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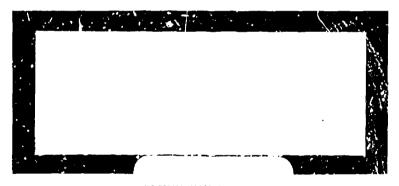
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#### ABSTRACT

This is the first in the fourth series of general bibliographies developed to disseminate information on documents analyzed at the ERIC Information Analysis Center for Science and Mathematics Education. Reported are 428 citations of selected documents related to instructional procedures in science and mathematics education. The documents include research reports, research reviews, manuals, speeches, textbooks, and other document types. Entries are listed in alphabetical order by author under science education, mathematics education, and general. An author index is provided. Citations include author, source, availability, and major ideas of the document. This bibliography updates, but does not replace bibliographies 1, 11, and 21. (FR)







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SCIENCE AND MATHEMATICS EDUCATION INFORMATION REPORT

# GENERAL BIBLIOGRAPHY SERIES BIBLIOGRAPHY 31

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101. SE 007 403

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102. SE 500 383

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\*ECOLOGY, \*RADIOISCTOPES, \*SCIENCE ACTIVITIES, BIOLOGY, COLLEGE SCIENCE, INSTRUCTION, RESOURCE MATERIALS, SECONDARY SCHOOL SCIENCE



103. SE 004 857

HELGESON, STANLEY LEON

AN INVESTIGATION INTO THE RELATIONSHIPS BETWEEN CONCEPTS OF FORCE ATTAINED AND MATURITY AS INDICATED BY GRADE LEVELS

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104. SE 500 333

HERRON, MARSHALL D.

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\*INSTRUCTION, \*PHILOSOPHY, \*SCIENCE EDUCATION, \*SCIENTIFIC ENTERPRISE,

\*TEACHER EDUCATION

105. SE 500 030

HILL, KATHERINE E.

SCIENCE IN THE ELEMENTARY SCHOOL - A LOOK AHEAD

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\*ELEMENTARY SCHOOL SCIENCE, CURRICULUM DEVELOPMENT, EDUCATIONAL FACILITIES, INSTRUCTIONAL MATERIALS, INSTRUCTION, INDIVIDUALIZED INSTRUCTION, TEACHER EDUCATION, NATIONAL SCIENCE TEACHERS ASSOCIATION

106. SE 500 182

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\*DISCOVERY LEARNING, \*ELEMENTARY SCHOOL SCIENCE, \*INSTRUCTION, INQUIRY TRAINING, SCIENCE ACTIVITIES, TEACHING PROCEDURES

107. SE 006 486

HOSTE, R.

THE USE OF TRIBOLIUM BEETLES FOR CLASS PRACTICAL WORK IN GENETICS JOURNAL OF BIOLOGICAL EDUCATION

12 00 68

\*GENETICS, \*SCIENCE ACTIVITIES, \*ZOOLOGY, BIOLOGY, INSTRUCTION, LADDRATORY EXPERIMENTS, RESOURCE MATERIALS, SECONDARY SCHOOL SCIENCE

108. SE 500 897

HUDGINS, WILLIAM KENT; REED, RONALD E.

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\*ELEMENTARY SCHOOL SCIENCE, \*INSTRUCTION, \*LEARNING, \*READING, \*READING COMPREHENSION, ABSTRACT PEASONING, CONCEPT FORMATION, MOTIVATION, 1969



109. SE 500 382

HURLBURT, EVELYN M.

A STUDY OF BIOSYNTRESIS USING RADIOTRACERS AS RESEARCH TOOLS

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\*COLLEGE SCIENCE, \*PHYSIOLOGY, \*RADIOISOTOPES, \*SCIENCE EXFERIMENTS, BIOLOGY, INSTRUCTION, MICROLIOLOGY, RESOURCE MATERIALS, UNDERGRADUATE STUDY

110. SE 006 202

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A COMPARISON OF THE EFFECTS OF TEACHER-DIRECTED AND SELF-DIRECTED PROBLEM

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111. SE 007 114

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112. SE 007 344

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\*CHEMISTRY, \*COLLEGE SCIENCE, CHEMICAL CALCULATIONS, \*EQUILIBRIUM, \*INSTRUCTION,

\*THERMODYNAMICS, 1965

113. SE 500 737

JENKINS, JERRY A.

AN EXPERIMENTAL INVESTIGATION OF THE EFFECTS OF STRUCTURED SCIENCE EXPERIENCES

ON CURIOSITY AMONG YOURTH GRADE CHILDREN

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\*CURIOSITY, \*ELEMENTARY SCHOOL SCIENCE, \*INSTRUCTION, \*INTEREST TESTS, CONCEPTUAL SCHEMES, GRADE 4, INTELLIGENCE LEVEL, SCIENCE ACTIVITIES,

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114. SE 006 204

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A STUDY OF INNOVATION ADOPTION BY TEACHERS FROM A CONSORTIUM OF SCHOOLS UNIVERSITY OF TEXAS, AUSTIN

UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN

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68 22

\*ELEMENTARY SCHOOL SCIENCE, \*INSERVICE TEACHER EDUCATION, \*INSTRUCTION, \*TEACHER BEHAVIOR, \*TEACHER EDUCATION, DOCTORAL THESES, ELEMENTARY SCHOOL TEACHERS, REJEARCH REPORTS, TEACHER CHARACTERISTICS, TEACHING METHODS, TEACHING TECHNIQUES

115. SE 500 793

JOHNSON, STEVEN V.

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THE AMERICAN BIOLOGY TEACHER

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116. SE 007 135

JONES, JOHN LINK

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66 136

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117. SE 500 032

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\*ASTRONOMY, \*ELEMENTARY SCHOOL SCIENCE, \*INSTRUCTION, \*SCIENCE ACTIVITIES, PHYSICAL SCIENCES

118. SE 006 206

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68 175

\*ACHIEVEMENT, \*INSTRUCTION, \*SECONDARY SCHOOL SCIENCE, \*TEAM TEACHING, ACADEMIC ACHIEVEMENT, BIOLOGY, COMPARATIVE ANALYSIS, DOUTORAL THUSES, GRADE 10, SEQUENTIAL TEST OF EDUCATIONAL PROGRESS



119. SE 006 463

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\*CURRICULUM, \*EVALUATION, \*ELEMENTARY SCHOOL SCIENCE, \*INSTRUCTION, \*SCIENCE COURSE IMPROVEMENT PROJECT, ELEMENTARY SCHOOL TEACHERS, ELEMENTARY SCHOOL STUDENTS, INSTRUCTIONAL MATERIALS, STUDENT CHARACTERISTICS, TEACHING METHODS, SCIENCE CURRICULUM IMPROVEMENT STUDY

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121. SE 007 343

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THE EFFECT OF LABORATORY-DISCOVERY METHODS AND DEMONSTRATION-DISCUSSION METHODS UPON ELEMENTARY SCIENCE METHODS STUDENTS' ABILITIES TO ANALYZE AND INTERPRET GRAPHS

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KELLY, JOHN WILLIAM

AN ANALYSIS AND EVALUATION OF A COORDINATED MASTER-TEACHER PROGRAM IN SOCIAL STUDIES AND IN SCIENCE AT THE FIFTH-GRADE LEVEL

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124. SE 007 311

KING, L. CARROLL; COOPER, MILTON

EXPERIMENTAL APPROACH TO STOICHIOMETRY IN FIRST-YEAR CHEMISTRY AT NORTHWESTERN

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\*CHEMISTRY, \*COLLEGE SCIENCE, CHEMICAL REACTIONS, LABORATORY EXPERIMENTS,

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126. SE 50C 189

KOCH, DAVID P.

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62 00 69 2

\*AUDIOVISUAL AIDS, \*INSTRUCTIONAL MATERIALS, \*PHYSICAL SCIENCES, \*PHYSICS, INSTRUCTION, OVERHEAD PROJECTORS, PROJECTION EQUIPMENT, TRANSPARENCIES

127. SE 500 601
KOLB, ALBERT C.
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\*EARTH SCIENCE, \*CRADE 8, \*INSTRUCTION, \*PHYSICAL GEOGRAPHY, COMMUNITY
INVOLVEMENT, MAP SKILLS, 1969

128. SE 500 773
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\*ELEMENTARY SCHOOL SCIENCE, \*INSTRUCTION, \*PROBLEM SOLVING, ABILITY, CREATIVE THINKING, CRITICAL THINKING, STUDENT CHARACTERISTICS, STUDENT SCIENCE INTERESTS, 1969

129. SE 500 603

KOSER, JOHN F.

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10 00 69 3

\*FLEXIBLE SCHEDULES, \*INDIVIDUALIZED INSTRUCTION, \*INSTRUCTION, \*PHYSICAL
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130. SE 500 239

KROCKOVER, GERALD H.; GLASS, LYNN W.

ADDING PROCESS TO YOUR ELEMENTARY SCIENCE CONTENT UNIT

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\*BIOLOGY, \*ELEMENTARY SCHOOL SCIENCE, \*INSTRUCTION, \*RESOURCE MATERIALS, SKILL

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131. SE 500 385

KUHN, DAVID J.

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132. SE 500 747
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\*INSTRUCTION, \*TEACHER ROLE, CONCEPT FORMATION, COMMUNICATION SKILLS, SCIENCE
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133. SE 005 143
LENNEK, DAVID
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TEST, COOPERATIVE SCIENCE TEST, WANTAGH JUNIOR HIGH SCHOOL, NEW YORK

134. SE 007 052
LERMAN, NOAR
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12 00 64 10
\*COLLEGE SCIENCE \*EDUCATIONAL OBJECTIVES, \*INSTRUCTION, \*PHYSICS, PROBLEM SOLVING, TEACHING TECHNIQUES, UNDERGRADUATE STUDY



135. SE 006 868

LERNER, MORRIS R.

HOW TO USE AN OSCILLOSCOPE

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136. SE 500 380

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137. SE 006 716

LINDAMAN, ARNOLD D.

SCIENCE AS A PROCESS--CAN 17 BE TAUGHT WITH INSTRUCTIONAL TELEVISION?

