

Newsletter

Vol. 22 #3 NEWSLETTER OF THE NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING Sept. 1980

PRESIDENT'S PAGE

The conduct and operation of an organization are governed by the constitution and by-laws of the organization. Many of an organization's activities and ventures, however, are not spelled out in these sources and are established under guidelines or policies set by the Executive Board. In similar fashion the NARST has, over the years, established many policies and guidelines that affect the committee structure, the operation, and the function of the association. Unfortunately, as time passes and Board membership changes, we frequently find ourselves committed to a particular course of action but lacking the knowledge of the circumstances that led to that course. In an attempt to clarify some of our current actions, Jack Renner and the Policy Advisory Committee are in the process of reviewing the minutes of the Executive Board meetings over the past five years. Their task will be to identify, extract from the minutes, and codify those Board actions that have resulted in the setting of policy. These policy statements and actions will then be assembled and maintained for subsequent Boards. We hope in this way to provide a documented sequence of past events which will in turn increase the continuity and coherence of future activities of the NARST.

In line with the establishments of such policies, at the 1980 Annual Meeting of the Executive Board it was moved by Jim Okey, and approved by the Board, that it be a policy of the NARST that the President address the membership at the Annual Meeting. The basic premise underlying this policy is that nomination for, and election to, the Presidency is an indication that the membership perceives these candidates as people of sensible ideas with something of value to contribute to the membership.

Stanley L. Helgeson
President

Dear NARST Colleagues:

As President-Elect of the National Association for Research in Science Teaching (NARST) I must bring to your attention a matter which concerns us all as NARST members and as part of the larger scientific research community.

Recently I was appointed Director of Research in Science Education (RISE) at the National Science Foundation. When I was interviewed for the position with NSF last March, I was also a candidate for the President-Elect of NARST, and asked about possible conflicts of interest if I were by chance elected to the NARST office and also selected for the NSF position. It appeared to us at that time that there were no potential conflicts of interest since NARST, as an organization, had never submitted a proposal to NSF. Shortly thereafter I was selected for both positions.

I have been in the office as Director of RISE for one week now; and quite apart from the views expressed earlier, I find that the nature of my responsibilities here at NSF have the potential for creating the appearance of a conflict of interest between my duties as President-Elect of NARST and as Director of RISE. Specifically, any approval or denial of support for proposals submitted to NSF by NARST members, whether my own recommendation or that of others above or below me, could appear to represent a conflict of interest.

Therefore, in order to maintain the goodwill and confidence of NARST members, and to protect the reputation of NSF and NARST, I believe it is in the best interest of the science education research community that I resign as President-Elect of NARST. I have discussed my decision with the President and Past President, and they have planned a smooth transition process. This process will be described by them.

And now, as Director of RISE, I would like to encourage you to become familiar with the RISE guidelines for preparation of proposals and the source book which describes research and development projects funded by NSF in the past, to the end that these activities might foster discussions among us and lead the advancement of science education through new research.

Very sincerely,

Rita W. Peterson, Program Director
Research in Science Education

+ + + + +

Dr. Mary Westerback, Long Island University, C. W. Post Center, Greenvale, NY 1148 is engaged in research on attitude toward teaching science and anxiety about teaching science in preservice elementary teachers. She would like to communicate with other researchers, particularly on anxiety about teaching science.

JRST MANUSCRIPT FLOW

Manuscript flow in the Journal during the period July 1, 1979 to June 30, 1980 dropped by approximately 15% from the preceding year. During the comparable period in 1978-79, approximately 160 manuscripts were submitted for publication of which 130 (81%) were accepted, 7 (4%) were rejected, and 22 (14%) were sent back to authors for revisions. The break-down of manuscript flow for the 1979-80 period is as follows:

MANUSCRIPTS

<u>Received</u>	<u>Accepted</u>	<u>Rejected</u>	<u>In Revision</u>	<u>In Review</u>
133	51 (38%)	35 (26%)	33 (25%)	14 (11%)

+ + + + + + + + + + + + + + +

RESORT SETTING FOR 1981 MEETING

The 1981 Annual Meeting will be held Sunday, April 5 through Wednesday, April 8 at Grossingers in the Catskill Mountains of New York State. Grossingers is about 90 miles northwest of New York City.

