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ERIC Information Analysis Center
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1460 West Lane Avenue
Columbus, Ohio 43221

May, 1968
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science and Society</td>
<td>1</td>
</tr>
<tr>
<td>History of Science Education</td>
<td>5</td>
</tr>
<tr>
<td>Science History</td>
<td>10</td>
</tr>
<tr>
<td>General Studies and Surveys</td>
<td>12</td>
</tr>
</tbody>
</table>
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(8) SCHOOL SCIENCE AND MATHEMATICS
(9) 11 00 64 (10) 4
(11) BIOLOGY, CHEMISTRY, SCIENCE HISTORY, PHYSICS, SCIENCE CASE HISTORIES, SECONDARY SCHOOL SCIENCE, TEACHING TECHNIQUES, PROGRAM DESCRIPTIONS

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1. BELT, SIDNEY LEON
   MEASURING ATTITUDES OF HIGH SCHOOL PUPILS TOWARD SCIENCE AND SCIENTISTS
   UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN

2. DART, FRANCIS E. AND PRADHAM, PANNA LAL
   CROSS-CULTURAL TEACHING OF SCIENCE
   02 10 67

3. HUBBARD, HOWARD NEWTON
   JUNIOR HIGH SCHOOL STUDENTS' PERCEPTIONS OF SCIENCE AND SCIENTISTS
   UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN
   64 260
   *SCIENTISTS, *SCIENCE AND SOCIETY, *SECONDARY SCHOOL SCIENCE, *STUDENT ATTITUDES, GRADE 8, RESEARCH REPORTS

4. KLOPFER, LEOPOLD E.
   THE USE OF CASE HISTORIES IN SCIENCE TEACHING
   SCHOOL SCIENCE AND MATHEMATICS
   11 00 64
5. SE 001 076 08 28 67 20 92 17 2 00 000 008
KLOPFER, LEOPOLD E. AND COOLEY, WILLIAM W.
THE HISTORY OF SCIENCE CASES FOR HIGH SCHOOLS IN THE DEVELOPMENT OF
STUDENT UNDERSTANDING OF SCIENCE AND SCIENTISTS
JOURNAL OF RESEARCH IN SCIENCE TEACHING
03 00 63 15
*NATURAL SCIENCE, *SCIENCE AND SOCIETY, *SCIENTIFIC ENTERPRISE, *STU-
DENT ATTITUDES, *SECONDARY SCHOOL SCIENCE, EDUCATIONAL OBJECTIVES,
INSTRUCTIONAL PROCEDURES, ACADEMIC ACHIEVEMENT, HISTORY OF SCIENCE
CASES FOR HIGH SCHOOLS (HOSC), COOPERATIVE CHEMISTRY TEST, COOPERA-
TIVE PHYSICS TEST, 1960, 1961

6. SE 001 144 06 09 67 20 85 17 1 00 000 004
KOELSCHE, CHARLES L.
SCIENTIFIC LITERACY AS RELATED TO THE MEDIA OF MASS COMMUNICATION
SCHOOL SCIENCE AND MATHEMATICS
11 00 65 4
*ELEMENTARY SCHOOL SCIENCE, *MASS MEDIA, *SCIENTIFIC LITERACY, *SEC-
ONDARY SCHOOL SCIENCE, SCIENTIFIC VOCABULARY, SCIENTIFIC PRINCIPLES,
SCIENCE AND SOCIETY, TECHNOLOGY AND SOCIETY, *RESEARCH REPORTS

7. SE 000 904 06 30 67 20 85 20 1 00 000 006
LEE, ADDISON E.
CURRENT PROBLEMS IN SCIENCE EDUCATION
SCIENCE EDUCATION
03 00 65 6
*COLLEGE SCIENCE, *CURRICULUM DEVELOPMENT, *SCIENTIFIC LITERACY,
*SCIENCE EDUCATION PROBLEMS, ELEMENTARY SCHOOL SCIENCE, SECONDARY
SCHOOL SCIENCE, SCIENCE INSTRUCTION, TEACHER ATTITUDES, PAPERS,
AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES

8. SE 000 560 06 29 67 20 95 03 2 32 000 200
NEW YORK STATE DEPARTMENT OF EDUCATION
SCIENCE IN SOUTH ASIA, PAST AND PRESENT—A PRELIMINARY BIBLIOGRAPHY
NEW YORK STATE DEPARTMENT OF EDUCATION
66 100
*SCIENTIFIC RESEARCH, *TECHNOLOGY, *SCIENCE EDUCATION, *ASTRONOMY,
BIOLOGY, CHEMISTRY, EARTH SCIENCE, MEDICINE, SPACE SCIENCE, INDIA,
Pakistan, CEYLON, CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE,
ROCKEFELLER UNIVERSITY, *BIBLIOGRAPHIES, NATURAL SCIENCES

