGICAL SCIENCES CURRICULUM STUDY (BSCS), BIOLOGY, CHEMICAL BOND APPROACH (CBA), CHEMICAL EDUCATION MATERIALS STUDY (CHEMS), CHEMISTRY, DISTRICT OF COLUMBIA, FILMS, PHYSICAL SCIENCE STUDY COMMITTEE (PSSC), PHYSICS, SCIENCE FACILITIES.

ED 011 002  
TEACHING HIGH SCHOOL BIOLOGY-A GUIDE TO WORKING WITH POTENTIAL BIOLOGISTS.  
BRANDWEIN, PAUL F. AND OTHERS  
AMERICAN INST. OF BIOLOGICAL SCIENCES.  
EDRS PRICE MF-\$0.50 HC-\$5.08 127P.

PUB DATE 62

DESCRIPTORS- \*ABLE STUDENTS, \*BIOLOGY, \*SECONDARY SCHOOL SCIENCE, \*STUDENT RESEARCH, \*TEACHING METHODS, BIBLIOGRAPHIES, DISTRICT OF COLUMBIA, NATURAL SCIENCES, STUDENT PROJECTS, TEACHING TECHNIQUES.

ED 011 064  
DIFFERENCES IN AIMS OF HIGH SCHOOL AND COLLEGE TEACHERS OF CHEMISTRY,  
D'AGOSTINO, BROTHER C. JOSEPH  
NEW YORK UNIV., N.Y., SCH. OF EDUCATION.  
EDRS PRICE MF-\$1.00 HC-\$8.44 211P.

PUB DATE 66

DESCRIPTORS- \*CHEMISTRY TEACHERS, \*COLLEGE STUDENTS, \*COLLEGE TEACHERS, \*COMMUNICATION PROBLEMS, \*SECONDARY SCHOOL TEACHERS, FACTOR ANALYSIS, NEW YORK CITY, QUESTIONNAIRES.

ED 011 155  
LABORATORY METHODS IN PHYSICS FOR THE BLIND,  
HENDERSON, DAVID RAY  
PITTSBURGH UNIV., PA.  
EDRS PRICE MF-\$0.50 HC-\$3.08 77P.

PUB DATE 65

DESCRIPTORS- \*BLIND, \*LABORATORIES, \*PHYSICS INSTRUCTION, \*TACTILE ADAPTATION, PHYSICS CURRICULUM, PITTSBURGH, RAISED LINE DRAWINGS, SENSORY AIDS.

ED 011 212

CURRICULUM GUIDE IN CONSERVATION EDUCATION. HERRINGTON, EUGENE H. ROBBINS, LARRY  
COLORADO STATE DEPT. OF EDUCATION,  
COLORADO STATE DEPT OF GAME, FISH AND PARKS,  
DENVER  
EDRS PRICE MF-\$0.50 HC-\$3.48 87P.

PUB DATE APR. 64

DESCRIPTORS- \*CLASS ACTIVITIES, \*CONSERVATION EDUCATION, \*CURRICULUM GUIDES, \*GENERAL SCIENCE, \*NATURAL RESOURCES, AGRICULTURAL TRENDS, BIOLOGY, DEMONSTRATION PROJECTS, DENVER, HUMAN RESOURCES, INTERMEDIATE GRADES, JUNIOR HIGH SCHOOLS, LAND USE, PRIMARY GRADES, WATER RESOURCES.

ED 011 232

BACKGROUND FACTORS AND SUCCESS IN COLLEGE  
EDRS PRICE MF-\$0.25 HC-\$0.36 9P.

PUB DATE 66

DESCRIPTORS- \*ACADEMIC ACHIEVEMENT, COLLEGE SCIENCE, STUDENT CHARACTERISTICS, ACHIEVEMENT, PHYSICAL SCIENCE STUDY COMMITTEE., \*SECONDARY SCHOOL SCIENCE, \*PHYSICS

ED 011 233

SCIENCE ACHIEVEMENT AS IT RELATES TO SCIENCE CURRICULA AND PROGRAMS AT THE SIXTH GRADE LEVEL IN MONTANA PUBLIC SCHOOLS.  
SWAN, MALCOLM D.

EDRS PRICE MF-\$0.25 HC-\$0.60 15P.

PUB DATE JUN 66

DESCRIPTORS- \*ACADEMIC ACHIEVEMENT, \*ELEMENTARY SCHOOL SCIENCE, \*EVALUATION, \*GRADE 6, \*LEARNING, \*PROGRAM EVALUATION, CURRICULUM DEVELOPMENT, MONTANA.

ED 011 234

ASSESSING THE PROGRESS OF EDUCATION IN SCIENCE,  
TYLER, RALPH W.

EDRS PRICE MF\$0.25 HC-\$0.32 8P.

PUB DATE SEP 66

DESCRIPTORS- \*EDUCATIONAL OBJECTIVES, \*EVALUATION, \*SCIENCE EDUCATION, \*SCIENTIFIC LITERACY, ADULT EDUCATION, ATTITUDES, COLLEGE SCIENCE, ELEMENTARY SCHOOL SCIENCE, SCIENTIFIC ATTITUDES, SECONDARY SCHOOL SCIENCE.

ED 011 235

THREE EMPHASES IN TEACHING BIOLOGY-A STATISTICAL COMPARISON OF RESULTS.  
YAGER, ROBERT E. WICK, JOHN W.

EDRS PRICE MF-\$0.25 HC-\$0.36 9P.

PUB DATE MAR 66

DESCRIPTORS- \*BIOLOGY, \*COGNITIVE DEVELOPMENT, \*CRITICAL THINKING, \*SECONDARY SCHOOL SCIENCE, \*TEACHING METHODS, BIOLOGICAL SCIENCES CURRICULUM STUDY, GRADE 8, INSTRUCTION, TEAM TEACHING.

ED 011 236

THE RELATIONSHIP OF THREE FACTORS IN PRINTED MATERIALS TO STUDENT ACHIEVEMENT.

EATON, EDWARD J.

EDRS PRICE MF-\$0.25 HC-\$0.52 13P.

PUB DATE MAR 66

DESCRIPTORS- \*ACADEMIC ACHIEVEMENT, \*ASTRONOMY, \*CURRICULUM, \*ELEMENTARY SCHOOL SCIENCE, \*STUDENT ATTITUDES, ELEMENTARY SCHOOL SCIENCE PROJECT, EVALUATION, FLORIDA, GRADE 6, INSTRUCTIONAL MATERIALS.