Note the change in plans. We shall meet after the NSTA meeting scheduled for New York City, April 3-5. In previous years we have met just prior to NSTA.

The Board approved this change for several reasons; the main one was cost. At Grossingers your total cost for the three-day session including room, meals, tips, taxes and transportation to and from either the NSTA headquarters hotel or a New York area airport will be \$168.91 double occupancy or \$207.43 single. The lowest rates we were quoted for Manhattan hotels were \$66.00 single, \$78.00 double, and \$23.00 for the annual luncheon.

The sessions will begin Sunday evening. A chartered bus will leave the NSTA headquarters hotel at about 3:00 p.m. on Sunday arriving at Grossingers in time for swimming, tennis or other diversions before 7:00 p.m. dinner. The sessions will conclude with luncheon Wednesday, ending about 2:00 p.m., after which a chartered bus will return you to New York. We'll try to arrange this trip to deliver to the New York area airports. Details will appear in the January newsletter.

Those who have previously experienced the food, entertainment and hospitality of Grossingers know that we shall have a rewarding and delightful meeting.

NOTE: These dates, above, differ by one day from those announced in the June newsletter. The NSTA sessions will conclude on Sunday rather than Monday as in the past. This allows us to advance our meeting by one day to begin on Sunday evening.

TORONTO TO HOST AAAS ANNUAL MEETING
3-8 JANUARY 1981

Washington, D.C.... "Science and Technology: Bridging the Frontiers" will be the theme for the 147th national meeting of the American Association for the Advancement of Science (AAAS) to be held in Toronto, 3-8 January 1981. The many facets of science, including medicine, engineering, ecology, physics, anthropology, chemistry, and psychology, will be presented.

Several thousand scientists, engineers, and others interested in science and technology are expected to attend the meeting, which will be headquartered at The Sheraton Centre and the Royal York Hotel.

+ + + + + + + + + + + + + +

A special issue, Science and Mathematics for Early Childhood Education, of the School Science and Mathematics Association, Inc., is being planned and science and mathematics educators are encouraged to notify the special issue editor directly if interested in preparing an article for it:

James P. Barufaldi, Director
Science Education Center, EDB 340
The University of Texas - Austin
Austin, TX 78712

+ + + + + + + + + + + + + +

BIOLOGY TEACHER AWARDS

Biology teachers in each state, Puerto Rico, and the District of Columbia are eligible to compete for 52 Outstanding Biology Teacher Awards (OBTA) sponsored by the National Association of Biology Teachers and the American Optical Company. Deadline for nominations for this prestigious award is November 1st.

Now in its 19th year, OBTA seeks to identify those junior and senior high biology teachers who are judged by their peers to be unusually effective. The American Optical Corporation supports the program by giving each OBTA winner a Series 150 binocular microscope, engraved with the recipient's name. Forty-six awards were made this year.

The selection process is carried out by a committee of teachers and biologists under the chairmanship of a state OBTA director. Recommendations may be made by anyone familiar with a candidate's teaching ability: colleagues, students, administrators, as well as candidates themselves. Necessary forms are obtainable from the National Association of Biology Teachers, 11250 Roger Bacon Drive #19, Reston, VA 22090.

OBTA is considered to be the most extensive and valuable teacher recognition program in the country. Teachers and administrators are urged to support the program by nominating qualified biology teachers. A bulletin board announcement giving further information may be found in the September and October issues of The American Biology Teacher, or obtained from NABT.

Dear NARST Members:

As she discusses in her letter elsewhere in the Newsletter, Rita Peterson has tendered her resignation from the Office of President-Elect of the NARST. Given the circumstances she has described, I believe that the Executive Board has no alternative but to accept her resignation, albeit with greatest regret.