(2)
9. SE 000 797 09 07 67 20 86 20 2 00 000 008
REDFIELD, DAVID D.
THE PHILOSOPHICAL BASIS OF MODERN SCIENCE
JOURNAL OF RESEARCH IN SCIENCE TEACHING
12 00 65 10
*SCIENCE HISTORY, *SCIENCE PHILOSOPHY, *SCIENTIFIC ENTERPRISE, EDUCATIONAL OBJECTIVES

10. SE 001 794 08 18 67 20 95 37 1 42 000 188
SEABORG, GLENN T.
SCIENCE AND OUR SOCIETY
U. S. ATOMIC ENERGY COMMISSION, DIVISION OF TECHNICAL INFORMATION
05 00 66 99
*ATOMIC ENERGY, *SCIENCE HISTORY, *SCIENCE AND SOCIETY, *TEACHER RESOURCE MATERIALS, ADULT EDUCATION, COLLEGE SCIENCE, NUCLEAR POWER, SPEECHES, SECONDARY SCHOOL SCIENCE

11. SE 001 351 08 29 67 20 96 19 2 00 000 011
WEAVER, WARREN
WHY IS IT SO IMPORTANT THAT SCIENCE BE UNDERSTOOD?
IMPACT OF SCIENCE ON SOCIETY
66 10
*SCIENCE AND SOCIETY, *SCIENTIFIC ENTERPRISE, EDUCATIONAL OBJECTIVES, NATURAL SCIENCES, SCIENTIFIC LITERACY

12. SE 001 031 08 15 67 20 95 20 1 00 000 006
WINTHROP, HENRY
ACQUAINTING SCIENCE TEACHERS WITH THE SOCIAL IMPACT OF SCIENCE AND TECHNOLOGY
SCIENCE EDUCATION
12 00 66 2
*SCIENTIFIC LITERACY, *SCIENCE AND SOCIETY, *SCIENTIFIC ENTERPRISE, *SECONDARY SCHOOL SCIENCE, SCIENCE AND TECHNOLOGY, BIBLIOGRAPHIES

13. SE 001 030 09 27 67 20 86 20 1 00 000 006
WINTHROP, HENRY
PROFESSIONAL PROJECTIONS OF FUTURE SCIENCE AND TECHNOLOGY AND THEIR BEARINGS ON SOCIAL CHANGE
SCIENCE EDUCATION
12 00 66 6
*SCIENCE AND SOCIETY, *SCIENTIFIC ENTERPRISE, *SCIENTIFIC LITERACY
WOOD, ROGER L. AND OTHERS
AN ANALYSIS OF THE CONTENT OF SCIENTIFICALLY AND/OR TECHNOLOGICALLY ORIENTED ARTICLES APPEARING IN A SAMPLE OF CAPITAL CITY NEWSPAPERS
UNIVERSITY OF WISCONSIN, MADISON

<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Author(s)</th>
<th>Journal/Year</th>
<th>Volume</th>
<th>Number</th>
<th>Start Page</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>THE PHYSICS TEACHER</td>
<td>ANDREWS, C. L.</td>
<td>*BIOGRAPHIES; *PHYSICS; *SCIENCE EDUCATION, *SECONDARY SCHOOL SCIENCE, *SCIENCE TEACHERS, *SCIENCE EDUCATION HISTORY, SCIENCE EDUCATORS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>THE PHYSICS TEACHER</td>
<td>COOLIDGE, WILLIAM DAVID</td>
<td>*BIOGRAPHIES, AUTOBIOGRAPHIES, PHYSICISTS, SCIENCE EDUCATION, SCIENCE EDUCATORS, SCIENTISTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>NATURE LORE AT GARRETTSVILLE AS REVEALED BY THE DIARIES OF GEORGE J. STREATOR 1881-1887</td>
<td>DEXTER, RALPH W.</td>
<td>*BIOLOGY, NATURALISTS, NATURAL HISTORY, *BIOGRAPHIES, GEORGE J. STREATOR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>BIOLOGICAL EDUCATION IN AMERICAN SECONDARY SCHOOLS 1890-1960</td>
<td>HURD, PAUL DEHART</td>
<td>*BIOLOGY, *SCIENCE EDUCATION, *SECONDARY SCHOOL SCIENCE, CURRICULUM, COURSE CONTENT, EDUCATIONAL OBJECTIVES, HISTORY, TEACHING METHODS, TEXTBOOKS, BIOLOGICAL SCIENCES CURRICULUM STUDY, AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES, NATIONAL SCIENCE FOUNDATION, RESEARCH REVIEWS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. KUSLAN, LOUIS I.
RENSSELAER AND BRIDGEWATER - A FOOTNOTE IN THE HISTORY OF AMERICAN
SCIENTIFIC EDUCATION
SCIENCE EDUCATION
02 00 66 5
COLLEGES, NORMAL SCHOOLS, SCIENCE EDUCATION, TEACHER EDUCATION,
RENSSELAER POLYTECHNIC INSTITUTE, BRIDGEWATER NORMAL SCHOOL,
HISTORICAL REVIEWS

