NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

Spring Board Meeting

April 10, 1980

April 13, 1980

Boston Park Plaza Hotel

Fall Bd Mtg
Oct. 30 – 31 Oct
12 Noon 12 Noon
KC

NARST AGENDA
1980 Spring Meeting of the Executive Board
Boston, Mass.
April 10, 1980 and April 13, 1980

1. Review of the minutes of the Executive Board Meeting held in Kansas City, Missouri, November 1-2, 1980.

2. Committee appointments 1980-81.

3. Meeting site for 1981.

4. Executive Secretary Search Committee. — Refer again on 13 apr if necessary.

5. Executive Secretary's Report
   a. Membership report
   b. Membership analysis
   c. Budget review
   d. Election results
   e. Membership Committee

6. Constitution and Bylaws
   a. Tony Lawson's observations
   b. Board action taken in Kansas City on Presidential succession (Section 3.01 Paragraph B and Section 3.04 Paragraph A).
   c. Clarification of the responsibilities and interrelationships of the Publications Advisory Committee and the Editorial Advisory Board.

7. Report of the Editor of the JRST.

8. Exhibiting at the Convention of other Science Education Organizations.

9. Standing Committee Reports
   a. JRST Awards Committee
   b. NARST Awards
   c. Placement Committee
   d. Publications Advisory Committee

Research Com.

10. The Novak Proposal.

11. Miscellaneous Information from the President.
   a. AAPT Report.
   b. Sea Grant Project.
   c. Special AAAS Meeting.
   d. AAAS Meeting in Toronto. — Consider joint sponsorships for AAAS

12. Length of the Annual Meeting.

13. Quorum for Committee Meetings. — Policy after Com.

14. Other Business.

1. Minutes of the Executive Board Meeting held in Kansas City, Missouri, November 1-2, 1980.

M E M O

TO: NARST Executive Board
FROM: Paul Josiin, Executive Secretary
RE: Minutes of the Executive Board meeting of November 1-2, 1979

Please read these carefully for errors and omissions. Check both fact and interpretation. Photocopy errant pages, enter changes and mail to me.

Note that you are to review the bylaws and report to J. Renner by Jan. 15.

This is the shortest set of minutes I've had as the executive secretary. I hope that is an indicator of improved efficiency. I feel best about having a budget for research activities.

Response to R. Cleminson's membership campaign is excellent. We have accepted 37 new members for 1980 and 13 of these have already paid dues.

Dues response has also been good. As of today, 131 members have paid 1980 dues.

Wiley will send Issue 1 of Volume 17 to all 1979 members. This issue is to be ready to go January 4.

MEMBERSHIP SUMMARY

	1978	1979	Female
Regular	705	685	119
Sustaining	7	7	2
Patron	2	2	0
Life	10	8	3
Emeritus	13	25	2
TOTALS	737	727	126

	Number	Percent
New in 1979	78	11
Female	126	17
Canadian	39	5
Other Non-U.S.	39	5
Total Non-U.S.	78	11
Australia	11	
Israel	7	
Africa	7	
Europe	5	
Asia	4	
Other	5	

/pk
12/19/79

95

Airport Holiday Inn
Kansas City, MO 64153
November 1, 1979

The regular Fall meeting of the Executive Board of the National Association for Research in Science Teaching was held in the Conference Room. President Jack Renner presided and called the meeting to order at 12:30 p.m. with the following in attendance:

Voting Members

John Renner, President
Stanley Helgeson, ~~Past~~ President-Elect
James Okey, Past President
Carl Berger, Board Member
Jack Easley, Jr., Board Member
Ann Howe, Board Member
Anton Lawson, Board Member
Rita Peterson, Board Member
John Wilson, Board Member
Arthur White, Research Coordinator

Non Voting Members

David Butts, Journal Editor
James Shymansky, Journal Editor Elect
Paul Joslin, Executive Secretary

Agenda - J. Renner

M: Peterson, Berger, to adopt the agenda as presented. Passed.

1. Minutes - P. Joslin

M: Berger, Okey, to approve the minutes of the Spring meeting as printed and distributed:
- Board meeting of 3/21/79
- Board meeting of 3/23/79
- Annual Membership Meeting of 3/22/79

Passed.

2. Program Committee Report - S. Helgeson

The Committee reported a completed program as follows:

Category	Proposals Submitted
Contributed Papers	88
Paper Sets	13
Symposia	8
Round Table	3
Techniques	6
Panels	0
Acceptance Percentage -	

The program will be lengthened by one-half day and shall begin on Friday morning with 6 research technique sessions. Each will accommodate 30 participants and admission shall be by ticket and advance registration only. The committee recommends a charge of $3.00 for each.

3. Executive Secretary's Report - P. Joslin

1). Summary Tables presented for:
- Membership
- Journal subscriptions
- Attendance at annual meetings

2). Final 1978 Financial Report presented. Auditors report to follow and will be included in minutes.

3). 1980 Budget presented with changes made as follows:
* All Editor's travel should be budgeted under Editor's Office.
* Proposed budget should go to Finance Committee on 8/1 of each year.
* Board would like actual expenditures for current year in budget, not projected.
* Reduce annual meeting registrations to 230 for receipts and expenses.
* Six Technique Sessions @ 30=180 persons @ $3.00 each = $540.00.
* Add to expenses $300.00 to Annual Meeting for Technique Sessions.

4. Approval of 1980 Budget

M: Howe, Berger, to table further budget considerations to Section 8 of the agenda. Passed.

5. President's Report - J. Renner

In addition to the written report the president reported:

1). He had attended a summer meeting of the NSTA Board of Directors. NSTA has financial and membership problems and currently is without an executive secretary.

2). He has planned, for the 1980 AAPT meeting, two sessions jointly sponsored.

3). He has followed through on sending the questionnaire referred to in the agenda reports for this meeting.

6. Journal Editor's Report - D. Butts

1). In addition to the printed report he reported that the new journal subscription rate for non-NARST members is $38.00 but that our rate remains at $17.50 for 1980.

2). M: Okey, Peterson, to confirm appointment of seven members to the Editorial Advisory Board for three year terms effective 1/1/80 as recommended jointly by the old and new editors. See agenda report. Passed.

3). M: Peterson, Berger, to approve the Editor's recommended budget amended as follows: (Passed)
* 722 subscriptions @ $17.50.....$12,635.00
* Postage..... 700.00

4). M: Helgeson, Easley, to direct the president to send letters of commendation and appreciation to persons completing service on the Editorial Advisory Board. Passed.

5). M: Howe, Helgeson, that files of former journal editor, Dave Butts, be kept at the University of Georgia for three years with authorization for disposal thereafter. Passed.

6). Howe suggested that we be careful to maintain participation of females on committees and boards, noting that with the retirements and new appointments there would be only one female on the Editorial Advisory Board.

7. Standing Committee Reports

M: Berger, Helgeson, to accept all reports of standing committees. Passed.

a. Elections - J. Okey

M. Berger, Helgeson to approve the slate of candidates submitted by the committee. Passed. (Additional member nominations were solicited in the October newsletter).

b. JRST Award - D. Riechard

No actions.

c. Membership - R. Cleminson

1). M. Okey, Wilson, to direct the president to send a letter of commendation and appreciation to R. Cleminson for his work on membership promotion. Passed.

2). A. Howe asked whether we were overlooking groups of potential members such as science supervisors, medical educators, and students. She asked about the possibility of a student member category.

3). J. Renner suggested that we should consider representation at other meetings to promote membership. Lawson suggested that such representatives could be supplied with materials for a booth, especially for those meetings with exhibit areas.

Renner said that he was willing to contact other presidents to arrange such solicitations. Helgeson said that he was willing to provide packets of those materials available to members from ERIC.

M: Lawson, Okey, to direct the President to contact the presidents of other appropriate organizations to set up membership promotion booths at selected meetings stocked with NARST promotional materials and ERIC publications. Passed.

4). M: Okey, Berger, to present an appropriate certificate of appreciation to each state membership coordinator who recruits five new members, the certificate to be presented at the annual luncheon. Passed.

5). M: Lawson, Helgeson, to direct the Executive Secretary to send out commercially-printed dues billings. Passed.

6). Renner suggested that the list of members unpaid after 30 days of the dues mailing be classified by state and each state list sent to the appropriate state membership coordinator for personal contact and follow-up.

d. NARST Award - E. Simmons

1). To summarize the procedure: the best paper from 1979 will be given again at the 1980 meeting as a special presentation. Four additional papers will be selected from the 1979 meeting to be given at the 1981 NSTA meetings.

2). The second paragraph of her agenda report is okay. The third paragraph is in error regarding presentation of the outstanding paper at the 1981 NSTA Convention.

3). M: Lawson, Wilson, to table Simmons' recommendation regarding a separate award for psychological, philosophical or other non-empirical approaches. Passed.

e. Placement - V. Penick

M: Helgeson, Okey, to direct the President to send a letter of commendation and appreciation to John Penick for his excellent work in developing new job listings. Passed.

f. Policy Advisory - J. Okey

The topic of presidential succession was considered. J. Okey reported that his committee recommended a bylaws change whereby the past-president would assume the office of president, should that office become vacant. The current bylaws require the ~~vice~~ president to assume the office while also chairing the program committee.

M: Berger, Easley, to approve the recommendation and to submit to a vote of the members the following substitution for Section III, Part C, Paragraph three:

"the past-president shall assume the presidency if the office is vacated before the completion of the term of office and shall succeed to the past-presidency the following year."

Motion passed. The effect of this change will be to change Paragraph 4 to read as follows:

"In the event that the office of president-elect is vacated, the executive board shall appoint a member of the board to fill the unexpired term, and the office shall be filled for the following year by election." (The president shall then serve two years.)

THE MEETING WAS RECESSED AT 5:30 P.M. FOR DINNER AND THE PRESIDENT ASKED TO RECONVENE AT 7:30 P.M.

THE MEETING RECONVENED AT 8:35 P.M.

g. Publications Advisory - D. Stronck

There was long and involved discussion and debate on Paragraph 1 of Stronck's report concerning present guidelines for position papers.

Lawson - The present rule requiring that an author summarize opposing views should be dropped. An author of a position paper should be responsible for his/her own view only. We need to be flexible in how a position paper may be constructed.

Berger - For any position there may be a range of possible positions and any issue for which a position may be taken should not be dichotomized.

Butts - A problem is that the Publications Advisory Committee did not deal decisively with the issue. "I would have to resign my position should it be possible to prepare and publish a position paper without acknowledging at least one other position, stating it clearly and reporting sufficient background on it to make it possible for readers to examine the proposed position adequately."

M: White, Okey to amend Section (b) of the Guidelines for contributors to read as follows:

"A review of literature should state clearly the nature, scope significance of the problem or topic on which the review focuses. The paper should summarize, synthesize and discuss the investigations involved so as to:

1) define the issue
2) cite and briefly summarize (an) alternate position(s) on the issue
3) develop a position on the issue, and
4) describe the implications of that position for science teaching".

The motion passed but not unanimously.

M: Okey, Berger, to adopt the recommendation of the Committee to permit advertisements in the Journal with the policy to be stated as follows:

"All types of advertisements which may typically appear in related journals, e.g., those of AERA, should be accepted by the JRST. The only restriction is that the advertisements should be of interest and/or benefit to science educators as professional science educators". Passed.

The third paragraph of Stronck's report was brought up by the President who advanced his recommendation that the Publications Advisory Committee should be involved in the nomination and selection of members of the Editorial Advisory Board. Subsequent discussion indicated that the

sense of the Executive Board was that its' members are directly elected and constitute a sufficient check on the Editor and protection for the members.

M: Helgeson, Berger, to table the issue. Passed.

THE MEETING WAS RECESSED AT 9:45 P.M., AND THE PRESIDENT CALLED FOR RECONVENING AT 7:30 A.M. ON FRIDAY.

THE MEETING RECONVENED AT 7:30 A.M. 11/2/79 WITH CONTINENTAL BREAKFAST.

M: Helgeson, Peterson, to remove from the Table Item 3 of Stronck's report concerning the involvement of the Publication's Advisory Committee in the nominating and possible confirmation of members of the Editorial Advisory Board. Motion to remove passed. No other action taken.

Okey recommended the addition of Marcia Linn to the Editorial Advisory Board.

M: Howe, Helgeson to appoint Dr. Linn subject to her acceptance. (Rationale: To add a qualified female and diversity to the Board.) Passed.

h. Research - A. White

Chairman White submitted a written summary of the Committee's activities for the year and three research reports. These reports were added to the agenda reports and become a part of this meeting's minutes.

* A Study of the Research Priorities as Perceived by Elementary and Secondary School Science Personnel - White, Yeany and Deture. Report presented to the School Science and Mathematics Association National Convention, Kansas City, November 1979.

* A Study of the Research Priorities as Perceived by Public School Personnel - Yeany, White, Deture and Duea. Report presented to the National Association for Research in Science Teaching National Convention, Atlanta, March 1979.

* A Plan for Increasing the Impact of Research in Science Teaching in Classroom Practive - White, Yeany, Deture. Report to the NARST and NSTA July 29, 1979.

President Renner commended Coordinator White on these research activities and summarized the consensus of the Board that the activities of the Research Committee represented a significant advance on one of the major objectives of the Association.

M: Wilson, Okey to budget $700.00 for Research Committee activities in 1980. Passed.

M: Berger, Howe to commend and thank A. White for his work. Passed.

i. Financial Advisory - R. Peterson

The President directed the Executive Secretary to carry out the budgeting suggestions agreed to in Section 3 of these minutes and to submit the 1981 budget to the Financial Advisory Committee on or before September 1st.

8. Continuing Business

a. Executive Secretary Search Committee - R. Peterson

R. Peterson reported that the committee had not yet been successful in its' search. After a disappointing response to the public calls for applicants, the committee had made personal contacts with members believed to be qualified. Unsettled conditions at many Universities are making it difficult to negotiate suitable long-term agreements. Results from these contacts were also disappointing.

Within the last week however, considerable interest had been expressed by William Holliday at the University of Calgary and it was generally agreed that he would be an excellent candidate.

Discussion followed on possible problems with having the executive secretary's office in Canada; problems such as postage, finances, tax status, etc. It was agreed that most of these could probably be solved and that the Committee should continue negotiating with Mr. Holliday with the President and Executive Secretary asked to help solve any problems of locating the office in Canada.

b. M: White, Okey, to accept the agreement with ERIC for publication of Abstracts of Presented Papers. Helgeson pointed out that this agreement was important to ERIC because it demonstrated NARST's financial commitment to ERIC. Passed. Agreement is for one copy per member and one copy for each non-member at the annual meeting at a cost to NARST of $1,000.00

c. Participation in NSTA Area Conventions

If we want, NSTA will give us a complete section for each area convention. The question: To what extent do we want to be involved?

President Renner explained that we are an NSTA affiliate and that their president is a member of our Board and our president is a member of their Board. Our present policy is:

* Members are encouraged to participate in NSTA area conventions.
* Our membership committee promotes NARST membership at these meetings.
* Our NARST Awards Committee selects papers from the NARST annual meeting that have relevancy for improving instruction. These are referred to the NSTA planning committees.

Renner said that he felt that the NARST president should routinely appoint NARST representatives to NSTA area and national convention program planning committees.

M: Okey, Berger, that the president draft guidelines for participation of NARST representatives to NSTA area conventions, these to be considered at the April 1980 board meeting. Passed.

d. Bylaws Revisions - J. Renner

President Renner directed all board members to study the two versions of the by-laws, the present official set and the set revised by Roger Olstad and last year's Policy Advisory Committee, and to report suggestions to him by January 15, 1980.

e. 1980 Budget

The president brought the 1980 budget to the floor for final revisions.

M: White, Berger, to set the charge for admission to the research technique sessions at $3.00. Passed with 2 nays.

M: Berger, Easley, to budget $540.00 for membership promotions. Passed.

M: Okey, Wilson, to approve the 1980 budget as amended. Passed. (1980 budget is attached and is a part of these minutes.)

f. NARST Logo - J. Renner

M: Howe, Berger, to not pursue the idea further. Easley spoke in favor of a logo as an effective means of communicating ideas. Peterson said that aesthetic communication ought to be considered and volunteered to develop one. The motion lost on a 4-4 tie.

g. Emeritus Members - P. Joslin

The Executive Secretary presented a list of applicants for Emeritus membership and recommended their approval.

M: Helgeson, Wilson to approve the following: (Passed)

Name	Retired From	Year	Joined
Kenneth E. Anderson	University of Kansas	1979	± 1950
Horace H. Bliss	University of Oklahoma	1973	− ??
Clarence H. Boech	University of Minn.	1979	+ 1947
Warren M. Davis	Lehigh University	1973	∓ 1952
T. Handley Diehl	Miami University	1977	− ??
Thomas P. Fraser	Morgan State Univ.	1975	1949
Clarence H. Nelson	Michigan State Univ.	1975	1949

9. New Business

Future Meeting Sites - P. Joslin

M: Peterson, Easley, to continue through 1982 the present plan of meeting in even years with AERA and in odd years with NSTA as follows:

1981.....New York.....April 1-3.....NSTA
1982.....Denver.....April 16-18.....AERA

The 1983 NSTA meeting is in Dallas. Should the above policy continue, NARST would meet April 6-8.

President Renner adjourned the meeting at 10:50 a.m.

Respectfully submitted,

Paul H. Joslin
Executive Secretary

/pk

Present alternatives to members in attendance at 1980 mtg.

3. Meeting Sites 1981.

Founded 1928
Incorporated 1961

Sponsoring The Journal of Research in Science Teaching
Affiliated with NSTA, AAAS and ICASE

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

Memorial Hall Drake University Des Moines, Iowa 50311

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Dr. Paul Joslin (1980)
Memorial Hall
Drake University
Des Moines, IA 50311

PRESIDENT
Dr. John W. Renner
Physical Sciences Ctr. Room 323
University of Oklahoma
Norman, OK 73019

PRESIDENT-ELECT
Dr. Stanley Helgeson
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210

IMMEDIATE PAST PRESIDENT
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Department of Science Education
The University of Georgia
Athens, GA 30602

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Dr. Carl F. Berger (1980)
School of Education
University of Michigan
Ann Arbor, MI 48109

Dr. J. A. Easley, Jr. (1982)
Dept. of Elementary Education
University of Illinois
Urbana, IL 61801

Dr. Ann C. Howe (1981)
101 Heroy Building
Syracuse University
Syracuse, NY 13210

Dr. Anton Lawson (1981)
Science Education-Dept. Physics
Arizona State University
Tempe, AZ 85281

Dr. Rita W. Peterson (1980)
Dept. of Teacher Education
California State University
Hayward, CA 94542

John T. Wilson (1982)
787 Physics Building
University of Iowa
Iowa City, IA 52242

JOURNAL EDITOR
Dr. David P. Butts (1979)
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Science Education-Physics Bldg.
University of Iowa
Iowa City, IA 52242

NSTA REPRESENTATIVE
Dr. Len Krause (1980)
National Science Teachers Association
1742 Connecticut Avenue, NW
Washington, DC 20009

February 12, 1980

TO: Stan Helgeson

FROM: Paul Joslin

RE: 1981 Meeting

I have talked with Jack about the problems of space availability and costs for the 1981 meeting scheduled for April 1-3 just prior to NSTA.

I have only two proposals from hotels. One is too expensive. The other location is too far from the NSTA headquarters hotel. I have told representatives of these two hotels and our contact at the NY Convention Bureau that no decision will be made before our next Board meeting on 4/11/80.

In the meantime, our local contact, Gary Bates will continue to try to locate a suitable place for us. But, I told him not to make a big project out of it.