PLEASANT VALLEY COMMUNITY SCHOOL DISTRICT, IOWA

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\*CONFERENCE REPORTS, \*ELEMENTARY SCHOOL SCIENCE, \*GENERAL EDUCATION,

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140. SE 500 243
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141. SE 006 217

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\*INSTRUCTION, \*PHYSICS TEACHERS, \*PHYSICS, \*SECONDARY SCHOOL SCIENCE, \*TEACHER BEHAVIOR, COMPARATIVE ANALYSIS, DOCTORAL THESES, RESEARCH REPORTS, TEACHER CHARACTERISTICS, INTERACTION PROCESS ANALYSIS, PHYSICAL SCIENCE STUDY COMMITTEE

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143. SE 500 261

METCALFE, JOHN A.

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04 00 69 3

\*BIOLOGY, \*ELEMENTARY SCHOOL SCIENCE, \*INSTRUCTION, \*INQUIRY TRAINING, \*SCIENCE ACTIVITIES, ANIMAL REHAVIOR, ECOLOGY, OUTDOOR EDUCATION

144. SE 500 795

MEYER, JAMES H.

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\*BIOLOGY, \*INSTRUCTION, \*SECONDARY SCHOOL SCIENCE, ACADEMIC ACHIEVEMENT, CRITICAL THINKING, SCIENTIFIC METHODOLOGY



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- 150. SE 006 732

  MONTAGUE, EARL J.

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\*EDUCATIONAL OBJECTIVES, \*INSTRUCTION, \*INSTRUCTIONAL DESIGN, \*OBJECTIVES,

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152. SE 500 581

MUSULIN, BORIS

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UNDERGRADUATE STUDY, 1969

153. SE 006 004

McBURNEY, WENDELL FARIS

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McCURDY, DONALD WILLIAM

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UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN

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155. SE 007 138

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UNIVERSITY OF NORTH DAKOTA, GRAND FORKS

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156. SE OC5 767

McLEONDON, ALVIN LEE

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AUBURN UNIVERSITY, ALABAMA

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68 191

\*COLLEGE SCIENCE, \*INSTRUCTION, \*INDIVIDUAL INSTRUCTION, \*PHYSICS, \*PROGRAMED INSTRUCTION, DOCTORAL THESES, GENERAL EDUCATION, SCIENCE ACTIVITIES, UNDERGRADUATE STUDY

157. SE 500 115

McMILLIN, JOHN G.

ON THE USE OF THREE PIMENSIONAL GRAPHS

THE AMERICAN BIOLOGY TEACHER

02 00 69

\*AUDIOVISUAL AIDS, \*BIOLOGY, \*GRAPHS, COLLEGE SCIENCE, INSTRUCTION, RESOURCE MATERIALS, SECONDARY SCHOOL SCIENCE

158. SE 007 066

NATIONAL SCIENCE TEACHERS ASSOCIATION

SCIENCE TEACHING ACHIEVEMENT RECOGNITION (STAR)

NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.

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63

BIOLOGY, CHEMISTRY, COURSE DESCRIPTIONS, ELEMENTARY SCHOOL SCIENCE, \*EDUCATIONAL INNOVATIONS, \*INSTRUCTION, \*PROFESSIONAL ASSOCIATIONS, \*SCIENCE EDUCATION, SECONDARY SCHOOL SCIENCE, SCIENCE EQUIPMENT, TEACHER AIDS, NATIONAL SCIENCE TEACHERS ASSOCIATION, NATIONAL SCIENCE TEACHERS ASSOCIATION STAR AWARDS

159. SE 007 329

O'CONNOR, ROD

NATURAL PRODUCT CHEMISTRY

JOURNAL OF CHEMICAL TOUCH TON

09 00 65

\*COLLEGE SCIENCE, CHEMICAL REACTION \*LABORATORY EXPERIMENTS, \*ORGANIC CHEMISTRY, RESEARCH TECHNIQUES, \*STUDENT INVESTIGATIONS, SEMI MICRO LABORATORY TECHNIQUES, \*SCIENCE ACTIVITIES, UNDERGRADUATE STUDY, 1965

160. SE 006 221

PALMER, RAY ALONZO

THE DEVELOPMENT OF SELECTED CONCEPTS BY STUDENTS IN BSCS BIOLOGY

GEORGE PEABODY COLLEGE FOR TEACHERS, NASHVILLE, TENNESSEE

UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN

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\*BIOLOGY \*CONCEPT FORMATION, \*INSTRUCTION, \*LEARNING, \*SECONDARY SCHOOL SCIENCE, DOCTORAL THESES, RESEARCH REPORTS, SCIENCE COURSE IMPROVEMENT PROJECT, BIOLOGICAL SCIENCES CURRICULUM STUDY



161. SE 006 262

PARAKH, JAL S.

A STUDY OF TEACHER-PUPIL INTERACTION IN BIOLOGICAL SCIENCES CURRICULUM STUDY, YELLOW VERSION BIOLOGY CLASSES

THE AMERICAN BIOLOGY TEACHER

12 00 68

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\*BIOLOGY, \*INSTRUCTION, \*INTERACTION PROCESS ANALYSIS, INSERVICE TEACHER EDUCATION, PRESERVICE EDUCATION, RESEARCH METHODOLOGY, RESEARCH REPORTS, \*SECOND'RY SCHOOL SCIENCE, \*STUDENT TEACHER RELATIONSHIPS, STUDENT BEHAVIOR, TEACHER BEHAVIOR, TEACHER EVALUATION

162. SE 006 222

PARKE, EDWARD CHARLES

OPEN-ENDED VERSUS CONVENTIONAL EXPERIMENTS IN GENERAL PHYSICS, AN EXPLORATORY STUDY

UNIVERSITY OF COLORADO, BOULDER

UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN

67 185

\*ACHIEVEMENT, \*COLLEGE SCIFNCE, \*DISCOVERY LEARNING, DOCTORAL THESES, LABORATORY ACTIVITIES, \*PHYSICS, RESEARCH REPORTS, \*SCIENCE ACTIVITIES, HUMBOLDT STATE COLLEGE, CALIFORNIA

163. SE 006 565

PARSEGIAN, V. LAWRENCE

INTRODUCTION TO NATURAL SCIENCE, PART I, THE PHYSICAL SCIENCES, TFACHER'S GUIDE ACADEMIC PRESS, NEW YORK, NEW YORK

68 195

\*COLLEGE SCIENCE, \*GENERAL EDUCATION, \*NATURAL SCIENCES, \*PHYSICAL SCIENCES, \*TEACHING GUIDES, CURRICULUM DEVELOPMENT, INSTRUCTION, TEACHER RESOURCE MATERIALS, TEACHING TECHNIQUES, PHYSICAL SCIENCE FOR NONSCIENCE STUDENTS

164. SE 500 102

PEARCE, LUCIA

EXPLORATION - INNOVATION - THE NEW LEARNING ENVIRONMENT

THE SCIENCE TRACKER

02 00 69

\*CURRICULUM DESIGN, \*INSTRUCTIONAL DESIGN, EDUCATIONAL ENVIRONMENT, INSTRUCTION, LEARNING, SCHOOL DESIGN, TEACHING METHODS, TEACHER EDUCATION

165. SE 500 241

PELLA, MILTON O.; SHERMAN, JACK

A COMPARISON OF TWO METHODS OF UTILIZING LABORATORY ACTIVITIES IN TEACHING THE COURSE IPS

SCHOOL SCIENCE AND MATRIMATICS

04 00 69 13

\*COMPARATIVE ANALYSIS, \*INSTRUCTION, \*PHYSICAL SCIENCES, \*SECONDARY SCHOOL SCIENCE, ABLE STIDENTS, GRADE 8, INTRODUCTORY FYSICAL SCIENCE



166. SE 500 127
PELLA, MILTON O.; STAUSS, NYLES G.
CONCEPTS RELATED TO THE BIOLOGICAL CELL
SCHOOL SCIENCE AND MATHEMATICS
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\*BIOLOGY, \*COGNITIVE PROCESSES, \*CONCEPT FORMATION, \*ELEMENTARY SCHOOL SCIENCE,
CELL THEORY, INSTRUCTION, SCIENTIFIC CONCEPTS, TEACHING PROCEDURES

167. SE 006 035

PELLA, MILTON O.; STAUSS, NYLES G.

THE RELATIONSHIP BETWEEN CONCEPT ATTAINMENT AND LEVEL OF MATURITY

JOURNAL OF RESEARCH IN SCIENCE TEACHING

12 00 68 12

\*BIOLOGY, \*CONCEPT FORMATION, \*COGNITIVE DEVELOPMENT, \*ELEMENTARY SCHOOL

SCIENCE, \*INSTRUCTION, \*LEARNING, COGNITIVE PROCESSES, CELL THEORY, RESEARCH

REPORTS, 1967

168. SE 005 159
PERSHERN, FRANK RICHARD
THE EFFECT OF INDUSTRIAL ARTS ACTIVITIES ON SCIENCE ACHIEVEMENT AND PUPIL ATTITUDES IN THE UPPER ELEMENTARY GRADES
TEXAS A AND M UNIVERSITY, COLLEGE STATION
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN
ED 027 187
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182

\*ACHIEVEMENT, \*CURRICULUM, \*ELEMENTARY SCHOOL SCIENCE, \*INSTRUCTION, ACADEMIC ACHIEVEMENT, DOCTORAL THESES, GRADE 4, GRADE 5, GRADE 6, PROGRAM DESCRIPTIONS, STUDENT ATTITUDES, TEACHING PROCEDURES

PETERSON, DONALD GORDON
AN EXPERIMENTAL COMPARISON OF CASE HISTORIES WITH CONVENTIONAL MATERIALS IN
THACHING A COLLEGE GENERAL EDUCATION COURSE IN SCIENCE
UNIVERSITY OF MINNESOTA, MINNEAPOLIS
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN
ED 030 570
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68
220

\*COLLEGE SCIENCE, COMPAPATIVE ANALYSIS, DOCTORAL THESES, \*GENERAL EDUCATION, PHYSICAL SCIENCES, RESEARCH REPORTS, SCIENTIFIC LITERACY, SCIENTIFIC ATTITUDES, SCIENTIFIC METHODOLOGY

170. SE 006 224

PEWITT, EDITH MARIE HENDRIX

THE TEACHING PRACTICES OF SCIENCE TEACHERS IN SELECTED TEXAS HIGH SCHOOLS

NORTH TEXAS STATE UNIVERSITY, DENTON

UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN

67 206

COLLEGE TEACHERS, DOCTORAL THESES, \*EDUCATIONAL FRACTICE, \*INSTRUCTION,

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TEACHER CHARACTERISTICS, TEACHING METHODS, TEXAS



169. SE 007 122

171. SE 007 131

PHILIPSON, WILLARD DALE

THE EFFECTIVENESS OF SELECTED FILMS ON LEARNING BIOLOGICAL CONCEPTS BY HIGH SCHOOL STUDENTS

UNIVERSITY OF MINNESOTA, MINNEAPOLIS

UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN

ED 031 402

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67 103

\*BIOLOGY, \*CONCEPT TEACHING, DOCTORAL THESES, FILMS, INSTRUCTIONAL MEDIA,

\*INSTRUCTION, RESEARCH REPORTS, \*SECUNDARY SCHOOL SCIENCE, 1967

SE 006 274 172.