7. LEHN, HOWARD M.
THE CHURCH'S STRUGGLE WITH SCIENCE
THE AMERICAN BIOLOGY TEACHER
12 00 65 2
*SCIENCE AND RELIGION, *SCIENCE HISTORY, *TEACHER RESOURCE MATERIALS,
SCIENCE ATTITUDES, *SCIENCE AND SOCIETY

8. MAYFIELD, JOHN C.
WILBUR LEE BEAUCHAMP, 1891-1962
JOURNAL OF RESEARCH IN SCIENCE TEACHING
03 00 63 1
*BIographies, *SCIENCE EDUCATION HISTORY, *SCIENCE EDUCATION, *SCIENCE
EDUCATORS

9. NEHER, H. V.
MILLIKAN - TEACHER AND FRIEND
THE PHYSICS TEACHER
11 00 64 4
*BIographies, *SCIENCE EDUCATION HISTORY, *PHYSICS, *SCIENCE EDUCATION,
*SCIENTISTS, *SCIENCE EDUCATORS, SPEECHES, AMERICAN ASSOCIATION FOR
PHYSICS TEACHERS, MILLIKAN LECTURES
10. OBOURN, ELLSWORTH S. AND JOHNSON, LLOYD K. NARST—ITS CONCERN FOR RESEARCH
THE SCIENCE TEACHER
12 00 64 1
*EDUCATIONAL RESEARCH, *SCIENCE EDUCATION, *PROFESSIONAL ORGANIZATIONS, GENERAL SCIENCE QUARTERLY, JOURNAL OF RESEARCH IN SCIENCE TEACHING, NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING, NATIONAL SOCIETY FOR THE STUDY OF EDUCATION, DIGESTS OF RESEARCH

11. PANUSH, LOUIS
TWENTY-FIVE YEARS OF THE AAAS COOPERATIVE COMMITTEE ON THE TEACHING OF SCIENCE AND MATHEMATICS
SCHOOL SCIENCE AND MATHEMATICS
05 00 67 3

12. POWERS, SAMUEL RALPH
THE BEGINNINGS OF ORGANIZED RESEARCH IN THE TEACHING OF SCIENCE
JOURNAL OF RESEARCH IN SCIENCE TEACHING
03 00 63 2
*EDUCATIONAL RESEARCH, *PROFESSIONAL ORGANIZATIONS, *SCIENCE EDUCATION, RESEARCHERS, SCIENCE EDUCATORS, NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

13. PRUITT, CLARENCE M.
ANNA MAY GEMMILL 1878-1962
SCIENCE EDUCATION
02 00 66 2
SCIENCE EDUCATION, SCIENCE EDUCATORS, BIOGRAPHIES
14. SE 000 908 06 23 67  21 86 04  1  00 000 006
   Pruitt, Clarence M.
   Arthur Oaklen Baker
   Science Education
   02 00 65 4
   *Science Educators, Science Education, Biographies

15. SE 000 895 07 11 67  21 86 04  1  00 000 006
   Pruitt, Clarence M.
   Benjamin Charles Gruneberg
   Science Education
   02 00 66 5
   Science Education, Science Educators, Biographies

16. SE 000 897 06 23 67  21 86 04  1  00 000 006
   Pruitt, Clarence M.
   Edith Marie Selberg
   Science Education
   03 00 65 4

17. SE 001 033 07 31 67  21 86 04  1  00 000 006
   Pruitt, Clarence M.
   Frederic Booth Dutton
   Science Education
   03 00 66 3
   Biographies, Science Education, Science Educators, Michigan State University

18. SE 000 909 06 23 67  21 86 04  1  00 000 006
   Pruitt, Clarence M.
   Harry Allen Cunningham
   Science Education
   02 00 65 2
   *Science Educators, Science Education, *Biographies
19. SE 001 456 07 26 67 21 86 04 1 00 000 006
   Pruitt, Clarence M.
   John Cunliffe Mayfield
   SCIENCE EDUCATION
   03 00 67 2

20. SE 000 886 06 23 67 21 86 04 1 00 000 006
   Pruitt, Clarence M.
   Milton Orville Pella
   SCIENCE EDUCATION
   02 00 66 4
   *SCIENCE EDUCATION, *SCIENCE EDUCATORS, *BIOGRAPHIES

21. SE 001 074 07 13 67 21 86 20 1 00 000 008
   Watkins, Ralph K.
   To the New Generation in NARST
   JOURNAL OF RESEARCH IN SCIENCE TEACHING
   03 00 63 2
   *PROFESSIONAL ORGANIZATIONS, *SCIENCE EDUCATION, NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING, HISTORICAL REVIEWS, SCIENCE EDUCATION HISTORY