I will begin to explore for alternative sites including some package deals in resort settings. My preference would be to meet separately at least every five years. March and April are the highest cost convention times and we could save some by shifting our dates.

xc: Gary Bates
John Renner

/pk

GRAND HYATT NEW YORK

January 28, 1980

Mr. Paul H. Joslin
Executive Secretary
NATIONAL ASSOCIATION OF
RESEARCH IN SCIENCE TEACHING
Drake University -
Memorial Hall
Des Moines, Iowa 50311

SUBJECT: April 1-3, 1981 Meeting

Dear Mr. Joslin:

We have received your letter of January 11 concerning space for your April 1-3, 1981 Meeting. At the present time, space is available for your program and our understanding of your needs is described in the enclosed agenda.

We understand that you would require 100 rooms and rates would be confirmed for your program one year prior to your arrival. April is a peak period for meetings and, therefore, we estimate that your rates would be in the area of:

Single occupancy	$75 to $ 85
Double/Twin occupancy	$95 to $105

These rates are estimates and, again, we would confirm guaranteed rates for your program this April. These rates are also very competitive with other deluxe hotels in our City.

In order to keep a balance of revenue between the number of sleeping rooms you will utilize and the amount of public space you will need, each breakout session will have a daily rental charge, which we estimate to be $50.00 per room. This, too, would be confirmed this April and we feel that our estimate is very close to the amount that we would quote for each breakout.

Mr. Joslin, we realize that your attendees have reduced budgets since many of them are associated with colleges and universities

....

GRAND HYATT NEW YORK

Mr. Paul Joslin
NATIONAL ASSOCIATION OF
RESEARCH IN SCIENCE TEACHING

January 29, 1980

but we, too, must maintain our projections and this is done according to the supply and demand. April is a very good period for conventions and seminars and, therefore little flexibility can be given to you regarding a discount.

I will contact you in the next week to further review your plans and the possibility of having your fine meeting at our Grand Hyatt Hotel. Thank you very much for your time and considerations.

Sincerely,

THE GRAND HYATT HOTEL

Marilyn J. Brown
Associate Director of Sales

MJB:pmcg
Enclosures
cc: Mr. Thomas J. DeGloria, N.Y. Convention & Visitors Bureau
HYATT HOTELS Worldwide Sales, Chicago
L-00349

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Incorporated 1961

Sponsoring The Journal of Research in Science Teaching
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NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

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February 4, 1980

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Dept. of Health Ed. & Safety
Southern Illinois University
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1742 Connecticut Avenue, NW
Washington, DC 20009

John W. Renner
Physical Sciences Center
Room 323
University of Oklahoma
Norman, OK 73019

Dear John:

We have a problem related to reserving a hotel for our 1981 meeting in New York City, just prior to NSTA. NSTA has locked up all the space and no hotel in the vicinity wants to deal with us.

The New York Convention and Visitors Bureau and the hotel managers with whom I have talked both recommend that we deal with NSTA for sleeping rooms and meeting rooms.

I agree, especially for this site. We would need to ask NSTA to credit us for that number of complimentary sleeping rooms earned by each fifty of our members registered. Arranging for meeting rooms should be no problem as long as we are scheduled ahead of them. We could thus go right into one of their headquarters hotels.

Please think this over. If this seems like the way to go, I'd like you to negotiate with NSTA through Krause. It's important to work from the top down to make it work. Once approved, the new program chairman and I could handle the details.

Sincerely,

Paul

Paul H. Joslin
Executive Secretary

xc: Stan Helgeson

/pk

TEACHERS COLLEGE COLUMBIA UNIVERSITY

NEW YORK, NEW YORK 10027

21 March 80

Dr. Paul Joslin, Executive Secretary
National Association for Research in Science Teaching
Memorial Hall
Drake University
Des Moines, Iowa 50311

Dear Paul,

I have visited four possible hotels (Barbizon Plaza, Biltmore, The Roosevelt, and the New York Statler) as possible sites for the 1981 NARST Convention in New York. The sales managers were most helpful and easy to work with. Considering cost, location, and facilities I currently favor the Biltmore and believe it would be desirable to have our meeting at a separate hotel from the NSTA Convention. Each of the hotels has agreed to send you a proposal. A few brief notes are included below.

BILTMORE	Madison & 43rd	10 min walk
Mr. John Blackburn	(212) 687-7000	

Older yet stately hotel next to Grand Central. Spacious meeting rooms on a single floor except for luncheon on main floor. Music room for larger meetings is a bit gaudy but fun. Sales manager is very helpful and willing to make suggestions on possible ways to significantly reduce cost of functions. All meeting rooms and complementary rooms requested will be included in the proposal. Room rates of $62 single/ $72 double seem standard for this area of midtown. Hotel located in a good section of town for browsing. Should be seriously considered.

NEW YORK STATLER	33rd and 7th Ave	15 min walk
Mr. Bill Viggiani	(212) 736-5000	

The Statler is somewhat shopworn but is undergoing a $35 Million renovation with major portions to be completed prior to April 81. New rooms are being done tastefully in earth tones -- quite a change from the usual hotel/motel style. Meeting space is on three floorsconnected by separate elevators and stairs. Breakout rooms are smaller than other hotels and meeting flow would be a bit awkward. Major renovation of meeting and room space will be completed this fall so it is a bit difficult to judge overall impact. The sales manager is very helpful and willing to negotiate. Their rates look about $10 cheaper than further uptown. There is convenient subway transportation to the NSTA Convention area as well as the Village; however, the area around the Statler is uninteresting. I believe this looks like the best price we will be able to get on rooms even though some charge may be made for meeting space. Worth considering.

THE ROOSEVELT 45th and Madison 10 min walk
Mr. Frank Des Longchamps (212) 661-9600

Located just one block north of the Biltmore. Currently undergoing a $9 Million renovation to restore some of the elegance which has been painted over. This work may result in a very nice presentation comparable to the Biltmore; however, at the present time it lacks flare. Good meeting facilities and nice flow without use of elevators. Will meet our requests for meeting and and complementary rooms as part of package which includes guarenteed booking in newly renovated rooms (which seem smaller than the Biltmore). The new management (European) is seeking to make this their US flagship hotel. The sales manager is very helpful and interested in negotiating, even willing to travel to Boston meeting. I believe the Roosevelt will try to bid below the Biltmore but cannot beat them by much. At present, although this may change with the restoration, the Biltmore is visually more striking. The Roosevelt is well worth considering.

BARBIZON PLAZA 6th and Central Park South 5 min walk
Mr. Gene Lynn (212) 247-7000

The Barbizon Plaza is a very nice hotel specializing in seminars and meeting such as ours. The location is excellent and very convenient to the NSTA convention center. Meeting rooms are nice and decorated in a light spring fashion. Larger session rooms are quite elegant. Sleeping rooms are nice but small to cramped. Room rates are moderately high $61-66 single/$71-78 double with probable 10-15% increase and only a six month guarentee. Looks as though all meeting space will be charged. My overall impression is that this would be a fine location but probably outside our price range.

GENERAL COMMENTS

- -Important to check food functions in detail since they are expensive and require addition of 8% tax (unless tax exempt) and a 17% gratuity.
- -May wish to limit the number of social functions since union regulations require 1 cashier and 1 bartender per 100 persons @ $40 each with drinks running $2.50-$3.
- -Consider alternatives for breakfast meetings: Coffee service plus dainish and OJ is about $60 for 20 while continental breakfast is around $5 each and full breakfast around $10.

Although these prices seem somewhat outrageous when considering only the convention functions, the cultural opportunities offered by New York City make the additional $100-150 for five days well worthwhile. Also, there are numerous clean, safe, and less expensive hotels where cost conscious members could stay with only slight inconvenience.

If there is anything else I can do, please let me know.

Sincerely,

Prof. Gary C. Bates
Science Education - Box 210
(212) 678-3379/3381

SUMMARY NEW YORK HOTELS

Biltmore: Madison and 43rd (10 minute walk)

Sleeping Rooms: S: $62. D: $72.
No complimentary rooms.

Meeting Rooms: With 225 luncheon and 95 sleeping rooms, No charge. Sliding scale to 40 or less $1800.

Luncheon: 225 guarantee $15. + 17% + tax.

New York Statler: 33rd and 7th (15 minute walk)

Sleeping Rooms: S: $54. D: $68.
One complimentary per 100.

Meeting Rooms: Apparently complimentary if reasonable number of sleeping rooms reserved. I'd say 100.

Luncheon: Necessary for meeting room use. No minimum specified but 200 assumed. Probably $15.00 + 17% + tax.

Roosevelt: 45th and Madison (10 minute walk)

Sleeping Rooms: S: $58. D: $66.
Additional Person $8. One complimentary per 50 used.

Meeting Rooms: Free if over 100 sleeping rooms used.
25-50 sleeping rooms $1500.00

Luncheon: Assumed 200 minimum $15. + 17% + tax.

Barbizon Plaza: 106 Central Park S. (No proposal received to date. More expensive than the others).

NOTES:

1. NSTA is at New York Hilton,
   1335 Avenue of the Americas
2. NY tax is 8% + $1.00 room occupancy tax.

/pk

4. Executive Secretary Search Committee

CALIFORNIA STATE UNIVERSITY, HAYWARD

HAYWARD, CALIFORNIA 94542

February 19, 1980

Dr. John Renner
Physical Sciences Center, Rm. 323
University of Oklahoma
Norman, OK 73019

Dear Dr. ~~Renner~~ Jack,

I want to bring you up to date on our efforts to recruit candidates for this position of Executive Secretary of NARST for 1981-1985.

You will recall that we decided to invite a small number of people to apply for this position after our two announcements in this NARST Newsletter failed to bring forth any expression of interest from the membership.

Seven of the eleven people you suggested we invite have expressed appreciation but regrets. Copies of their letters are enclosed, along with a list of those who responded by telephone.

One candidate, Bill Holliday of the University of Calgary, has expressed strong interest. He and I have talked at length over the phone about the position and factors that should be considered in having an Executive Secretary office in Canada. I have summarized the information that seems pertiment, and attached it to Bill's letter of interest and resume (See Summary of Facts RE: US/ Canadian Candidates).

At the November meeting of the NARST Executive Board in Kansas City, I posed the question, "Would a Canadian candidate for Executive Secretary be as acceptable as one of equal qualifications from the U.S.?" I raised the question to determine whether to encourage Bill to try to negotiate the necessary release time, and whether to have him send his papers along, or whether there was a strong opposition to having the Executive office in Canada.

The Board discussed this question at length and concluded that "NARST would not be adversely affected by having the office of Executive Secretary in Canada," so long as (1) the letterhead on stationery implied NARST was a national organization of the U.S., and (2) there would be no legal, tax-related impact from having a U.S. Non-profit organization operating in Canada (specifically, would NARST lose it's non-profit status by leaving the country?) Carl Berger will check on this latter question with the attorneys or legal advisors on his campus.

Georgia, expressed interest over the phone but was uncertain about institutional support. I haven't heard from him. Two others, John Schaff from University of Toledo and Ron Cleminson from Memphis State University, have not responded to several phone calls. Russ, since you are closest to these three would you please check with each of them?

That concludes the status report. We should present our slate of candidates to the NARST Executive Board on April 11, 1980 in Boston. What suggestions do you have for completing our task? Please phone or write to let me know how you want to proceed.

(415) 881-3010 or [m] Wed. pm. 3-5
(415) 841-3363

Cordially,

Rita

Rita W. Peterson
Chair, Search Committee

RWP: slm

Jack, I can't believe it took 30 da. To have finished typing for this material. Could you pls. let me know in early Mar. if you think a slate of One is appropriate, in case Russ gets no affirmative responses from Bill Capie or the 2 mentioned above?

Thanks, Rita

March 10, 1980

Professor William G. Holliday
Department of Educational
Curriculum and Instruction
Education Tower 538
The University of Calgary
Calgary, Alberta, Canada
T2N 1N4

Dear Bill:

Thank you for forwarding your resume and letters of support from the Department Head and Vice-President of your institution. I have forwarded copies of your papers to the other members of the Search Committee. The Search Committee for the position of Executive Secretary of NARST has been asked to make its recommendation to the Executive Board on April 10th in Boston at the annual meeting. I will be in touch with you regarding the Executive Board's decision as soon as it is made. On behalf of the Search Committee, thank you for accepting our invitation to be considered as a candidate for the position.

From the letter I received from Dr. Ralph Miller and from phone conversations with Jack Renner, I offer the following information regarding the expectations of the University of Calgary, should the Executive Board recommend your appointment as Executive Secretary of NARST:

1. NARST documents including letterhead, newsletters, and other promotional and scholarly materials would clearly designate the fact that the University of Calgary served as the Executive Headquarters. A sample of the Executive Board's recommendation for letterhead designation is enclosed.

2. To involve the office of Executive Secretary in the major operations of NARST, the President of NARST recommends that the Executive Secretary serve on the Policy Advisory Committee, the Program Committee, and ~~the Elections Committee of NARST~~, and on each new President's recommendation, that the Executive Secretary also serve on the NSTA Board of Directors or on the ~~NSTA Program Committee, whichever each President prefers~~. These suggestions which came from Jack Renner, current

and on @ new pres. recommen-, that the E.S. serve on the NSTA Prog. Committee

President of NARST, will be forwarded to the Executive Board for their consideration and final recommendation.

The other points which Dr. Miller raised regarding NARST's contribution to the Executive Secretary Headquarters, should they be located at the University of Calgary, are consistent with NARST's policy of support in the past and should be assumed to continue, so far as budget allocations permit.

It has been a pleasure to talk and correspond with you on this matter of your willingness to serve as a candidate for the position, Bill. Personally, I have been impressed with your resume and with the professional quality of your research and publications. Additionally, I look forward to introducing your up-coming presentation, Selective Attention Effects of Textbook Study Questions, at the Boston meeting.

Until then, I remain

Yours sincerely,

Rita

Rita W. Peterson
Chair, Search Committee

Copies to:

Members of the Search Committee

Dr. Ronald Anderson, University of Colorado
Dr. Richard Sagness, Idaho State University
Dr. Robert Steiner, University of Puget Sound
Dr. Russell Yeany, University of Georgia
Dr. John Renner, Ex-Officio, President of NARST

March 10,1980

Professor John Schaff
Associate Dean of the
College of Education
University of Toledo
Toledo, Ohio 43606

Dear John:

This letter is to follow up our phone conversation of last week. The Search Committee of the National Association for Research in Science Teaching wishes to invite you to consider candidacy for the position of Executive Secretary of the organization. Because this position is critical in the leadership of the Association, we hope you will give serious consideration to your candidacy.

Enclosed you will find a description of the position, its duties and the term of office. As I mentioned in our conversation, a letter or phone call from your Dean indicating willingness to provide support from the institution will be necessary to complete our review process, if you should agree to become a candidate. Would you also please include your resume?

The Search Committee has been asked to make its recommendation to the NARST Executive Board at the annual meeting in Boston. Thus, we have about three weeks to complete our review process. I regret the rush but my earlier phone call to you was followed by an immediate and unexpected trip to Washington, D.C.

If you have any questions or would like more information, please phone me or any other members of the Search Committee.

Sincerely,

Rita W. Peterson

Rita W. Peterson
Chair, Search Committee

Members of the Search Committee
Dr. Ronald Anderson, University of Colorado
Dr. Richard Sagness, Idaho State University
Dr. Robert Steiner, University of Puget Sound
Dr. Russell Yeany, University of Georgia
Dr. John Renner, Ex-Officio, President of NARST

The University of Toledo

2801 W. Bancroft Street
Toledo, Ohio 43606

College of Education
Office of Special Services
and Development
(419) 537-2465

March 17, 1980

Dr. Rita W. Peterson, Chair
Search Committee
National Association for Research in Science Teaching
Department of Teacher Education
California State University
Hayward, California 94542

Dear Rita:

In response to your letter of March 10, 1980 I have considered with the Dean, College of Education, your invitation to become a candidate for the Executive Secretary of NARST. I am sorry to inform you that it will not be possible for me to consider this important opportunity at the present time because of the following:

1. Due to the demand on my administrative and teaching responsibilities, the College is not in a position to grant the one-third release time requested. The College has been fortunate to experience increased enrollments and externally supported programs during the past two years, but without an increase in faculty positions.

2. The College is not in a position to provide a one-half time clerical position with the current demands on our secretarial staff, and no provisions for additions at the present time.

The Dean and I both realize the significance of the professional opportunity in serving as Executive Secretary of NARST. However, the only way the College would be able to grant the released time and secretarial services necessary would be to negotiate partial reimbursement for replacement of the services provided.

I sincerely appreciate the consideration the Search Committee has extended to me with the invitation to become a candidate for the Executive Secretary position.

Best wishes as you and the Committee pursue a most important responsibility. I look forward to seeing you at the meeting in Boston.

Sincerely,

John F. Schaff
Associate Dean

JFS/dja
cc: George E. Dickson, Dean
Search Committee
Ronald Anderson
Richard Sagness
Robert Steiner
Russell Yeany
John Renner

APPLICANTS CONTACTED	RESPONSE
1. Rodger Olstad University, Washington	No; has just accepted Exec. Sect'y of Section Q AAAS. (See letter)
2. Larry Lowery University California Berkeley	No; has just accepted appointment as Assoc. Dean of School. (See letter)
3. Eric Streitberger California State University, Fullerton	No; has just received NSF grant and commission to write textbook.
4. Gene Craven Oregon State University	No; in Malasia
5. Fred Fox Oregon State University	No Response to letter following phone call of interest. No, (letter of non-acceptance)
6. David Stronch University Victoria	No; new faculty appointment; dean cannot commit to untenured faculty.
7. Ronald Simpson North Carolina State University	No; will call 11/1-2 Support may be a problem. (See letter)
8. Ronald Cleminson Memphis State University	No response to 3 phone calls
9. William Holliday University Calgary	Yes; very interested.
10. John Schaff University Toledo	No response to recent call, will hear
11. Bill Capie University Georgia	Yes; interested institutional support may be problem; $\frac{1}{4}$ time Exec. Secty. probably O.K.; $\frac{1}{2}$ clerical may not.

The University of Calgary
2920 24 AVE. N.W.
CALGARY, CANADA
T2N 1N4

FACULTY OF EDUCATION
DEPARTMENT OF EDUCATIONAL CURRICULUM AND INSTRUCTION
TELEPHONE: (403) 284-5639

TO: National Association for Research in Science Teaching, Dr. Rita W. Peterson, Chairman, Executive Secretary Search Committee

FROM: Dr. Ralph M. Miller, Head, Dept. of Educational Curriculum and Instruction, Faculty of Education, The University of Calgary, Calgary, Alberta, Canada

DATE: 79-11-19

RE: NARST Executive Office and Archives

The Faculty of Education of The University of Calgary would be pleased to have the Executive Headquarters of the National Association for Research in Science Teaching (NARST) located on our campus, and to have the faculty recognized as the custodian of the organization's permanent records. It is our understanding that NARST was founded in 1928 for the purpose of promoting research in science education and disseminating research findings so as to improve science teaching at all educational levels. The Faculty of Education would be pleased to assist NARST in attaining these laudable goals.

It is our intention, insofar as budget allocations permit, during the five year period (1981-1986) of Dr. Holliday's term as Executive Secretary of NARST to provide:

1. One-third released time of a faculty member (Dr. William G. Holliday) during the period of his service as Executive Secretary of NARST.

2. Part-time clerical/secretarial services averaging about one-half time during each year, and/or computerized record-keeping where possible.

3. Necessary office space including facilities for storage of permanent records of NARST.

4. Necessary operating services such as heating, cooling, lighting, maintenance and reasonable security.

It is also our understanding that Dr. Holliday has contacted the Controller's Office and has been advised that they will provide a

.....2

complete accounting service without charge. All NARST funds received by the University would be held in Canadian funds and discharged in either Canadian or United States funds at the current rate of exchange. We further understand that the Controller's Office would levy no exchange commission charges against NARST.