ED 011 237

BIBLIOGRAPHY OF SCIENCE COURSES OF STUDY AND TEXTBOOKS GRADES 1-9, 1966 EDITION, NATIONAL SCIENCE TEACHERS ASSN., WASHINGTON, D.C.

EDRS PRICE MF-\$0.25 HC-\$1.72 43P.

PUB DATE 66

DESCRIPTORS- \*ELEMENTARY SCHOOL SCIENCE, \*SCIENCE COURSES, \*SECONDARY SCHOOL SCIENCE, \*TEXTBOOKS, BIBLIOGRAPHIES, BIOLOGY, CHEMISTRY, COMPUTER SCIENCE, DISTRICT OF COLUMBIA, GENERAL SCIENCE, NATIONAL EDUCATION ASSOCIATION, NATIONAL SCIENCE TEACHERS ASSOCIATION, PHYSICAL SCIENCES, PHYSICS, PROGRAMED INSTRUCTION, REFERENCE BOOKS.

ED 011 238

HOW WELL IS SSTP ACHIEVING ITS PURPOSES.  
EDGERTON, HAROLD A.

NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.  
EDRS PRICE MF-\$0.50 HC-\$2.84 71P.

PUB DATE APR 65

DESCRIPTORS- \*ABLE STUDENTS, \*PROGRAM EVALUATION, \*SECONDARY SCHOOL SCIENCE, \*STUDENT INTERESTS, COLLEGE SCIENCE, DISTRICT OF COLUMBIA, NATIONAL SCIENCE FOUNDATION, SCIENCE CAREERS, STUDENT CHARACTERISTICS, SUMMER SCIENCE PROGRAMS, SUMMER SCIENCE TRAINING PROGRAM.

ED 011 239

THE DIRECT TEACHING OF CRITICAL THINKING IN GRADES FOUR THROUGH SIX.

MASON, JOHN M.

EDRS PRICE MF-\$0.25 HC-\$0.56 14P.

PUB DATE DEC 63

DESCRIPTORS- \*COGNITIVE DEVELOPMENT, \*COGNITIVE PROCESSES, \*CRITICAL THINKING, \*ELEMENTARY SCHOOL SCIENCE, \*PROBLEM SOLVING, DEARBORN, EAST LANSING, FLINT, GRADE 4, GRADE 5, GRADE 6, GROSSE POINTE, LANSING, MICHIGAN, PONTIAC.

ED 011 240

IDENTIFYING THE "SLOW LEARNER" IN BSCS HIGH SCHOOL BIOLOGY.

GROBMAN, HULDA.

EDRS PRICE MF-\$0.25 HC-\$0.52 13P.

PUB DATE MAR 65

DESCRIPTORS- \*ACADEMIC ACHIEVEMENT, \*BIOLOGY, \*PROGRAM EVALUATION, \*SECONDARY SCHOOL SCIENCE, \*SLOW LEARNERS, BSCS BIOLOGY SPECIAL MATERIALS, BSCS GREEN VERSION, BSCS YELLOW VERSION, EVALUATION, GRADE 10, INSTRUCTION, INSTRUCTIONAL MATERIALS, SCIENCE COURSE IMPROVEMENT PROJECT.

ED 011 241

SELF-EVALUATION BY PHYSICAL SCIENCE INSTRUCTORS.

SIMPSON, RAY H.

EDRS PRICE MF-\$0.25 HC-\$0.44 11P.

PUB DATE

DESCRIPTORS- \*COLLEGE SCIENCE, \*EVALUATION, \*PHYSICAL SCIENCES, \*SELF EVALUATION, TEACHER IMPROVEMENT, EVALUATION METHODS, EVALUATION TECHNIQUES, TEACHER RATING.

ED 011 311

BIBLIOGRAPHY ON ACHIEVEMENT. SUPPLEMENT 1. HARVARD UNIV., CAMBRIDGE, MASS.

EDRS PRICE MF \$0.25 HC-\$0.36 9P.

PUB DATE OCT 66

DESCRIPTORS- \*ACADEMIC ACHIEVEMENT \*ACHIEVEMENT, \*BIBLIOGRAPHIES, \*PROBABILITY, \*UNDERACHIEVERS, CAMBRIDGE.

ED 011 476

OUR DESERT FRIENDS.

CROTZER, EMMETT H. AND OTHERS

NEVADA STATE DEPT. OF EDUCATION, CARSON CITY.

EDRS PRICE MF-\$0.50 HC-\$3.28 82P.

PUB DATE 64

DESCRIPTORS- \*AMERICAN INDIANS, \*BOTANY, \*EDUCATIONAL RESOURCES, \*ELEMENTARY GRADES, \*FOLK CULTURE, BIOLOGY INSTRUCTION, CARSON CITY, CARSON INDIAN AGENCY, INSTRUCTIONAL MATERIALS, NEVADA INDIAN AGENCY.

ED 011 505

EIGHTH-GRADE EARTH SCIENCE, TEXTBOOK READABILITY AND OTHER FACTORS WHICH COULD INFLUENCE THE SUCCESS OF THE EIGHTH-GRADE EARTH SCIENCE COURSE IN THE TEXAS PUBLIC SCHOOLS.

KLINE, LOREN E., JR.

EAST TEXAS STATE UNIV., COMMERCE

EDRS PRICE MF-\$1.25 HC-\$11.16 279P.

PUB DATE AUG 66

DESCRIPTORS- \*EARTH SCIENCE, \*EVALUATION, \*GRADE 8, \*SECONDARY SCHOOL SCIENCE, COMMERCE, EARTH SCIENCE CURRICULUM PROJECT, READABILITY, SCIENCE EQUIPMENT, SCIENCE FACILITIES, TEACHER EDUCATION, TEXAS EDUCATION AGENCY.

ED 011 506

BSCS BIOLOGY-IMPLEMENTATION IN THE SCHOOLS.

GROBMAN, ARNOLD B. AND OTHERS

BIOLOGICAL SCIENCES CURRICULUM STUDY, BOULDER, COLO.

EDRS PRICE MF-\$0.50 HC-\$4.16 104P.

PUB DATE JUN 64

DESCRIPTORS - \*BIOLOGY, \*CURRICULUM DEVELOPMENT, \*SCIENCE EQUIPMENT, \*SCIENCE FACILITIES, \*SECONDARY SCHOOL SCIENCE, BIOLOGICAL SCIENCES CURRICULUM STUDY (BSCS), BOULDER, NATIONAL DEFENSE EDUCATION ACT, SCIENCE COURSE IMPROVEMENT PROJECT, SCIENCE MATERIALS.

ED 011 507

EDUCATION AND THE SPIRIT OF SCIENCE.