PLANTS, HELEN L.; VENABLE, WALLACE S.

DEVELOPMENT AND EVALUATION OF TWO APPROACHES TO AN ELEMENTARY COURSE IN DYNAMICS, FINAL REPORT

WEST VIRGINIA UNIVERSITY, MORGANTOWN

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12 00 68

68

\*ENGINEERING, \*INSTRUCTION, \*PROGRAMED INSTRUCTION, ACHIEVEMENT, COMPARATIVE

173. SE 006 227

PLESS, HERBERT

THE USE OF STRUCTURAL ANALYSIS BY HIGH SCHOOL BIOLOGY STUDENTS AS A METHOD FOR LEARNING AND RETAINING THE DEFINITIONS OF TECHNICAL VOCABULARY TERMS

TEMPLE UNIVERSITY, PHILADELPHIA, PENNSYLVANIA

ANALYSIS, PROBLEM SOLVING, UNDERGRADUATE STUDY

UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN

66 177

\*BIOLOGY, DOCTORAL THESES, GRADE 10, \*INSTRUCTION, \*LEARNING, RETENTION, RESEARCH REPORTS, \*SECONDARY SCHOOL SCIENCE, TEACHING TECHNIQUES, \*VOCABULARY

174. SE 006 499

POULOS, CHRIS G.

THE RELATIVE EFFECTIVENESS OF A CLOSED-CIRCUIT TELEVISION TEAM-TEACHING METHOD IN HIGH SCHOOL BIOLOGY INSTRUCTION, FINAL REPORT

WAUSAU SENIOR HIGH SCHOOL, WISCONSIN

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63 104

\*BIOLOGY, \*CLOSED CIRCUIT TELEVISION, \*INSTRUCTION, \*SECONDARY SCHOOL SCIENCE, \*TEAM TEACHING, ACADEMIC ACHIEVEMENT, RESEARCH REPORTS, TELEVISION, METROPOLITAN SCIENCE TEST, COOPERATIVE BIOLOGY TEST, STEP SCIENCE TEST

175. SE 007 336

PRICE, A. H.; BAKER, R. T. K.

LABORATORY EXPERIMENTS IN GAS KINETICS

JOURNAL OF CHEMICAL EDUCATION

11 00 65

\*CHEMISTRY, \*COLLEGE SCIENCE, \*GASES, \*KINETICS, LABORATORY FXFERIMENTS,

\*SCIENCE ACTIVITIES, 1965



176. SE 006 479

RAMSEY, GREGOR A.; HOWE, ROBERT W.

AN ANALYSIS OF RESEARCH RELATED TO INSTRUCTIONAL PROCEDURES IN ELEMENTARY SCHOOL SCIENCE

SCIENCE AND CHILDREN

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14

\*ELEMENTARY SCHOOL SCIENCE, \*EVALUATION, \*INSTRUCTION, \*RESEARCH REVIEWS (PUBLICATIONS), \*SCIENCE EDUCATION, AUDIOVISUAL AIDS, ABILITY GROUPING, CREATIVITY, CONCEPT FORMATION, CRITICAL THINKING, FIELD TRIPS, INDIVIDUAL INSTRUCTION, PROGRAMED INSTRUCTION, TEACHING METHODS

177. SE 006 396

RAMSEY, GREGOR A.; HOWE, ROBERT W.

AN ANALYSIS OF RESEARCH ON INSTRUCTIONAL PROCEDURES IN SECONDARY SCHOOL SCIENCE, PART I--OUTCOMES OF INSTRUCTION

THE SCIENCE TEACHER

**EDRS** 

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03 00 69

\*ACHIEVEMENT, \*CRITICAL THINKING, \*INSTRUCTION, \*SECONDARY SCHOOL SCIENCE, ATTITUDES, BIOLOGY, CHEMISTRY, DEDUCTIVE METHODS, EARTH SCIENCE, EVALUATION, GENERAL SCIENCE, INDUCTIVE METHODS, PHYSICS, TEACHING METHODS, ERIC INFORMATION ANALYSIS CENTER FOR SCIENCE EDUCATION

178. SE 006 480

RAMSEY, GREGOR A.; HOWE, ROBERT W.

AN ANALYSIS OF RESEARCH ON INSTRUCTIONAL PROCEDURES IN SECONDARY SCHOOL SCIENCE, PART II -- INSTRUCTIONAL PROCEDURES

THE SCIENCE TEACHER

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\*INSTRUCTION, \*RESEARCH REVIEWS (PUBLICATIONS), \*SCIENCE EDUCATION, \*SECONDARY SCHOOL SCIENCE, \*TEACHING METHODS, BIOLOGICAL SCIENCES, CHEMISTRY, GENERAL SCIENCE, INTERACTION PROCESS ANALYSIS, INDIVIDUAL INSTRUCTION, PHYSICAL SCIENCES, PROGRAMED INSTRUCTION, PHYSICS, TEAM TEACHING

179. SE 500 531

REKVELD, J.

NEW ASPECTS OF THE TEACHING OF SPECIAL RELATIVITY

AMERICAN JOURNAL OF PHYSICS

6

07 00 69

\*COLLEGE SCIENCE, \*INSTRUCTION, \*FHYSICS, \*RELATIVITY, \*TEACHING PROCEDURES, RESOURCE MATERIALS, SECONDARY SCHOOL SCIENCE, UNDERGRADUATE STUDY, 1969



180. SE 005 163

REQUA, LYLE KEITH

AN ANALYSIS OF TWO METHODS OF TEACHING BIOLOGICAL SCIENCES LABORATORY
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66 90

AUDIOVISUAL AIDS, \*AUDIOVISUAL INSTRUCTION, \*BIOLOGY, \*COLLEGE SCIENCE, DOCTORAL
THESES, \*INSTRUCTION, LABORATORY TECHNIQUES, RESEARCH REPORTS, SCIENCE

ACTIVITIES, TEACHING TECHNIQUES, OKLAHOMA STATE UNIVERSITY, 1966

- 181. SE 500 111
  RICHARD, PAUL W.
  EXPERIMENTAL INDIVIDUALIZED BSCS BIOLOGY
  THE SCIENCE TEACHER
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  \*BIOLOGY, \*INSTRUCTION, \*INDIVIDUALIZED INSTRUCTION, \*SECONDARY SCHOOL SCIENCE,
  CONVENTIONAL INSTRUCTION, COURSE DESCRIPTIONS, COMPARATIVE ANALYSIS, SCIENCE
  COURSE IMPROVEMENT PROJECT
- 182. SE 500 294
  RICHARD, PAUL; SUND, ROBERT B.
  INDIVIDUALIZED INSTRUCTION IN BIOLOGY
  THE AMERICAN BIOLOGY TEACHER
  04 00 69 5
  \*BIOLOGY, \*INDIVIDUALIZED INSTRUCTION, \*SECONDARY SCHOOL SCIENCE, COMPARATIVE
  ANALYSIS, INSTRUCTION, BIOLOGICAL SCIENCES CURRICULUM STUDY GREEN VERSION
- 183. SE 006 748
  RICHARD PAUL W.; SUND, ROBERT B.
  INDIVIDUALIZATION OF BIOLOGICAL SCIENCES CURRICULUM STUDY BIOLOGY
  JOURNAL OF RESEARCH SERVICES, COLORADO STATE COLLEGE, GREELEY
  05 00 67
  \*BIOLOGY, \*CURRICULUM DEVELOPMENT, EDUCATIONAL PROGRAMS, \*INDIVIDUALIZED
  INSTRUCTION, \*INSTRUCTION, PROGRAM DESCRIPTIONS, \*SECONDARY SCHOOL SCIENCE,
  BIOLOGICAL SCIENCES CURRICULUM STUDY
- 184. SE 007 067
  RICHARDS, JAMES E.
  CONCEPTUAL SCIENCE EXPERIENCES FOR JUNIOR HIGH SCHOOL
  NORTHWEST LIBRARY SERVICE, PORTLAND, OREGON
  ED 030 567
  NOT AVAILABLE FROM EDRS
  69
  143
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  \*SCIENCE ACTIVITIES, \*TEACHING GUIDES



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185. SE 005 165

RINER, WARREN FRANCIS

AN EVALUATIVE STUDY OF THE MONTCLAIR SCIENCE PROJECT, A LABORATORY PROGRAM IN PHYSICAL SCIENCE DESIGNED FOR NINTH GRADE STUDENTS

UNIVERSITY OF KANSAS

UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN

ACADEMIC ACHIEVEMENT, \*CURRICULUM, CRITICAL THICKING, CHEMISTRY, DOCTORAL THESES, GRAL 9, \*INSTRUCTION, \*LABORATORY PROCEDURES, LABORATORY TECHNIQUES, \*PHYSICAL SCIENCES, PHYSICS, \*SECONDARY SCHOOL SCIENCE, MONICLAIR SCIENCE PROJECT

186. SE 500 378

RIZZA, JOHN J.

MITOSIS TECHNIQUE

THE AMERICAN BIOLOGY TEACHER

05 00 59

\*BOTANY, \*GENETICS, \*LABORATORY TECHNIQUES, BIOL'SY, CYTOLOGY, COLLEGE SCIENCE, INSTRUCTION, MICROBIOLOGY, SECONDARY SCHOOL SCIENCE, SCIENCE ACTIVITIES

187. SE 500 332

ROBINSON, JAMES T.