NARST would

1. Locate its Executive Headquarters on The University of Calgary campus and clearly designate this fact on NARST documents including letterhead, newsletters, and other promotional and scholarly materials of all kinds.

2. Involve (official or exofficio status) the Executive Secretary (Dr. William G. Holliday) in the major operations of NARST. The University assumes that this office would constitute a leadership position within the organization and that NARST would provide the structure and funds necessary to exercise such influence.

3. Reimburse the University for such campus operating expenses as postage, printing and paper, long distance phone calls, photocopying, and clerical assistance beyond the capacity of a part-time secretary (especially during peak business periods for the University, for example, September 1-15).

4. Reimburse the Executive Secretary for all travel costs related to NARST business and would seriously consider expanding this budget item to include regular meetings with such organizations as the National Science Teachers' Association.

The Faculty of Education is impressed with the individual scholarly accomplishments of NARST members, with the professional quality of its official publication, the Journal of Research in Science Teaching, and with the positive impact the NARST organization has on matters pertaining to the advancement of research in science education. We would feel privileged to help NARST by providing the described services and facilities.

RM/jm

SUMMARY OF FACTS RE: US/CANADIAN

APPLICANT : Bill Holliday, University Calgary

Note: Approximately 50 NARST members are Canadian = 6.6%

Interested in the direction NARST well go in 1980's; would like to be involved in shaping/sharing that direction. Active research program, at present & in past.

ASSETS RE: NARST

University Calgary has:

1. Elaborate accounting system which does continuous auditing free of charge. (Offsets differ in phone rates Canada/U.S.)

2. Dean & Dept. Chair give no reason to think support will be problem: ¼ time Executive Secretary; ½ clerical

3. All checks written through University Calgary Account in U.S. Dollars. Therefore, no charge for exchange rate (of 85¢ c = 1.00 U.S.) or conversion.

NEUTRAL or LITTLE EFFECT RE: NARST

A. Postage: 1st Class Canadian = 17¢
Postage: 1st Class U.S. = 15¢

B. Phones: Person-to-person Calgary

Avg.	to San Francisco, Kansas City, Columbus, Ohio & N.Y.	= $9.80 + tax 3%
Avg	Person-to-Person from Kansas City to N.Y., San Francisco, Columbus & Calgary	= $6.50 + tax 3%

Estimate 1 ten-minute phone call per week, person-to-person, from Calgary costs 3.30 more than from Kansas City or 3.30 X 52 = $ 171.60/yr.

5. Executive Secretary's Report.

Emeritus	25
Life	8
Regular	462
New for 1980	53
	548

Founded 1928
Incorporated 1961

Sponsoring The Journal of Research in Science Teaching
Affiliated with NSTA, AAAS and ICASE

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

Memorial Hall Drake University Des Moines, Iowa 50311

EXECUTIVE SECRETARY
Dr. Paul Joslin (1980)
Memorial Hall
Drake University
Des Moines, IA 50311

PRESIDENT
Dr. John W. Renner
Physical Sciences Ctr. Room 323
University of Oklahoma
Norman, OK 73019

PRESIDENT-ELECT
Dr. Stanley Helgeson
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210

IMMEDIATE PAST PRESIDENT
Dr. James R. Okey
Department of Science Education
The University of Georgia
Athens, GA 30602

BOARD MEMBERS
Dr. Carl F. Berger (1980)
School of Education
University of Michigan
Ann Arbor, MI 48109

Dr. J. A. Easley, Jr. (1982)
Dept. of Elementary Education
University of Illinois
Urbana, IL 61801

Dr. Ann C. Howe (1981)
101 Heroy Building
Syracuse University
Syracuse, NY 13210

Dr. Anton Lawson (1981)
Science Education-Dept. Physics
Arizona State University
Tempe, AZ 85281

Dr. Rita W. Peterson (1980)
Dept. of Teacher Education
California State University
Hayward, CA 94542

John T. Wilson (1982)
737 Physics Building
University of Iowa
Iowa City, IA 52242

JOURNAL EDITOR
Dr. David P. Butts (1979)
Department of Science Education
The University of Georgia
Athens, GA 30602

NEWSLETTER EDITOR
Dr. Robert J. Vanden Branden (1979)
Memorial Hall
Drake University
Des Moines, IA 50311

RESEARCH COORDINATOR
Dr. Arthur White (1980)
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210

PLACEMENT COORDINATOR
Dr. John E. Penick (1981)
Science Education-Physics Bldg.
University of Iowa
Iowa City, IA 52242

NSTA REPRESENTATIVE
Dr. Len Krause (1980)
National Science Teachers Association
1742 Connecticut Avenue, NW
Washington, DC 20009

March 21, 1980

John Renner, President
NARST
University of Oklahoma
Norman, OK 73019

Dear John: RE: Agenda for Board Meeting.

Believe it or not, I have no agenda items that you are not aware of. In terms of back business we appear to be caught up and have no pressing problems.

I have sent separately to all board members:
- *1978 Financial report as approved by the auditor
- *1979 Financial Report
- *1980 Budget
- *1979 Membership Report
- *Continuous Membership Report

To Board Agenda Book.

We have achieved, pretty much, the goals I had when I took this job:
- *Stabilized active membership with accurate records
- *Stabilized financial condition with accurate records
- *A start on active research activities and reports

Our two offices, editorial and secretarial, seem to be working quite smoothly. With our routine work under control, we have a potential for greater service to our members and the profession.

There is one job I want to complete before the end of my term and that is the printing and distribution to members of the revised bylaws.

After my successor takes over I'd like Board permission to retain previous records so that I may organize them for historical purposes. I may get a start on this job this summer.

I hope that we can appoint an aggressive and competent successor and I look forward to helping him/her in any way I can.

Very truly yours,

Paul H. Joslin

/pk

NATIONAL ASSOCIATION FOR
RESEARCH IN SCIENCE TEACHING

January 15, 1979

1978 FINANCIAL REPORT

Savings Accounts

Item	1/1/78	Deposits	Interest	12/31/78
7 1/2% CD Due 12/12/82	$1570.47	None	$117.80*	$1570.47
Passbook	581.46	$117.80*	32.21	731.47
	$2151.93	--	$150.01	$2301.94

Checking Account

RECEIPTS		
Balance in Bank 1/1/78	$2,328.41	
From East Lansing Bank	2,815.92	
	$5,144.33	$5,144.33
DUES		
Regular (722 @ $21.99)	$15,876.12	
Patron (2 @ $100.00)	200.00	
Sustaining (6 @ $40.00)	240.00	
Life (10 @ None)	--	
	$16,316.12	$16,316.12
ANNUAL MEETING		
Registrations (201 @ $20.00)	$4,020.00	
Other	273.00	
	$4,293.00	$4,293.00
OTHER		
Journal Royalties	$1,800.00	
Bank Credits	7.62	
Miscellaneous	340.20	
	$2,147.82	$2,147.82
TOTAL RECEIPTS		$27,901.27

DISBURSEMENTS

President's Office	$ 37.50	$ 37.50
Executive Board & Program Committee	2,391.05	2,391.05
Executive Secretary's Office		
Annual Meeting Travel	$ 393.92	
Postage	1,058.06	
Typing Membership Lists	192.93	
Photocopying	150.00	
Phone (Long Distance)	120.00	
Supplies	347.60	
Audit	75.00	
Miscellaneous	64.20	
	$2,401.71	$2,401.71
Membership Communications		
Abstracts of Presented Papers	$1,000.00	
Newsletters	705.53	
Promotions (Brochures, etc.)	541.30	
	$2,246.83	$2,246.83
Journal and Editors Office		
Printing and Mailing	$10,770.13	
Editorial Board Postage	400.00	
Editors Travel	357.00	
Editorial Board Breakfast	67.27	
Due Journal Publisher for 1977	5,000.00	
	$16,594.40	$16,594.40
Annual Meeting		
Program Evaluation	$ 51.75	
Annual Luncheon	1,265.00	
Program Printing & Mailing	335.48	
Supplies	155.29	
Awards	41.65	
Board Meeting	19.55	
	$1,868.72	$1,868.72
Other		
ICASE Dues	$ 72.00	
Miscellaneous	109.20	
Bank Debits (Foreign Exchange)	267.88	
	$ 449.08	$ 449.08

TOTAL DISBURSEMENTS	$25,989.29
CASH BALANCE CREDIT TO EX. SECRETARY	50.00
BALANCE 12/31/78	1,861.98
	$27,901.27

NARST 1980 BUDGET

Adopted by Executive Board 11/2/79 — December 1, 1979

SAVINGS ACCOUNTS

	Account	1/1/80	Interest	Deposits	Withdrawals	12/31/80
1.	V. Miles Trust CD 72 mo 7 1/2% 12/12/82	$1570.47	$117.80*	None	$117.80*	$1570.47
2.	V. Miles Trust PB	392.13	23.82	$117.80*		533.75
3.	Regular PB	878.07	47.00			925.07
	TOTALS.....	$2840.67	$188.62	$117.80	($117.80)	$3029.29

RECEIPTS

Balance on Hand 12/31/79.....	$1850.00
DUES	
Regular..... 700 @ $26.50.....	$18550.00
Sustaining.... 6 @ $53.00.....	318.00
Patron..... 2 @ 100.00.....	200.00
Life..... 10 @ None.....	-----
Emeritus..... 27 @ None.....	-----
	$19068.00
ANNUAL MEETING	
Registrations 230 @ $20.00.....	$4600.00
Technique Sessions.... 180 @ 3.00.....	540.00
	$5140.00
OTHER	
Interest on Checking Account.....	$640.00
Journal Royalties.....	1250.00
Bank Credits.....	25.00
Miscellaneous.....	50.00
	$1965.00
TOTAL RECEIPTS.....	$28023.00

DISBURSEMENTS

PRESIDENT'S OFFICE	
Postage	$60.00
Supplies	60.00
	$120.00
EXECUTIVE BOARD	
Spring Meeting	$100.00
Fall Meeting	2500.00
	$2600.00
EXECUTIVE SECRETARY'S OFFICE	
Postage	$1100.00
Supplies	300.00
Phone	120.00
Photocopying	100.00
Typing	120.00
Annual Meeting	350.00
	$2090.00
MEMBERSHIP	
Newsletters... 5 @ $130.00	$650.00
Promotions	540.00
	$1190.00
JOURNAL AND EDITOR OFFICE	
Subscriptions... 722 @ $17.50	$12635.00
Editor's Postage	700.00
Editorial Board Breakfast	100.00
Editor's Travel	450.00
	$13885.00
ANNUAL MEETING	
Program Committee Meeting	$1300.00
Program Printing and Mailing	700.00
Abstracts	1000.00
Luncheon... 230 @ $8.00	1840.00
Lectures	300.00
Awards	250.00
Supplies	200.00
Miscellaneous	100.00
Technique Sessions.. 6 @ $50.00	300.00
	$5990.00
RESEARCH COMMITTEE	
Research Projects	$700.00
	$700.00
OTHER	
Financial Audit	$50.00
Bank Debits	50.00
ICASE Dues	72.00
Miscellaneous	200.00
	$372.00
TOTAL EXPENSES	$26947.00
Balance on Hand 12/31/80	$1076.00
TOTAL DISBURSEMENTS	$28023.00

NATIONAL ASSOCIATION FOR
RESEARCH IN SCIENCE TEACHING

March 1, 1980

1979 FINANCIAL REPORT

Savings Accounts

Account	1/1/79	Interest	Deposits	Withdrawals	12/31/79
1. Vaden Miles Trust 72 mos. 7 1/2 % CD Due 12/12/82	$1570.47	$117.80*	None	$117.80	$1570.47
2. Trust Savings	None	6.89	$353.40	None	360.29
3. Passbook Savings	731.47	44.07	500.00 117.80	353.40	1039.94
Totals	$2301.94	$168.76	$971.20	$471.20	$2970.70

Checking Account

RECEIPTS

Balance On Hand 12/31/78		$ 1861.98	$ 1861.98
Dues			
Regular (691 @ $26.50)		18311.50	
Sustaining (7 @$53.00)		371.00	
Patron (2 @ $100.00)		200.00	
Life (8 @ None)		--	
Emeritus (25 @ None)		--	
1980 Paid in 1979		4137.14	
		$23019.64	$23019.64
Annual Meeting 294			
Registrations (200 @ $20.00)		$ 5805.00	
Other		36.00	
		$ 5841.00	$ 5841.00
Other			
Journal Royalties		$ 1233.74	
Foreign Exchange Credits		--	
Miscellaneous		60.40	
Interest on Checking		611.08	
		$ 1905.22	$ 1905.22
TOTAL RECEIPTS			$32627.84

DISBURSEMENTS

President's Office		
Postage	$ --	
Supplies	34.60	
	$ 34.60	$ 34.60
Executive Board		
Fall Meeting	$ 2604.99	
Spring Meeting	104.94	
	$ 2709.93	$ 2709.93
Executive Secretary Office		
Postage	$ 836.36	
Supplies	388.10	
Phone	--	
Photocopying	24.75	
Typing	63.75	
Travel to Annual Meeting	265.31	
Miscellaneous	54.06	
	$ 1632.33	$ 1632.33
Membership		
Newsletters (5 @ $150.00)	$ 509.59	
Promotions	449.99	
	$ 959.58	$ 959.58
Journal & Editor Office		
Journal Subscriptions	$11937.00	
Editorial Board Postage	600.00	
Editorial Board Breakfast	127.49	
Editor's Travel	274.28	
New Editor's Travel	220.00	
	$13158.77	$13158.77
Annual Meeting		
Program Committee Meeting	$ 1688.15	
Program Printing & Mailing	663.18	
Abstracts 240	1000.00	
Luncheon (200 @ $8.00)	2583.36	
Receptions	120.00	
Awards	341.99	
Supplies	30.00	
Miscellaneous	328.09	
	$ 6754.77	$ 6754.77
Research Committee		
Research Project	$ 654.28	$ 654.28
Other		
Financial Audit	$ 25.00	
Bank Debits	272.40	
ICASE Dues	72.00	
Miscellaneous	313.72	
To Savings	500.00	
	$ 1183.12	$ 1183.12

TOTAL EXPENSES	$27087.38
BALANCE ON HAND 12/31/78	$ 5540.46
TOTAL DISBURSEMENTS	$32627.84

INSTITUTIONAL SUPPORT

University of Georgia and University of Iowa

Editorial Staff	$17,000.00
Office Supplies	1,000.00
	$18,000.00

Drake University

Executive Secretary	$ 5,000.00
Secretary	1,200.00
Graduate Assistant	800.00
Supplies	100.00
Photocopying	100.00
Long Distance Phone	120.00
	$ 7,320.00

/pk

Move that the publication set price for Oct Bd Mtg + dues missing be by 1000.

MEMBERSHIP REPORT

March 10, 1980

NARST MEMBERSHIP FLOW

YEARS	MARCH	MAY	OCTOBER	DECEMBER	NEW
	548				
1979	460	604	717	(723)	67
1978	543	669	715	737	82
1977	367	608	620	710	66
1976	523		713	761	
1975			626	635	
1974		592	757	773	
1973		539	788	810	

JOURNAL MAILING LABELS (Issue Number)

YEAR	1	2	3	4	5	6
1979	330	460	604	678	692	(702)
1978	781	610	669	669	715	715
1977	752	752				814

ATTENDANCE AT ANNUAL MEETING

YEAR	CITY	WITH	ATTENDANCE
1979	Atlanta	NSTA	294
1978	Toronto	AERA	201
1977	Cincinnati	NSTA	251
1976	SanFrancisco	AERA	162

MEMBERSHIP BY CATEGORY

TYPE	12/31/79	Female	12/31/78
Regular	691	119	705
Sustaining	7	2	7
Patron	2	0	2
Life	8	3	10
Emeritus	25	2	13
Totals	733	126	737

MEMBERSHIP GEOGRAPHY

STATE	1979	1980 (New)	STATE	1979	1980 (New)
Alabama	0		Missouri	9	1
Alaska	1		Montana	2	
Arizona	9	2	Nebraska	5	
Arkansas	3		Nevada	0	
California	32	2	New Hampshire	1	
Colorado	12	1	New Jersey	25	
Connecticut	11	1	New Mexico	0	
Delaware	0		New York	63	7
D.C.	6		North Carolina	9	5
Florida	21	2	North Dakota	1	
Georgia	26	1	Ohio	36	1
Hawaii	0		Oklahoma	6	4
Idaho	0		Oregon	8	
Illinois	39	1	Pennsylvania	39	5
Indiana	30	1	Rhode Island	2	
Iowa	31	1	South Carolina	5	
Kansas	5	1	South Dakota	4	
Kentucky	4		Tennessee	8	
Louisiana	4		Texas	27	2
Maine	4		Utah	2	1
Maryland	18	2	Vermont	1	
Massachusetts	17	1	Virginia	9	
Michigan	36		Washington	11	
Minnesota	10	2	West Virginia	4	
Mississippi	6		Wisconsin	17	
			Wyoming	2	

COUNTRY	1979	1980 (New)	COUNTRY	1979	1980 (New)
Canada	43	3	Iran	1	
Australia	10		West Germany	1	1
Israel	7		Korea	1	
Nigeria	3		Botswana	1	
Egypt	2		Spain	1	
Mexico	2		Phillipines	1	
West Indies	2		India	1	
England	2		Kenya	1	
Panama	1		Zambia	1	
Jordan	1		Belgium	1	
Singapore	1		Japan	0	1

6. Constitution and Bylaws

United States of America

STATE OF MINNESOTA

DEPARTMENT OF STATE

I, JOAN ANDERSON GROWE, Secretary of State of the State of Minnesota, do hereby certify that the annexed is a full, true and correct photocopy of

ARTICLES OF INCORPORATION

OF

The National Associaition for Research

in Science Teaching

as the same appears of record in this office, and of the whole thereof.

In Testimony Whereof, I have hereunto set my hand and affixed the Great Seal of the State, at the Capitol in St. Paul, this 17th *day of* August

A. D. 19 76.

SECRETARY OF STATE

J-20, 29

ARTICLES OF INCORPORATION

of

THE NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

We, the undersigned, for the purpose of forming a corporation under and pursuant to the provisions of Chapter 317 Minnesota Statutes, known as the Minnesota Nonprofit Corporation Act, do hereby associate ourselves together as a body corporate and adopt the following Articles of Incorporation:

ARTICLE I

This corporation shall be known as the National Association for Research in Science Teaching, hereinafter referred to as the Association or the NARST.

ARTICLE II

The purpose of this corporation shall be to promote research in science education, and to disseminate the findings of this research in such ways as to improve science teaching.

The Association shall publish, or cause to be published for the benefit of its members and others, selected articles, reviews or reports of research which are in harmony with the purposes of the Association.

ARTICLE III

This corporation shall not afford pecuniary gain, incidentally or otherwise, to its members.

No part of the income of the Association shall be paid to any member as a share or as a monetary benefit, but officers, committee members, and employees may be reimbursed for necessary expenses related to their duties and employees may be paid reasonable compensation for services rendered in connection with the Association's purposes and program.

J-20, 70

ARTICLE IV

The period of duration of corporate existence of this corporation shall be perpetual.