22. SE 001 073 07 13 67 21 86 20 1 00 000 008
   Webb, Hanor A.
   Famous Firsts of NARST
   JOURNAL OF RESEARCH IN SCIENCE TEACHING
   03 00 63 1
   *PROFESSIONAL ORGANIZATIONS, *SCIENCE EDUCATION, NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING, HISTORICAL REVIEWS, SCIENCE EDUCATION HISTORY

23. SE 001 193 07 31 67 21 36 06 1 00 000 009
   Winch, Ralph P.
   Proceedings of the American Association of Physics Teachers
   THE PHYSICS TEACHER
   05 00 66 1
   *CONFERENCE REPORTS, *PHYSICS, *PROFESSIONAL ORGANIZATIONS, *SCIENCE EDUCATION, SCIENCE EDUCATION HISTORY, AMERICAN ASSOCIATION OF PHYSICS TEACHERS
1. SE 001 264 11 13 67 23 86 17 2 22 000 319
DANIELS, GEORGE HARRISON, JR.
BACONIAN SCIENCE IN AMERICA, 1815-1845
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN
63 358

2. SE 000 134 10 18 67 23 23 18 2 00 000 003
HAMMETT, LOUIS P.
PHYSICAL ORGANIC CHEMISTRY IN RETROSPECT
JOURNAL OF CHEMICAL EDUCATION
09 00 66 6

3. SE 001 180 11 09 67 23 95 20 2 00 000 009
HUNTOON, R. D.
THE BASIS OF OUR MEASUREMENT SYSTEM
THE PHYSICS TEACHER
03 00 66 4
*CHEMISTRY, *MEASUREMENT, *PHYSICS, *SCIENCE HISTORY, BIOLOGY, METRIC SYSTEM, MEASUREMENT STANDARDS, MASS, PHYSICAL CONSTANTS, TEMPERATURE, TIME, INSTITUTE OF BASIC STANDARDS, NATIONAL BUREAU OF STANDARDS, INTERNATIONAL BUREAU OF STANDARDS

4. SE 001 303 11 16 67 21 86 17 2 22 000 319
REIF, SISTER MARY RICHARD
NATURAL PHILOSOPHY IN SOME EARLY SEVENTEENTH CENTURY SCHOLASTIC TEXTBOOKS
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN
62 374

(10)
WOLFENDEN, JOHN H.
THE ROLE OF CHANCE IN CHEMICAL INVESTIGATION
JOURNAL OF CHEMICAL EDUCATION

*CHEMISTRY, *SCIENTIFIC METHODOLOGY, *SERENDIPITY, *SCIENCE HISTORY,
NEW ENGLAND ASSOCIATION OF CHEMISTRY TEACHERS, COLLEGE SCIENCE,
RESEARCH METHODOLOGY
1. ANDERSON, NORMAN D. AND GOODE, JOHN M.  
THE STATUS OF PHYSICS TEACHING IN NORTH CAROLINA  
NORTH CAROLINA STATE DEPARTMENT OF EDUCATION  
PHYSICS, SECONDARY SCHOOL SCIENCE, PHYSICS TEACHERS, TEACHER QUALIFICATIONS, TEACHER EDUCATION, COLLEGE SCIENCE, NORTH CAROLINA  

2. BENNETT, LLOYD M.  
COMPARISON OF CURRENT SCIENCE TEACHING PRACTICES IN TEXAS HIGH SCHOOLS  
SCHOOL SCIENCE AND MATHEMATICS  
EDUCATIONAL TRENDS, ENROLLMENTS, JUNIOR HIGH SCHOOL, SECONDARY SCHOOL SCIENCE, SCHOOL ORGANIZATION, TIME ALLOCATION, SCIENCE FACILITIES, RESEARCH REPORTS  

3. BENNETT, LLOYD M.  
CURRENT PRACTICES IN SCIENCE TEACHING IN THE JUNIOR HIGH SCHOOLS OF TEXAS  
SCIENCE EDUCATION  
COURSE CONTENT, SCIENCE FACILITIES, SECONDARY SCHOOL SCIENCE, TEACHING METHODS, GRADE 7, GRADE 8, TEACHING ASSIGNMENTS, 1964, RESEARCH REPORTS  

4. BIOLOGICAL SCIENCES CURRICULUM STUDY  
BSCS NEWSLETTER 21  
BIOLOGICAL SCIENCES CURRICULUM STUDY, UNIVERSITY OF COLORADO, BOULDER  
BIOLOGY, LABORATORY EQUIPMENT, NEWSLETTERS, SCIENCE COURSE IMPROVEMENT PROJECTS, SECONDARY SCHOOL SCIENCE, LABORATORY SUPPLIES SCIENCE EDUCATION, 1964, BIOLOGICAL SCIENCES CURRICULUM STUDY, BOULDER, COLORADO  