COREY, ARTHUR F. AND OTHERS

NATIONAL EDUCATION ASSN.,

WASHINGTON, D.C.

EDRS PRICE MF-\$0.25 HC-\$1.36 34P.

PUB DATE 66

DESCRIPTORS- \*EDUCATIONAL OBJECTIVES, \*SCIENCE EDUCATION, DISTRICT OF COLUMBIA, EDUCATIONAL POLICIES COMMISSION, NATIONAL DEFENSE EDUCATION ACT, SOCIO ECONOMIC INFLUENCES.

ED 011 512

IMPROVING SCIENCE EDUCATION IN THE UNITED STATES.

GATEOOD, CLAUDE W. OBOURN, ELLSWORTH S.

EDRS PRICE MF-\$0.25 HC-\$1.96 49P.

PUB DATE DEC 63

DESCRIPTORS- \*CURRICULUM DEVELOPMENT, \*EQUIPMENT MANUFACTURERS, \*FOUNDATION PROGRAMS, \*SCIENCE EDUCATION HISTORY, \*TEACHER EDUCATION, BIOLOGICAL SCIENCES CURRICULUM STUDY, CEYLON, CHEMICAL BOND APPROACH, COURSE CONTENT, EDUCATIONAL OBJECTIVES, INSERVICE TEACHER EDUCATION, INSTITUTES (TRAINING PROGRAMS), NATIONAL SCIENCE FOUNDATION, PHYSICAL SCIENCE STUDY COMMITTEE, SCIENCE EQUIPMENT, SCIENCE TEACHING CENTERS, SECONDARY SCHOOL SCIENCE.

ED 011 514

SCIENCE TEACHING IN THE PUBLIC JUNIOR HIGH SCHOOL.

ROGERS, LOLA ERIKSEN

OFFICE OF EDUCATION, WASHINGTON, D.C.

EDRS PRICE MF-\$0.50 HC NOT AVAILABLE, 70P.

PUB DATE 67

DESCRIPTORS- \*SCHOOL ORGANIZATION, \*SCIENCE TEACHERS, \*SECONDARY SCHOOL SCIENCE, \*STUDENT ENROLLMENT, DISTRICT OF COLUMBIA, GRADE 7, GRADE 8, GRADE 9, INSERVICE TEACHER EDUCATION, INSTRUCTIONAL MATERIALS, JUNIOR HIGH SCHOOLS, NDEA TITLE III, SCHOOL STATISTICS, SCIENCE CLUBS, SCIENCE CONSULTANTS, SCIENCE FAIRS.

ED 011 515

PLANNING FOR EXCELLENCE IN HIGH SCHOOL SCIENCE.

STOLLBERG, ROBERT AND OTHERS

NATIONAL SCIENCE TEACHERS ASSN., WASHINGTON, D.C.

EDRS PRICE MF-\$0.50 HC-\$3.04 76P.

PUB DATE 61

DESCRIPTORS- \*CURRICULUM DEVELOPMENT, \*SCIENCE EDUCATION, \*SECONDARY SCHOOL SCIENCE, CONFERENCE REPORTS, DISTRICT OF COLUMBIA, EDUCATIONAL OBJECTIVES, EFFECTIVE TEACHING, SCIENCE AND SOCIETY, SCIENCE SUPERVISION, TEACHER EDUCATION.

ED 011 516

SUPERVISION FOR QUALITY EDUCATION IN SCIENCE, REPORT ON A CONFERENCE ARRANGED BY THE SPECIALISTS FOR SECONDARY SCIENCE (JUNE 25-29, 1962).

ALEXANDER, UHLMAN S.

OFFICE OF EDUCATION, WASHINGTON, D.C.

EDRS PRICE MF-\$0.75 HC NOT AVAILABLE, 178P.

PUB DATE 63

DESCRIPTORS- \*CONFERENCE REPORTS, \*NATURAL SCIENCE, \*SCIENCE EDUCATION, \*SCIENCE SUPERVISION, SUPERVISION, CURRICULUM DEVELOPMENT, DISTRICT OF COLUMBIA, EDUCATIONAL OBJECTIVES, SECONDARY SCHOOL SCIENCE.

ED 011 610

A CRITICAL EXAMINATION OF THE DEVELOPMENT OF SCIENCE CONCENTRATIONS IN THE TEACHER PREPARATION PROGRAM FOR THE PROSPECTIVE ELEMENTARY SCHOOL TEACHER AT THE UNIVERSITY OF TEXAS.

EATON, EDWARD J.

EDRS PRICE MF-\$0.25 HC-\$0.72 18P.

PUB DATE 66

DESCRIPTORS- \*COLLEGE STUDENTS, \*COUNSELING EFFECTIVENESS, \*ELEMENTARY EDUCATION, \*SCIENCE CAREERS, \*STUDENT INTERESTS, AUSTIN, BIOLOGY, DATA COLLECTION, GEOLOGY, PROGRAM IMPROVEMENT, STATISTICAL ANALYSIS, STUDENT CHARACTERISTICS, TEACHER EDUCATION.

ED 011 781

THE NEED TO ESTABLISH A MARINE SCIENCES TECHNOLOGY PROGRAM AT SHORELINE COMMUNITY COLLEGE.

TEEL, WARD AND OTHERS

SHORELINE COMMUNITY COLL., SEATTLE, WASH.

EDRS PRICE MF-\$0.25 HC-\$1.56 39P.

PUB DATE 66

DESCRIPTORS- \*BIOLOGICAL SCIENCES, \*BIOLOGY INSTRUCTION, \*JUNIOR COLLEGES, \*OCEANOLOGY, \*TECHNICAL EDUCATION, CAREER OPPORTUNITIES, COMMUNITY SURVEYS, CURRICULUM GUIDES, CURRICULUM RESEARCH, INDUSTRIAL EDUCATION, JOB TRAINING, MARINE BIOLOGY, OCCUPATIONAL INFORMATION, OCCUPATIONAL SURVEYS, SEATTLE, VOCATIONAL EDUCATION.

ED 011 807

OUTDOOR EDUCATION-A METHOD OF TEACHING.

ISENBERG, ROBERT M.

EDRS PRICE MF-\$0.25 HC-\$0.32 8P.

PUB DATE 67

DESCRIPTORS- \*CAMPING, \*INSTRUCTIONAL INNOVATION, \*LEARNING ACTIVITIES, \*LEARNING EXPERIENCE, \*OUTDOOR EDUCATION, HEADSTART PROGRAM, LEARNING MOTIVATION, LOS ANGELES, TEACHING METHODS.