ARTICLE V

The location of the registered office of this corporation in this state is College of Education, University of Minnesota, Minneapolis, Minnesota

ARTICLE VI

The name and address of each incorporator of this corporation is:

Clarence W. Borck	5101 Ewing Avenue So. Minneapolis, Minnesota
J. Jarvis Shutts	[illegible] Minneapolis, Minnesota
Jane Jameter	Moorhead State College Moorhead, Minnesota

ARTICLE VII

The number of directors constituting the first board of directors of this corporation shall be eight (8) and the names in office of such first board of directors shall be one (1) year, or until successors are elected and qualified. The name and address of each such first director is:

Clarence W. Borck	5101 Ewing Avenue So. Minneapolis, Minnesota
Herbert A. Smith	University of Kansas Lawrence, Kansas
Harry Branson	Howard University Washington D.C.
Elizabeth S. Oburn	U.S. Office of Education Washington D. C.
Paul Lockwood	U.S. Office of Education Washington D. C.
Edward Weaver	Atlanta University Atlanta, Georgia
Vaden Miles	Wayne State University Detroit, Michigan

J-20, 31

Clarence Pruitt — Tampa University, Tampa, Florida

ARTICLE VIII

The members shall have no personal liability for corporate obligations.

ARTICLE XI

This corporation shall have no capital stock.

ARTICLE X

These Articles may be amended by affirmative votes of not fewer than two-thirds of the members present at the Annual Business Meeting, provided printed notice of the proposed amendment has been sent to the members at least thirty days prior to such Annual Business Meeting. A proposed amendment may be submitted at the Annual Business Meeting with modifications from the previously-published form, in the light of such comments as may have been made since the previous publication.

The Secretary shall notify the members by mail at the address given for each member on the membership list, unless written notice of a change of address is furnished to the Secretary prior to mailing of such notice.

IN WITNESS WHEREOF, we have hereunto subscribed our names this 27th day of January, 1961.

Witnesses:

Clarence Pruitt

Clarence Pruitt

Robert L. Peterson

Robert L. Temple

Jane Johnston

Clarence M. Pearce

J. Kenney Shutts

Germaine Pasko

J-20, 72

STATE OF MINNESOTA)
)ss.
COUNTY OF HENNEPIN)

On this 27th day of January, 1961, personally appeared before me CLARENCE H. BOECK, J. HERVEY SHUTTS, and JANE JOHNSTON, to me known to be the persons described in and who executed the foregoing Articles of Incorporation of THE NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING, and they acknowledged that they executed the same as their free act and deed, for the uses and purposes therein expressed.

Edward J. Parker

Notary Public, Hennepin County, Minn.
My Commission Expires Nov. 3, 1967.

STATE OF MINNESOTA
DEPARTMENT OF STATE

I hereby certify that the within instrument was filed for record in this office on the 30 day of January A.D. 1961 at 2:15 o'clock P.M. and was duly recorded in Book J-20 of Incorporations on page 29

Joseph L. Donovan
Secretary of State

ARTICLES FILED
IN BOOK 6
AND FILED
IN BOOK J-20

ARTICLES OF INCORPORATION

of

THE NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

We, the undersigned, for the purpose of forming a corporation under and pursuant to the provisions of Chapter 317 Minnesota Statutes, known as the Minnesota Nonprofit Corporation Act, do hereby associate ourselves together as a body corporate and adopt the following Articles of Incorporation:

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The Association shall publish, or cause to be published for the benefit of its members and others, selected articles, reviews or reports of research which are in harmony with the purposes of the Association.

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No part of the income of the Association shall be paid to any member as a share or as a monetary benefit, but officers, committee members, and employees may be reimbursed for necessary expenses related to their duties and employees may be paid reasonable compensation for services rendered in connection with the Association's purposes and program.

ARTICLE IV The period of duration of corporate existence of this corporation shall be perpetual.

ARTICLE V The location of the registered office of this corporation in this state is College of Education, University of Minnesota, Minneapolis, Minnesota.

ARTICLE VI The name and address of each incorporator of this corporation is: (Clarence H. Boeck, Jane Johnston, and J. Hervey Shutts).

ARTICLE VII The number of directors constituting the first Board of Directors of this corporation shall be eight and the tenure in office of such first Board of Directors shall be one (1) year, or until successors are elected and qualified. The name and address of each such first director is: (Present Executive Committee).

ARTICLE VIII The members shall have no personal liability for corporate obligations.

ARTICLE IX This corporation shall have no capital stock.

ARTICLE X These Articles may be amended by affirmative votes of not fewer than two-thirds of the members present at the annual business meeting, provided printed notice of the proposed amendment has been sent to the members at least thirty days prior to such Annual Business Meeting. A proposed amendment may be submitted at the annual business meeting with modifications from the previously-published form, in the light of such comments as may have been made after the previous publication.

The Secretary shall notify the members by mail at the address shown for each member on the membership list, unless written notice of a change of address is furnished to the Secretary prior to mailing of such notice.

Founded 1928
Incorporated 1961

Sponsoring The Journal of Research in Science Teaching
Affiliated with NSTA, AAAS and ICASE

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

Memorial Hall Drake University Des Moines, Iowa 50311

January 11, 1979

Dr. John W. Renner
Physical Sciences Ctr. Room 323
University of Oklahoma
Norman, Oklahoma 73019

Dear Jack,

Thank you for sending the copy of the revised bylaws. I have read them and found no changes of substance.

I do have one question, however, and one observation. On page 3 section 3.03 C it says that the executive secretary shall be appointed to a five year term but it does not specify who does the appointing. I believe that this is an oversight in the bylaws and should be clarified. As far as I can tell the bylaws do not clarify the issue elsewhere.

My observation was the statement in section 6.07 concerning special committees. According to the statement special committees are discharged at the close of the Annual Meeting that follows the appointment. We talked about sunset laws at an earlier board meeting concerning the Patron Activities Committee. Did we not decide to disband this committee after considerable discussion? According to the bylaws the discussion and decision was unnecessary. Is this correct?

Sincerely yours,

Anton E. Lawson
Associate Professor
Science Education

AEL:eml

EXECUTIVE SECRETARY
Dr. Paul Joslin (1980)
Memorial Hall
Drake University
Des Moines, IA 50311

PRESIDENT
Dr. John W. Renner
Physical Sciences Ctr. Room 323
University of Oklahoma
Norman, OK 73019

PRESIDENT-ELECT
Dr. Stanley Helgeson
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210

IMMEDIATE PAST PRESIDENT
Dr. James R. Okey
Department of Science Education
The University of Georgia
Athens, GA 30602

BOARD MEMBERS
Dr. Carl F. Berger (1980)
School of Education
University of Michigan
Ann Arbor, MI 48109

Dr. J. A. Easley, Jr. (1980)
Dept. of Elementary Education
University of Illinois
Urbana, IL 61801

Dr. Ann C. Howe (1981)
[illegible]

Dr. Arthur E. [illegible] (1981)
[illegible]

Dr. Rita A. [illegible] (1981)
[illegible]

[illegible] (1982)
[illegible]

JOURNAL EDITOR
[illegible] (1979)
[illegible]

NEWS LETTER EDITOR
[illegible] (1979)
[illegible]

RESEARCH COORDINATOR
Dr. Arthur White (1980)
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210

PLACEMENT COORDINATOR
Dr. John E. Penick (1981)
Science Education-Physics Bldg.
University of Iowa
Iowa City, IA 52242

NSTA REPRESENTATIVE
Dr. Leo Krause (1980)
National Science Teachers Association
1742 Connecticut Avenue, NW
Washington, DC 20009

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

BYLAWS AS Edited by R. OLSTAD

BYLAWS

ARTICLE I: MEMBERSHIP

Section 1.01. Eligibility. This association shall consist of members who have made the preparation, demonstrated the competence, and evidenced the interest to make important research contributions to the field of science education. The usual preparation for members is advanced graduate work in science education or its equivalent. Competence is usually demonstrated by a report on a research study or on an application of research in science education.

Section 1.02. Classes of Membership. The membership of the Association shall consist of Regular Members, Sustaining Members, Patron Members or Patrons, and Emeritus Members.

A. Regular Members are those who meet eligibility requirements and pay annual dues.

B. Sustaining Members are those who meet eligibility requirements and pay specified additional dues as a source of revenue.

C. Patron Members and Patrons may be individuals, associations, institutions, or corporations that meet eligibility requirements and pay specified annual dues.

D. 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 recivve full rights and privileges of the Association without cost, except for the Journal, which may be purchased at the member contract rate.

Section 1.03. Application for Membership. All new members shall supply the information requested on an application form that can be obtained from the Executive Secretary.

Section 1.04. Termination of Membership. Any member may resign by sending a letter of resignation to the Executive Secretary.

ARTICLE II: DUES AND CONTRIBUTIONS

Section 2.01. Total Annual Dues. The total annual dues shall include Association dues and the cost of the Journal of Research in Science Teaching. The amount of the Association dues shall be recommended by the Executive Board and approved by a majority vote of members by mail ballot returned within 30 days of mailing. The subscription costs for JRST shall be approved by the Executive Board. The total dues shall cover one calendar year and shall become payable at the beginning of the calendar year.

A. Dues for Sustaining Members shall be double the dues for Regular Members.

B. Minimum annual dues for Patron Members will be set by the Executive Board and will exceed annual dues for Regular and Sustaining Members. Associations, institutions, or corporations may be admitted as Patrons with suitable contributions negotiated by an ad hoc Patrons Activities Committee.

Section 2.02. Nonpayment of Dues. If the dues of a member remain unpaid beyond six months after the dues notice, the Executive Secretary shall remove the name from the membership list. Any former member may be reinstated without prejudice upon request to the Executive Secretary and upon payment of the current dues.

ARTICLE III: OFFICERS AND EXECUTIVE BOARD

Section 3.01. Officers. The officers of the Association with specific duties include the President, President-Elect, Past President, Executive Secretary, Research Coordinator, and Board Members-at-Large.

A. The President shall act as chairperson of the Executive Board, have general charge of the affairs of the Association, preside at all business meetings, and be an ex-officio member of all committees.

B. The President-Elect shall preside at all business meetings in the absence of the president and be chairperson of the Program Committee for the Annual Meeting.

C. The Past President shall serve as chairperson of both the Policy Advisory Committee and the Election Committee.

D. The Executive Secretary shall keep an account of the receipts and expenditures, pay all bills of the Association, make a report to the members at the Annual Meeting, and prepare a proposed budget for the forthcoming year.

E. The Research Coordinator shall act as chairperson of the Research Committee, organize and supervise the research activities of the Association (subject to review by the Executive Board), and make a report to the Association at the Annual Meeting.

F. The Board Members-at-Large shall serve on standing and special committees as requested.

Section 3.02. Executive Board. The Executive Board of the Association shall consist of the officers (President, President-Elect, the immediate Past President, Research Coordinator), six Executive Board Members-at-Large, and the president of affiliated groups as approved by majority vote of the Board. Each member of the Board shall hold an equal vote in the business of the Board. Ex-officio members of the Executive Board shall consist of the Executive Secretary, JRST Editor, and the chairpersons of the standing committees not otherwise members of the Executive Board.

A. Powers. The Executive Board shall have the power to transact all official business for the Association. The Board will meet at the time of the Annual Meeting and, if needed, at one other time midyear. The Executive Board shall consider all business and accept or reject decisions and actions taken by the officers between meetings of the entire Executive Board. The Executive Board may use the mails and/or wire service for transacting business that must be conducted between regular meetings.

B. Votes. Only regular members of the Executive Board may cast official votes in the transaction of business. Ex-officio members of the Executive Board may enter fully into all discussions and other matters concerning the business brought before the Board either in formal meetings or by mail or wire transactions, but ex-officio members have no vote in the transaction of business of the Executive Board.

Section 3.03. Terms of Office and Eligibility. Only members shall be eligible to hold office.

A. Candidates for office of President-Elect must have been active members of the Association. Active service will usually mean prior service as a member of the Executive Board or as a chairperson of a standing committee. Neither the President nor the President-Elect shall serve a second term in the same office.

B. Two of the six Board Members-at-Large shall be elected to three-year terms each year. No Board Members-at-Large shall serve more than one three-year term.

C. The Executive Secretary shall be appointed by the Executive Board to a five-year term.

D. The Editor shall be appointed by the Executive Board to a single five-year term.

E. The term of Research Coordinator shall be a three-year term. A person may not hold this office for more than two terms. If the Research Coordinator stands for re-election, a competitive slate of at least one other candidate for the office is required.

Section 3.04. Vacancies

A. The President-Elect shall assume the presidency if the office is vacated before the completion of the term. If serving such an unexpired term results in six months or more in the office of president, a new President-Elect shall be appointed by the Executive Board. This appointed President-Elect will then become President the following year. If less than six months is involved, the new President shall serve the entire next year as president as well. The office of president-elect will then remain unfilled until the regular time for elections.

B. In the event that both the office of president and president-elect are vacated at the same time, or within the same term, the Executive Board shall appoint members of the Board to fill the unexpired terms and both offices will be filled the following year through election.

C. The President, with the consent of the majority of the Executive Board, shall appoint Members-at-Large to fill positions vacated before completion of the term.

D. The terms of office for the Executive Secretary and the Editor can be reduced by a two-thirds vote of the other members of the Executive Board. If the offices of editor, executive secretary, or research coordinator are vacated before the end of the separate terms, the Executive Board shall fill the unexpired terms by appointment.

Section 3.05. Election of Officers. At the regular Annual Meeting, the President shall appoint an Election Committee of three to prepare mail ballots for electing officers for the ensuing year.

A. The Slate. A slate of two or more nominees shall be selected for each vacant office. The slate proposed by the Election Committee shall be published in the Newsletter at least four (4) months prior to the Annual Meeting. Additional nominations may be made by petition of ten (10) members. Said petitions shall be in the hands of the Executive Secretary three (3) months prior to the Annual Meeting.

B. Ballots. Ballots shall be mailed by the Executive Secretary to all members eligible to vote two (2) months prior to the Annual Meeting. The completed ballots shall be returned to the chairperson of the Election Committee for counting no later than four (4) weeks from date of mailing to members.

C. Final Decision. Election shall be by plurality, in serial order. In event of a tie vote, the decision shall be made by vote of the members present at the Annual Meeting.

D. Terms of Office. All terms of officers shall begin at the close of the Annual Meeting at which the election results are announced and shall continue until the close of the Annual Meeting of the year the term ends.

ARTICLE IV: PUBLICATIONS

Section 4.01. Editor. An editor shall be selected in the manner described previously. The Editor shall serve on the Executive Board and the Publications Advisory Committee in an ex-officio capacity. The Editor shall absent himself from ~~these~~ sessions when policies and considerations are being made where such absence is ~~suggested~~ requested by a voting member of the Executive Board.

A. Responsibilities. The Editor shall administer all publication ventures of the Association. Responsibilities may be delegated to others with approval and consent of the Publications Advisory Committee and the Executive Board.

B. Annual Report. The Editor shall prepare an annual report for the meeting of the Executive Board, for the Publications Advisory Committee, and for the Annual Business Meeting.

C. JRST. The Editor shall work with the Editorial Board in the publication of the Journal of Research in Science Teaching. Changes in policy shall be approved by the Publications Advisory Committee and the Executive Board. The Editor shall present nominations for positions on the Editorial Board to the Executive Board for confirmation.

Section 4.02. Editorial Board. The Editor, the Associate Editor, and members of a special review committee shall be known as an Editorial Board with the Editor as chairperson. The Editorial Board shall be responsible for evaluating papers submitted for publication in the Journal of Research in Science Teaching. The Editorial Board will be responsible for carrying out the policies suggested by the Publications Advisory Committee and approved by the Executive Board. The size of

the Editorial Board shall be determined by the necessary divisions of labor in preparing the Journal. The Editorial Board may request changes in policy by making recommendations to the Publications Advisory Committee for appropriate consideration. The Executive Board may make specific recommendations directly to the Editorial Board concerning Journal policy.

ARTICLE V: MEETINGS

Section 5.01. Annual Meeting. The Executive Board shall arrange the time and place of the Annual Meeting and may arrange additional meetings.

Section 5.02. Business Meeting. The business meeting of the Association shall be held at the time and place of the Annual Meeting. The members present (with a minimum of 5% of the total membership) shall constitute a quorum for conducting the business of the Association.

Section 5.03. Conduct of Meetings. Robert's Rules of Order, Revised, shall govern the conduct of all meetings held by any group whatsoever in conducting the business of the Association except as otherwise specified in these Bylaws.

ARTICLE VI: COMMITTEES

The President, with the approval of the Executive Board, shall appoint all standing and special committees. Standing committees include the following with duties as outlined.

Section 6.01. Policy Advisory Committee. The members include the immediate Past President as chairperson, two members (with two-year rotating terms), and the President-Elect (ex-officio). The duties are annual review of the Bylaws, changes in structure or orientation of the Association, and review of new activities or ventures of the Association.

Section 6.02. Financial Advisory Committee. The members include a chairperson (three-year term), three members (with three-year rotating terms), and the Executive Secretary (ex-officio). The duties are to consider the annual budget prepared by the Executive Secretary, approve program expenses, approve publication costs and new ventures, offer advice and recommendations to the Executive Board regarding all financial affairs of the Association, and conduct an annual audit of the financial accounts of the Association.

Section 6.03. Publications Advisory Committee. The members include a chairperson (three-year term), three members (with three-year rotating terms), and the Editor (ex-officio). The duties are to establish policy concerning the Newsletter, the Journal, and special publication ventures of the Association; review arrangements with editors of publications; and suggest changes in yearly publication practices to the Executive Board.

Section 6.04. Program Committee. The members include the President-Elect as chairperson, four members (with two-year rotating terms), and the Research Coordinator (ex-officio). The duties are to establish theme and format for the Annual Meeting, arrange for special speakers and symposia, and evaluate abstracts for contributed papers. (A local arrangement committee may be established if desired.)

Section 6.05. Research Committee. The members include the Research Coordinator as chairperson and three members (with three-year rotating terms). The duties are to prepare yearly reviews of research in science education, work closely with ERIC Center, and recommend needed areas of research, research symposia, and training programs.

Section 6.06. Election Committee. The members include the immediate Past President as chairperson and two members (with one-year terms). The duties are to establish the slate of officers for each election four months prior to the date of the Annual Meeting, make arrangements for preparation and distribution of ballots three months prior to the data of the Annual Meeting, tabulate election results, notify candidates of the outcome of the election a month prior to their assuming office, announce election results at the Annual Meeting, and arrange for installation of new officers and transfer of the responsibilities of the Executive Board for the Association.

Section 6.07. Special Committees. The nature and duties of special committees shall be specified at the time of the appointment. Each special committee appointed by a president shall be considered automatically discharged at the close of the Annual Meeting that follows the appointment, unless specific action to continue the appointment be taken by the President who enters the office at the close of the Annual Meeting.

Section 6.08. Committee Reports. Standing and special committees shall prepare reports for the Annual Business Meeting and at such other times as requested by the President.

ARTICLE VII: AFFILIATIONS

The Association may, on action of the Executive Board, affiliate with international, national, regional, and local scientific and professional groups where combined efforts will contribute to the overall purposes of the Association but in no way reduce the autonomy of the Asscoiation. Upon vote of the Executive Board, the president of an affiliated organization may be named a member of the Executive Board.

ARTICLE VIII: DISSOLUTION

The following provisions as to dissolution shall be observed in so far as compatible with the Minnesota Nonprofit Corporation Act, NSA 317.44-61.

In the event of dissolution of the Association, the Executive Board shall, after payment of debits and obligations, transfer the net assets to one of its affiliated organizations if such affiliated organization is then exempt from federal income taxes as a charitable and/or educational organization. Such assets shall be used to promote research in science education. If, among the affiliated organizations, none is so exempt, the net assets, as aforesaid, shall be transferred to any nonprofit university, or to any other tax exempt agency selected by the Executive Board because of its interest in improving and advancing research in science education.