PHILOSOPHY OF SCIENCE: IMPLICATIONS FOR TEACHER EDUCATION (PAPER PRESENTED AT THE NATIONAL ASSOCIATION FOR RESEABCH IN SCIENCE TEACHING MEETING, FEBRUARY 1968) JOURNAL OF RESEARCH IN SCIENCE TEACHING

69

\*INSTRUCTION, \*PHILOSOPHY, \*SCIENTIFIC ENTERPRISE, \*SCIENCE EDUCATION, \*TEACHER BEHAVIOR, SCIENCE HISTORY, TEXTBOOKS, TEACHER EDUCATION

188. SE 500 266

ROELLIG, I. O.; AND OTHERS

UNIVERSITY RESEARCH PROGRAMS FOR INNER CITY HIGH SCHOOL STUDENTS THE PHYSICS TEACHER

03 00 69

\*DISADVANTAGED YOUTH, \*INSTRUCTION, \*PHYSICS, \*SECONDARY SCHOOL SCIENCE, \*SUMMER SCIENCE PROGRAMS, BIOLOGY, CHEMISTRY, INSTRUCTIONAL PROGRAMS

189. SE 500 199

ROSE, SUSAN L.; MACRAE, EDITH K.

PLANARIAN REGENERATION

THE AMERICAN BIOLOGY TEACHER

03 00 69

\*BIOLOGY, \*IAPORATORY EXPERIMENTS, \*PHYSIOLOGY, \*SCIENCE ACTIVITIES, SCIENCE MATERIALS, SECONDARY SCHOOL SCIENCE, ZOOLOGY, PLANARIA

190. SE 500 175

ROWE, MARY BUDD

SCIENCE, SILENCE, AND SANCTIONS

SCIENCE AND CHILDREN

03 00 69

\*ELEMENTARY SCHOOL SCIENCE, \*INSTRUCTION, \*QUESTIONING TECHNIQUES, CLASSROOM FARTICIFATION, DISCUSSICE (TRACHING TECHNIQUE), ELEMENTALY SCHOOL TRACHERS, INSTRUCTIONAL IMPROVEMENT, STUDENT PARTICIPATION



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191. SE 500 031 SAMPLES. ROBERT E. BACKYARD UNIVERSE SCIENCE AND CHILDREN 02 00 69 5

\*ELEMENTARY SCHOOL SCIENCE, \*EARTH SCIENCE, \*INSTRUCTION, \*SCIENCE ACTIVITIES, SECONDARY SCHOOL SCIENCE, URBAN EDUCATION, EARTH SCIENCE CURRICULUM PROJECT

192. SE 500 353

SCHAGRIN, MORTON L.

HISTORY OF SCIENCE: HISTORY OR SCIENCE (A REVISION OF A PAPER PRESENTED AT THE 1967 CENTRAL ASSOCIATION OF SCIENCE AND MATHEMATICS TEACHERS CONVENTION) SCHOOL SCIENCE AND MATHEMATICS

\*INSTRUCTION, \*SCIENCE HISTORY, \*SCIENCE EDUCATION, \*SCIENTIFIC ENTERPRISE. HISTORY, PHILOSOPHY

193. SE 500 354

SCHMIDT, DONALD

AN ACTIVITY DESIGNET TO ILLUSTRATE SCIENCE AS A PROCESS OF ONGOING INQUIRY (PAPER PRESENTED AT THE 1968 CENTRAL ASSOCIATION OF SCIENCE AND MATHEMATICS TEACHERS CONVENTION)

SCHOOL SCIENCE AND MATHEMATICS

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\*BIOLOGICAL SCIENCES, \*INSTRUCTION, \*SCIENCE FXPERIMENTS, INQUIRY TRAINING, SCIENCE ACTIVITIES, TEACHING PROCEDURES

194. SE 006 599

SCHUCK, ROBERT F.

THE EFFECTS OF SET INDUCTION UPON THE ACHIEVEMENT OF NINTH-GRADE PUPILS AND THEIR PERCEPTION OF TEACHER EFFECTIVENESS

JOURNAL OF EDUCATIONAL RESEARCH

02 00 69

5 \*ACADEMIC ACHIEVEMENT, \*BIOLOGY, \*EFFECTIVE TEACHING, \*INSTRUCTION, RESEARCH REPORTS, \*SECONDARY SCHOOL SCIENCE, STUDENT TEACHERS, BIOLOGICAL SCIENCES CURRICULUM STUDY, 1969

195. SE CO6 248

SCHUCK, ROBERT FREDERICK

AN INVESTIGATION TO DETERMINE THE EFFECTS OF SET INDUCTION UPON THE ACRIEVEMENT OF NINTH GRADE PUPILS AND THEIR PERCEPTION OF TEACHER EFFECTIVENESS IN A UNIT ON RESPIRATION IN THE BSCS CURRICULA

ARIZONA STATE UNIVERSITY, TEMPE

UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN

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> 68 174

\*ACHIEVEMENT, \*BIOLOGY, DOCTORAL THESES, \*EFFECTIVE TEACHING, GRADE 9, \*INSTRUCTION, RESEARCH REPORTS, \*SECONDARY SCHOOL SCIENCE, STUDENT OPINION, STUDENT TEACHERS, BIOLOGICAL SCIENCES CURRICULUM STUDY, 1968



196. SE 500 770
SCHULTZ, BETH
YOUR TOWN, A BIOTIC COMMUNITY WITH PEOPLE
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\*BIOLOGY, \*ECOLOGY, \*ELEMENTARY SCHOOL SCIENCE, \*SCIENCE ACTIVITIES,
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197. SE 006 428
SCHWENDEMAN, R. H.
COMPUTER SIMULATION OF EXPERIMENTAL DATA
JOURNAL OF CHEMICAL EDUCATION
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\*COLLEGE SCIENCE, \*CHEMISTRY, \*COMPUTER SIMULATION, \*INSTRUCTION, \*LABORATORY
EXPERIMENTS, TELEVISED INSTRUCTION, UNDERGRADUATE STUDY, FORTRAN

198. SE 500 536
SHARON, Y. Y.; AND OTHERS
THE PHYSICS WORKSHOP AT NORTHEASTERN UNIVERSITY IN BOSTON
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\*COLLEGE SCIENCE, \*INSTRUCTION, \*PHYSICS, \*TUTORIAL PROGRAMS, \*UNDERGRADUATE
STUDY, GRADUATE STUDENTS, STUDENT SCHOOL RELATIONSHIP, 1969

199. SE 007 406
SHEPHERD, RON
DISCOVERY IN SECONDARY SCHOOL SCIENCE CLASSROOMS
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\*DISCOVERY LEARNING, \*EDUCATIONAL OBJECTIVES, \*INSTRUCTION, \*SECONDARY SCHOOL SCIENCE, \*STUDENT PROJECTS, CREATIVE THINKING, FOREIGN COUNTRIES, INDUCTIVE METHODS, LABORATORY EXPERIMENTS, PROBLEM SOLVING, SKILL DEVELOPMENT, SCIENCE FACILITIES, AUSTRALIA

200. SE 004 545
SHOCKLEY, WILLIAM; AND OTHERS
THE CONSERVATION OF ENERGY CONCEPT IN NINTH GRADE GENERAL SCIENCE
STANFORD UNIVERSITY, CALIFORNIA
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02 00 68 93
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CURRICULUM, \*CURRICULUM DEVELOPMENT, EVALUATION, EDUCATIONAL OBJECTIVES, GRADE 9,
\*GENERAL SCIENCE, \*INSTRUCTIONAL MATERIALS, \*INSTRUCTION, INSERVICE TEACHER
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RESEARCH REPORTS, SCIENCE ACTIVITIES, \*SECONDARY SCHOOL SCIENCE, SCIENTIFIC
CONCEPTS, \*TEACHING TECHNIQUES, TEACHER EDUCATION, BIOLOGICAL SCIENCES
CURRICULUM STUDY, INTRODUCTORY PHYSICAL SCIENCE, EARTH SCIENCE CURRICULUM
PROJECT, PROGRESSIVE MATRICES TEST, RATIONAL REASONING TEST, DIFFERENTIAL
APTITUDE TEST, NATURE OF SCIENCE TEST, PROBLEM SOLVING INVENTORY



201. SE 500 899 SHRIGLEY, ROBERT L. A LIGHT YEAR IS LIGHT YEAR IS A . . . SCIENCE AND CHILDREN \*ASTRONOMY, \*ELEMENTARY SCHOOL SCIENCE, \*INSTRUCTION, \*MEASUREMENT, CONCEPT FORMATION, TEACHING PROCEDURES, 1969 202. SE 500 740 SIEMANKOWSKI, FRANCIS T. AN AUTO-PACED TEACHING PROCESS IN PHYSICAL SCIENCE FOR ELEMENTARY TEACHER PREPARATION: A PILOT REPORT JOURNAL OF RESEARCH IN SCIENCE TEACHING \*COLLEGE SCIENCE, \*ELEMENTARY SCHOOL TEACHERS, \*INDIVIDUALIZED INSTRUCTION, \*MULTIMEDIA INSTRUCTION, \*PRYSICAL SCIENCES, ACADEMIC ACHIEVEMENT, ATTITUDES, TEACHER EDUCATION, TEST ON UNDERSTANDING SCIENCE, PURDUE MASTER ATTITUDES SCALE, 1969 203. SE 500 546 SIEMANKOWSKI, FRANCIS T.; CAZEAU, CHARLES J. AUTO-PACED LABORATORIES IN PHYSICAL GEOLOGY JOURNAL OF GEOLOGICAL EDUCATION 04 00 69 5 \*AUDIOVISUAL AIDS, \*COLLEGE SCIENCE, \*EARTH SCIENCE, \*INSTRUCTION, GEOLOGY, INDIVIDUALIZED INSTRUCTION, RESEARCH REPORTS 204. SE 500 357 SIMMONS, MAITLAND P. RECOGNIZING OUR DIRT, AN EIGHTH-GRADE LIFE SCIENCE ACTIVITY SCHOOL SCIENCE AND MATHEMATICS \*INSTRUCTION, \*SCIENCE ACTIVITIES, \*SOIL SCIENCE, \*SECONDARY SCHOOL SCIENCE,

\*TEACHING TECHNIQUES, BIOLOGICAL SCIENCE, PROBLEM SOLVING, LABORATORY EXPERIMENTS



205.