In view of the fact that plans for the 1981 Annual Meeting must be developed immediately, we must take action to fill the vacant office. Jack Renner, Rita, and I have discussed this problem at considerable length. The most reasonable solution as it appears to us and to the Executive Board is described below.

I have requested, and the Executive Board has approved, the appointment of John W. Renner to serve as President-Elect until a new President-Elect is installed following the regular elections. He has agreed to serve in this capacity with the understanding that he will be responsible for the collection, review, and selection of proposals for the program; the blocking out of the program outline; and the conduct of the Program Committee meeting at Kansas City. I will assist him in these functions and assume responsibility for the production, printing, and distribution of the preliminary program and the final copy of the program, and for establishing arrangements with the hotel. We will, in effect, co-chair the annual meeting.

The reasons for recommending Jack for this position are as follows:

1. The By-laws require that a member of the Executive Board be appointed to fill such a vacancy.
2. The By-laws specify that no one may serve more than one term in office. Appointment of a person to this office would, under the current By-laws, prevent that person from standing for election for Presidency. This seems an unfair penalty to assess anyone who might be willing to assume the responsibility. Since Jack has served as President, he is not eligible to serve again in that capacity and, hence, would not be penalized in this way.
3. Finally, Jack has the knowledge, ability, and past experience to handle the job effectively.

I will request that the Executive Board take formal action at the Fall meeting in Kansas City approving this appointment to record the action in the minutes.

Under the By-laws, in this circumstance, the office of President is extended for an additional year. I regret the condition, but am willing to accept the responsibility. However, there is no provision in the By-laws for the office of Past President in this situation. Because a vacancy in the office of Past President would mean there would be no available replacement should the office of President become vacated, I will request the Executive Board take action to extend John Renner's term as Past President. This will serve to protect the continuity of the office of President. I am also requesting that the Policy Advisory Committee review the By-laws and recommend any changes that will eliminate such a problem in the future.

I am deeply sorry, for both Rita and the NARST, that these actions are necessary. At the same time, I respect Rita's decision and applaud her courage in making this difficult choice. With cooperation of the members of the Executive Board and of the NARST membership we shall surmount this obstacle.

Sincerely,

Stanley L. Helgeson, President

+ + + + +

CHANGES IN JRST

Effective immediately, several changes in JRST editorial policy were approved by the Executive Board at the Spring meeting. The changes are as follows:

- (1) Elimination of "Research Paper" and "Research Report" headings in the Journal. No effort will be made to discriminate between the types of scholarly papers submitted. All papers about research on science teaching are within the Journal's domain and are invited for review.
- (2) Imposition of restriction on length of "comments and Criticism" manuscripts. Authors are advised to limit remarks about previously published manuscripts to 250 words. The purpose of this section in the Journal is stimulate dialogue among the readers. Authors wishing to go beyond a sharply focused comment or criticism are encouraged to develop their ideas in a position paper or a similar scholarly form for review and possible publication.
- (3) Publication of abstracts. All papers submitted for publication in the Journal must include a 100-200 word abstract. Abstracts will accompany all Journal articles in future issues.

A complete summary of the new guidelines for contributors will appear in Issue 6 of Volume 17 (1980) and Issue 1 of Volume 18 (1981).

Jim Shymansky
Journal Editor

+ + + + +

LOST MEMBERS

James T. Robinson
375 Hopi Place
Boulder, CO 80303

HISTORY OF SCIENCE SOCIETY

The 19th Annual Meeting of the HISTORY OF SCIENCE SOCIETY will be held at the Park Plaza Hotel in Toronto, Canada on October 17-19, 1980. This will be a unique 4-society meeting of the Society for the History of Technology, the Society for Social Studies in Science, the Philosophy of Science Association, and the History of Science Society, with plans for a joint printed program and their mutual interactions including plans for some joint sessions.

Richard Jarrell, Department of Natural Science, Atkinson College, York University, Downsview, Ontario, Canada is chairperson for the History of Science Society local arrangements.