(12)
5. SE 000 824 09 14 67 22 82 17 2 00 000 008
BLACKWOOD, PAUL E.
SCIENCE TEACHING IN THE ELEMENTARY SCHOOL—A SURVEY OF PRACTICES
JOURNAL OF RESEARCH IN SCIENCE TEACHING
09 00 65 21
*ELEMENTARY SCHOOL SCIENCE, *RESEARCH REPORTS, *SCHOOL ORGANIZATION,
*SCIENCE EQUIPMENT, *SCHOOL SURVEYS, AUDIOVISUAL AIDS, CURRICULUM
DEVELOPMENT, EDUCATIONAL OBJECTIVES, INSERVICE EDUCATION, SCIENCE
TEACHERS, SECONDARY SCHOOL SCIENCE, U. S. OFFICE OF EDUCATION,
NATIONAL SCIENCE FOUNDATION, NATIONAL DEFENSE EDUCATION ACT, 1965

6. SE 001 956 09 05 67 22 91 17 2 22 000 319
BRANDOW, FREDERICK MILTON
ORGANIZATION, PRESENT PRACTICE AND CHANGES IN ELEMENTARY SCIENCE
PROGRAMS
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN
59 399
*COURSE EVALUATION, *ELEMENTARY SCHOOL SCIENCE, *RESEARCH REPORTS,
*SCHOOL ORGANIZATION, *TEACHING METHODS, ADMINISTRATION, NATURE
STUDY, CURRICULUM, LEGISLATIVE ACTS, PROBLEM SOLVING, TEACHER
QUALIFICATIONS, TEXTBOOKS, 1959

7. SE 001 313 11 17 67 22 82 17 2 22 000 319
BROGDON, WALLACE MURROW
AN ANALYSIS OF CERTAIN FACTORS PERTINENT TO SCIENCE EDUCATION PRO-
GRAMS IN GEORGIA HIGH SCHOOLS
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN
62 218
*CURRICULUM, *CURRICULUM EVALUATION, *RESEARCH REPORTS, *SCIENCE
EDUCATION, *SECONDARY SCHOOL SCIENCE, *TEACHER CHARACTERISTICS,
*TEACHER QUALIFICATIONS, *TEACHER EDUCATION, CLASS SIZE, DOCTORAL
THESIS, SCHOOL CONSOLIDATION, TEACHER SALARIES, TEACHER OPINION,
TEACHER ROLE, 1962, NATIONAL SCIENCE FOUNDATION, GEORGIA

8. SE 000 917 09 07 67 22 95 18 3 51 000 279
BROWN, KENNETH E. AND BLACKWOOD, PAUL E.
SCIENCE EDUCATION RESEARCH STUDIES-1953
U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE, OFFICE OF
EDUCATION
54 32
*COLLEGE SCIENCE, *EDUCATIONAL RESEARCH, *ELEMENTARY SCHOOL SCIENCE,
*SECONDARY SCHOOL SCIENCE, *SCIENCE EDUCATION, RESEARCH, INSTRUCTION,
RESEARCH REVIEWS

(13)
9. SE 001 261 08 28 67 22 33 17 2 22 000 319
CLARIDGE, GEOFFREY GEORGE
A STUDY OF THE EVENTS AND TRENDS IN PROGRAMS FOR THE PREPARATION
OF ASTRONOMERS IN THE UNITED STATES
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN
63 117
*ASTRONOMY, *COLLEGE SCIENCE, *DEGREES (ACADEMIC), *RESEARCH REPORTS,
*SCIENCE CAREERS, MATHEMATICS, PHYSICS, PROGRAM DESCRIPTIONS, STUDENT
QUALIFICATIONS, 1963

10. SE 000 490 08 18 67 22 95 17 2 08 000 200
DELAWARE STATE DEPARTMENT OF PUBLIC INSTRUCTION
STATUS OF SCIENCE TEACHING IN PUBLIC SCHOOLS OF DELAWARE
DELAWARE STATE DEPARTMENT OF PUBLIC INSTRUCTION
05 00 61 63
*ELEMENTARY SCHOOL SCIENCE, *RESEARCH REPORTS, COURSE OFFERINGS,
ENROLLMENT, SECONDARY SCHOOL SCIENCE, SCIENCE EQUIPMENT, SCIENCE
FACILITIES, TEACHER QUALIFICATIONS, TEACHER ATTITUDES, 1960, 1961, DELA-
WARE,, NATIONAL DEFENSE EDUCATION ACT