SE 500 895

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GRADE 6, 1969

SKELTON, MARION A. A TIME TO DYE SCIENCE AND CHILDREN

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\*BOTANY, \*ELEMENTARY SCHOOL SCIENCE, \*SCIENCE ACTIVITIES, ART, CHEMISTRY.

206. SE 005 952

SKINNER, RAY

THE EFFECT OF DIFFERENT COMBINATIONS OF TELEVISION PRESENTATIONS AND CLASSROOM TEACHER CONDUCTED INQUIRY SESSIONS ON THE ACHIEVEMENT AND INTEREST IN SCIENCE OF FIFTH GRADERS

OHIO UNIVERSITY, ATHENS

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\*AUDIOVISUAL AIDS, \*ELFMENTARY SCHOOL SCIENCE, \*EDUCATIONAL TELEVISION,
\*INSTRUCTION, \*TELEVISED INSTRUCTION, \*TEACHING PROCEDURES, ACHIEVEMENT,
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GRADE 5, INSTRUCTIONAL MATERIALS, INDUCTIVE METHODS, INSTRUCTIONAL MEDIA,
INQUIRY "TA" INING, MOTIVATION, STUDENT SCIENCE INTERESTS, RESEARCH REPORTS,
U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE, OFFICE OF EDUCATION, BUREAU
OF RESEARCH

207. SE 006 039

SKINNEP, RAY, JR.

RESEARCH REPORTS - INQUIRY SESSIONS - AN ASSIST FOR TEACHING SCIENCE VIA INSTRUCTIONAL TELEVISION IN THE ELEMENTARY SCHOOLS JOURNAL OF RESEARCH IN SCIENCE TEACHING

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\*ELEMENTARY SCHOOL SCIENCE, \*EDUCATIONAL TELEVISION, \*INSTRUCTION, \*TELEVISION INSTRUCTION, AUDIOVISUAL AIDS, ACHIEVEMENT, DEDUCTIVE METHODS, EARTH SCIENCE, GRADE 5, INDUCTIVE METHODS, INQUIRY TRAINING, RESEARCH REPORTS, 1967

208. SE 500 125

SOUERS, CHARLES V.

THE QUESTIONNAIRE AS A TOOL IN PROCESS TEACHING

SCHOOL SCIENCE AND MATHEMATICS

02 00 69

\*INSTRUCTION, \*SECONDARY SCHOOL SCIENCE, \*SCIENTIFIC ENTERPRISE, \*TEACHING PROCEDURES, GENERAL SCIENCE, QUESTIONNAIRES, SCIENTIFIC ATTITUDES

209. SE 006 371

SOUTHEASTERN PENNSYLVANIA OUTDOOR EDUCATION CENTER SOUTHEASTERN PENNSYLVANIA OUTDOOR EDUCATION CENTER, GRADE 1 CURRICULUM MATERIALS SOUTHEASTERN PENNSYLVANIA OUTDOOR EDUCATION CENTER, MEDIA

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210. SE 006 372

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\*BIOLOGY, \*ELEMENTARY SCHOOL SCIENCE, \*FIELD TRIPS, \*INSTRUCTION, KINDERGARTEN, NATURAL SCIENCE, NATURE STUDY, SCIENCE ACTIVITIES, TEACHING SUIDES



211. SE 006 370

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\*BIOLOGY, \*ELEMENTARY SCHOOL SCIENCE, \*FIELD TRIPS, \*INSTRUCTION, \*TEACHING GUIDES, CURRICULUM DEVELOPMENT, GRADE 2, NATURAL SCIENCES, NATURE STUDY, SCIENCE ACTIVITIES

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- \*BIOLOGY, \*ELEMENTAR" SCHOOL SCIENCE, \*FIELD TRIPS, \*INSTRUCTION, \*TEACHING CUIDES, CURRICULUM DEVELOPMENT, ENTOMOLOGY, GRADE 3, NATURAL SCIENCES, NATURE STUDY, SCIENCE ACTIVITIES
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  SOUTHEASTERN PENNSYLVANIA OUTDOOR EDUCATION CENTER, MEDIA
  68 56
  \*BIOLOGY, \*ELEMENTARY SCHOOL SCIENCE, \*FIELD TRIPS, \*INSTRUCTION, \*TEACHING
  GUIDES, CURRICULUM DEVELOPMENT, GRADE 4, NATURAL SCIENCES, NATURE STUDY,
- 214. SE 006 367
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  SOUTHEASTERN PENNSYLVANIA OUTDOOR EDUCATION CENTER, GRADE 5 CURRICULUM MATERIALS
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  \*BIOLOGY, \*ELEMENTARY SCHOOL SCIENCE, \*FIELD TRIPS, \*INSTRUCTION, \*TEACHING
  GUIDES, CURRICULUM DEVELOPMENT, EROSION, GRADE 5, NATURAL SCIENCES, SCIENCE
- 215. SE 006 366
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  68 70
  \*CURRICULUM DEVELOPMENT, \*ELEMENTARY SCHOOL SCIENCE, \*INSTRUCTION, BOTANY,
  BIOLOGY, EROSION, ENTOMOLOGY, GRADE 6, FIELD TRIPS, NATURAL SCIENCES, NATURE
  STUDY, SCIENCE ACTIVITIES, TEACHING GUIDES, ZOOLOGY
- 216. SE 500 116
  SPEARE, LDWARD P.
  PHOTO-LAMINATES
  THE AMERICAN BIOLOGY TEACHER
  02 00 69 2
  \*AUDIOVISUAL AIDS, \*FROTOGRAPHS, \*MICROBIOLOGY, BIOLOGY, COLLEGE SCIENCE,
  INSTRUCTION, SECONDARY SCHOOL SCIENCE



217. SE 500 183
ST. JCHN, LEO
AIRPLANES AND FLIGHT
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03 00 66 2
\*AEROSPACE TECHNOLOGY, \*ELEMENTARY SCHOOL SCIENCE, \*INSTRUCTION, DISCOVERY
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218. SE 006 418
STEERE, NORMAN V.
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INSTRUCTIONAL MATERIALS, LABORATORY EXTERIMENTS, LABORATORY TECHNIQUES,
LABORATORY EQUIPMENT. SECONDARY SCHOOL SCIENCE, TEACHING TECHNIQUES

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STONEBARGER, CHARLES W.
FINDING A WAY TO BE A HUMAN
THE SCIENCE TEACHER
10 00 69 4
\*CREATIVE ACTIVITIES, \*EDUCATIONAL FACILITIES, \*INSTRUCTION, \*INDIVIDUALIZED-PROGRAMS, \*PERMISSIVE ENVIRONMENT, COMMUNITY INVOLVEMENT, TEACHER ROLE, 1969

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STOPPEL, DAVID ARTHUR
AN EXPERIMENT IN TEACHING COLLEGE GENERAL CHEMISTRY BY DEPICTIVE AND QUANTITATIVE METHODS
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65 153
\*CURRICULUM DEVELOPMENT, \*CHEMISTRY, \*COLLEGE SCIENCE, \*COMPARATIVE ANALYSES,
\*INSTRUCTION, ACADEMIC ABILITY, ABILITY GROUPING, DOCTORAL THESES, PROBLEM SOLVING, QUANTITATIVE PEASONING, RESEARCH REPORTS, 1965, SCHOOL AND COLLEGE ABILITY TEST, UNIVERSITY OF MINNESOTA

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222. SE 500 197
STRAYER, JAMES L.
LIVING CRAYFISH IN THE LABORATORY
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223. SE 500 363

STULL, JOHN L.

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\*INSTRUCTION, \*MOTION, \*PHYSICAL SCIENCES, \*PHYSICS, \*SECONDARY SCHOOL SCIENCE, COLLEGE SCIENCE, ENERGY, SCIENCE EXPERIMENTS, TEACHING TECHNIQUES

224. SE 006 496

SWANN, A. HENRY

STATIC ELECTRICITY

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10 00 68

- 3

ELECTRICITY, \*ELEMENTARY SCHOOL SCIENCE, INSTRUCTION, \*PHYSICAL SCIENCES, STATIC ELECTRICITY, \*SCIENCE ACTIVITIES

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SWEETERS, WILLIAM GEORGE

DISCOVERY ORIENTED INSTRUCTION IN SCIENCE SKILLS FOR EDUCABLE MENTALLY RETARDED CHILDREN

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JOURNAL OF RESEARCH IN SCIENCE TEACHING

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\*COMPARATIVE ANALYSIS, \*DEDUCTIVE METHODS, \*INDUCTIVE METHODS, \*INSTRUCTION.
\*SECONDARY SCHOOL SCIENCE, ATTITUDES, DISCOVERY LEARNING, RETENTION, TRANSFER
OF TRAINING, 1969

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EXPOSITORY-DEDUCTIVE VS. DISCOVERY-INDUCTIVE PROGRAMING OF PHYSICAL SCIENCE PRINCIPLES (PAPER PRESENTED AT THE MEETING OF THE NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING, FEBRUARY 1969)

OREGON STATE UNIVERSITY, CORVALLIS

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\*INSTRUCTION, \*LEARNING PROCESSES, \*PROGRAMED INSTRUCTION, \*SECONDARY SCHOOL SCIENCE, DEDUCTIVE METHODS, DISCOVERY LEARNING, GRADE 9, PHYSICAL SCIENCES, RESEARCH REPORTS, SCIENTIFIC PRINCIPLES, 1969



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\*DISCOVERY LEARNING, \*INDUCTIVE METHODS, \*INSTRUCTION, \*SECONDARY SCHOOL SCIENCE, ACHIEVEMENT, COMPARATIVE ANALYSIS, DEDUCTIVE METHODS, DOCTORAL THESES, GRADE 9, GENERAL SCIENCE, PHYSICS, RESEARCH REPORTS, DIFFERENTIAL APTITUDE TEST OF MECHANICAL REASONING

229. SE 005 324

TAYLOR, PAUL H.; AND OTHERS

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65 31

\*CURRICULUM, \*CURRICULUM GUIDES, \*ELEMENTARY SCHOOL SCIENCE, \*TEACHING GUIDES, COURSE OBJECTIVES, CONCEPTUAL SCHEMES, EDUCATIONAL OBJECTIVES, PROGRAM DESCRIPTIONS