ED 011 834

CORE STUDIES FOR UNDERGRADUATE MAJORS-A CONFERENCE REPORT.

HALL, THOMAS AND OTHERS

EDRS PRICE MF-\$0.25 HC-\$0.40 10P.

PUB DATE 64

DESCRIPTORS- \*BIOLOGY, \*COLLEGE SCIENCE, \*CORE COURSES, \*COURSE CONTENT, \*CURRICULUM DEVELOPMENT, BERKELEY, CONFERENCES, ST. LOUIS, TEACHER EDUCATION.

ED 011 835

RESEARCH IN THE TEACHING OF SCIENCE JULY 1957 TO JULY 1959

OSBOURN, ELLSWORTH S. AND OTHERS

OFFICE OF EDUCATION, WASHINGTON, D.C.

EDRS PRICE MF-\$0.50 HC-\$3.76 94P.

PUB DATE 62

DESCRIPTORS- \*COLLEGE SCIENCE, \*EDUCATIONAL RESEARCH, \*ELEMENTARY SCHOOL SCIENCE, \*SCIENCE EDUCATION, \*SECONDARY SCHOOL SCIENCE, CURRICULUM, DISTRICT OF COLUMBIA, EDUCATIONAL OBJECTIVES, EDUCATIONAL PHILOSOPHY, LEARNING, NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING, EQUIPMENT, SCIENCE FACILITIES, TEACHER EDUCATION.

ED 011 836

RESEARCH STUDIES IN COLLEGE SCIENCE FROM JULY 1963 TO JULY 1964.

LEE, ADDISON E. AND OTHERS

TEXAS UNIVERSITY, SCIENCE EDUCATION CENTER, AUSTIN.

EDRS PRICE MF-\$0.25 HC\$0.96 24P.

PUB DATE 65

DESCRIPTORS- \*COLLEGE SCIENCE, \*CURRICULUM, \*TEACHER EDUCATION, AUSTIN, EDUCATIONAL OBJECTIVES, EDUCATIONAL PHILOSOPHY, EDUCATIONAL RESEARCH DESIGN, EVALUATION, LEARNING, LEARNING THEORIES, SCIENCE EQUIPMENT, SCIENCE FACILITIES, TEACHING METHODS.

ED 011 837

SOME STATISTICS OF U.S. SECONDARY SCHOOLS, 1964-1965.

NSTA STAFF.

EDRS PRICE MF-\$0.25 HC-\$0.20 5P.

PUB DATE SEP 65

DESCRIPTORS- \*SCHOOL ORGANIZATION, \*SCIENCE EDUCATION, \*SECONDARY SCHOOLS, \*TEACHER CHARACTERISTICS, \*TEACHER PLACEMENT, MATHEMATICS EDUCATION, NATIONAL ASSOCIATION OF

SECONDARY SCHOOL PRINCIPALS, NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS, NATIONAL SCIENCE FOUNDATION, NATIONAL SCIENCE TEACHERS ASSOCIATION, PRIVATE SCHOOLS, PUBLIC SCHOOLS, SECONDARY SCHOOL SCIENCE, STUDENT ENROLLMENT, TEACHING LOAD.

ED 011 839

A HALF CENTURY OF TEACHING SCIENCE AND MATHEMATICS.

ISENBARGER, KATHARINE U. AND OTHERS  
CENTRAL ASSOCIATION OF SCIENCE AND MATH. TEACHERS INC.

EDRS PRICE MF-\$1.00 HC-\$8.28 207P.

PUB DATE 50

DESCRIPTORS- \*CURRICULUM, \*EDUCATIONAL OBJECTIVES, \*SCIENCE EDUCATION, \*SECONDARY SCHOOL SCIENCE, \*TEACHER EDUCATION, BIOLOGY, CENTRAL ASSOCIATION OF SCIENCE AND MATHEMATICS TEACHERS, CHEMISTRY, COURSE CONTENT, COURSE DESCRIPTORS, GENERAL SCIENCE, MATHEMATICS EDUCATION, PHYSICAL SCIENCES, PHYSICS, TEACHING METHODS.

ED 011 840

A DIRECTORY OF INFORMATION RESOURCES IN THE UNITED STATES. PHYSICAL SCIENCES, BIOLOGICAL SCIENCES, ENGINEERING.

LIBRARY OF CONGRESS, WASHINGTON, D.C.

EDRS PRICE MF-\$1.50 HC-\$14.32 359P.

PUB DATE JAN 65

DESCRIPTORS- \*BIOLOGICAL SCIENCES, \*DIRECTORIES, \*ENGINEERING, \*PHYSICAL SCIENCES, DISTRICT OF COLUMBIA, INFORMATION DISSEMINATION, NATIONAL REFERRAL CENTER FOR SCIENCE AND TECHNOLOGY, SCIENCES, TECHNOLOGICAL ADVANCEMENT.

ED 011 841

EVALUATION IN ELEMENTARY SCHOOL SCIENCE.

TANNENBAUM, HAROLD E. AND OTHERS  
OFFICE OF EDUCATION, WASHINGTON, D.C.

EDRS PRICE MF-\$0.50 HC-\$3.32 83P.

PUB DATE 64

DESCRIPTORS- \*CURRICULUM EVALUATION, \*EDUCATIONAL OBJECTIVES, \*ELEMENTARY SCHOOL SCIENCE, \*EVALUATION, DISTRICT OF COLUMBIA, EFFECTIVE TEACHING, INSERVICE TEACHER EDUCATION, INSTRUCTION, SCIENCE TESTS, SELF EVALUATION, STUDENT EVALUATION, SUPERVISION, TEACHER EVALUATION, TEST CONSTRUCTION, TEXTBOOK EVALUATION, U.S. OFFICE OF EDUCATION.

ED 011 842

EDUCATIONAL RESEARCH RELATED TO SCIENCE INSTRUCTION FOR THE ELEMENTARY AND JUNIOR HIGH SCHOOL - A REVIEW AND COMMENTARY.

SMITH, HERBERT A.

EDRS PRICE MF-\$0.25 HC-\$0.08 27P.

PUB DATE SEP 63

DESCRIPTORS- \*CURRICULUM DEVELOPMENT, \*ELEMENTARY SCHOOL SCIENCE, \*SCIENCE EDUCATION, \*SECONDARY SCHOOL SCIENCE, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, BIBLIOGRAPHIES, COMMISSION ON SCIENCE EDUCATION, COURSE CONTENT, EDUCATIONAL OBJECTIVES, INSTRUCTION, RESEARCH METHODOLOGY, STUDENT EVALUATION, TEACHER EDUCATION, TEACHING METHODS.