ARTICLE IX: AMENDMENTS

Proposed amendments to the Bylaws will be prepared by the Policy Advisory Committee and submitted to the Executive Board for approval. Proposed amendments so approved will be mailed by the Executive Secretary along with a ballot to members. A majority of those responding within 30 days of the date of mailing must indicate approval before an amendment is accepted. Upon acceptance the amendment will become effective.

7. Report of the Editor of the JRST

JOURNAL OF
RESEARCH IN SCIENCE TEACHING

JAMES A. SHYMANSKY, Editor

Science Education Center
The University of Iowa
Iowa City, Iowa 52242

Telephone No. (319) 353-4098

M E M O R A N D U M

TO: NARST PUBLICATION ADVISORY COMMITTEE

David Stronck
Mike Abraham
Anne Howe
Vince Lunetta

FROM: Jim Shymansky JAS

Enclosed please find my contribution of agenda items, background information, and motions for your consideration in advance of our Publications Advisory Committee meeting in Boston. As you can see, all of the items deal with substantive matters concerning journal operations and will require committee action.

Since Dave Stronck has indicated he will not be attending the NARST meeting in Boston, I have taken the liberty of setting up a tentative meeting time: Thursday, April 10, 7:00 p.m., my hotel room at the Park Plaza. This schedule will allow time for discussion and action prior to the NARST Executive Board meeting scheduled for Sunday morning.

It is my understanding that a simple majority (3) is needed to conduct committee business; however absent members may express their opinions on the enclosed motions prior to the April 10 committee meeting.

Please review these materials and contact me if you are not going to attend the meeting in Boston.

cc: Jack Renner ✓
Stan Helgeson

JAS:tt

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NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

PUBLICATIONS ADVISORY COMMITTEE MEETING

APRIL 11, 1980

* * * * * *

I. Research classifications presently used in JRST (Attachment A).

II. Changing the section title, "Position Papers" (Attachment B).

III. New "Guidelines to Contributors" (Attachment C).

IV. Some new ideas for the Journal (Attachments B, D).

V. Editorial Board Assignments (Attachment E).

VI. New Business

PUBLICATIONS ADVISORY COMMITTEE

ATTACHMENT A

Background

Two of the major sections in the Journal deal with empirical studies on science teaching. These sections are called "Research Papers" (RP) and "Research Reports" (RR). The current "Guidelines to Contributors" describe RP's as controlled experiments, surveys, status studies, correlational studies, or clinical studies and RR's as pilot studies, replication studies, or investigations that lack a well-defined conceptual base.

Problem

The distinction between RP's and RR's requires further clarification. Both sections include empirical studies on science teaching; the major difference between the two (other than manuscript length) appearing to be the quality of the research reported. The decision to publish manuscripts as RP's or RR's appear to be arbitrary. There are some members who view the RR section as a dumping ground for marginal papers--an indictment supported by the guidelines' statement, "investigations that lack a well-defined conceptual base" and the fact that many manuscripts which ostensibly fit into the RP category (surveys, status studies, etc.) end up as RR's. The end result is a mish-mash of quality and marginal research studies across both the RP and RR sections. This, I feel, diminishes the overall quality of the Journal.

There is a second dimension to this problem which is much more subtle, yet far more pervasive in the NARST and the Journal - - "What is research?" Past volumes of JRST and the track record of rejections suggest that the NARST has a rather narrow view of research, i.e., empirical studies in which quantitative data are collected and analyzed. Almost nonexistent in past volumes are historical research papers or library research studies (one form of which is the popular meta-analysis procedure suggested by Glass).

Proposal

I propose that the categories "Research Papers" and "Research Reports" be eliminated in favor of the following:

Experimental Research Reports - Studies in which one or more factors are systematically varied according to some preconceived plan in order to determine the effects of this variation on certain responding variables. In studies of this type it must be clear that the researcher had sufficient control over at least one factor to establish two or more levels of treatment in the experimental design. In such articles readers expect to find a conceptual base from the related research for the questions studied, a description of the procedures followed including a specification of the independent variables and the experimental conditions, the findings, the conclusions, and implications of the findings for science teaching.

Descriptive Research Papers - Studies in which independent variables are not directly and systematically varied. Included in this section are surveys, status studies, correlational studies, historical research, case studies, instrument development research, and library research (meta-analysis studies).

NOTE: Authors submitting manuscripts for consideration as an "Experimental Study Report" or a "Descriptive Research Paper" should adhere closely to the specifications given in Chapter 1 (pp. 11-22), "Content and Organization of a Manuscript" of the APA Publication Manual.

Motion

. . . . that the present categories, "Research Papers" and "Research Reports" and their descriptions as published in the "Guidelines to Contributors" be eliminated in favor of the categories, "Experimental Research Reports" and "Descriptive Research Papers" and that these new categories and their descriptions be implemented in the Journal as soon as it is convenient with the publisher, John Wiley & Sons.

PUBLICATIONS ADVISORY COMMITTEE

ATTACHMENT B

Background

The Journal section entitled "Position Papers" is described as "articles about research in science teaching." The "Guidelines to Contributors" characterize this section as "papers that present (a) theoretical formulations appropriate to research in science teaching, or (b) a review of the literature in an area." Generally, the guidelines imply that scholarly papers of a non-empirical nature are appropriate for this section.

Problem

The number of manuscripts submitted for review as a Position Paper has not been very great over the past several years. And of those published, most have taken a very similar form (i.e., identification of an issue in science education, and the defense of a position on that issue). Papers describing new models, paradigms, typologies, theories, etc. have been sparse, if non-existent, in past volumes. I contend that one of the reasons for the lack of manuscripts submitted for consideration in this section is the heading, "Position Papers." Even though the guidelines map out a much broader field of scholarly activity, the section heading and the pattern of published manuscripts suggest a much narrower view.

Proposal

The Position Paper Section has the potential of being one of the most interesting parts of the Journal; it can provide the forum for new and exciting research ideas. To stimulate manuscripts for this section, I propose that the section heading be changed from "Position Papers" to "Perspectives on Science Teaching" and that position papers be added as one type of a "Perspective's" paper.

Motion

. . . . that the section heading "Position Papers" be changed to "Perspectives on Science Teaching" and that position papers be added to the section as one type of "Perspectives" paper.

Revised

PUBLICATIONS ADVISORY COMMITTEE

ATTACHMENT C

Motion

. . . . that the "Guidelines to Contributors" be ammended as follows:

Several types of scholarly papers are within the Journal's domain:

1. Experimental Research Reports

Reports of studies in which one or more factors are systematically varied according to some preconceived plan in order to determine the effects of this variation on certain responding variables. In studies of this type it must be clear that the researcher had sufficient control over at least one factor to establish two or more levels of treatment in the experimental design. In such articles readers expect to find a conceptual base from the related research for the questions studied, a description of the procedures followed including a specification of the independent variables and the experimental conditions, the findings, the conclusions, and implications of the findings for science teaching.

2. Descriptive Research Papers

Studies in which independent variables are not directly and systematically varied. Included in this section are surveys, status studies, correlational studies, historical research, case studies, instrument development research, and library research (meta-analysis studies.)

3. Perspectives on Science Teaching

Articles about research in science teaching. The broad term "about research" characterizes papers that present (a) theoretical formulations appropriate to research in science teaching, (b) a critical review of the literature in an area, or (c) a defense of a position regarding an issue in science education. The content and organization of such manuscripts will differ from that which is followed for manuscripts in the research sections.

(a) Theoretical formulations may include analogies or models, paradigms, typologies, and theories related to research on science teaching. To be appropriate to research, theoretical formulations should be generalizable to a whole class of events or processes and should be capable of being tested empirically. Articles that suggest the need for such formulations, conceptual or methodological, also will be considered.

(b) A review of literature should state clearly the nature, scope, and significance of the problem or topic on which the review focuses. The paper should summarize, discuss, and synthesize the investigations involved. Trends should be identified, along with aspects of the problem which have not yet been clarified by research. Conclusions should be stated. A review that draws on investigations from other disciplines should make clear the implicit or potential relevance of such research for science teaching.

(c) A position paper should define an issue, cite and briefly summarize (an) alternative position(s) on the issue, develop a position on the issue, and describe the implications of that position for science teaching.

4. Comments and Criticism

Critiques of previous publications in the Journal are included within this section. When a critique is submitted, the Editor will send a copy to the author(s) of the original article(s) with an invitation to respond. The author(s) will be asked to respond to the critique within three weeks. A comment and its response will be considered for publication in the same Journal issue.

PUBLICATIONS ADVISORY COMMITTEE

ATTACHMENT D

NEW IDEAS FOR THE JOURNAL

I. Theme issues of JRST - One issue per volume devoted to a theme with articles drawn from the pool of papers delivered at the annual meeting and reactions provided by key researchers from the science education community. To facilitate participation, the theme for each subsequent issue could be decided and announced at the annual meeting each year in advance. The theme issue could be published as early as Issue 5 of each year. Consideration might be given to the idea of a "guest editor" for the special theme issue.

II. Invited Papers - A broad-based policy wherein researchers are invited to submit manuscripts which summarize and/or synthesize research in selected areas. For example, a call for a meta-analysis, a critical review/synthesis paper, an historical treatment of a selected topic, or a "comments and criticism" of a submitted paper might be issued to the research community as a whole or to an individual or small group. Topics and/or individuals to address the topics could be suggested to the Editor by the Publications Advisory Committee or some small group.

III. An Editor's Page - Providing a forum for the expression of ideas relating to research in science teaching--doing it, reading it, writing it, discussing it, etc. For example, excerpts from the enclosed paper might be presented on the Editor's Page.

Motions

1) . . . . that one issue per volume of the Journal be devoted to a theme derived from papers delivered to the annual meeting of the NARST, and

. . . . that the publications Advisory Committee take the responsibility of identifying the theme for each special issue and announcing the same to the membership at the annual meeting, and

. . . . that a "guest editor" be appointed by the Publications Advisory Committee and be given the responsibility of editing, soliciting feedback and generally organizing the special issue.

2) . . . . that the Editor be empowered to solicit "Comments and Criticisms" of selected manuscripts and,

. . . . that the Editor be empowered to solicit manuscripts dealing with critical reviews, and

. . . . that the Editor be empowered to solicit manuscripts dealing with meta-analyses of research in selected areas, historical studies, and other scholarly assignments following the recommendation of the Publication's Advisory Committee.

PUBLICATIONS ADVISORY COMMITTEE

ATTACHMENT E

Background

Editorial Advisory Board members currently serve 4 years terms with a "no succession" provision applicable to consecutive terms only. This policy was implemented several years ago to ensure maximum opportunity for membership involvement on the Board and to guard against concentrating power over publications in the hands of a few. The 5 year term of the Editor is consistent with this policy.

Problem

The Editorial Advisory Board is an extension of the editor's office and, as such, should be responsible to the Editor. The current 4 year term with its no succession provision has some distinct drawbacks. For example, a board member who for one reason or another finds it is difficult to review manuscripts promptly and thoroughly feels locked into a term and is not likely to resign. Manuscripts then either accumulate in this person's files or the Editor ceases to send manuscripts for review. This results in poor turn-around on accumulated manuscripts or an overload of manuscripts on other reviewers because of the finite size of the Editorial Board. Considering that all board members are contributing reviews as a service to the organization and the Editor, it is awkward for either the NARST Board or the Editor to take action against any Editorial Board member.

Proposal

In order to facilitate prompt and thorough manuscript reviews necessary for efficient Journal operation, I propose the following changes in Editorial Advisory Board Assignment:

(1) Reduce current 4 year terms to 2 years terms
(2) Suspend the "no succession" rule, but limit Board members to 2 successive terms
(3) Acknowledge the input of additional reviewers in the Journal (by issue or volume) as they are used.

Motions

1) . . . . that terms for Editorial Board Members be fixed at 2 years with the stipulation that no member may serve more than two successive terms, and that said policy become effective for Board members newly appointed at the Fall, 1980 meeting of the NARST Executive Board.

2) . . . . that all persons who provide reviews in addition to members of the Editorial Advisory Board have their names published in the last issue of each volume in recognition of their service.

MEMO TO: NARST Executive Board

FROM: James A. Shymansky, Editor, Journal of Research in Science Teaching

Re: Annual Report of the Journal Editor

I. Area of Concern and Presidential Charge.

1. Execute policies recommended by the Publication Advisory Committee and approved by the NARST Board of Directors.

2. Continue working relationships with Editorial Advisory Board.

3. Work with Wiley to facilitate the printing and distribution of the Journal.

4. Recommend changes to the publication Advisory Committee for their approval prior to submission to NARST Board of Directors

II. Activities

Before proceeding to the Journal business of manuscript flow, review, and publication, I would like to take this opportunity to express my sincere thanks to David Butts for making the transition of editorships a trauma-free event. He not only supplied me with a highly organized and systematic review format, he provided personal guidance and insights on numerous occasions which have been invaluable to me in these first nine months. Indeed the NARST membership has been fortunate to have had David as Journal editor for the past five years.

a. Working Relationship with Editorial Advisory Board

The Editorial Advisory Board is to be commended for their prompt, critical reviews. Their dilligent efforts have greatly facilitated the smooth transition of editorships this past year. (Please see Attachment A for membership of the current Editorial Advisory Board and Attachment B for complete data on manuscript flow).

b. Working Relationship with Wiley

The staff at John Wiley & Sons, Inc. have been extremely cooperative during the editorship transition. A special thanks is due to Allan Wittman and Mayda Rumberg. They have supplied needed information promptly and courteously on numerous occasions during the past nine months.

Circulation on JRST totalled 2136 during 1979 (706 member and 1430 non-member subscriptions). Non-member subscribers will pay $38.00 in 1980 but subscription prices for NARST members will remain at $17.50 per volume.

Based on non-member subscriptions in 1979 (N = 1430), the NARST will receive a royalty check in the amount of $1354.50 from John Wiley & Sons, Inc.

EDITORIAL ADVISORY BOARD

VOLUME 17

James A. Shymansky, Editor

John E. Penick, Associate Editor

MEMBERS	APPOINTED	TERMINATION
Aikenhead	Jan 1, 1973	Dec 31, 1982
Anderson	Jan 1, 1979	Dec 31, 1982
Bybee	Jan 1, 1980	Dec 31, 1983
Forsyth	Jan 1, 1980	Dec 31, 1983
Hall	Jan 1, 1974	Dec 31, 1981
Holiday	Jan 1, 1980	Dec 31, 1983
Ivany	Jan 1, 1970	Dec 31, 1980
Koran	Jan 1, 1974	Dec 31, 1982
Krockover	Jan 1, 1978	Dec 31, 1981
LaShier	Jan 1, 1978	Dec 31, 1981
Lawson	Jan 1, 1980	Dec 31, 1983
Linn	Jan 1, 1980	Dec 31, 1983
Peterson	Jan 1, 1974	Dec 31, 1981
Raven	Jan 1, 1971	Dec 31, 1980
Shrigley	Jan 1, 1980	Dec 31, 1983
Smith	Jan 1, 1977	Dec 31, 1980
Yeany	Jan 1, 1980	Dec 31, 1983

EDITORIAL ADVISORY BOARD ACTIVITY

July 1, 1979 - March 31, 1980

MEMBER	MANUSCRIPT OUTSTANDING	MANUSCRIPT REVIEWED
Aikenhead	1	8
Anderson	2	9
Bybee	0	4
Forsyth	1	5
Hall	0	12
Holiday	1	4
Ivany	3	8
Koran	2	10
Krockover	2	11
LaShier	2	11
Lawson	1	3
Linn	1	3
Peterson	2	8
Raven	2	9
Shrigley	2	2
Smith	3	3
Yeany	3	2

Average Review Time: 25 days

Range of Review Time: $6 \leq R.T \leq 70$

MANUSCRIPT FLOW

	9/74-8/75	9/75-8/76	9/76-8/77	9/77-8/78	10/78-3/80	* 9/79-3/80
A. Manuscripts Received	133	127	117	130	159	93
B. Manuscripts Rejected	27	9	10	5	7	17
C. Manuscripts in Review	34	42	25	9	22	57 (40)
MSS in Revision						17
D. Manuscripts to Wiley	72	76	82	116	130	20
1. Position Papers	1	5	4	6	8	1
2. Research Papers	40	21	14	26	29	13
3. Research Reports	28	39	52	76	83	3
4. Comments	3	11	11	8	10	3
5. Book Reviews	0	0	1	0	0	0
E. Manuscript Acceptance Rate	54%	59%	70%	89%	82%	21.5%
F. Manuscript Rejection Rate	20%	7%	8%	4%	4%	18%

* Shymansky Editorship

8. Exhibiting at the Conventions of other Science Education Organizations.

People attached letter sent to.

Dr. Dale M. Shafer
Executive Secretary
Stright Hall
P.O. Box 164
Indiana Univ. of Pennsylvania
Indiana, PA 15705

Dr. Len Krause
President, NSTA
National Science Teachers
Association
1742 Connecticut Ave. NW
Washington, D.C. 20009

Dr. Manert H. Kennedy
President, NABT
B.S.C.S.
P.O. Box 930
Boulder, CO 80302

Dr. James Gerhart
President, AAPT
Department of Physics
University of Washington
Seattle, WA 98195

cc: Dr. Robert G. Fuller
President-Elect, AAPT
Department of Physics &
Astronomy
University of Nebraska
Lincoln, NB 68588

Founded 1928
Incorporated 1961

Sponsoring The Journal of Research in Science Teaching
Affiliated with NSTA, AAAS and ICASE

National Association for Research in Science Teaching

Memorial Hall Drake University Des Moines, Iowa · 50311

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Dr. Paul Dunn (1983)
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Des Moines, IA 50311

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Dr. John W. Renner
Physical Sciences Ctr. Room 323
University of Oklahoma
Norman, OK 73019

PRESIDENT-ELECT
Dr. Stanley Helgeson
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210

IMMEDIATE PAST PRESIDENT
Dr. [illegible]
Department of Science Education
The University of Georgia
Athens, GA 30602

BOARD MEMBERS
[illegible] (1980)
[illegible]

[illegible] (1982)
[illegible] Education
[illegible]

Dr. [illegible] (1981)
[illegible]

[illegible] Physics
[illegible]

[illegible]

[illegible] Education
[illegible]

[illegible] (1979)

RESEARCH COORDINATOR
Dr. Arthur White (1980)
[illegible] Education
[illegible] University

[illegible]
Dr. [illegible]
[illegible] Bldg.

[illegible]
[illegible] Teachers Association
[illegible] Avenue, NW
Washington, DC 20009

Dear Mr./Ms. President:

At regional and national meetings of your organization, we would like to have some space to present our organization to your members. We would like to display some of our publications, have one or two of our members in attendance to answer questions, and make membership application forms available. I am assuming that the non-commercial character of our organization would exempt us from the commercial exhibitors rates.

If your organization can extend the NARST this courtesy, each year the president of your organization will be informed by the president of the NARST of who represent the NARST at your various meetings will be.

We sincerely hope your organization can cooperate with us. The NARST does not have commercial exhibits at its national meeting. If, however, your organization would wish to set up a membership display in the registration area, that can be arranged.

Thank you for your consideration.

Sincerely,

John W. Renner
President

JWR/aw
cc: Board Members

American Association of Physics Teachers

Executive Office
Graduate Physics Building, SUNY at Stony Brook
Stony Brook, N.Y. 11794
(516) 246-6840

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James B. Gerhart
Dept. of Physics
University of Washington
Seattle, WA 98195

President-Elect
Robert G. Fuller
Dept. of Physics & Astronomy
University of Nebraska-Lincoln
Lincoln, NE 68588

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Physics Dept.
Southwest Texas Junior College
Uvalde, TX 78801

Executive Officer
Arnold A. Strassenburg
AAPT Executive Office
SUNY at Stony Brook
Stony Brook, NY 11794

January 4, 1980

John W. Renner, President
National Association for Research
in Science Teaching
Physical Sciences Center Room 323
University of Oklahoma
Norman, Oklahoma 73019

Dear Jack:

Your proposal for NARST and AAPT to exchange association display areas at national meetings strikes me as desireable and probably something that can be accomplished without too much difficulty. AAPT has had an arrangement of this sort with NSTA.