+ + + + + + + + + + + + + + + +

CENTER FOR EDUCATIONAL RESEARCH AND EVALUATION

The Center for Educational Research and Evaluation of the BSCS is holding an invitational conference, "Research in Science Education" New Questions, New Directions" in conjunction with the annual BSCS Board of Directors' meeting. The conference will be held at the BSCS headquarters in Boulder, CO. Thursday and Friday, November 6-7, 1980.

The conference will present new research approaches, new questions being addressed, and new outcomes of research efforts that have great potential for improving our knowledge of the learning of science in schools. The three research fields selected for the conference are: analysis of science texts, investigating the mechanisms of knowledge acquisition in science, and naturalistic studies of science classrooms.

For further information about the conference, write to Dr. James T. Robinson, Director, Center for Educational Research and Evaluation, P. O. Box 930, Boulder, Colorado 80306.

+ + + + + + + + + + + + + + + +

Members who retired from active service in 1980 are invited to apply for Emeritus member status. Emeritus members are members in good standing who, upon retirement from professional service, are voted to that status by the Executive Board, acting upon a written request. Emeritus Members shall receive full rights and privileges of the Association without cost, except for the Journal, which may be purchased at the member contract rate. Request application forms from the Executive Secretary: Paul Joslin, Reading-Learning Center, Drake University, Des Moines, IA 50311.

NARST ANNUAL MEETING

1981

CALL FOR PROPOSALS

The 1981 Annual Meeting of NARST will be held in the Catskill Mountains at Grossinger's Conference Center, two hours drive from New York City, on April 6-9 following the NSTA meeting in New York City. An announcement appears elsewhere in this Newsletter. Members should find this mountain retreat atmosphere and the more favorable rates a welcomed change!

This is a call to NARST members and others who wish to submit proposals for the program of the 1981 meeting. Lists of TOPIC AREAS, TYPES OF RESEARCH AND PROGRAM FORMATS appear on the following pages and are representative of previous programs, but suggestions for innovation are invited.

Persons interested in submitting proposals should send:

1. Two copies of the completed Cover Page.
2. Six copies of a 3-6 page Proposal with Bibliography. Please omit name(s) of author(s).
3. Six copies of an Abstract of no more than 500 words, which will appear in ERIC ABSTRACTS. Please omit name(s) of author(s).
4. Two self-addressed, stamped envelopes, to acknowledge receipt of proposals and Program Committee's final decision.

SEND TO: John W. Renner, Chair
NARST Program Committee
Physical Sciences Center 323
University of Oklahoma
Norman, OK 73019

| |
|---|
| POSTMARKED
NO LATER THAN
OCTOBER 10, 1980 |
|---|

All proposals must be reviewed anonymously by the Program Committee before October 30-31, when they meet to plan the program and prepare the ADVANCE PROGRAM which will be mailed about December 1, 1980 to all NARST members and others who have submitted proposals. The Advanced Program is intended to facilitate early registration for reservations at Grossinger's.

PROGRAM FORMATS

1. Contributed Papers: Generally, brief 15-minute reports of research are grouped by the Program Committee, three or four per session. This format accommodates persons who have not planned to report their research with other members of a team. Proposals accepted for presentation will be evaluated and those judged of high quality will be scheduled for special sessions. Discussants are usually assigned to these sessions and presenters will provide discussants with a copy of the paper before the annual meeting.
2. Paper Sets: Several related studies originating from a common base of research are presented in a single concurrent session. This format accommodates from three to five persons who may divide a single report which represents a major research effort in terms of time, number of researchers, and/or geography. This format also allows for common elements of design or approach to be presented once rather than repetitiously. An outside discussant may be assigned to the session.
3. Round Table Discussions: Round Table Discussions are used to provide a thorough analysis of a paper by a group. Presenters will have an hour in which various aspects of their study are examined with others in a discussion format. One or more papers may be discussed simultaneously in a round table format. If members agree to present their research in this format, they should bring materials such as protocols, instruments, computer printouts, experimental curriculum materials, and logs to aid the discussion. Round table discussions may be held in large rooms with one or more tables, or outdoors, weather permitting. This format is not conducive to presentations which require the use of audio-visual equipment.
4. Panels: Panels are constituted to provide a mechanism for debating or discussing serious issues in science education. Each panel has a moderator, who may or may not organize the panel, but who is expected to regulate the flow of discussion or debate. Proposals should describe various aspects of the issue and the diverse views represented by the speakers.
5. Symposia: Webster (1953) described symposia as an ancient Greek form of entertainment characterized by drinking, music and intellectual discussion. The Program Committee will accept proposals formed to promote discussion of current or needed research, sans music and dancing, although any Greeks may arrange their own informal symposia. Following a brief presentation by each member of the symposium, interaction among presenters and the audience is expected. Proposals should describe the common research interest of symposia members, and their varied backgrounds, positions or experience, without naming individuals.
6. Research Methods Seminar/Workshop: This format is designed to acquire new research skills or update old ones. These one or two hour sessions are planned for intensive involvement by those in attendance, and presenters are expected to provide resources for study and discussion.