11. SE 001 831 11 14 67 22 81 17 2 22 000 319
DILLON, JESSE D.
AN ANALYSIS OF SCIENCE TEACHERS IN MARYLAND ELEMENTARY SCHOOLS,
WITH LIMITED COMPARISONS TO PRACTICES REVEALED IN A NATION-WIDE
STUDY
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN
65 203
*CURRICULUM PLANNING, *ELEMENTARY SCHOOL SCIENCE, *INSERVICE
TEACHER EDUCATION, *PROGRAM COSTS, *RESEARCH REPORTS, *SCIENCE
CONSULTANTS, *SCIENCE FACILITIES, *SCIENCE EQUIPMENT, *TEACHING
METHODS, DOCTORAL THESSES, INTEGRATED CURRICULUMS, MARYLAND, 1965

12. SE 000 682 07 19 67 22 93 06 3 51 000 239
EISS, ALBERT F. (EDITOR)
SCIENCE EDUCATION IN THE JUNIOR COLLEGE—PROBLEMS AND PRACTICES
NATIONAL SCIENCE TEACHERS ASSOCIATION
66 53
*COLLEGE SCIENCE, *GENERAL EDUCATION, *SCIENCE EDUCATION, *SCIENCE
INSTRUCTION, *VOCATIONAL EDUCATION, BIOLOGY, EARTH AND SPACE SCIENCE,
JUNIOR COLLEGES, PHYSICAL SCIENCES, SPACE SCIENCE, TEACHER RESOURCE
MATERIALS, REPORTS, CONFERENCES, NATIONAL SCIENCE TEACHERS ASSOCIA-
TION, COMMISSION ON THE EDUCATION OF TEACHERS OF SCIENCE (CETS)
13. SE 001 763 11 20 67 22 86 17 3 00 000 328
ENGINEERING MANPOWER COMMISSION
DEMAND FOR ENGINEERS AND TECHNICIANS - 1966
ENGINEERING MANPOWER COMMISSION, 345 EAST 47 STREET, NEW YORK, NEW YORK
11 00 66 96

14. SE 001 268 08 28 67 22 85 17 2 22 000 319
FISK, FRANKLIN GREGORY
IS THE NATIONAL SCIENCE FOUNDATION BECOMING A NEW FEDERAL EDUCATIONAL AGENCY?
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN
63 446

15. SE 001 998 08 23 67 22 95 17 2 22 000 319
FOSTER, FRANCIS GORDON
A SURVEY OF CERTAIN FACTORS RELATING TO THE SCIENCE PROGRAMS IN THE PUBLIC HIGH SCHOOLS OF MISSOURI, 1954-1955
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN
56 369

16. SE 001 697 10 25 67 22 42 20 1 00 000 197
HUME, JAMES D.
EARTH SCIENCE IN THE NEW ENGLAND PUBLIC SECONDARY SCHOOLS
JOURNAL OF GEOLOGICAL EDUCATION
12 00 64 2
*EARTH SCIENCE, *ENROLLMENTS, *SECONDARY SCHOOL SCIENCE, GRADE 7, GRADE 8, GRADE 9, TEACHER CERTIFICATION, TEACHER EDUCATION, NEW ENGLAND STATES, 1964
17. **SE 001 008 07 31 67**
   **22 92 17**
   **1**
   **00 000 001**
   **HUNTER, E. C.**
   **SCIENCE TEACHERS AND TEACHING IN LOUISIANA**
   **THE AMERICAN BIOLOGY TEACHER**
   **05 00 62**
   **3**
   *NATURAL SCIENCE, *RESEARCH REPORTS, *SECONDARY SCHOOL SCIENCE, *TEACHER EDUCATION, *TEACHER QUALIFICATIONS, *TEACHER CHARACTERISTICS, INSERVICE EDUCATION, LOUISIANA*

18. **SE 000 850 07 24 67**
   **22 95 18**
   **3**
   **51 000 241**
   **JOHNSON, LLOYD K. AND OTHERS**
   **RESEARCH IN THE TEACHING OF SCIENCE**
   **U. S. GOVERNMENT PRINTING OFFICE**
   **65**
   *COLLEGE SCIENCE, *EDUCATIONAL RESEARCH, *ELEMENTARY SCHOOL SCIENCE, *SECONDARY SCHOOL SCIENCE, CURRICULUM, EDUCATIONAL OBJECTIVES, LEARNING, SCIENCE TEACHING, TEACHER EDUCATION, TEACHING METHODS, RESEARCH REVIEWS, NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING*

19. **SE 00 914 09 07 67**
   **22 95 18**
   **3**
   **51 000 279**
   **JOHNSON, PHILIP G.**
   **SCIENCE EDUCATION RESEARCH STUDIES-1950**
   **U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE, OFFICE OF EDUCATION**
   **51 30**

20. **SE 000 915 09 07 67**
   **22 95 18**
   **3**
   **51 000 279**
   **JOHNSON, PHILIP G.**
   **SCIENCE EDUCATION RESEARCH STUDIES-1951**
   **U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE, OFFICE OF EDUCATION**
   **02 00 52**
   **30**
21. JOHNSON, PHILIP G.