ED 011 843

SCIENTIFIC LITERACY IN THE SIXTIES.

KOELSCHE, CHARLES L. MORGAN, ASHLEY G.

GEORGIA UNIVERSITY, ATHENS.

EDRS PRICE MF-\$0.25 HC-\$1.80 45P.

PUB DATE SEP 64

DESCRIPTORS- \*LITERACY, \*SCIENTIFIC LITERACY, \*SCIENTIFIC PRINCIPLES, ATHENS, BIOLOGICAL SCIENCES CURRICULUM STUDY, CHEMICAL BOND APPROACH, CHEMICAL EDUCATION MATERIALS STUDY, CONCEPT FORMATION, GENERAL EDUCATION, PHYSICAL SCIENCE STUDY COMMITTEE, READING.

ED 011 844

RESEARCH IN THE TEACHING OF SCIENCE,

JOHNSON, LLOYD K. AND OTHERS

OFFICE OF EDUCATION, WASHINGTON, D.C.

EDRS PRICE MF-\$0.75 HC-\$6.40 160P.

PUB DATE 65

DESCRIPTORS- \*COLLEGE SCIENCE, \*EDUCATIONAL RESEARCH, \*ELEMENTARY SCHOOL SCIENCE, \*SECONDARY SCHOOL SCIENCE, CURRICULUM, DISTRICT OF COLUMBIA, EDUCATIONAL OBJECTIVES, LEARNING, NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING, RESEARCH REVIEWS, SCIENCE INSTRUCTION, TEACHER EDUCATION, TEACHING METHODS.

ED 011 845

SCIENCE EDUCATION RESEARCH STUDIES - 1950.

JOHNSON, PHILIP G.

OFFICE OF EDUCATION, WASHINGTON, D.C.

EDRS PRICE MF-\$0.25 HC-\$1.32 33P.

PUB DATE 51

DESCRIPTORS- \*COLLEGE SCIENCE, \*EDUCATIONAL RESEARCH, \*ELEMENTARY SCHOOL SCIENCE, \*SCIENCE EDUCATION, \*SECONDARY SCHOOL SCIENCE, DISTRICT OF COLUMBIA, RESEARCH REVIEWS (PUBLICATIONS), SCIENCE INSTRUCTION.

ED 011 846

SCIENCE EDUCATION RESEARCH STUDIES-1951.

JOHNSON, PHILIP G.

OFFICE OF EDUCATION, WASHINGTON, D.C.

EDRS PRICE MF-\$0.25 HC-\$1.32 33P.

PUB DATE FEB 52

DESCRIPTORS- \*COLLEGE SCIENCE, \*EDUCATIONAL RESEARCH, \*ELEMENTARY SCHOOL SCIENCE, \*SCIENCE EDUCATION, \*SECONDARY SCHOOL SCIENCE, DISTRICT OF COLUMBIA, RESEARCH, RESEARCH REVIEWS (PUBLICATIONS), SCIENCE INSTRUCTION.

ED 011 847  
SCIENCE EDUCATION RESEARCH STUDIES-1952.  
JOHNSON, PHILIP G.  
OFFICE OF EDUCATION, WASHINGTON, D.C.  
EDRS PRICE MF-\$0.50 HC-\$2.36 56P.

PUB DATE JUN 53

DESCRIPTORS- \*COLLEGE SCIENCE, EDUCATIONAL RESEARCH, \*ELEMENTARY SCHOOL SCIENCE, \*SCIENCE EDUCATION, \*SECONDARY SCHOOL SCIENCE, DISTRICT OF COLUMBIA, RESEARCH, RESEARCH REVIEWS (PUBLICATIONS), SCIENCE INSTRUCTION.

ED 011 848  
SCIENCE EDUCATION RESEARCH STUDIES-1953.  
BROWN, KENNETH E. BLACKWOOD, PAUL E.  
EDRS PRICE MF-\$0.25 HC-\$1.40 35P.

PUB DATE 54

DESCRIPTORS- \*COLLEGE SCIENCE, \*EDUCATIONAL RESEARCH, \*ELEMENTARY SCHOOL SCIENCES, \*SCIENCE EDUCATION, \*SECONDARY SCHOOL SCIENCE, RESEARCH, RESEARCH REVIEWS (PUBLICATIONS), SCIENCE INSTRUCTION.

ED 011 852  
IMPROVING SCIENCE EDUCATION. REPORT OF A NATIONAL CONFERENCE OF SCIENCE SUPERVISORS (JUNE 14-17, 1966).

PILTZ, ALBERT STIEDLE, WALTER  
TEXAS EDUCATION AGENCY, AUSTIN

EDRS PRICE MF-\$0.50 HC-\$4.00 102P.

PUB DATE JUN 66

DESCRIPTORS- \*CURRICULUM, \*EDUCATIONAL OBJECTIVES, \*FEDERAL LEGISLATION, \*SCIENCE EDUCATION, \*SCIENCE INSTRUCTION, \*SCIENCE SUPERVISION, AUSTIN, DISADVANTAGED YOUTH, LABORATORY SAFETY, LABORATORY TECHNIQUES, LEARNING THEORIES, OUTDOOR EDUCATION, SCIENCE EQUIPMENT, SCIENCE FACILITIES, TEACHER EDUCATION.

ED 011 853  
NATIONAL DEFENSE EDUCATION ACT OF 1958, AS AMENDED, TITLE III, ANNUAL REPORT-FISCAL YEAR 1966. PART III, NARRATIVE REPORT, SCIENCE.

PILTZ, ALBERT STEIDLE, WALTER  
OFFICE OF EDUCATION, WASHINGTON, D.C.

EDRS PRICE MF-\$0.50 HC-\$4.00 100P.

PUB DATE 66

DESCRIPTORS- \*ANNUAL REPORTS, \*CURRICULUM, \*ELEMENTARY SCHOOL SCIENCE, \*FEDERAL LEGISLATION, \*SECONDARY SCHOOL SCIENCE, DISTRICT OF COLUMBIA, INSERVICE TEACHER EDUCATION, NDEA TITLE III, PRESERVICE EDUCATION, SCIENCE EQUIPMENT, SCIENCE FACILITIES, SCIENCE MATERIALS, SCIENCE SUPERVISION, TEACHER EDUCATION.

ED 011 854

GUIDELINES FOR PREPARATION PROGRAMS OF TEACHERS OF SECONDARY SCHOOL SCIENCE AND MATHEMATICS.

NATIONAL ASSN. OF STATE DIR. OF TEACH. EDUC. CERT. AMERICAN ASSN. FOR THE ADVANCEMENT OF SCIENCE.