The Program Committee may ask a few individuals to make presentations if proposals are not submitted in areas which, in the Committee's view, deserve attention. In addition, the Committee wishes to accommodate a greater number of papers next year, and asks for support from proposers if it is necessary to reassign some papers from one format to another among Formats 1, 2, and 3.

TOPIC AREAS

- | | |
|---|--|
| 01 - Teacher Education:
Preservice | 07 - Curriculum Development/
Evaluation |
| 02 - Teacher Education:
Inservice | 08 - Research Methodology |
| 03 - Teacher Behavior/
Characteristics | 09 - Instrument Development/
Testing |
| 04 - Student Behavior/
Characteristics | 10 - Scientific Literacy |
| 05 - Instruction | 11 - Science & National
Issues |
| 06 - Learning Theory | 12 - Other |

TYPES OF RESEARCH

To promote a broad research base, the Committee encourages proposals that describe a variety of types of research. Standard guidelines appropriate for reporting each type of research are found in most research methods texts, and should be followed in preparation of Proposals and Abstracts. In general, these include: Objectives or Purpose, Methodology or Procedure Followed, Results and Conclusions.

- TYPES: A. Experimental
B. Non-Experimental: 1. Survey, 2. Ex Post Facto,
3. Evaluation, 4. Historical, 5. Philosophical,
6. Case Study, and 7. Other

CRITERIA

The following standard criteria will be applied to review proposals:

- * Significance of the problem and conclusions for the advancement of research in science education, as evidenced by the link to or departure from previously published research theories, methods or conclusions.
- * Clarity of expression and description.
- * Appropriateness of the procedures and conclusions, given the stated purpose and results.

COVER SHEET
CALL FOR PROPOSALS
1981 NARST ANNUAL MEETING

1. TITLE OF PAPER _____

2. AUTHOR PRESENTING PAPER _____
INSTITUTION _____

ADDRESS _____

Phone _____

If your proposal is part of a Paper Set, each member of the set should submit a separate proposal. Proposals for Panels, Symposia or Seminar/Workshops composed of more than one person, please list names and addresses of all persons here rather than on the proposal.

3. TOPIC AREA (Listed on previous page) _____

4. TYPE OF RESEARCH (Listed on previous page) _____

5. PROGRAM FORMAT (Listed on previous page) _____
If you are willing to have your proposal reassigned to Formats 1, 2, 3, please indicate here: Yes _____ No _____

6. EQUIPMENT: Do you need an overhead projector? Yes _____ No _____

7. DISCUSSANT: *If you are willing to serve as a Discussant for a session, whether or not you submitted a proposal, please indicate:*

Name

Phone

8. NOTE: *Each person is limited to the presentation of one paper, but may be named on the program as a co-author of another paper, or serve on a symposium or panel, or as a presider or discussant.*

NATIONAL ASSOCIATION FOR
RESEARCH IN SCIENCE TEACHING
READING-LEARNING CENTER
1316 26th STREET
DRAKE UNIVERSITY
DES MOINES, IA 50311

FIRST CLASS MAIL