I will present the proposal to our Executive Board two weeks hence. I am uncertain at this point as to whether our contractual obligations relating to exhibits and displays at our Annual Meeting are involved here. I hope not, but we will have to check.

Since you are going to be in Chicago with us, I'll be able to tell you something more definite then.

Sincerely,

James B. Gerhart

cc: A. A. Strassenburg

American Association of Physics Teachers

Executive Office
Graduate Physics Building, SUNY at Stony Brook
Stony Brook, N.Y. 11794
(516) 246-6840

February 5, 1980

President
James B. Gerhart
Dept. of Physics
University of Washington
Seattle, WA 98195

President-Elect
Robert G. Fuller
Dept. of Physics & Astronomy
University of Nebraska-Lincoln
Lincoln, NE 68588

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Southwest Texas Junior College
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Executive Officer
Arnold A. Strassenburg
AAPT Executive Office
SUNY at Stony Brook
Stony Brook, NY 11794

Professor John W. Renner, President
National Association for Research
in Science Teaching
Physical Sciences Center Room 323
University of Oklahoma
Norman, OK 73019

Dear Jack:

I have before me a copy of Jim Gerhart's letter to you dated January 4th. As you probably know, Jim Gerhart was recently hospitalized and was unable to attend the January Winter meeting of the AAPT/APS. As a result, he did not discuss with the Executive Board your proposal to exchange exhibits between AAPT and NARST. On behalf of AAPT, let me say that I would be only too happy to implement the suggestion, and I believe I have the power to do so without further Executive Board action. I suggest that you plan to submit materials for display at our Summer meeting which will be held on the campus of Rensselaer Polytechnic Institute in Troy, New York June 25-27. I will take responsibilty for the display of whatever you send. In exchange, I would be happy to hear from you the date of the next national NARST meeting, and some particulars about the location and expected attendence. We might either send materials for you to display or possibly send one of our members to man a display booth on our behalf.

I certainly feel that this is a fine step toward stronger cooperation between our two Societies and I welcome it.

Sincerely yours,

Arnie

Arnold A. Strassenburg

AAS/mgu

February 15, 1980

Dr. Arnold A. Strissenburg
Executive Officer
American Association of Physics Teachers
Department of Physics
SUNY at Stony Brook
Stony Brook, New York 11794

Dear Arnie:

Thank you for your letter of February 5, 1980. I am forwarding it on to the Board of Directors, and I know we will take action on it at the Board Meeting in Boston in April. I appreciate your concern and your attention to the matter.

I was sorry I did not have more time in Chicago at the AAPT meeting to find you and Bob Fuller and sit down for a pleasant chat. I hope that we can do that in the near future.

Sincerely,

John W. Renner
President

JWR:sjl

The National Association of Biology Teachers, Inc.

1979

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ACTING EXECUTIVE DIRECTOR

Mrs. Susan Varney Nolan
NABT Executive Offices
11250 Roger Bacon Drive
Reston, VA 22090

December 12, 1979

Dr. John W. Renner
President, NARST
Memorial Hall
Drake University
Des Moines, IA 50311

Dear Dr. Renner:

Thank you for your letter of December 5 inquiring about exhibiting space at the NABT National Convention. We have a standard policy that makes available exhibiting space to nonprofit, tax-exempt groups such as NARST at a substantially reduced fee.

By copy of this letter and yours I am informing Mrs. Sue Nolan, Exhibits Manager for NABT, of your request.

Sincerely,

Manert H. Kennedy
President

mk/ec
c S. Nolan

SCHOOL SCIENCE
AND
MATHEMATICS ASSOCIATION,
INCORPORATED

SSMA

EXECUTIVE OFFICE: P.O. BOX 1614 - INDIANA UNIVERSITY OF PENNSYLVANIA - INDIANA, PENNSYLVANIA 15701 - 412-357-3000

December 17, 1979

Dr. John W. Renner
Physical Sciences Center Room 323
University of Oklahoma
Norman, OK 73019

Dear Jack:

How good it was to again hear from you! I had secretly hoped that you might make the SSMA meeting in Kansas City in November at which time we could have reviewed the good old days.

I have forwarded your letter for free exhibit space for NARST at our conventions to our current president, Dr. Barbara Thomson at the Ohio State University. I presume that Barbara will want to bring this matter to the attention of our board of directors when we meet for the next time in March 1980. As soon as a decision is reached, you will be hearing from us concerning this request.

I often think of you and the fine educational experience I had at the University of Oklahoma. Please let me extend to you and your family my sincerest wish for a joyous holiday season.

Sincerely,

Dale

Dale M. Shafer
Executive Secretary

DMS:mas

cc: Barbara Thomson

NATIONAL
SCIENCE
TEACHERS
ASSOCIATION

AN AFFILIATE OF
THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

1742 CONNECTICUT AVENUE, N.W. WASHINGTON, D.C. 20009 • TELEPHONE: AREA CODE 202 • 265-4150

December 13, 1979

Dr. John Renner
409 N. Mercedes Drive
Norman, Oklahoma 73069

Dear John:

With respect to your December 5 letter which requests space for displays at the NSTA regional and national meetings, I plan to review your request with the Executive Committee during our January 11-13, 1980 meeting in Washington, D.C.

We have been experiencing problems for some time because of numerous requests we get from our State Chapters and from affiliated county level groups to set up membership booths and to display various of their materials. Frankly, we find that accommodating these requests detracts considerably from our membership efforts to build the NSTA body.

It is now my intention to explore with the Executive Committee the feasibility of continuing this practice of accommodation. Of course I also will request the Conventions Committee to consider the situation.

Yours very cordially,

Leonard M. Krause
NSTA President, 1979-80

cc: Clare Everhart

LK:sp

NATIONAL SCIENCE TEACHERS ASSOCIATION

AN AFFILIATE OF
THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

1742 CONNECTICUT AVENUE, N.W. WASHINGTON, D.C. 20009 • TELEPHONE: AREA CODE 202 • 265-4150

January 22, 1980

Mr. John W. Renner
409 N. Mercedes Drive
Norman, Oklahoma 73069

Dear John:

Quoted below is motion 18 from our recently concluded Executive Committee meeting:

> "In response to a request from John Renner, President of NARST, and the ensuing discussion, it was moved, seconded and approved to charge President Len Krause to respond to the NARST President's request that space will be made available to NARST in the curriculum materials center area of the convention to display materials, answer questions, and make application forms available at area and national conventions."

It is our considered response to your letter requesting exhibit space during the NSTA 1980 national convention in Anaheim. Please be in contact with: Phillip Lucero, 550 Del Rey Drive, Placentia, CA 92670, Chairman of the Curriculum Materials Center, about your needs.

Sincerely,

Len

Dr. Leonard Krause
NSTA President 1979-80

cc: Phillip Lucero
Cliff Hofwolt
Clare Everhart
Bill Aldridge

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NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

Memorial Hall Drake University Des Moines, Iowa 50311

EXECUTIVE SECRETARY
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Columbus, OH 43210

IMMEDIATE PAST PRESIDENT
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Department of Science Education
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University of Iowa
Iowa City, IA 52242

NSTA REPRESENTATIVE
Dr. Lee Hansen (1980)
National Science Teachers Association
1742 Connecticut Avenue, NW
Washington, DC 20009

TO: Board Members of the NARST DATE: November 26, 1979

FR: Jack Renner

SUBJ: Carrying out instructions given me at the November 1, 2, 1979, meeting in Kansas City.

You will find enclosed copies of all the letters you instructed me to write to various persons. Ron Cleminson and I have yet to complete the operational details of contacting each state membership director but that should be done soon.

You also directed me to prepare a draft of guidelines to be used by members of the NARST who accept membership on the area planning committees of the NSTA. You will find a draft attached. Please comment right on the draft and return it to me. Len Krause will get a copy as a Board Member of the NARST. I have also sent a copy to the Convention Coordinator of the NSTA, Clare Everhart.

Hope to have your comments soon.

JWR/aw
enc.

DRAFT I

GUIDELINES FOR THE PARTICIPATION OF THE NARST IN THE REGIONAL CONVENTIONS OF THE NSTA

1. Beginning in 1980-81, the President-Elect of the NARST will find out where the regional conventions of the NSTA will be held. A member of the NARST from each area will then be appointed to represent the NARST on each NSTA area convention committee and so inform the President, Executive Director, and Convention Coordinator of the NSTA.

2. In addition to serving on the area convention planning committees, the representative of the NARST will construct a display table that publicizes the NARST. That display table will be attended by a member of the NARST as much as possible during the area convention.

3. The representative of the NARST to each area convention planning committee may organize a session (or sessions) which focuses on research in science teaching. That session(s) will be listed in the program as jointly sponsored by the NARST and the NSTA.

4. Each representative of the NARST to the area convention planning committees of the NSTA will inform the President of the NARST of the extent of the involvement of the NARST within 30 days after the area convention of the NSTA has been held.

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November 26, 1979

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Dr. Jim Rhodes (1980)
National Science Teachers Association
1742 Connecticut Avenue, NW
Washington, DC 20009

Ms. Clare Everhart
Convention Coordinator
NSTA
1742 Connecticut Ave. NW
Washington, D.C. 20009

Dear Ms. Everhart:

The Board of the NARST is anxious that all parties concerned understand the role and responsibilities of the representatives of the NARST to the area convention planning committees of the NSTA. At its November meeting the Board of the NARST directed me to draft guidelines for those representatives. You will find a draft attached. If you have comments and/or suggestions, please contact me as soon as possible. You may write your comments directly on the attached copy if you wish. Thank you for your consideration.

Sincerely,

John W. Renner
President

JWR/aw
Enclosure
cc: Board of the NARST

9. Standing Committee Reports

MEMORANDUM

March 20, 1980

TO: NARST Board

SUBJECT: JRST Award Committee Report

FROM: Donald E. Riechard, Chairman, JRST Award Committee
Division of Educational Studies
Emory University
Atlanta, GA 30322 phone: (404) 329-6468

Committee Members: Eileen Mays, William Ritz, Richard Campbell, Eugene Chiappetta, Harold Jaus, and Dan Jones

The JRST Award Committee has completed its evaluation of the six issues of JRST, volume 16. One member, Dr. Eileen Mays, did not participate in the procedure. However, since six persons did finish the total of volume 16, a fair and complete evaluation is assumed.

After completing initial evaluations and conducting a run-off among the top four articles, the Committee was evenly divided on its choice for the "best" article. Therefore, we recommend that the JRST Award be made to both articles. The articles are:

Author(s)	Abbreviated Title	Issue
Staver and Gabel	The Development and Construct....	6
Deture	Relative Effects of Modeling....	6

On this date, I notified Executive Secretary, Dr. Paul Joslin, by phone of the Committee's decision. Dr. Joslin will have the JRST Award certificates prepared. I am also in the process of notifying each winner of the award and its presentation at the award's luncheon, Saturday, April 12.

Recommendations

1. Obtain a reaffirmation of each member's intent to remain on the Committee and participate in its work.

2. Appoint a new chairperson who is familiar with the Committee's functioning, its work load, its problems, etc. Such a procedure would seem to facilitate getting the work started and keeping it flowing smoothly over the year. I would be most happy to pass along materials and information to the new chair just as my predecessor did (thank goodness!).

Personal Comment:

My term as chair of the Committee ends this year and it has been a pleasure serving our organization. Each president with whom I have served has been very cooperative and understanding. A special thanks goes to Dr. Joslin who seems to keep the whole thing together.

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NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

Memorial Hall Drake University Des Moines, Iowa 50311

November 18, 1979

212-325-7566
Dr. Ellen Stephanie Simmons
4315 Martha Avenue
Woodlawn Heights
New York, NY 10470

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Memorial Hall
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[illegible]
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Dr. [illegible] (1981)
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[illegible]

Dr. [illegible] (1982)
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[illegible]

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[illegible]

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National Science Teachers Association
1742 Connecticut Avenue, NW
Washington, DC 20009

Dr. John W. Renner
President
National Association for Research in Science Teaching
Physical Science Center, Room 323
University of Oklahoma
Norman, OK 73019

Dear John:

As per telephone conversation on Tuesday, I would like to clarify my September 26th letter to you. The only one paper to be repeated at the 1980 NARST Convention in Boston will be the winner of the Outstanding Paper Award. Furthermore, this author, of the Outstanding Paper Award, will be asked to present his/her paper in 1981 at the NSTA Convention in New York City along with four other papers having practical application for the classroom teacher.

Please find enclosed photocopies of my letters to Leonard Krause and Paul Jostin.
Also I would like to form a motion for the Board to consider:

> Since the National Association for Research in Science Teaching has as its primary function research, and that an Outstanding Paper Award based on empirical research is awarded, I propose that NARST consider granting a second award for papers with psychological, philosophical, or other non-emperical approach presented at NARST. Hence, there would be two Outstanding Paper Awards, one based on emperical research and the other based on a non-emperical approach.

Finally, I would like you to know that to date, I have not received the evaluation materials--"Science Education: Accomplishments and Needs".

With my best wishes always.

Sincerely,

Ellen S. Simmons

Ellen S. Simmons, Ph.D.
Chairperson NARST Awards Committee

ESS:CAA

Enclosure

cc: Dr. Stanley Helgeson

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Dr. Len Krause (1980)
National Science Teachers Association
1742 Connecticut Avenue, NW
Washington, DC 20009

Dr. Paul H. Joslin
Executive Secretary
National Association for Research in Science Teaching
Memorial Hall
Drake University
Des Moines, IA 50311

Dear Paul:

The following four papers have been identified for their practical application for the classroom teacher:

1. "Concrete and Formal Instruction" - Schneider & Renner.
2. "The Mole Concept: Investigation of an Hierarchical Model" -- Griffiths & Kass.
3. "The Effects of Diagnosis, Remediation, and Locus of Control on Achievement, Retention, and Attitude of Middle School Science Students" - Saunders & Yeany.
4. "The Effects of a Diagnostic-Prescriptive Teaching Strategy on the Achievement and Attitudes of High School Biology Students" - Long, Okey & Yeany.

The following paper is the winner of the NARST Outstanding Paper Award:

1. "A Meta-Analysis of Selected Advance Organizer Research Reports From 1960-1977" - Kozlow & White.

Kindly prepare the certificates and order the plaques.

Sincerely,

Ellen S. Simmons, Ph.D.
Chairperson NARST Awards Committee

ESS:CAA

Enclosure

cc: Dr. Stanley Helgeson
Dr. John Renner

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November 14, 1979

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University of Iowa
Iowa City, IA 52242

NSTA REPRESENTATIVE
Dr. Len Krause (1980)
National Science Teachers Association
1742 Connecticut Avenue, NW
Washington, DC 20009

Dr. Leonard M. Krause
NSTA President - Elect
School District of Philadelphia
Division of Science Education
Administration Building
Room 305, 21st & The Parkway
Philadelphia, Pennsylvania 19103

Dear Mr. Krause:

I need to contact The Program Chairperson for the 1981 NSTA Convention in New York City to arrange for the presentation of five papers. Kindly return my stamped self-addressed postcard.

Sincerely,

Ellen S. Simmons

Ellen S. Simmons, Ph.D.
Chairperson NARST Awards Committee

ESS:caa

Enclosure

cc: Dr. John W. Renner
Dr. Stanley Helgeson

MEMPHIS STATE UNIVERSITY

Memorandum

To: John W. Renner, President, NARST

Ron Cleminson (ed)

From: Membership Committee; Ron W. Cleminson, Chairman; Charlotte M. Boener, Glen Clark, Herbert G. Cohen, John T. Norman, Leonard Simons, Dennie Sunal, and Chris A. Pouler

Subject: Final Report, 1979-1980

Date: March 24, 1980

The activities of the 1979-80 membership committee were as follows:

Enclosure #1 outlines the procedure; it is designed for the membership coordinators who have already been identified. It was mailed in September, 1979.

Enclosure #2 is designed for membership coordinators we will attempt to identify this year. These were also mailed in September.

Enclosure #3 is the nomination form. Upon receiving the names from membership coordinators, officers, members, etc., we mailed a personal letter (Enclosure #4) inviting the nominee to join NARST. The envelope also included a NARST brochure and application form.

Enclosure #5 was sent to the membership coordinators who did not respond to the initial letter. This was mailed on the first of November, 1979.

Enclosure #6, entitled AETS Membership by State, serves to identify the number of members by state, Canada, and foreign countries. Note that we have five new members in North Carolina, New York, and Pennsylvania. The membership coordinators from these areas should receive certificates for their effort. They are: Paul B. Haunshell, 713 Greenwood Road, Chapel Hill, NC 27514, Rodney Doran, Department of Education, State University of New York, Amherst, NY 14260 and Chester E. Raun, Elementary Education, Temple University, Philadelphia, PA 19122. In addition, I would like to recommend that the membership coordinators from Arizona, Minnesota, and Oklahoma also receive a certificate of recognition. They are Herbert Cohen, Elementary Education, Arizona State University, Tempe, AZ 85280, Gene Gennaro, Curriculum and Instruction, University of Minnesota, Minneapolis, MN 55455, and John W. Renner, Science Education, University of Oklahoma, Norman, OK 73019.

Their names have been submitted to Paul Joslin. It is my understanding he will contact them and plan to have them attend the NARST luncheon in Boston to be recognized for their effort.

As chairman of the membership committee, we are continuing to mail information to prospective candidates. It is our plan for the membership drive to be an on-going process throughout the year. I have agreed to act as chairman of the committee for 1980-81.

September, 1979

As a NARST Membership Coordinator, we need your help!!

The task of increasing (and maintaining) the quality and significance of programs in the face of rising costs is a difficult problem. That's why we are asking you to again participate in our membership drive, a program designed to provide new members, new ideas, and a wider base of support for NARST.

Our 1979-80 Membership Drive is a concentrated effort to utilize our most valuable recruiting resources: our active NARST members. We ask that you use the enclosed nomination forms to provide the names of colleagues you think would be interested in NARST. We will send each nominee a letter extending an invitation to membership and indicate that he or she was nominated by you. Special recognition will be given next Spring at the National NARST meeting in Boston, Massachusetts to those Membership Coordinators who have a significant increase in membership in their respective areas (i.e., states, provinces, or countries).

Enclosed you will find ten (10) NARST brochures, application forms and nomination forms. If there are other members in your area, please call upon them to recommend individuals to you for NARST from their respective universities, colleges, school systems, etc. I have also enclosed the names of current NARST members from your area. Feel free to call upon them for assistance. When nominating individuals, please consider colleagues, graduate assistants, and science coordinators/consultants in your area. In addition, you might consider nominating appropriate junior college faculty members. If you need more membership materials, please write or call me at (901) 454-2373.

I strongly encourage you to represent NARST at your state science association meetings. You may want to schedule a session at a state meeting to inform science supervisors, teachers, etc. about NARST.

Again we need your help! We are counting on you to make this membership drive a success.

Sincerely,

Ron W. Cleminson, Chairman
Membership Committee

Enclosures

September, 1979

You have been identified as a NARST Membership Coordinator for (state, province or country). Please, seriously consider the opportunity to assist in our recruiting effort and accept the responsibility.

We need your help! The task of increasing (and maintaining) the quality and significance of programs in the face of rising costs is a difficult problem. That's why we are asking you to participate in our 1979-1980 Membership Drive, a program designed to provide new members, new ideas, and a wider base for support for NARST.