EDRS PRICE MF-\$0.25 HC-\$1.64 41P.

PUB DATE SEP 61

DESCRIPTORS- \*CERTIFICATION, \*SECONDARY SCHOOL SCIENCE, \*TEACHER EDUCATION PROGRAMS, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, CARNEGIE CORPORATION OF NEW YORK, COLLEGE SCIENCE, CONFERENCES, PRESERVICE EDUCATION, TEACHER EDUCATION.

ED 011 856

A STUDY OF THE ATTRIBUTES OF APPLICANTS TO NATIONAL SCIENCE FOUNDATION SUMMER INSTITUTES IN 1964.

BERGER, RAYMOND M.

PSYCHOMETRICS CONSULTANTS, LOS ANGELES, CALIFORNIA.

EDRS PRICE MF-\$1.50 HC-\$14.60 356P.

PUB DATE AUG 65

DESCRIPTORS- \*COLLEGE SCIENCE, \*ELEMENTARY SCHOOL SCIENCE, \*SCIENCE INSTITUTES, \*SCIENCE TEACHERS, \*SECONDARY SCHOOL SCIENCE, \*TEACHER CHARACTERISTICS, \*TEACHER EDUCATION, BIOLOGY, CHEMISTRY, CORPORATION FOR ECONOMIC AND INDUSTRIAL RESEARCH, EARTH SCIENCE, LOS ANGELES, MATHEMATICS TEACHERS, NATIONAL SCIENCE FOUNDATION, PHYSICS, SCIENCE RESEARCH ASSOCIATES, SUMMER INSTITUTES.

ED 011 857

IMPACTS OF THE NATIONAL SCIENCE FOUNDATIONS SUMMER SCIENCE PROGRAM FOR HIGH ABILITY SECONDARY SCHOOL STUDENTS.

EDGERTON, HAROLD A. RICHARDSON, BELLOWS HENRY AND CO. INC., NEW YORK.

EDRS PRICE MF-\$0.75 HC-\$5.88 147P.

PUB DATE 62

DESCRIPTORS- \*ABLE STUDENTS, \*ACADEMIC ACHIEVEMENT, \*EDUCATIONAL PROGRAMS, \*SECONDARY SCHOOL SCIENCE, \*SECONDARY SCHOOL STUDENTS, \*STUDENT ATTITUDES, NATIONAL SCIENCE FOUNDATION, NEW YORK CITY, SCIENCE CAREERS, STUDENT INTERESTS.

ED 011 860

COURSE AND CURRICULUM IMPROVEMENT PROJECTS-MATHEMATICS, SCIENCE, ENGINEERING.

FONTAINE, THOMAS D.

NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

EDRS PRICE MF-\$0.50 HC-\$5.00 125P.

PUB DATE SEP 66

DESCRIPTORS- \*COLLEGE SCIENCE, \*CURRICULUM DEVELOPMENT, \*ELEMENTARY SCHOOL SCIENCE, \*SCIENCE COURSE IMPROVEMENT PROJECT, \*SECONDARY SCHOOL SCIENCE, BIOLOGICAL SCIENCES CURRICULUM STUDY, BIOLOGY, CHEMICAL BOND APPROACH, CHEMISTRY, COLLEGE MATHEMATICS, EARTH SCIENCE, EARTH SCIENCE CURRICULUM PROJECT, ELEMENTARY SCHOOL MATHEMATICS, ENGINEERING, NATIONAL SCIENCE FOUNDATION, PHYSICS, PSYCHOLOGY, SECONDARY SCHOOL MATHEMATICS, SOCIAL SCIENCES.

ED 011 861

ACHIEVE LEARNING OBJECTIVES, PAPERS PREPARED ESPECIALLY FOR A SUMMER INSTITUTE ON EFFECTIVE TEACHING FOR YOUNG ENGINEERING TEACHERS (PENNSYLVANIA STATE UNIVERSITY, AUGUST 28 THROUGH SEPTEMBER 3, 1960).

LANCASTER, OTIS E.

PENNSYLVANIA STATE UNIVERSITY,  
UNIVERSITY PARK.

EDRS PRICE MF-\$2.25 HC-\$21.32 533P.

PUB DATE SEP 60

DESCRIPTORS- \*COLLEGE SCIENCE, \*CURRICULUM DEVELOPMENT, \*ENGINEERING EDUCATION, \*LEARNING THEORIES, \*PAPERS, \*SCIENCE EDUCATION, \*TEACHING METHODS, AMERICAN SOCIETY OF ENGINEERING EDUCATION, AUDIOVISUAL AIDS, BIBLIOGRAPHIES, CONFERENCE REPORTS, EDUCATIONAL OBJECTIVES, EDUCATIONAL RESEARCH, EVALUATION, FORD FOUNDATION, TEACHER EDUCATION, THE ENGINEERS COUNCIL FOR PROFESSIONAL DEVELOPMENT.

ED 011 862

PROCEEDINGS ON THE CONFERENCE ON THE IMPACT OF COMPUTERS OF EDUCATION IN ENGINEERING DESIGN (CHICAGO, APRIL 21-23, 1966).

FENVES, STEVEN J. AND OTHERS

COMMISSION ON ENGINEERING EDUCATION, WASHINGTON, D.C.

EDRS PRICE MF-\$0.75 HC-\$7.20 180P.

PUB DATE 66

DESCRIPTORS- \*CONFERENCE REPORTS, \*CURRICULUM DEVELOPMENT, \*ENGINEERING EDUCATION, \*TECHNICAL EDUCATION, CHICAGO, COMPUTER ASSISTED INSTRUCTION, DISTRICT OF COLUMBIA, EDUCATIONAL TECHNOLOGY, INFORMATION RETRIEVAL, INSTRUCTION, NATIONAL SCIENCE FOUNDATION, SCIENCE EDUCATION.

ED 011 866

GUIDELINES AND SUGGESTED TITLE LIST FOR UNDERGRADUATE CHEMISTRY LIBRARIES, A REPORT OF A.C.C.C. PANEL MEETINGS ON GUIDELINES FOR BOOKLISTS AND LIBRARY DEVELOPMENT (WASHINGTON, D.C. FEBRUARY 1965).

LIPPINCOTT, W. T. AND OTHERS

ADVISORY COUNCIL ON COLLEGE CHEMISTRY.

EDRS PRICE MF-\$0.25 HC-\$1.96 49P.

PUB DATE APR 66

DESCRIPTORS- \*BOOKLISTS, \*CHEMISTRY, \*COLLEGE SCIENCE, \*TEXTBOOKS, ADVISORY COUNCIL ON COLLEGE CHEMISTRY (ACCC).

