National Association
for
Research in Science Teaching

PROGRAM
32nd Annual Meeting

HOTEL DENNIS, ATLANTIC CITY, NEW JERSEY
FEBRUARY 18, 19, 20, and 21, 1959

and

Joint Meeting
with the
Council of Elementary Science
International

FEBRUARY 21, 1959
OFFICERS OF THE ASSOCIATION

1958-1959

President
THOMAS P. FRASER
Morgan State College
Baltimore, Maryland

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Detroit Michigan

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Tampa Florida

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University of Minnesota
Minneapolis, Minnesota
NATHAN S. WASHTON
Queens College
Flushing, New York

Program for February 21 Arranged by
ARNOLD M. LAHTI
Western Washington College
Bellingham, Washington
N. A. R. S. T. MEETING SCHEDULE

Wednesday, February 18

10:00 a.m.-11:45 a.m. Executive Committee .................. The Studio

12:30 p.m. Luncheon Smorgasbord ............... Fjord Room

2:00 p.m.-4:30 p.m. Executive Committee ...................... The Studio

1. Progress Report and Report on Plans for the Future:
   a. Re-Print of Francis D. Curtis' "Digests of Investigations in the Teaching of Science"
      NATHAN S. WASHTON, Queens College, Flushing, N. Y.
   b. "Fourth Digest of Investigations in the Teaching of Science"
      KENNETH E. ANDERSON, University of Kansas, Lawrence
   c. "Fifth Digest of Investigations in the Teaching of Science"
      GEORGE G. MALLINSON, Western Michigan University, Kalamazoo
   d. Committee on the Seventh Annual Review of Research in Science Teaching
      EDWARD K. WEAVER, Co-Chairman, Atlanta University, Atlanta, Ga.

2. Other Business

6:00 p.m. Informal Seafood Dinner for
          NARST Members and Guests......... Hackney's

8:00 p.m. Committee Meetings ......................... The Studio

1. Executive Committee

2. Committee on Needed Research in Science Education

   WILLIAM C. VAN DEVENTER, Chairman,
   Western Michigan University, Kalamazoo

Thursday, February 19

8:30 a.m.-9:15 a.m. Registration and Coffee
                    Hour ........................................ Garden Lounge

9:15 a.m.-11:45 a.m. Investigations and
                    Research Papers ....................... Garden Lounge

CHAIRMAN: Milton O. Pella
          University of Wisconsin, Madison
1. "A Comparison of Inductive and Deductive Methods of Teaching High School Chemistry"
   Sister Ernestine Marie, Sisters of Charity, Halifax; Saint Patrick's Convent, Quebec, P. Q. (Paper read by title)
2. "Elementary Science in Connecticut, 1850-1900"
   Louis I. Kuslan, New Haven State Teachers College (15 min.)
3. "Watch Your Language"
   Mervin E. Oakes, Queens College, Flushing, N. Y. (15 min.)
   John S. Shrader, Central Washington College, Ellensburg (15 min.)
   Edward Frankel, Bronx High School of Science, New York (15 min.)
6. "The Status of Science Education in the High Schools of Ohio"
   Charles L. Koelsche, Specialist for Secondary School Science, U.S. Office of Education (20 min.)
7. "What Do Our Schools Mean by Conservation Education?"
   Martha E. Munzer, Research Assistant, the Conservation Foundation, New York (20 min.)
   Milton O. Pella, University of Wisconsin (20 min.)
9. Questions (15 min.)

1:15 p.m.-3:30 p.m. Papers by Invitation ............ Garden Lounge

   CHAIRMAN: Vaden W. Miles
   Wayne State University, Detroit

   1. "Continental Classroom: Evaluation Program"
      Edwin P. Adkins, National Coordinator, Continental Classroom (45 min.)
   2. "The Crisis in Science Education Research"
   3. "What Action Must NARST Take to Meet the Crisis?"
      William C. Van Deventer, Western Michigan University, Kalamazoo (45 min.)

3:45 p.m.-5:15 p.m. Unresolved Issues and Problems in Science Education Research

   1. Discussion Group I ......................... Garden Lounge

   CHAIRMAN: John Woodburn
   The John Hopkins University, Baltimore, Maryland
Friday, February 20

8:30 a.m.-10:00 a.m. Seventh Annual Review of Research in Science Education.............Garden Lounge

Co-Chairmen: Edward K. Weaver, Atlanta University, Atlanta, Georgia, and Ellsworth S. Osbourn, Specialist for Science, U. S. Office of Education, Washington, D. C.