SCIENCE EDUCATION RESEARCH STUDIES - 1952

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

06 00 53 53

22. JONES, JAMES WOODARD

THE PHYSICAL SCIENCE PROGRAM IN THE SENIOR HIGH SCHOOLS OF ARKANSAS

UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN

64 103
*COURSE OFFERINGS, *PHYSICAL SCIENCES, *RESEARCH REPORTS, *SECONDARY SCHOOL SCIENCE, SCIENCE EQUIPMENT, SCIENCE FACILITIES, TEACHER QUALIFICATIONS, ARKANSAS, 1964

23. KENYON, RAYMOND GEORGE

A NINE YEAR COMPARATIVE STUDY OF THE STATUS OF CONSERVATION EDUCATION IN PUBLIC ELEMENTARY SCHOOLS OF NEW YORK STATE FROM 1955 TO 1964

UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN

65 208

24. LEE, ADDISON E. AND OTHERS

RESEARCH STUDIES IN COLLEGE SCIENCE FROM JULY 1963 TO JULY 1964

UNIVERSITY OF TEXAS, AUSTIN SCIENCE EDUCATION CENTER

65 21
*COLLEGE SCIENCE, *TEACHER EDUCATION, *CURRICULUM, EVALUATION, EDUCATIONAL OBJECTIVES, EDUCATIONAL PHILOSOPHY, EDUCATIONAL RESEARCH, LEARNING, LEARNING THEORY, SCIENCE EQUIPMENT, SCIENCE FACILITIES, TEACHING METHODS
25. MERTENS, THOMAS R.
PROGRAMMED INSTRUCTION AND THE CHANGING ROLE OF THE FACULTY MEMBER
THE AMERICAN BIOLOGY TEACHER
12 00 66  4
*BIOLOGY, *COLLEGE SCIENCE, *COLLEGE SCIENCE TEACHERS, *PROGRAMED INSTRUCTION, *TEACHING TECHNIQUES, GENERAL BIOLOGY, GENETICS, TEACHER ROLES

26. MONNETT, V. BROWN
STATUS OF BIOLOGICAL EDUCATION IN THE UNITED STATES TODAY
JOURNAL OF GEOLOGICAL EDUCATION
03 00 62  4

27. NSTA STAFF
SOME STATISTICS OF UNITED STATES SECONDARY SCHOOLS, 1964-65
THE SCIENCE TEACHER
09 00 65  5

28. NEW JERSEY STATE DEPARTMENT OF EDUCATION
DIVISION OF CURRICULUM AND INSTRUCTION
NEW JERSEY STATE DEPARTMENT OF EDUCATION
03 00 66  14
*GRADE 7, *GRADE 8, *GRADE 9, *SECONDARY SCHOOL SCIENCE, COURSES, COURSE ORGANIZATION, RESEARCH REPORTS, NATURAL SCIENCES, SCIENCE EQUIPMENT, SCIENCE FACILITIES
29. SE 001 238 08 28 67 22 92 17 2 22 000 319
NORRIS, STANLEY
VIEWS ON SCIENCE EDUCATION IN FOUNDATION SUPPORTED LITERATURE
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN
63 330

30. SE 000·066 08 16 67 22 95 18 3 51 000 279
OBOURN, ELLSWORTH S., BLACKWOOD, PAUL E. AND OTHERS
RESEARCH IN THE TEACHING OF SCIENCE JULY 1957-JULY 1959
U. S. GOVERNMENT PRINTING OFFICE
62 84
*COLLEGE SCIENCE, *ELEMENTARY SCHOOL SCIENCE, *SECONDARY SCHOOL SCIENCE, *SCIENCE EDUCATION, CURRICULUM, EDUCATIONAL OBJECTIVES, EDUCATIONAL PHILOSOPHY, EDUCATIONAL RESEARCH, LEARNING, SCIENCE EQUIPMENT, SCIENCE FACILITIES, TEACHER EDUCATION, U. S. OFFICE OF EDUCATION, NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING, RESEARCH REVIEWS

31. SE 000 061 07 25 67 22 91 17 3 15 000 240
PORTER, T. R.
THE STATUS OF SCIENCE IN THE PUBLIC SCHOOLS OF IOWA
PART I- ELEMENTARY SCHOOL
STATE UNIVERSITY OF IOWA, IOWA CITY, IOWA
64 33
*COURSE CONTENT, *CURRICULUM DEVELOPMENT, *ELEMENTARY SCHOOL SCIENCE, *EVALUATION, INSERVICE TEACHER EDUCATION, TEACHER QUALIFICATIONS, TEACHING PROCEDURES