ED 011 867

TEACHING EARLY ADOLESCENTS TO THINK.

BAUGHMAN, M. DALE

JUNIOR HIGH SCHOOL ASSN. OF ILLINOIS, URBANA.

EDRS PRICE MF-\$0.50 HC-\$3.08 77P.

PUB DATE 64

DESCRIPTORS- \*CREATIVE THINKING, \*CRITICAL THINKING, \*ENGLISH EDUCATION, \*INQUIRY TRAINING, \*PAPERS, \*SECONDARY SCHOOL SCIENCE,

\*SOCIAL STUDIES, ART EDUCATION, BIBLIOGRAPHIES, COGNITIVE PROCESSES, INDUCTIVE METHODS, JUNIOR HIGH SCHOOL ASSOCIATION OF ILLINOIS, PROBLEM SOLVING, SPEECHES, STUDENT CHARACTERISTICS, TEACHING METHODS, URBANA.

ED 011 965

HIGH SCHOOL PHYSICS BY TELEVISION - THE HOUSTON AREA PROJECT.

STREVELL, WALLACE H.

HOUSTON UNIV., TEXAS, BUR OF EDUC, RES. AND SER.

EDRS PRICE MF-\$0.25 HC-\$1.60 40P.

PUB DATE SEP 60

DESCRIPTORS- \*GROUPING (INSTRUCTIONAL PURPOSES), \*INSTRUCTIONAL TECHNOLOGY, \*PHYSICS INSTRUCTION, \*PROGRAM EFFECTIVENESS, \*TELEVIEWED INSTRUCTION, CLASS ORGANIZATION, CONVENTIONAL INSTRUCTION, HIGH SCHOOL STUDENTS, HOUSTON, NEGRO STUDENTS, OPEN CIRCUIT TELEVISION.

ED 012 106

TOWARDS BETTER CURRICULA THROUGH COMPUTER SELECTED SEQUENCING OF SUBJECT MATTER.

TAFT, MARTIN I. REISMAN, ARNOLD.

EDRS PRICE MF-\$0.25 HC-\$1.08 27P.

DESCRIPTORS- \*COMPUTER ORIENTED PROGRAMS, \*CURRICULUM PLANNING, \*LEARNING THEORIES, \*MATHEMATICAL MODELS, \*SEQUENTIAL LEARNING, ALGORITHMS, REINFORCEMENT, SCHEDULING, SIMULATION, STUDENTS.

ED 012 233

RETHINKING SCIENCE EDUCATION, THE FIFTY-NINTH YEARBOOK OF THE NATIONAL SOCIETY FOR THE STUDY OF EDUCATION, PART I,

BARNARD, J. DARRELL

NATIONAL SOCIETY FOR THE STUDY OF EDUCATION, CHICAGO.

EDRS PRICE MF-\$1.50 HC-\$14.76 369P.

PUB DATE 60

DESCRIPTORS- \*COLLEGE SCIENCE, \*ELEMENTARY SCHOOL SCIENCE, \*RESEARCH REVIEWS (PUBLICATIONS), \*SCIENCE EDUCATION, \*SECONDARY SCHOOL SCIENCE, BIBLIOGRAPHIES, CHICAGO, CRITICAL THINKING, CURRICULUM, CURRICULUM DEVELOPMENT, EDUCATIONAL OBJECTIVES, GENERAL EDUCATION, INSTRUCTIONAL MATERIALS, LEARNING, SCIENCE EQUIPMENT, SCIENCE FACILITIES, SUPERVISION, TEACHER EDUCATION.

ED 012 234

GUIDELINES FOR THE DOCTORATE IN SCIENCE EDUCATION, A STATEMENT BY THE ASSOCIATION FOR THE EDUCATION OF TEACHERS IN SCIENCE

RUTHERFORD, F. JAMES AND OTHERS

NATIONAL SCIENCE TEACHERS ASSN., WASHINGTON, D.C.

EDRS PRICE MF-\$0.25 HC-\$0.32 8P.

PUB DATE OCT 66

DESCRIPTORS- \*COLLEGE SCIENCE \*CURRICULUM DEVELOPMENT, \*DOCTORAL DEGREES, \*SCIENCE EDUCATION, \*TEACHER EDUCATION, ASSOCIATION FOR THE EDUCATION OF TEACHERS IN SCIENCE, CURRICULUM, DISTRICT OF COLUMBIA, DOCTORAL PROGRAMS, GRADUATE STUDY.

ED 012 235

REVIEW OF RESEARCH STUDIES IN SCIENCE EDUCATION,

TAYLOR, WAYNE AND OTHERS

MICHIGAN STATE UNIV., EAST LANSING.

EDRS PRICE MF-\$0.25 HC-\$2.04 51P.

PUB DATE 66

DESCRIPTORS- \*BIBLIOGRAPHIES, \*EDUCATIONAL RESEARCH, \*RESEARCH REVIEWS (PUBLICATIONS), \*SCIENCE EDUCATION, \*SECONDARY SCHOOL SCIENCE, ACADEMIC ACHIEVEMENT, ATTITUDES, BIOLOGY, CHEMISTRY, CURRICULUM, EARTH SCIENCE, EAST LANSING, EFFECTIVE TEACHING, EVALUATION, INSTRUCTION, INSTRUCTIONAL MATERIALS, LEARNING, PHYSICAL SCIENCES, PHYSICS, SCIENCE FACILITIES, TEACHER EDUCATION, TEACHING METHODS.

ED 012 239

A REVIEW OF NEW SCIENCE CURRICULUM MATERIALS.

O'HEARN, GEORGE T.

WISCONSIN STATE DEPT. OF PUB. INSTR., MADISON

EDRS PRICE MF-\$0.25 HC-\$1.56 39P.

PUB DATE 66

DESCRIPTORS- \*CURRICULUM DEVELOPMENT, \*ELEMENTARY SCHOOL SCIENCE, \*SCIENCE COURSE IMPROVEMENT PROJECT, \*SCIENCE EQUIPMENT, \*SCIENCE MATERIALS, \*SECONDARY SCHOOL SCIENCE, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, ASTRONOMY, BIBLIOGRAPHIES, BIOLOGICAL SCIENCES CURRICULUM STUDY, BIOLOGY, CHEMICAL BOND APPROACH, CHEMISTRY, EARTH SCIENCE, MADISON, MINNEAPOLIS, PHYSICAL SCIENCES, PHYSICS.