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THOMAS, BARBARA SCHALK

AN ANALYSIS OF THE EFFECTS OF INSTRUCTIONAL METHODS UPON SELECTED OUTCOMES OF

INSTRUCTION IN AN INTERDISCIPLINARY SCIENCE UNIT

UNIVERSITY OF IOWA, IOWA CITY

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68 172

\*ACRIEVEMENT, \*EARTH SCIENCE, \*INSTRUCTION, \*SECONDARY SCHOOL SCIENCE, \*TEACHING METHODS, COMPARATIVE ANALYSIS, CRITICAL THINKING, DEDUCTIVE METHODS, DOCTORAL THESES, GENERAL SCIENCE, GRADE 8, INDUCTIVE METHODS, PROBLEM SOLVING, SCIENTIFIC ENTERPRISE, STUDENT CHARACTERISTICS, TEST ON UNDERSTANDING SCIENCE, TAB INVENTORY OF SCIENCE PROCESSES



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TOLANSKY, S.
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07 00 66 9
\*COLLEGE SCIENCE, \*INTERFERENCE, \*INSTRUCTIONAL IMPROVEMENT, \*OPTICS, \*PHYSICS,
\*SCIENTIFIC PRINCIPLES, INTERNATIONAL EDUCATION, LIGHT, \*ODELS (DEMONSTRATION),
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TOROP, WILLIAM
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\*CHEMISTRY, \*INSTRUCTION, \*LABORATORY PROCEDURES, \*SECONDARY SCHOOL SCIENCE, \*TEACHING PROCEDURES, ACHIEVEMENT, COMPARATIVE ANALYSIS, DOCTORAL THESES, GRADE 11, GRADE 12, RESEARCH REPORTS, SCIENCE COURSE IMPROVEMENT PROJECT, CHEMICAL EDUCATION MATERIALS STUDY, WATSON GLASER CRITICAL THINKING APPRAISAL, TEST ON UNDERSTANDING SCIENCE

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\*\*SECONDARY SCHOOL SCHENCE, \*TEACHER EDUCATION, BIBLIOGRAPHIES, ANNOTATED

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MICHIGAN STATE UNIVERSITY, EAST LANSING UNIVERSITY MICHORIUMS ANN ARROR MICHOL

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\*CHEMISTRY, \*FILMS, \*INSTRUCTIONAL MATERIALS, \*INSTRUCTION, \*SECONDARY SCHOOL SCIENCE, COMPARATIVE ANALYSIS, DOCTORAL THESES, RESEARCH REPORTS, CHEMICAL EDUCATION MATERIALS STUDY

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TURNER, A. MASON
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VICTOR, LAURENCE J.

SYSTEMS - AN ORGANIZING PRINCIPLE FOR SCIENCE CURRICULA

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02 00 69

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\*CONCEPT TEACHING, \*CHEMISTRY, COGNITIVE DEVELOPMENT, \*CONCEPT FORMATION, ELEMENTARY SCHOOL SCIENCE, \*INSTRUCTION, \*LEARNING, \*RESEARCH REPORT, \*TEACHING TECHNIQUES

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WARREN, J. W.
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\*ANATOMY, BIOLOGY, \*COLLEGE SCIENCE, COMPARATIVE ANALYSIS, \*CONVENTIONAL
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WHITFORD, P. B.
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\*ECOLOGY, \*INSTRUCTION, \*SCIENCE EXPERIMENTS, BIOLOGY, COLLEGE SCIENCE, RESOURCE
MATERIALS, SCIENCE ACTIVITIES, SECONDARY SCHOOL SCIENCE

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WILHM, JERRY L.
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250. SE 007 110
WILLIAMS, HOMER RONALD
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HIGH SCHOOL CHEMISTRY
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\*INSTRUCTION, LARGE GROUP INSTRUCTION, RESEARCH REPORTS, \*SECONDARY SCHOOL
SCIENCE, SMALL GROUP INSTRUCTION, \*STUDENT SCIENCE INTERESTS, 1966

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WILSON, EVELYN H.; PALLRAND, GEORGE J.
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WITTERS, WELDON L.; WITTERS, WATRICIA
STUDENT INVESTIGATIONS OF BIOLOGICAL CXYGEN DEMAND
SCHOOL SCIENCE AND MATHEMATICS
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\*BIOLOGY, \*INSTRUCTION, \*SECONDARY SCHOOL SCIENCE, \*SCIENCE EXPERIMENTS,
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254. SE 500 246
WOODBURN, JOHN H.
HYPOTHESES--CROSSROADS TO SUCCESS VERSUS FAILURE IN SCIENCE AND SCIENCE TEACHING SCHOOL SCIENCE AND MATHEMATICS
04 06 69 5

\*HYPOTHESIS TESTING, \*INSTRUCTION, \*INQUIRY TRAINING, \*SKILL DEVELOPMENT, \*SECONDARY SCHOOL SCIENCE, BIOLOGY

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WOODWARD, ELIZABETH SCUDDER

AN ANALYSIS OF COGNITIVE FACTOR CHANGE IN TENTH GRADE BSCS BIOLOGY STUDENTS WITH SPECIAL REFERENCE TO VERSION SPECIFICITY FLORIDA STATE UNIVERSITY, TALLAHASSEE UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN

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\*BIOLOGY, \*COGNITIVE DEVELOPMENT, \*INSTRUCTION, \*SECONDARY SCHOOL SCIENCE, COGNITIVE PROCESSES, COMPARATIVE ANALYSIS, DOCTORAL THESES, RESEARCH REPORTS, SCIENCE COURSE IMPROVEMENT PROJECT, BIOLOGICAL SCIENCES CURRICULUM STUDY, KIT OF REFERENCE TESTS FOR COGNITIVE FACTORS, FLORIDA

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WRIGHT, ROBERT W.
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THE AMERICAN BIOLOGY TRACHER
03 00 69 ?
\*EMBRYOLOGY, \*SEX EDUCATION, \*SCIENCE ACTIVITIES, \*ZOOLOGY, BIOLOGY, COLLEGE
SCIENCE, SCIENCE MATERIALS, SECONDARY SCHOOL SCIENCE, SAND DOLLARS



257. SE 500 329

YAGER, ROBERT E.; AND OTHERS

EFFECTS OF THE LABORATORY AND DEMONSTRATION METHODS UPON THE OUTCOMES OF INSTRUCTION IN SECONDARY BIOLOGY

JOURNAL OF RESEARCH IN SCIENCE TEACHING

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YARGER, RICHARD D.; CRANSON, K. R.

APPLICATION OF THE AUDIO-VISUAL-TUTORIAL APPROACH TO EARTH SCIENCE INSTRUCTION JOURNAL OF GEOLOGICAL EDUCATION

04 00 69

\*COLLEGE SCIENCE, \*EARTH SCIENCE, \*EDUCATIONAL PROGRAMS, \*INSTRUCTION, AUDIOVISUAL AIDS, PROGRAM DESCRIPTIONS, RESEARCH REPORTS

259. SE 500 371

YEE, CILBERT C.

THE CWL PELLET

SCIENCE AND CHILDREN

05 00 69

\*ANATOMY, \*ELEMENTARY SCHOOL SCIENCE, \*SCIENCE ACTIVITIES, \*ZOOLOGY, BIOLOGY, SKILL DEVELOPMENT

260. SE 007 463

YODER, JOHN T., III

DEVELOPMENT AND EVALUATION OF INSTRUCTIONAL AIDS IN A TECHNICAL PHYSICS COURSE FOR INDUSTRIAL TECHNOLOGY STUDENTS

FLORISSANT VALLEY COMMUNITY COLLEGE, FERGUSON, MISSOURI

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261. SE 001 565

YOESTING, CLARENCE CALVIN

AN EVALUATION OF THE OUTCOMES OF A GENERAL PHYSICAL SCIENCE COURSE WITH RESPECT TO SPECIFIC OBJECTIVES

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\*FLEXIBLE SCHEDULING, GRADE 9, GRADE 10, \*INSTRUCTION, LARGE GROUP INSTRUCTION, LEARNING, PLANE GEOMETRY, RESEARCH REPORTS, \*SECONDARY SCHOOL MATHEMATICS



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41. SE 500 085 GURAU, PETER K.

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\*(URRICULUM, \*INTERNATIONAL EDUCATION, \*INSTRUCTION, \*MODERN MATHEMATICS,

\*\*HYSICS, \*SECONDARY SCHOOL MATHEMATICS, COMPUTER PROGRAMS, CALCULUS, GEOMETRY,

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ALGEBRA, COMPUTERS, \*COMPUTER ORIENTED PROGRAMS, \*MATHEMATICS EDUCATION, LOGIC, \*MATHEMATICS, \*FROBLEM, \*COMPUTER ORIENTED PROGRAMS, \*MATHEMATICS EDUCATION

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- 52. S2 500 216
  IKEDA, HITOSHI; ANDO, MASUE
  INTRODUCTION TO THE NUMERATION OF TWO-PLACE NUMBERS
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  04 00 69 3
  \*ELEMENTARY SCHOOL MATHEMATICS, \*INSTRUCTION, \*MATHEMATICS, \*NUMBER CONCEPTS,
  \*TEACHING TECHNIQUES, ARITHMETIC
- 53. SE 500 005

  JACOBSON, RUTH S.

  A STRUCTURED METHOD FOR ARITHMETIC PROBLEM SOLVING IN SPECIAL EDUCATION
  THE ARITHMETIC TEACHER
  01 00 69

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  \*ARITHMETIC, \*ELEMENTARY SCHOOL MATHEMATICS, \*PROBLEM SOLVING, \*SPECIAL
  EDUCATION, GRADE 4, TEACHING TECHNIQUES
- JEFFRYES, JAMES
  LET'S PLAY WFF'N FROOF
  THE MATHEMATICS TEACHER
  02 00 69 5
  \*INSTRUCTION, \*LOGICAL THINKING, \*MATHEMATICAL LOUIC, \*SECONDARY SCHOOL
  MATHEMATICS, \*SYMBOLIC LEARNING, EXPERIMENTAL PROGRAMS, WFF'N PROOF, THE GAME
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55. SE 006 753 JOHNSON, ROSA B.