Our 1979-80 Membership Drive is a concentrated effort to utilize our most valuable recruiting resources: our active NARST members. We ask that you use the enclosed nomination forms to provide the names of colleagues you think would be interested in NARST. We will send each nominee a letter extending an invitation to membership and indicate that he or she was nominated by you. Special recognition will be given next Spring at the National NARST meeting in Boston, Massachusetts to those Membership Coordinators who have a significant increase in membership in their respective areas (i.e., states, provinces, or countries).

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I strongly encourage you to represent NARST at your state science association meetings. You may want to schedule a session at a state meeting to inform science supervisors, teachers, etc. about NARST.

We are counting on you to make this membership drive a success.

Sincerely,

Ron W. Cleminson, Chairman
Membership Committee

Enclosures

I would like to nominate the following for membership in NARST:

NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

NAME OF NARST MEMBERSHIP COORDINATOR_____

Please return form to: Ronald W. Cleminson, Chairman
NARST Membership Committee
Science Education Center
Dept. of Curr. & Instr.
Memphis State University
Memphis, TN 38152

THANK YOU

Nominated by:

As the Association's Membership Chairman, I am pleased to extend to you on behalf of the National Association for Research in Science Teaching (NARST) and its officers, a cordial invitation to become a member of our organization. The enclosed brochure contains an application form, as well as additional information about NARST.

We sincerely hope you will complete and return the application form and, thereby, join with many of your colleagues in promoting research and its utilization in science education.

Cordially,

Ronald W. Cleminson, Chairman
Membership Committee

Enclosures

Our NARST Membership Drive is now moving into its second month. As a membership coordinator, would you please use the enclosed nomination forms to provide us with the names of colleagues, graduate assistants and science coordinators/consultants in your area who you think would be interested in NARST. I will send each nominee a letter extending an invitation to join our organization and indicate that he or she was nominated by you. Also, special recognition will be given next Spring at our National NARST meeting in Boston to those Membership Coordinators who have a significant increase in membership in their respective areas (i.e., states, proviences, or countries).

We are counting on you to make our membership drive a success.

Sincerely,

Ronald W. Cleminson, Chairman
Membership Committee

Enclosures

AETS Membership by State

0....5....10...15..20...25..30...35...40...45...50...55..60...65...70...75..80...85

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(0)
——(3)
————(9) (2)
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——————————(27) (2)
—(2) (1)
————(9)
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——————(11)
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——(4)
—(2)

Canada has 43 members plus 3 new 1980 memberships.

All other countries have 41 members plus 2 new 1980 memberships.

TOTAL MEMBERSHIP: 665

PRELIMINARY PROPOSAL
Directorate for Science Education
Cover Page

FOR CONSIDERATION BY NSF ORGANIZATIONAL UNIT	PROGRAM ANNOUNCEMENT NUMBER: SE 80-55
RESEARCH IN SCIENCE EDUCATION	Proposal Number: R____ (To be assigned by NSF)

NAME OF SUBMITTING ORGANIZATION TO WHICH AWARD SHOULD BE MADE (INCLUDE BRANCH/CAMPUS/OTHER COMPONENTS)

The Ohio State University Research Foundation

ADDRESS OF ORGANIZATION (INCLUDE ZIP CODE)

1314 Kinnear Road
Columbus, OH 43212

TITLE OF PROPOSED PROJECT (10 word limit)

Impact of Research on Science Teaching

TOTAL REQUESTED FROM NSF:	PERIOD OF PROJECT OPERATION:
$134,363.00	Starting Date: February 1, 1981 Duration in Months: 12

PRINCIPAL INVESTIGATOR'S NAME AND SOCIAL SECURITY NO.* (Name only one person) (Dr.) ~~Prof., Mr., Ms.~~	PI PHONE NO. Area Code: 614
Arthur L. White 523-44-8648	Office: 422-4121 Home: 846-2046

PI DEPARTMENT	DISCIPLINE	PI ORGANIZATION
Education	Science and Mathematics	The Ohio State University

Characteristics of Study: Category I (II) (Circle one)
Subject Matter to be Studied Teaching Practices

FOR PROGRAM USE ONLY

CHECK ALL APPROPRIATE BOXES

- ☒ Early Adolescence
- ☒ Technology
- ☐ Women
- ☒ Cognition
- ☐ Continuing Education Component
- ☒ Minorities
- ☒ Physically Handicapped
- ☒ Science Literacy
- ☐ Other
- ☐ Informal Education Component

Determined by Participants

- ☐ Significant Development Component
- ☐ P.I. new to Science Education Research

TARGET POPULATION (Check all that apply)

- ☐ Pre-School
- ☒ Grades K-4
- ☒ Grades 5-8
- ☒ Grades 9-12
- ☐ Undergraduates
- ☐ Graduates
- ☐ Other

*Submission of social security numbers is voluntary and will not affect the organization's eligibility for an award. However, they are an integral part of the NSF information system and assist in processing the proposal. SSN solicited under NSF Act of 1950, as amended.

ABSTRACT: The purpose is to develop a mechanism for reducing the gap between science education research and practice. A research/communications network including teachers, researchers, and professional association representatives will be established for the purposes of communicating what is current knowledge, formulating and conducting research, increasing generalizability of research throughout the science education community. The network would include ten teacher-researcher teams. The project would begin with a conference for the purpose of establishing communication between the participants and for the identification and conceptualization of research questions. This conference will be followed by formalization and implementation of pilot studies at each site. The results of the pilots will be reported and reviewed at the second conference. Four of these pilot projects will be selected for refinement and replication throughout the network. The replication results and this research network process will be disseminated to the science education community.

PI SIGNATURE	DATE
Arthur L. White	3/12/80

IMPACT OF RESEARCH ON SCIENCE TEACHING

INTRODUCTION

An overarching concern in science education is the need for a stronger relation between research and practice in science teaching. There are a number of reasons why this relationship is not what we would hope. Four of the major factors which have a bearing on this problem are:

A. PERCEIVED IMPORTANCE OF RESEARCH RESULTS BY THE TEACHERS IN THE FIELD.

In many instances the communication between researchers and the public school persons has been a one way communication. Often teachers feel that researchers are making recommendations which are irrelevant to the needs in the classroom or which are not feasible.

B. STYLE AND EFFECTIVENESS OF COMMUNICATING IMPLICATIONS OF RESEARCH TO THE FIELD.

Communication between researchers and teachers concerning the implications of research to classroom practice has not been as effective as it might. Results and analysis of research are often presented in a style and language that are foreign to the teachers.

C. METHODS OF DISSEMINATION OF RESEARCH RESULTS AND THE IMPLICATIONS OF RESEARCH TO THE FIELD.

The usual methods for disseminating research findings are through research oriented journals and through conference presentations. These journals frequently are not readily accessible to the classroom teachers and often funds are not available for teachers to attend conferences.

D. INFREQUENCY OF CLASSROOM TEACHERS' INVOLVEMENT IN PLANNING AND DESIGNING RESEARCH.

Research studies are usually carried out at the university or collegiate level and a large percentage of these are doctoral student

dissertations. Classroom teachers are unlikely to be involved in designing, implementing, and reporting research studies unless enrolled in a degree program.

PURPOSE

It is the intent of this project to provide a link for communication and the facilitating activities that will help to reduce the gap between research and practice. Reducing this gap and enchancing two way communication will be achieved by establishing a network of science educators which includes teachers and researchers. The goals of this network of educators are to:

A. COMMUNICATE WHAT IS CURRENTLY KNOWN AND AVAILABLE RELEVANT TO THE NEEDS WITHIN THE FIELD OF SCIENCE EDUCATION.

The proposed network would provide a ready source of feedback to the science education community concerning current needs as perceived by teachers. The network, in cooperation with the ERIC/SMEAC Center at Ohio State University, would locate and communicate already existing information concerning specific solutions and materials relevant to the needs of concerned teachers.

B. FORMULATE AND CARRY OUT RESEARCH IN AREAS WHERE STUDIES INDICATE A NEED.

The network would identify researchers and teachers who have the interest and expertise necessary to design and conduct studies concerning problems for which more study is needed. These groups of individuals would be encouraged to develop prototypes for research studies which could then be replicated by others in the network.

C. INCREASE THE GENERALIZABILITY OF RESEARCH THROUGH BROAD REPLICATION.

The development and implementation of a research plan would be facilitated by the active involvement of research teams in the network. A

set of research procedures including sampling, testing, treatment, administration, and data analysis would be replicated at multiple sites to improve the external validity of the findings.

D. ESTABLISH DIALOGUE, COOPERATION, AND MUTUAL RESPECT AMONG SCIENCE EDUCATION PERSONS FOR THE PURPOSE OF BETTER MEETING THE NEEDS IN THE FIELD.

The joint efforts of teachers and researchers in identifying needs, planning and conducting research, and interpreting and disseminating results would enhance the relevance and application of the research findings for all persons involved in science education.

PRELIMINARY GROUNDWORK

The conceptualization of this project has grown out of a general concern expressed by members of the NSTA Research Committee at the June, 1978 NSTA committee workshops at the University of Maryland. This concern was for increasing the influence of classroom science teachers on science education research. Ultimately it was anticipated that increased teacher involvement would help to establish a greater relevance and credibility of research leading to the increased impact of research on practice.

Funds for pursuing this purpose were made available for NSTA (Action Grant Proposal), NARST (as a part of the annual budget), and by Ohio State University (in the form of small grants and release time). The project was developed as a cooperative effort between NSTA and NARST.

A needs assessment to determine the research concerns of secondary and elementary school science teachers was conducted. Reports of the needs assessment results were made in Atlanta (1979, NARST Meeting), Kansas City (1979, SSMA Meeting) and will be reported at Anaheim (1980, NSTA Meeting). The results of the needs assessment were also included in the 1979 Fall Newsletter for NARST members.

This preliminary proposal will be discussed and reviewed by the NSTA research committee at Anaheim and by the NARST board at the 1980 annual meetings in Boston. These reviews will be for the purpose of obtaining input for development of the formal proposal and for establishing procedures for identifying Level II and III participants.

DESIGN AND PROCEDURES

The conceptual framework in which the goals of this proposal will be accomplished is a three-level network. The proposed network is illustrated by Figure 1.

The center of the network diagram represents a nuclear group under the auspices of the NARST-NSTA Research Committees. This will be referred to as Level I of the network. The arrows signify two way exchange of information between Level I and science educators acting as coordinators of research efforts across the country. These coordinators are represented by Level II in the network and participate in a two way communication with teachers, administrators, and/or other educational practitioners. These practitioners are represented by Level III in the diagram.

Within this project, Level I will consist of four science educators (two directors and two project advisors). Level II will consist of ten research coordinators and Level III of ten classroom teachers. Level II and Level III persons from ten different states will comprise the research sites. Sites will be encouraged to involve other Level II and III types, but these will not be financed by this project. Five of the sites will focus on research questions of primary interest to elementary teachers and five on questions of primary interest to secondary teachers.

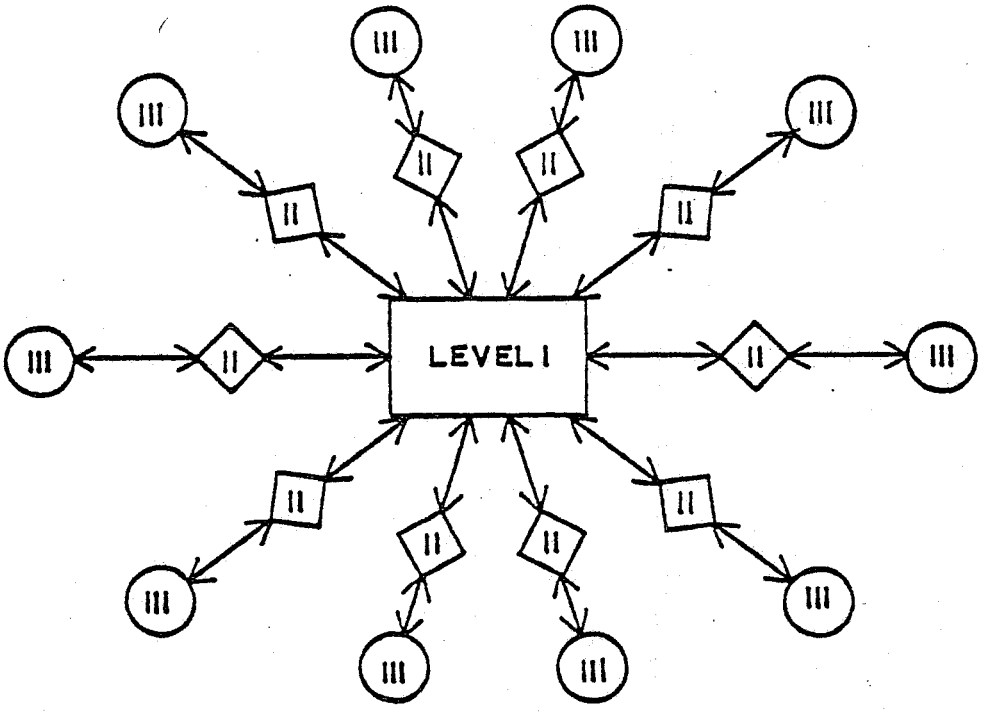


Figure 1

Functions of the Network Levels

The functions of Level I personnel include:

A. Coordinating the identification of the needs of educational practitioners for which research can be of assistance.

B. Facilitating the communication of research findings relevant to the needs of educational practitioners.

C. Stimulating the cooperative development of research studies relevant to needs of educational practitioners.

D. Maintaining long term communication and cooperation between all levels of the network.

The functions of Level II personnel include:

A. Providing a communication link between the educational practitioners (Level III) and the nuclear group (Level I).

B. Collecting data concerning needs of educational practitioners and transmitting the data to Level I.

C. Disseminating available information and results of research from Level I to the field (Level III).

D. Organizing a group of researchers and educational practitioners for cooperative research efforts.

A benefit for Level II personnel is the opportunity to engage in an integrated research effort that might otherwise be unavailable to them.

The functions of Level III personnel include:

A. Providing information and feedback concerning needs of the educational practitioners.

B. Actively participating with Level II people to design and carry out research.

C. Communicating results of research efforts back thru the network to other Level III units with similar needs and reporting at national and regional professional association meetings.

PROJECTED CALENDAR OF EVENTS

The projected calendar of events upon funding is as follows:

Project Begins (February, 1981)	- Final identification of Level II and Level III participants.
Conference 1 (February, 1981)	- Level I, II, and III personnel meet to review research and methodology, identify specific research areas, and design research studies for piloting.
Pilot Studies (March-May, 1981)	- Level II and Level III personnel initiate research prototypes and carry out pilot studies.

Site Visits (March-May, 1981)	- Level I personnel act as consultants through written communication and visitations.
Distribution of Pilot Study Results (May-June, 1981)	- Level II and Level III personnel write reports of their pilot research studies.
Conference - Pilot Review and Replication Selection (June, 1981)	- Level I, II, and III personnel meet to report findings of pilot research studies, evaluate significance and contribution of each study, examine inherent problems of design, and determine which studies should be replicated.
Replication (July-November, 1981)	- Level II and Level III personnel prepare for and replicate studies which show promise of significant impact.
Site Visits (July-November, 1981)	- Level I personnel act as consultants thru written communication and visitation.
Site Reports (November-December, 1981)	- Level II and Level III personnel write final reports of replicated studies.
Project Reports (December, 1981-January, 1982)	- Level I personnel compile studies and summarize findings for final report.

PERSONNEL (Level I)

Co-director

Arthur L. White: Professor of Science Education at Ohio State University: Research Coordinator for NARST; NSTA Research Committee Member; Co-investigator for RISE project. (Dr. White conceived and used a network of research sites for the calculator research project); Evaluator for three NSF projects (2-CAUSE and 1-PSTEP) from 1977-80; Computer use coordinator for information dissemination function at ERIC/SMEAC (1969-1977); Co-investigator for National Survey of Teaching Practices

(1970-1971); Conducted NARST Workshops on Multiple Regression and Evaluation.

Co-director

Russell H. Yeany: Associate Professor Science Education at University of Georgia; NARST Research Committee; Co-investigator on research needs and priority studies; outstanding Science Educator by AETS (1977); received two NARST/NSTA awards for research influencing practices in science classrooms (1979); conducted NARST workshops on Research Designs (1976), Post-Hoc Analysis (1978), and Meta-Analysis (1980).

Project Advisor

Linda R. DeTure: Adjunct Graduate Education Faculty, Rollins College, Winter Park, Florida; Secondary School Science Teacher, 7 years grades 9-12; NSTA Research Committee Referral Group (served as chairperson of NSTA Research Committee when network proposal was conceived); Outstanding Teacher Award, State of Florida; Patron Award for Outstanding Paper, 1978 NARST Meeting; Science Coordinator of the Learning Resources Center at University of Maryland; Co-author of Summary of Research in Science Education (1973).

Project Advisor

Joan Duea: K-8th grade classroom teacher and Professor of Education at Price Laboratory School, University of Northern Iowa; NSTA Research Committee Referral Group; Past President of CESI; Consultant to Children's Television Workshops ("3, 2, 1 Contact"); Advisor to Science magazine; Director and writer of Ginn Science Program.

BUDGET

Personnel:

Ohio State University		
Co-director	(30%) 12 mo.	$10,725.00
Research Assistant	10 hours/week (25%) 12 mo.	3,600.00
Secretary	12 hours/week (30%) 12 mo. $5.00/hour	3,120.00
Benefits	Fac(13.5%), Sec(13.71%), Med($85/mo.)	2.482.00
		$19,927.00
University of Georgia		
Co-director	(20%) 12 mo.	6,060.00
Research Assistant	13 hours/week (33%) 12 mo.	5,500.00
Secretary	10 hours/week (25%) 12 mo.	2,250.00
Benefits	Fac (22%), Sec(25.6%)	1,909.00
Indirect Costs	60% x $13,810.00	8,286.00
		$24,005.00

Consultants:

2-Level I Project Advisors	20 days @ $150.00	6,000.00

Participant Payment:

10- Level II Research Coordinators	@$400.00	4,000.00
10- Level III Classroom Teacher	@ $400.00	4,000.00
10- Substitute Teachers	14 days @ $30.00	4,200.00
		12,200.00

Travel:

2- Workshop Conferences	24 people @$715 (4 da x $35 per diem & $200 air) (5 da x $35 per diem & $200 air)	17,160.00
Site Visits	@$140.00 (20 day x $40 per diem & 20 sites x $100.00 air fare ave.)	2,800.00
4- Convention Presentations	8 people @$150.00	1,200.00
2- Co-director and NSF staff meetings Wash. D.C.	@$250.00	500.00
		21,660.00

Operating Expenses:

Level I:	Ohio State University	(phone, postage, duplicating)	1,700.00
	University of Georgia	(phone, postage, duplicating, computer time	750.00
Level II:	Local Travel to School	(2 visits/wk x 36 wks x 30 mi x .18 x 10 sites), (phone and duplicating @ $300.00	3,880.00
			3,000.00
Level III:	Materials and supplies	10 sites @$150.00	1,500.00
			10,830.00

Direct Costs:	94,622.00
Indirect Costs:	39,741.00
Total:	134,363.00

Uncited References

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Ornstein, Allan C. "Needed: A Better Relationship Between Practitioner and Researcher," NASSP Bulletin, Vol. 62, N. 416, pps. 93-99, March, 1978.

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Shaver, James P. "The Productivity of Educational Research and the Applied Basic Research Distinction," Educational Researcher, Vol. 8, No. 1, pp. 3-9, January, 1979.

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Yager, Robert E. "Crises In Science Education," A paper contracted with the National Science Foundation, Feb. 1979.