ED 012 240

HIGHER EDUCATION AND THE DEMAND FOR SCIENTIFIC MANPOWER IN THE UNITED STATES, OECD REVIEWS OF NATIONAL POLICIES FOR SCIENCE AND EDUCATION.

COCKCROFT, JOHN AND OTHERS

ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT.

EDRS PRICE MF-\$0.50 HC-\$4.16 104P.

PUB DATE NOV 63

DESCRIPTORS- \*EDUCATIONAL POLICY, \*HIGHER EDUCATION, \*SCIENCE EDUCATION, \*SCIENTIFIC MANPOWER, \*VOCATIONAL EDUCATION, COLLEGE SCIENCE, FRANCE, MANPOWER DEVELOPMENT, MANPOWER UTILIZATION, NATURAL SCIENCES, PARIS, SCIENCES, UNITED STATES.

ED 012 243

GUIDELINES FOR SCIENCE AND MATHEMATICS IN THE PREPARATION PROGRAM OF ELEMENTARY

SCHOOL TEACHERS.

VIAL, WILLIAM P. AND OTHERS

NATIONAL ASSN. OF STATE DIR. OF TEACH. EDUC. CERT. AMERICAN ASSN. FOR THE ADVANCE OF SCI. WASHINGTON, D.C.

EDRS PRICE MF-\$0.25 HC-\$1.20 30P.

PUB DATE 63

DESCRIPTORS- \*COLLEGE SCIENCE, \*CURRICULUM DEVELOPMENT, \*ELEMENTARY SCHOOL SCIENCE, \*TEACHER EDUCATION, COLLEGE MATHEMATICS, DISTRICT OF COLUMBIA, EDUCATIONAL PROGRAMS, ELEMENTARY SCHOOL MATHEMATICS, INSERVICE EDUCATION, PRESERVICE EDUCATION.

ED 012 247

THE CHANGING SCHOOL CURRICULUM.

GOODLAD, JOHN I. AND OTHERS

FUND FOR THE ADVANCEMENT OF EDUCATION, NEW YORK.

EDRS PRICE MF-\$0.50 HC-\$4.88 122P.

PUB DATE AUG 66

DESCRIPTORS- \*CURRICULUM DEVELOPMENT, \*ELEMENTARY SCHOOL MATHEMATICS, \*ELEMENTARY SCHOOL SCIENCE, \*SECONDARY SCHOOL SCIENCE, ANNOTATED BIBLIOGRAPHIES, BIOLOGY, CHEMICAL BOND APPROACH, CHEMISTRY, CURRICULUM EVALUATION, EDUCATIONAL OBJECTIVES, EVALUATION, HEALTH EDUCATION, INSTRUCTION, NEW YORK CITY, PHYSICAL SCIENCES, PHYSICS, SCIENCE COURSE IMPROVEMENT PROJECT, SECONDARY SCHOOL MATHEMATICS, SOCIAL SCIENCES.

ED 012 248

ANNOTATED BIBLIOGRAPHY OF GEOLOGICAL EDUCATION.

BERG, J. ROBERT AND OTHERS

AMERICAN GEOLOGICAL INST., WASHINGTON, D.C.

EDRS PRICE MF-\$0.25 HC-\$1.16 29P.

PUB DATE 63

DESCRIPTORS- \*ANNOTATED BIBLIOGRAPHIES, \*COLLEGE SCIENCE, \*CURRICULUM, \*SCIENCE EDUCATION, \*GEOLOGY, \*SCIENCE EDUCATION, AMERICAN GEOLOGICAL INSTITUTE, DISTRICT OF COLUMBIA, GEOSTUDY PROGRAM, GRADUATE STUDY, NATIONAL ASSOCIATION OF GEOLOGY TEACHERS, NATIONAL SCIENCE FOUNDATION, UNDERGRADUATE STUDY.

ED 012 250

NATURE CENTERS AND OUTDOOR EDUCATION FACILITIES.

NATIONAL AUDUBON SOCIETY,

NEW YORK, N. Y.

EDRS PRICE MF-\$0.25 HC-\$0.80 20P.

PUB DATE MAR 67

DESCRIPTORS- \*COLLEGE SCIENCE, \*DIRECTORIES, \*ELEMENTARY SCHOOL SCIENCE, \*NATURE CENTERS, \*OUTDOOR EDUCATION, \*SCIENCE FACILITIES \*SECONDARY SCHOOL SCIENCE, BIOLOGY, CONSERVATION EDUCATION, NEW YORK CITY, SCIENCE CENTERS.

ED 012 251

THE NEW SCHOOL SCIENCE,

A REPORT TO SCHOOL ADMINISTRATORS ON

REGIONAL ORIENTATION CONFERENCES IN SCIENCE.  
VIAL, WILLIAM P. AND OTHERS  
AMERICAN ASSN. FOR THE ADVANCEMENT OF SCIENCE.

EDRS PRICE MF-\$0.50 HC-\$4.00 100P.

PUB DATE 63

DESCRIPTORS- \*CURRICULUM DEVELOPMENT,  
\*ELEMENTARY SCHOOL SCIENCE, \*SECONDARY  
SCHOOL SCIENCE, ADMINISTRATION, BIOLOGY,  
CHEMICAL BOND APPROACH, CHEMISTRY, CUR-  
RICULUM, DISTRICT OF COLUMBIA, EARTH SCI-  
ENCE, EARTH SCIENCE CURRICULUM PROJECT,  
NATIONAL SCIENCE FOUNDATION, NATURAL SCI-  
ENCES, PHYSICS, SCHOOL ADMINISTRATION, SCI-  
ENCE COURSE IMPROVEMENT PROJECT, SUPER-  
VISION.

ED 012 252

THE DIFFERENTIAL EFFECT OF INTERIM TESTING  
IN THE USE OF AN AUTO-INSTRUCTIONAL PROGRAM  
IN AN AREA OF GENERAL SCIENCE FOR TEACHERS.  
SHELL, WILLIAM B. TRIPP, JOHN D.

AUBURN UNIV., ALA.

EDRS PRICE MF-\$0.25 HC-\$2.00 50P.

PUB DATE AUG 67

DESCRIPTORS- \*ACADEMIC ACHIEVEMENT, \*COL-  
LEGE SCIENCE, \*EVALUATION, \*GENERAL SCI-  
ENCE, \*INSTRUCTIONAL PROCEDURES, \*PRO-  
GRAMED INSTRUCTION, ATOMIC STRUCTURE,  
AUBURN, CHEMICAL BONDING, LEARNING, NELSON  
DENNY READING TEST, RETENTION, SEQUENTIAL  
TEST OF EDUCATIONAL PROGRESS, TEACHER EDU-  
CATION, TESTING.

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