THE EFFECTIVENESS OF A TEACHING METHOD IN REMEDIAL MATHEMATICS AT THE

PRE-FRESHMAN LEVEL

ALBANY STATE COLLEGE, GEORGIA, DEPARTMENT OF MATHEMATICS

\*REMEDIAL MATHEMATICS, \*INSTRUCTION, ACHIEVEMENT, COLLEGE MATHEMATICS, COMPARATIVE ANALYSIS, PROGRAMED INSTRUCTION, RESEARCH REPORTS, REMEDIAL INSTRUCTION, TEACHING METHODS, COOPERATIVE ARITHMETIC TEST, CALIFORNIA MATHEMATICS TEST

56. SE 006 798 JONES, THOMAS

THE EFFECT OF MODIFIED PROGRAMMED LECTURES AND MATHEMATICAL GAMES UPON

ACHIEVEMENT AND ATTITUDE OF NINTH-GRADE LOW ACHIEVERS IN MATHEMATICS THE MATHEMATICS TEACHER

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5 \*ACHIEVEMENT, \*A'TITUDES, EDUCATIONAL GAMES, GRADE 9, \*INSTRUCTION, LEARNING, RESEARCH REPORTS, \*SPCCNDARY SCHOOL MATHEMATICS, TEACHING PROCEDURES,

57. SE 500 307 JUNGE, CHARLOTTE W. DOTS, PLOTS, AND PROFILES THE ARITHMETIC TEACHER 8

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05 00 69 \*ARITHMETIC, \*ELEMENTARY SCHOOL MATHEMATICS, \*GRAPHS, \*INSTRUCTION, AUDIOVISUAL AIDS, GEOMETRIC CONCEPTS, GRADE 5, NUMBER CONCEPTS, TEACHING PROCEDURES

58. SE 500 231 KAMINS, MARTIN P. DISCOVERING EXPONENTS THE ARITHMETIC TEACHER 04 00 63 \*DISCOVERY LEARNING, \*FLEMENTARY SCHOOL MATHEMATICS, \*INSTRUCTION, \*MULTIPLICATION, \*NUMBER CONCEPTS, ARITHMETIC, TEACHING TECHNIQUES

59. SE 500 211 KIEREN, THOMAS E. QUADRATIC EQUATIONS -- COMPUTER STYLE THE MATHEMATICS TEACHER 04 00 69 \*ALGEBRA, \*COMPUTER ORIENTED PROGRAMS, \*INSTRUCTION, \*MATHEMATICS, \*TEACHING PROCEDURES, SECONDARY SCHOOL SCIENCE

60. SE 500 283 KING, ROBERT W. USING PROGRAMMED INSTRUCTION TO INVESTIGATE THE EFFECTS OF GROUP INTERACTION ON LEARNING MATHEMATICS THE MATHEMATICS TEACHER 05 00 69 \*ACHIEVEMENT, \*INSTRUCTION, \*MATHEMATICS, \*PROGRAMED INSTRUCTION, \*SECONDARY SCHOOL MATHEMATICS, COMPARATIVE ANALYSIS



61. SE 006 273

LACKNER. LOIS M.

THE TEACHING OF TWO CONCEPTS IN BEGINNING CALCULUS BY COMBINATIONS OF INDUCTIVE AND DEDUCTIVE APPROACHES, FINAL REPORT

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\*CALCULUS, \*INSTRUCTION, \*MATHEMATICS, \*PROGRAMED INSTRUCTION, \*SECONDARY SCHOOL MATHEMATICS, COMPARATIVE ANALYSIS, GRADE 11, GRADE 12, TEACHING

62. SE 500 062

LAFRENZ, DALE E.; KIEREN, THOMAS E.

COMPUTERS FOR ALL STUDENTS, A NEW PHILOSOPHY OF COMPUTER USE

SCHOOL SCIENCE AND MATHEMATICS

01 00 69

\*COMPUTER ASSISTED INSTRUCTION, \*INSTRUCTION, \*MATHEMATICS, \*SECONDARY SCHOOL MATHEMATICS. COMPUTER ORIENTED PROGRAMS, TEACHING PROCEDURES

63. SE 006 514

LEVIN, ALVIN IRVING

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UNIVERSITY OF CALIFORNIA, LOS ANGELES

UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN

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\*ELEMENTARY SCHOOL MATHEMATICS, \*FRACTIONS, \*INSTRUCTION, \*INSTRUCTIONAL MATERIALS, \*PROGRAMED INSTRUCTION, ARITHMETIC, ACHIEVEMENT TESTS, BEHAVIORAL OBJECTIVES, COMPARATIVE ANALYSIS, GRADE 5, TESTS, DOCTORAL THESES, THE TAXONOMIC SKILLS ACHIEVEMENT TEST IN FRACTIONS

64. SE 007 206

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INEQUALITIES AND REAL NUMBERS AS A BASIS FOR SCHOOL MATHEMATICS, CAMBRIDGE CONFERENCE ON SCHOOL MATHEMATICS FRASIBILITY STUDY NUMBER 38
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ARITHMETIC, \*ELEMENTARY SCHOOL MATHEMATICS, GRADE 1, GRADE 2, \*INSTRUCTION, \*INSTRUCTIONAL MATERIALS, MATHEMATICAL CONCEPTS, RESOURCE MATERIALS

65. SE 007 210

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PROGRESS REPORT FOR MARCH, 1964, CAMBRIDGE CONFERENCE ON SCHOOL MATHEMATICS FEASIBILITY STUDY NUMBER 33

CAMBRIDGE CONFERENCE ON SCHOOL MATHEMATICS, NEWTON, MASSACHUSETTS EDRS

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\*CURRICULUM DEVELOPMENT, \*ELEMENTARY SCHOOL MATHEMATICS, \*INSTRUCTION, MATHEMATICS EDUCATION, \*PROGRAM DESCRIPTIONS, \*REPORTS, CAMBRIDGE CONFERENCE ON SCHOOL MATHEMATICS (64)



66. SE 006 512
LOMBARD, AVIMA DUSHKIN
EFFECTIVENESS OF INSTRUCTION IN PUZZLE ASSEMBLY SKILLS WITH PRESCHOOL CHILDREN
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\*ELEMENTARY SCHOOL MATHEMATICS, \*INSTRUCTION, \*PROGRAMED INSTRUCTION, \*PUZZLES, DOCTORAL THESIS, EDUCATIONAL GAMES, PRESCHOOL EDUCATION, VERBAL DEVELOPMENT

- 67. SE 500 309
  MAERTENS, NORBERT
  AN ANALYSIS OF THE EFFECTS OF ARITHMETIC HOMEWORK UPON THE ARITHMETIC ACHIEVEMENT
  OF THIRD-GRADE PUPILS
  THE ARITHMETIC TEACHER
  05 00 69 7
  \*ARITHMETIC, \*ACHIEVEMENT, \*ELEMENTARY SCHOOL MATHEMATICS, \*HOMEWORK, GRADE 3,
  \*INSTRUCTION, COMPARATIVE ANALYSIS, LEARNING, MATHEMATICS, PROBLEM SOLVING
- 68. SE 500 301
  MAUTHE, ALBERT H.
  CLIMB THE LADDER
  THE ARITHMETIC TEACHER
  05 00 69 3
  \*ADDITION, \*ELEMENTARY SCHOOL MATHEMATICS, \*INSTRUCTION, \*NUMBER CONCEPTS,
  \*WHOLE NUMBERS, ARITHMETIC, MATHEMATICAL CONCEPTS, TEACHING PROCEDURES
- 69. SE 006 777

  MECONI, L. J.

  CONCEPT LEARNING AND RETENTION IN MATHEMATICS

  JOURNAL OF EXPERIMENTAL EDUCATION

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  \*ALGEBRA, \*CONCEPT FORMATION, COMPARATIVE ANALYSIS, \*DISCOVERY PROCESSES,

  GRADE 8, GRADE 9, \*INSTRUCTION, \*LEARNING, PROGRAMED MATERIALS, \*SENDMARY

  SCHOOL MATHEMATICS, RESEARCH REPORTS
- 70. SE 500 302

  MEHL, WILLIAM G.; MEHL, DAVID W.

  GRISLY GRIDS

  THE ARITHMETIC TEACHER

  05 00 69 3

  \*ARITHMETIC, \*AUDIOVISUAL AIDS, \*INSTRUCTION, \*MULTIPLICATION, \*WHOLE NUMBERS, ELEMENTARY SCHOOL MATHEMATICS, INSTRUCTIONAL MATERIALS, MATHEMATICAL CONCEPTS, NUMBER CONCEPTS, TLACHING PROCEDURES
- 71. SE 500 161
  MILGRAM, JOEL
  TIME UTILIZATION IN ARITHMETIC TEACHING
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  03 00 69 3
  \*ELEMENTARY SCHOOL TEACHERS, \*ELEMENTARY SCHOOL MATHEMATICS, \*INSTRUCTION,
  \*TEACHING, \*TIME FACTORS (LEARNING), ARITHMETIC



72. SE 500 395

MILLER, WILLIAM A.

A UNIT IN SENTENTIAL LOGIC FOR JUNIOR HIGH SCHOOL STUDENTS; INVOLVING BOTH VALID AND INVALID INFERENCE PATTERNS

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\*INSTRUCTION, \*LOGIC, \*SECONDARY SCHOOL MATHEMATICS, ABSTRACT REASONING, GRADE 7, LOGICAL THINKING, MATHEMATICS

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\*ADDITION, \*ELEMENTARY SCHOOL MATHEMATICS, \*INSTRUCTION, \*MULTIPLICATION, \*WHOLE NUMBERS, ARITHMETIC, AUDIOVISUAL AIDS, NUMBER CONCEPTS, TEACHING TECHNIQUES

74. SE 500 092

MILNE, ESTRER

SUBTRACTION OF INTEGERS -- DISCOVERED THROUGH A GAME

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02 00 69

\*AUDICVISUAL AIDS, \*ELEMENTARY SCHOOL MATHEMATICS, \*INSTRUCTION, \*SUBTRACTION,

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75. SE 006 511

MOODY, WILLIAM BRAUN

AN INVESTIGATION OF THE RELATIONSRIP BETWEEN FIFTH-GRADE STUDENT AND TEACHER

PERFORMANCE ON SELECTED TASKS INVOLVING NONMETRIC GEOMETRY

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\*ACHIEVEMENT, \*ELEMENTARY SCHOOL MATREMATICS, \*EFFECTIVE TEACHING, \*INSTRUCTION,

\*TEACHER EDUCATION, ELEMENTARY SCHOOL TEACHERS, GRADE 5, GEOMETRY, MATREMATICS

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MORECZ, JUDY

INEQUALITY LESSONS AT ADAMS SCHOOL, CAMBRIDGE CONFERENCE ON SCHOOL MATHEMATICS

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77. SE 500 279

McCRHERY, LOUIS R.