1. Elementary Level (30 min.)
   Betty Lockwood Wheeler
   Central Michigan College, Mt. Pleasant

2. Secondary Level (30 min.)
   Margaret McKibben
   National Science Teachers Association, Washington, D. C.

3. College Level (30 min.)
   John H. Woodburn
   The Johns Hopkins University, Baltimore, Maryland

10:15 a.m.-11:45 a.m. Investigations and Research Papers ......................... Garden Lounge

Chairman: Waldo W. E. Blanchet
Fort Valley State College,
Fort Valley, Georgia

1. “Problems in Semantics of Importance in Science Teaching”
   Albert F. Eiss, State Teachers College, Indiana, Pa. (15 min.)

   Charles F. Beck, Jr., Mt. Lebanon High School, Pittsburgh, Pa. (15 min.)
3. "Results of Three Experimental Studies Aimed at Testing Korzybskian Principles"
   THOMAS M. WEISS, Arizona State University, Tempe (20 min.)

4. "Principles of Alternating Current for the College Physics Course for Prospective Science Teachers"
   R. M. HELMS, East Carolina College, Greenville, North Carolina (20 min.)

   PETER DEAN, Wayne State University, Detroit, Mich. (20 min.)

1:15 p.m.-3:00 p.m. Investigations and Research Papers ................................ Garden Lounge

   CHAIRMAN: Thomas P. Fraser
               Morgan State College, Baltimore, Maryland

1. "The Academic and Teaching Backgrounds of Secondary Science Teachers in the State of Ohio"

2. "Reactions of Science Educators to Certain Published Science Education Findings"
   EDWARD K. WEAVER, Atlanta University, Atlanta, Georgia (20 min.)

3. "Dreyfus Program for the Improvement of Science Teaching in New Jersey Secondary Schools"
   IRWIN H. GAWLEY, New Jersey State Teachers College, Montclair, N.J., and FRED T. PREGGER, New Jersey State Teachers College, Trenton, N.J. (20 min.)

4. "A Comparison of Two Methods of Teaching College Biology: Lecture and Principle-Unit"
   LUTHER COLYER, The College of Emporia, Emporia, Kansas (20 min.)

5. "The Preparation Needed by Science Teachers in Community Colleges"
   NATHAN S. WASHTON, Queens College, Flushing, N.Y. (20 min.)

6. "Some Characteristics of Honors Section Students in Natural Science at a State University: A Follow-Up"
   (paper read by title)
   IRVIN J. LEHMANN, Michigan State University, East Lansing

3:15 p.m.-5:15 p.m. Business Meeting ........................ Garden Lounge

   CHAIRMAN: Clarence H. Boeck
               University of Minnesota, Minneapolis

1. Review of the Activities of the Association
   THOMAS P. FRASER, President, NARST, Morgan State College, Baltimore, Maryland

2. Relationships with the National Science Teachers Association
   HERBERT A. SMITH, President, NSTA, University of Kansas, Lawrence
3. **Relationships with the American Association for the Advancement of Science**
   GEORGE G. MALLINSON, Western Michigan University, Kalamazoo
   JOHN R. MAYOR, Director of Education, AAAS, Washington, D.C.

4. **Relationships with the American Association of Colleges for Teacher Education**
   THOMAS P. FRASER, Morgan State College, Baltimore, Md.
   VADEN W. MILES, Wayne State University, Detroit, Mich.

5. **Relationships with the U. S. Office of Education**
   (including the National Defense Act of 1958)
   CHARLES L. KOELSCH, Office of Education, Washington, D.C.

6. **Relationships with the Council of Elementary Science International**
   WILLARD JACOBSON, President, CESI, Teachers College, Columbia University, New York, N.Y.

7. **Report of Committee on Educational Trends**
   ABRAHAM RASKIN, Co-Chairman, Hunter College, New York, N.Y.
   JEROME METZNER, Co-Chairman, Bronx High School of Science, New York, N.Y.

8. **Report of Publications Committee**
   NATHAN WASHTON, Co-Chairman, Queens College, Flushing, N.Y.

9. **Report of the Committee on Needed Research in Science Education**
   WILLIAM C. VAN DEVENTER, Chairman, Western Michigan University, Kalamazoo

10. **Reports of Special Committees**

11. **Report of Secretary-Treasurer**
    CLARENCE M. PRUITT, University of Tampa, Tampa, Florida


13. **New Business**

8:00 p.m.       Next Steps for NARST........Garden Lounge
                 Reports by the Recorders of the Group Discussions on February 19; Unresolved Issues
                 and Problems in Science Education Research

**CHAIRMAN:** S. Ralph Powers
               President of NARST, 1939
               Professor Emeritus, Teachers College,
               Columbia University, New York, N.Y.

**Group I**    Margaret McKibben, NSTA,
                Washington, D.C.

**Group II**   Mervin E. Oakes, Queens College,
                Flushing, N.Y.

SUMMARY:  Edward K. Weaver, Atlanta University, Atlanta, Georgia
Open Discussion

Saturday, February 21

Joint Meeting of the Council of Elementary Science International and the National Association for Research in Science Teaching.