32. SE 000 060 06 29 67 22 92 17 3 15 000 240
PORTER, T. R.
THE STATUS OF SCIENCE IN THE PUBLIC SCHOOLS OF IOWA
PART II - JUNIOR HIGH SCHOOL
STATE UNIVERSITY OF IOWA, IOWA CITY
65 44
*CURRICULUM DEVELOPMENT, *COURSE CONTENT, *EVALUATION, *SECONDARY SCHOOL SCIENCE, BIOLOGY, GENERAL SCIENCE, INSERVICE TEACHER EDUCATION, PHYSICAL SCIENCES, TEACHER QUALIFICATIONS, TEACHING PROCEDURES

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<td>33.</td>
<td>SE 000 059 06 29 67</td>
<td>22 92 17</td>
<td>3</td>
<td>PORTER, T. R. THE STATUS OF SCIENCE IN THE PUBLIC SCHOOLS OF IOWA PART III - SENIOR HIGH SCHOOL STATE UNIVERSITY OF IOWA, IOWA CITY, IOWA</td>
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<td>*COURSE CONTENT, CURRICULUM DEVELOPMENT, *EVALUATION, *SECONDARY SCHOOL SCIENCE, BIOLOGY, CHEMISTRY, EARTH SCIENCE, GENERAL SCIENCE, INSERVICE TEACHER EDUCATION, PHYSICS, TEACHER QUALIFICATIONS, TEACHING PROCEDURES, PHYSICAL SCIENCE STUDY COMMITTEE, CHEMICAL EDUCATION MATERIALS STUDY, CHEMICAL BOND APPROACH, BIOLOGICAL SCIENCES CURRICULUM STUDY</td>
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<td>SE 001 516 11 17 67</td>
<td>22 82 17</td>
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<td>35.</td>
<td>SE 001 753 10 18 67</td>
<td>22 23 20</td>
<td>1</td>
<td>SCOTT, ARTHUR F. CHEMICAL RESEARCH AND THE SMALL COLLEGE JOURNAL OF CHEMICAL EDUCATION</td>
</tr>
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<td>36.</td>
<td>SE 000 884 08 22 67</td>
<td>22 86 17</td>
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<td>SIMON, KENNETH A. AND GRANT, W. VANCE DIGEST OF EDUCATIONAL STATISTICS 1966 U.S. GOVERNMENT PRINTING OFFICE</td>
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37. SNYDER, NORMAN CONRAD
Socio-Cultural Background Differences in the Personnel of the Social, Biological, and Physical Sciences—A Chapter in the Institutionalization of the Sciences
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN

65 320

38. TWEETEN, PAUL W.
Science Curriculum Trends in Iowa
SCHOOL SCIENCE AND MATHEMATICS

01 00 67 5

39. UNESCO
A Survey of the Teaching of Physics at Universities
UNESCO PUBLICATIONS

66 396

40. UNESCO
World Survey of Education II—Primary Education
UNESCO PUBLICATIONS

58 1395
41. SE 000 725 07 03 67 22 95 17 1 00 000 205
UNESCO
WORLD SURVEY OF EDUCATION IV-HIGHER EDUCATION
UNESCO PUBLICATIONS
66 1433

42. SE 001 995 09 14 67 22 83 17 2 22 000 319
WEBSTER, SAMUEL OMER
SCIENCE IN GENERAL EDUCATION AT THE OKLAHOMA STATE COLLEGES
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN
58 342
*COLLEGE SCIENCE, *GENERAL EDUCATION, *RESEARCH REPORTS, CURRICULUM, ADMINISTRATION, EVALUATION, HIGHER EDUCATION, OKLAHOMA, 1958

43. SE 001 581 08 21 67 22 95 17 2 49 000 200
WISCONSIN STATE DEPARTMENT OF PUBLIC INSTRUCTION
THE STATUS OF SCIENCE AND MATHEMATICS IN WISCONSIN PUBLIC SCHOOLS
WISCONSIN STATE DEPARTMENT OF PUBLIC INSTRUCTION
04 00 66 9
*ELEMENTARY SCHOOL SCIENCE, *NATURAL SCIENCES, *RESEARCH REPORTS, *SECONDARY SCHOOL SCIENCE, ENROLLMENTS, MATHEMATICS, TEACHER QUALIFICATIONS, BIOLOGICAL SCIENCES CURRICULUM STUDY, PHYSICAL SCIENCE STUDY COMMITTEE, EARTH SCIENCE CURRICULUM PROJECT, CHEMICAL BOND APPROACH, CHEMICAL EDUCATION MATERIALS STUDY, INTRODUCTORY PHYSICAL SCIENCE

44. SE 001 324 11 17 67 22 92 17 2 22 000 319
WOODARD, ROBERT LEWIS
THE SCIENCE OFFERINGS, ENROLLMENTS, FACILITIES, AND SCIENCE TEACHERS IN THE PUBLIC SECONDARY SCHOOLS OF UPSTATE NEW YORK, FALL 1958 AND 1961
UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN
63 232
YOUNG, VICTOR J.
SURVEY ON ENROLLMENTS IN PHYSICS
THE PHYSICS TEACHER

03 00 65 3