LIVELY FUNCTIONS FOR ALGEBRA ONE

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05 100 69

\*ALCHBRA, \*INSTRUCTION, \*MATHEMATICS, \*MATHFMATICAL CONCEPTS, \*SECONDARY SCHOOL MATHEMATICS, MATHEMATICAL APPLICATIONS, TEACHING PROCEDURES

78. SE 500 154
McDERMOTT, JOHN J.
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\*COMPUTER ORIENTED PROGRAMS. \*ELEMENTARY SCHOOL MATHEMATICS. \*INSTRUCTION.

79. SE 007 203

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80. SE 007 201 McLANE, LYN

PROBABILITY LESSONS AT HANCOCK SCHOOL, CAMBRIDGE CONFERENCE ON SCHOOL MATHEMATICS FEASIBILITY STUDY NUMBER 41 CAMBRIDGE CONFERENCE ON SCHOOL MATHEMATICS, NEWTON, MASSACHUSETTS

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81. SE 500 313

McLEAN, ROBERT C. ESTIMATING QUOTIENTS FOR THE NEW LONG DIVISION ALGORITHM

THE ARITHMETIC TEACHER

05 00 69 3 \*DIVISION, \*ELEMENTARY SCHOOL MATHEMATICS, \*INSTRUCTION, \*WHOLE NUMBERS, ARITHMETIC, NUMBER CONCEPTS, TEACHING PROCEDURES

82. SE 500 082 NELSEN, JEANNE

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02 00 69 5
\*ARITHMETIC. \*ELEMENTARY SCHOOL MATHEMATICS. \*PERCENTAGE. \*TEACHING PROCEDURES

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86. SE 004 867

84. SE 006 220
NIETLING, LLOYD CHARLES
USING PROBLEMS TO INITIATE THE STUDY OF CERTAIN TOPICS IN MATHEMATICS
OHIO STATE UNIVERSITY, COLUMBUS
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\*COLLEGE MATHEMATICS, \*INSTRUCTION, \*MATHEMATICS, \*PROBLEM SOLVING, \*TEACHING TECHNIQUES, ALGEBRA, COMPARATIVE ANALYSIS

- 85. SE 500 846
  NODDINGS, NELLIE L.
  PROVIDING FOR INDIVIDUAL RATES OF LEARNING IN MATHEMATICS
  THE MATHEMATICS TEACHER
  11 00 69 3
  \*INDIVIDUALIZED INSTRUCTION, \*LEARNING, \*SECONDARY SCHOOL MATHEMATICS, \*TEACHING TECHNIQUES, GRADE 11, MATHEMATICS EDUCATION
- O'BRIEN, THOMAS C.

  AN EXPERIMENTAL INVESTIGATION OF A NEW APPROACH TO THE TEACHING OF DECIMALS
  NEW YORK UNIVERSITY, NEW YORK
  UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN
  ED 028 060 NOT AVAILABLE FROM EDRS
  67 142
  \*ARITHMETIC, \*ACHIEVEMENT, \*DECIMAL FRACTIONS, \*ELEMENTARY SCHOOL MATHEMATICS,
  \*INSTRUCTION, \*MATHEMATICS, DOCTORAL THESES, EXPERIMENTAL TEACHING, GRADE 6,
  LEARNING, TEACHING PROCEDURES, 1967
- 87. SE 006 395

  PACE, ANGELA

  THE EFFECT OF INSTRUCTION UPON THE DEVELOPMENT OF THE CONCEPT OF NUMBER

  JOURNAL OF EDUCATIONAL RESEARCH

  12 00 68 7

  \*ELEMENTARY SCHOOL MATHEMATICS, \*INSTRUCTION, \*NUMBER CONCEPTS, ARITHMETIC,

  CURRICULUM DEVELOPMENT, GRADE 1, KINDERGARTEN, MATHEMATICS, PRESCHOOL EDUCATION,

  RESEARCH REPORTS, LORGE-THORNDIKE INTELLIGENCE TESTS



88. SE 500 091
PARKER, ROBERT
GRAPH PAPER - A VERSATILE VISUAL AID
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02 00 69 5
\*AUDIOVISUAL AIDS, \*ELEMENTARY SCHOOL MATHEMATICS, \*INSTRUCTIONAL MATERIALS,
\*TEACHING PROCEDURES, NUMBER CONCEPTS, GRAPH PAPER

89. SE 006 797
PETHTEL, RICHARD D.
CLOSED-CIRCUIT TELEVISION INSTRUCTION IN COLLEGE MATHEMATICS
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05 0C 68 5
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90. SE 006 225

PHILLIPS, PAUL HAROLD
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91. SE 500 236
PICARD, ANTHONY J.
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O4 00 69 6
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92. SE 500 089
PINCUS, MORRIS
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02 00 69 2
\*ADDITION, \*ELEMENTARY SCHOOL MATHEMATICS, \*FRACTIONS, \*INSTRUCTION, \*SUBTRACTION, ARITHMETIC, MATHEMATICAL CONCEPTS, MATHEMATICS

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93. SE 500 210
POINCARE, HENRI
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94. SE 004 870
POST, THOMAS ROBERT
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UNIVERSITY OF INDIANA, BLOOMINGTON
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\*ACHIEVEMENT, \*INSTRUCTION, \*MATHEMATICS, \*PROBLEM SOLVING, \*SECONDARY SCHOOL MATHEMATICS, DOCTORAL THESES, GRADE 7, LEARNING, TEACHING PROCEDURES, 1967

95. SE 500 004
POTTENGER, MARY JO; LETH, LEONARD
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01 00 69 4
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- 96. SE 500 748

  PRIENOW, JACK R.

  WHY JOHNNY CAN'T "READ" WORD PROBLEMS

  SCHOOL SCIENCE AND MATHEMATICS

  10 00 69 8

  \*INSTRUCTION, \*PROBLEM SOLVING, \*SECONDARY SCHOOL MATHEMATICS, \*TEACHING PROCEDURES, DATA ANALYSIS, READING CCAPREHENSION, SYMBOLS (MATHEMATICS)
- 97. SE 006 774
  PRICE, JACK
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  12 00 67 2
  \*ACHIEVEMENT, COMPARATIVE ANALYSIS, \*CRITICAL THINKING, \*DISCOVERY PROCESSES,
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- 98. SE 500 083
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  02 00 69 3
  \*DIVISION, \*FRACTIONS, \*ELEMENTARY SCHOOL MATHEMATICS, \*INSTRUCTION, ARITHMETIC, EDUCATIONAL PROBLEMS, MATHEMATICS
- RABATA, CAROLYN; McCARTHY, SHIRLEY
  HOMOGENEOUS GROUPING IN MATHEMATICS, GRADE 3
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  \*ELEMENTARY SCHOOL MATHEMATICS, \*HOMOGENEOUS GROUPING, \*INSTRUCTION,
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  RESEARCH REPORTS, TEACHING PROCEDURFS

99.

SE 006 747

100. SE 006 787
RETZER, KENNETH A.; HENDERSON, KENNETH B.
EFFECT OF TEACHING CONCEPTS OF LOGIC ON VERBALIZATION OF DISCOVERED MATHEMATICAL GENERALIZATIONS
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11 00 67
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ABILITY, ALGEBRA, COLLEGE BOUND STUDENTS, COMPARATIVE ANALYSIS, \*DISCOVERY PROCESSES, GRADE 7, GRADE 8, \*INSTRUCTION, LOGIC, \*MATHEMATICAL LOGIC, PROGRAMED INSTRUCTION, RESEARCH REPORTS, \*SECONDARY SCHOOL MATHEMATICS, TEACHING PROCEDURES, VERBAL COMMUNICATION

101. SE 006 657

ROMBERG, THOMAS A.; AND OTHERS

PAPERS FOR THE RESEARCH REPORTING SECTIONS OF THE FORTY-SEVENTH ANNUAL MEETING

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ACHIEVEMENT, CURRICULUM, \*ELEMENTARY SCHOOL MATHEMATICS, \*INSTRUCTION, LEARNING, \*MATHEMATICS EDUCATION, MATHEMATICS, MATHEMATICS TEACHERS, \*RESEARCH REVIEWS (PUBLICATIONS), \*SECONDARY SCHOOL MATHEMATICS

- 102. SE 500 234
  SANDERS, WALTER J.
  EQUIVALENCE AND EQUALITY
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  04 00 69 6
  \*ELEMENTARY SCHOOL MATHEMATICS, \*INSTRUCTION, \*NUMBER CONCEPTS, ARITHMETIC,
  MATHEMATICS. PROBLEM SOLVING
- 103. SE 500 316
  SCHLOFF, CHARLES E.
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  SCHRANK, WILBURN R.
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ARITHMETIC PROGRAM

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\*ARITHMETIC, \*INSTRUCTION, \*REMEDIAL ARITHMETIC, \*SECONDARY SCHOOL MATHEMATICS, ACHIEVEMENT, ADDITION, COMPARATIVE ANALYSIS, COMPUTER ASSISTED INSTRUCTION, DOCTORAL THESES, LOW ABILITY STUDENTS, SUBTRACTION

106. SE 006 780

SHEEHAN, T. JOSEPH PATTERNS OF SEX DIFFERENCES IN LEARNING MATHEMATICAL PROBLEM-SOLVING

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\*ALGEBRA, COMPARATIVE ANALYSIS, GRADE 9, \*INSTRUCTION, \*LEARNING, MATHEMATICS, \*MENTAL DEVELOPMENT, PROBLEM SOLVING, RESEARCH REPORTS, \*SEX DIFFERENCES, \*SECONDARY SCHOOL MATHEMATICS, SURVEY OF ALGEBRAIC APTITUDE

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108. SE 500 207

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A NEW WAY TO TEACH PROBABILITY STATISTICS

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\*INSTRUCTION, \*MATHEMATICS, \*PROBABILITY THEORY, \*STATISTICS, \*SECONDARY SCHOOL MATHEMATICS, TEACHING PROCEDURES

109. SE 500 003

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