8:30 a.m.-9:00 a.m.  Registration ..................... Garden Lounge
9:00 a.m.-10:30 a.m. Investigations and Research Papers ..................... Garden Lounge

CHAIRMAN:  Willard Jacobson, President CESI Teachers College, Columbia University, New York, N.Y.

1. "Acquiring Knowledge and Attaining Understanding of Children's Scientific Concept Development"
   JOHN GARENE, New York City Public Schools, New York

2. "Considerations In Selecting, Developing, and Validating Experience Units in General Biology for Prospective Elementary Teachers"
   JOHN SYROCKI, State University Teachers College, Brockport, N.Y.

3. "The Teaching of Science in Elementary Schools by Recent Graduates of Atlantic Christian College as Related to Their Preparation"
   J. P. TYNDALE, Atlantic Christian College, Wilson, N.C.

4. "A Plan for a Professionally Treated Course in General Science Centered Around Persistent Life Situations for Use at Wayne State University with Prospective Teachers of Junior High School Science"
   FRANK YOUTHETT, Wayne State University, Detroit, Michigan

5. "Using a Checklist to Evaluate Elementary School Science Programs"
   EVAN C. RICHARDSON, New Jersey State Teachers College, Newark, N.J.

6. "The Effectiveness of a Television Series in Improving an Elementary School Science Program"
   WILLIAM REINER, Board of Education of the City of New York, New York

11:00 a.m.-12:00 a.m.  Implications of Research........Garden Lounge

CHAIRMAN:  Willard Jacobson

1. "Implications of Research for the Preparation of Primary Teachers"
   CLARK HUBLER, Wheelock College, Boston, Massachusetts

2. "Implications of Research for the Preparation of Intermediate Teachers"
   CLARENCE BOECK, University of Minnesota, Minneapolis

3. "Implications of Research for the Preparation of Junior High School Teachers"
   HERBERT A. SMITH, University of Kansas, Lawrence
12:15 p.m.-2:00 p.m. Luncheon (Honoring the Twenty-Six Presidents of NARST) .......... Ozone Room

Speaker: Randall M. Whaley, Executive Director, Advisory Board on Education, National Academy of Science—National Research Council, Washington, D.C.

Subject: "New Demands on Research in Science Education"

2:15 p.m.-3:45 p.m. Concurrent Discussion Groups

Topic: What Preparation Helps the Teacher Teach for Pervasive Objectives?

Group I ............................................. Garden Lounge

Leader: Brenda Lansdown, Brooklyn College, New York

Recorder: James Perlman, San Francisco State College, San Francisco, Calif.

Group II ............................................. Card Room

Leader: William Rogers, Classical High School, Lynn, Mass.

Recorder: John Schrader, Central Washington College of Education, Ellensburg

Group III ............................................. The Tent

Leader: Helen Challand, National College of Education, Evanston, Ill.

Recorder: Robert Werher, Teachers College, Columbia University, New York

Group IV ............................................. The Studio

Leader: Charles Prewitt, Willimantic State Teachers College, Willimantic, Conn.

Recorder: Harold Tannenbaum, State University of New York, New Paltz

4:00 p.m.-5:00 p.m. Reports of Discussion Groups by Recorders ................. Garden Lounge

Chairman: Willard Jacobson
National Association For Research
In Science Teaching

The National Association for Research in Science Teaching is an organization devoted to the pursuit of research in curriculum organization, course content and teaching methods in the field of the sciences. Membership in the Association includes science teachers and administrators at all levels, elementary, secondary and college. The organization was founded in 1928, at Cambridge, Massachusetts.

N.A.R.S.T. meets annually, usually alternating between an eastern seaboard location and a mid-western location. At the meetings, research papers in the field of science education are presented, along with symposia on topics of interests to teachers and educational research workers. Since 1947 the Association has included committees for the review of science education research at the elementary, secondary and college levels in cooperation with the U.S. Office of Education. The reviews are published annually in Science Education, the official publication of the organization.

Membership in N.A.R.S.T. is by nomination and election. The constitution provides for membership drawn from those active in research in science education, and those outstanding in science educational leadership. N.A.R.S.T. is affiliated with the American Association for the Advancement of Science, and for the past several years has cooperated with the other science teaching organizations in sponsoring a program at the annual meeting of the A.A.A.S.
# PRESIDENTS OF
# NATIONAL ASSOCIATION FOR RESEARCH IN
# SCIENCE TEACHING

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# NOTES
The Sign Of The Turtox Pledges Absolute Satisfaction

Program Courtesy Of General Biological Supply House, Chicago, Illinois