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MEMORANDUM

TO: Members of the NARST Publications Advisory Committee

FROM: David R. Stronck, Chairman

DATE: 25 February 1980

RE: Report by the Chairman to the Committee

On November 29, 1979, President John W. Renner sent me a letter to describe what happened to our recommendations at the Executive Board meeting on November 1 and 2. Our recommendation on advertisement in the Journal of Research in Science Teaching (JRST)was approved without change. Our recommendation of the role of the Publications Advisory Committee on the selection of the Editorial Board members was received, but no action was taken on it. Our recommendation on position papers generated much discussion. The Executive Board finally adopted the following policy for JRST:

A position paper - - -

b. A review of the literature should state clearly the nature, scope, and significance of the problem or topic on which the review focuses. The paper should summarize, discuss, and synthesize the investigations involved so as to:

1) define the issue,
2) cite and briefly summarize (an) alternative position(s) on the issue.
3) develop a position on the issue, and
4) describe the implications of the position for science teaching.

On December 12, 1979, Jim Shymansky, Editor of JRST telephoned each member of our Committee to react to the requests of Mary Budd Rowe who is currently with the National Science Foundation. Although we gave Jim our various opinions, I have collected in writing the responses of each member of the Committee to my memorandum of December 12 on these questions. Here is the report on our responses to the request from the NSF:

1. Should the NSF pay for the pages in our Journal which may be dedicated to abstracts of the proposals? -- Our majority vote is yes, i.e., the NSF should be required to pay for such pages. Vince Lunetta wisely observes: "There should also be a notation on these pages indicating that this has happened and that the text has not been reviewed or endorsed by the JRST Editorial Board."

2. Should JRST publish such abstracts? -- Our majority vote is yes, i.e., JRST should publish the abstracts.

3. Should both JRST and Science Education publish the same materials, i.e., abstracts of RISE and of DISE? -- Our majority vote is no, i.e., JRST and Science Education should not publish the same material. The distribution lists of the two magazines probably are not substantially different. Vince Lunetta observes: "I do believe that whereever the abstracts are published, the RISE and DISE should be kept together under one cover to facilitate review by the research community." Apparently our Committee recommends that JRST publish the abstracts of both RISE and DISE and that Science Education should publish neither. This recommendation may not be acceptable to either the NSF or the editor of Science Education. Mike Abraham sees no problem in both journals publishing both sets of abstracts. If the NSF is unwilling to pay for both sets of abstracts in both journals, Ann C. Howe suggests that JRST publish RISE while Science Education would publish the abstracts of DISE.

   Copyright problems need to be discussed with the NSF.

4. Should progress reports on funded research projects of RISE and DISE be published in JRST? -- Our unanimous vote is no, i.e., progress reports are not acceptable in JRST. Apparently our Committee maintains its policy formulated on Feb. 21, 1979: "The Committee opposes the publication of articles describing research in progress in the JRST. However, findings from on-going research projects as they occur may be appropriately presented in JRST."

   Vince Lunetta notes: "If the NSF wishes to compile progress reports, they ought to be welcome to distribute them free of charge to persons on the NARST membership list." Mike Abraham suggests that progress reports could be published in the Newsletter. Obviously such progress reports should conform to the style of the Newsletter.

* *

During the last two years, I have enjoyed serving as the chairman of the Publications Advisory Committee of NARST. Thank you for your excellent cooperation. My three-year term on this Committee will soon come to its end. I am recommending that Ann C.Howe become the next chairperson of our Committee. Ann has many excellent insights into the directions which should be taken by our Committee. She has served on the Executive Board of NARST and the Editorial Board of JRST. She has consented to accept my recommendation that she be so appointed. She also will be calling a meeting of our Committee in Boston at the annual meeting. Unfortunately my funding this year allows me to travel only to the NSTA Convention in Anaheim, California, which is only 1,000 air miles south from Victoria.

cc: John W. Renner

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REPORT from the NARST Publications Advisory Committee

From David R. Stronck, Chairman March 26, 1980

Mary Budd Rowe of the National Science Foundation on December 12, 1979, asked Jim Shymansky, Editor of the Journal of Research in Science Teaching a series of questions. He refered these questions to our Committee which has provided the following answers:

1. Should the NSF pay for the pages in our Journal which may be dedicated to abstracts of the proposals? -- Our majority vote is yes, i.e., the NSF should be required to pay for such pages. Vince Lunetta wisely observes: "There should also be a notation on these pages indicating that this has happened and that the text has not been reviewed or endorsed by the JRST Editorial Board."

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MEMORANDUM

TO: Jim Shymansky

FROM: Dave Stronck

DATE: 26 March 1980

RE: Motions for the vote of the NARST Publications Advisory Committee

1. I vote "yes" in favor of the new categories, "Experimental Research Reports" and "Descriptive Research Papers."
2. I vote "yes" in favor of a section "Perspectives on Science Teaching."
3. I concur with the ammendments to the "Guidelines to Contributors" although I recommend the following change under 4. "Comments and Criticism": The author(s) will be asked to respond to the critique within one month after receiving the critique. My recommendation is based on the problem of receiving items promptly through the mail, especially international mails. Some authors may be unable to respond promptly because of consulting trips, vacation periods, etc.
4. I vote "yes" on the remaining motions, i.e., for one issue per volume to be a theme issue; for the editor to solicit "Comments and Criticisms" of selected manuscripts, etc.; that the assignment to the Editorial Advisory Board be changed, etc.

cc: Jack Renner

MEMPHIS STATE UNIVERSITY

Memorandum

To: John W. Renner, President, NARST

From: Membership Committee; Ron W. Cleminson, Chairman; Charlotte M. Boener, Glen Clark, Herbert G. Cohen, John T. Norman, Leonard Simons, Dennie Sunal, and Chris A. Pouler

Subject: Final Report, 1979-1980

Date: March 24, 1980

The activities of the 1979-80 membership committee were as follows:

Enclosure #1 outlines the procedure; it is designed for the membership coordinators who have already been identified. It was mailed in September, 1979.

Enclosure #2 is designed for membership coordinators we will attempt to identify this year. These were also mailed in September.

Enclosure #3 is the nomination form. Upon receiving the names from membership coordinators, officers, members, etc., we mailed a personal letter (Enclosure #4) inviting the nominee to join NARST. The envelope also included a NARST brochure and application form.

Enclosure #5 was sent to the membership coordinators who did not respond to the initial letter. This was mailed on the first of November, 1979.

Enclosure #6, entitled AETS Membership by State, serves to identify the number of members by state, Canada, and foreign countries. Note that we have five new members in North Carolina, New York, and Pennsylvania. The membership coordinators from these areas should receive certificates for their effort. They are: Paul B. Haunshell, 713 Greenwood Road, Chapel Hill, NC 27514, Rodney Doran, Department of Education, State University of New York, Amherst, NY 14260 and Chester E. Raun, Elementary Education, Temple University, Philadelphia, PA 19122. In addition, I would like to recommend that the membership coordinators from Arizona, Minnesota, and Oklahoma also receive a certificate of recognition. They are Herbert Cohen, Elementary Education, Arizona State University, Tempe, AZ 85280, Gene Gennaro, Curriculum and Instruction, University of Minnesota, Minneapolis, MN 55455, and John W. Renner, Science Education, University of Oklahoma, Norman, OK 73019.

Their names have been submitted to Paul Joslin. It is my understanding he will contact them and plan to have them attend the NARST luncheon in Boston to be recognized for their effort.

As chairman of the membership committee, we are continuing to mail information to prospective candidates. It is our plan for the membership drive to be an on-going process throughout the year. I have agreed to act as chairman of the committee for 1980-81.

September, 1979

As a NARST Membership Coordinator, we need your help!!

The task of increasing (and maintaining) the quality and significance of programs in the face of rising costs is a difficult problem. That's why we are asking you to again participate in our membership drive, a program designed to provide new members, new ideas, and a wider base of support for NARST.

Our 1979-80 Membership Drive is a concentrated effort to utilize our most valuable recruiting resources: our active NARST members. We ask that you use the enclosed nomination forms to provide the names of colleagues you think would be interested in NARST. We will send each nominee a letter extending an invitation to membership and indicate that he or she was nominated by you. Special recognition will be given next Spring at the National NARST meeting in Boston, Massachusetts to those Membership Coordinators who have a significant increase in membership in their respective areas (i.e., states, provinces, or countries).

Enclosed you will find ten (10) NARST brochures, application forms and nomination forms. If there are other members in your area, please call upon them to recommend individuals to you for NARST from their respective universities, colleges, school systems, etc. I have also enclosed the names of current NARST members from your area. Feel free to call upon them for assistance. When nominating individuals, please consider colleagues, graduate assistants, and science coordinators/consultants in your area. In addition, you might consider nominating appropriate junior college faculty members. If you need more membership materials, please write or call me at (901) 454-2373.

I strongly encourage you to represent NARST at your state science association meetings. You may want to schedule a session at a state meeting to inform science supervisors, teachers, etc. about NARST.

Again we need your help! We are counting on you to make this membership drive a success.

Sincerely,

Ron W. Cleminson, Chairman
Membership Committee

Enclosures

September, 1979

You have been identified as a NARST Membership Coordinator for (state, province or country). Please, seriously consider the opportunity to assist in our recruiting effort and accept the responsibility.

We need your help! The task of increasing (and maintaining) the quality and significance of programs in the face of rising costs is a difficult problem. That's why we are asking you to participate in our 1979-1980 Membership Drive, a program designed to provide new members, new ideas, and a wider base for support for NARST.

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I strongly encourage you to represent NARST at your state science association meetings. You may want to schedule a session at a state meeting to inform science supervisors, teachers, etc. about NARST.

We are counting on you to make this membership drive a success.

Sincerely,

Ron W. Cleminson, Chairman
Membership Committee

Enclosures

I would like to nominate the following for membership in NARST:

NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

NAME OF NARST MEMBERSHIP COORDINATOR_____

Please return form to: Ronald W. Cleminson, Chairman
NARST Membership Committee
Science Education Center
Dept. of Curr. & Instr.
Memphis State University
Memphis, TN 38152

THANK YOU

Nominated by:

As the Association's Membership Chairman, I am pleased to extend to you on behalf of the National Association for Research in Science Teaching (NARST) and its officers, a cordial invitation to become a member of our organization. The enclosed brochure contains an application form, as well as additional information about NARST.

We sincerely hope you will complete and return the application form and, thereby, join with many of your colleagues in promoting research and its utilization in science education.

Cordially,

Ronald W. Cleminson, Chairman
Membership Committee

Enclosures

Our NARST Membership Drive is now moving into its second month. As a membership coordinator, would you please use the enclosed nomination forms to provide us with the names of colleagues, graduate assistants and science coordinators/consultants in your area who you think would be interested in NARST. I will send each nominee a letter extending an invitation to join our organization and indicate that he or she was nominated by you. Also, special recognition will be given next Spring at our National NARST meeting in Boston to those Membership Coordinators who have a significant increase in membership in their respective areas (i.e., states, proviences, or countries).

We are counting on you to make our membership drive a success.

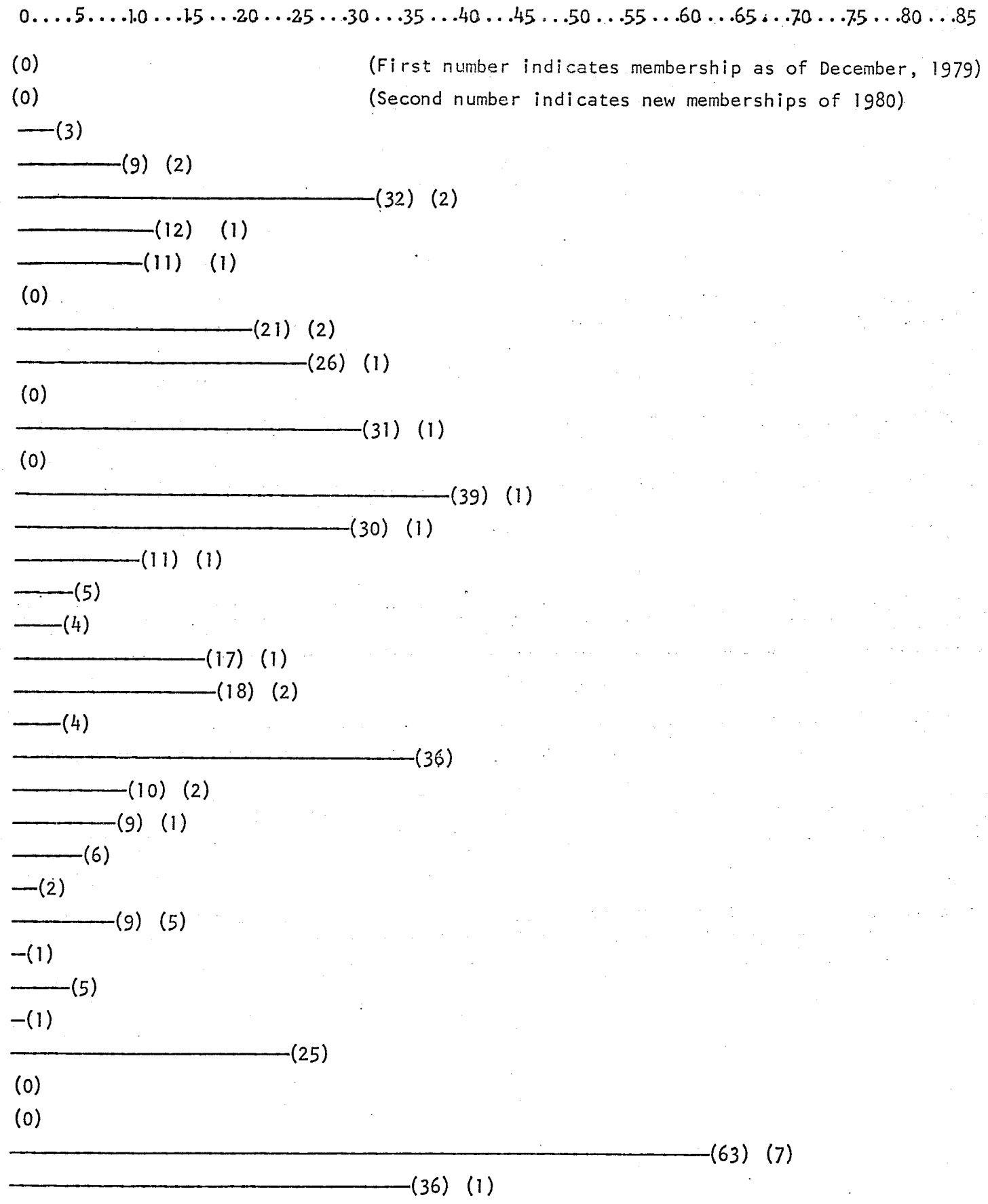
Sincerely,

Ronald W. Cleminson, Chairman
Membership Committee

Enclosures

Enclosure #6

AETS Membership by State



(First number indicates membership as of December, 1979)

(Second number indicates new memberships of 1980)

———(6) (4)
————(8)
————————————————————————(39) (5)
—(2)
———(5)
——(4)
————(8)
————————————————(27) (2)
—(2) (1)
————(9)
—(1)
————(11)
————————(17)
——(4)
—(2)

Canada has 43 members plus 3 new 1980 memberships.

All other countries have 41 members plus 2 new 1980 memberships.

TOTAL MEMBERSHIP: 665

Founded 1928
Incorporated 1961

Sponsoring The Journal of Research in Science Teaching
Affiliated with NSTA, AAAS and ICASE

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

Memorial Hall Drake University Des Moines, Iowa 50311

EXECUTIVE SECRETARY
Dr. Paul Joslin (1980)
Memorial Hall
Drake University
Des Moines, IA 50311

PRESIDENT
Dr. John W. Renner
Physical Sciences Ctr. Room 323
University of Oklahoma
Norman, OK 73019

PRESIDENT-ELECT
Dr. Stanley Helgeson
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210

IMMEDIATE PAST PRESIDENT
Dr. James R. Okey
Department of Science Education
The University of Georgia
Athens, GA 30602

BOARD MEMBERS
Dr. Carl F. Berger (1980)
School of Education
University of Michigan
Ann Arbor, MI 48109

Dr. J. A. Easley, Jr. (1982)
Dept. of Elementary Education
University of Illinois
Urbana, IL 61801

Dr. Ann C. Howe (1981)
101 Heroy Building
Syracuse University
Syracuse, NY 13210

Dr. Anton Lawson (1981)
Science Education-Dept. Physics
Arizona State University
Tempe, AZ 85281

Dr. Rita W. Peterson (1980)
Dept. of Teacher Education
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Hayward, CA 94542

John T. Wilson (1982)
787 Physics Building
University of Iowa
Iowa City, IA 52242

JOURNAL EDITOR
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Department of Science Education
The University of Georgia
Athens, GA 30602

NEWSLETTER EDITOR
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Memorial Hall
Drake University
Des Moines, IA 50311

RESEARCH COORDINATOR
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Columbus, OH 43210

PLACEMENT COORDINATOR
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Science Education-Physics Bldg.
University of Iowa
Iowa City, IA 52242

NSTA REPRESENTATIVE
Dr. Len Krause (1980)
National Science Teachers Association
1742 Connecticut Avenue, NW
Washington, DC 20009

COMMITTEE REPORT

Placement Services
March 27, 1980

During the past year, members of the Placement Committee have been actively searching a variety of sources such as *The New York Times*, *The Chicago Tribune*, *Educational Researcher*, *Chronicle of Higher Education*, *Journal of Teacher Education*, *Science*, and several other regional and local sources.

The Committee has identified and mailed a list of job opportunities as follows:

TYPE OF POSITION	NUMBER
Teacher education	19
Science teaching	4
Research	4
K-12 teaching or supervision requiring Ph.D.	2
Other positions	2
TOTAL opportunities listed in the original mailing	31

We are also accumulating additional job opportunities to be distributed at the NARST annual meeting. There will probably be another 40 on this listing. I should note at this point, that at least 90% of all the job vacancies which have been identified have been contributed by Dr. John Staver of DePaul University. Without his help, the list would be frighteningly short.

JEP/kag

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JEP/kag

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Education
Stone Hall
Ithaca, N. Y. 14853

April 8, 1980

TO: NARST Board and JRST Editorial Board

FROM: Joseph D. Novak

RE: Suggestions for the Encouragement of Improved Research

I am sure that all of you have heard from one or more colleagues the expression that papers submitted to JRST for publication or to NARST for program contributions are judged arbitrarily (or sometimes even capriciously) and that standards seem to be applied that are either inappropriate or inconsistent. Whatever the merit of individual criticisms along these lines, they occur often enough that I believe they warrant serious consideration. The issue, of course, is how to proceed in the very difficult task of judging scholarly work and encouraging the improvement of scholarship in science education. It is to this issue that this memorandum is addressed.

I wish to propose for consideration that in the future all papers submitted for presentation at the NARST meetings be judged by two or more referees whose written opinions will be provided to the proposer. In my view, the practice of supposedly "blind" reviews are both inappropriate and impractical. It would obviously be absurd to attempt to judge a research proposal submitted for funding without knowing the research accomplishments of the proposer, the institutional resources available, and the general milieu in which the research setting is to be conducted. In a similar way, the previous accomplishments and "track record" of the proposer is highly relevant.

If we were to move the adoption of this more open policy toward review and criticism of program suggestions, I believe it would encourage dialogue and constructive criticism, since the record would be open for everyone to examine and to defend or criticize. My own policy with my

graduate students and other colleagues is always to offer open criticism, in person or in writing, and I believe the courts are increasingly pushing toward a policy that will move away from anonymous review and criticism. While I am aware of the arguments in favor of such review, I believe that our organization is sufficiently close knit with enough responsible members that an open review policy could do much to enhance the quality of research and the quality of participation in the annual meeting.

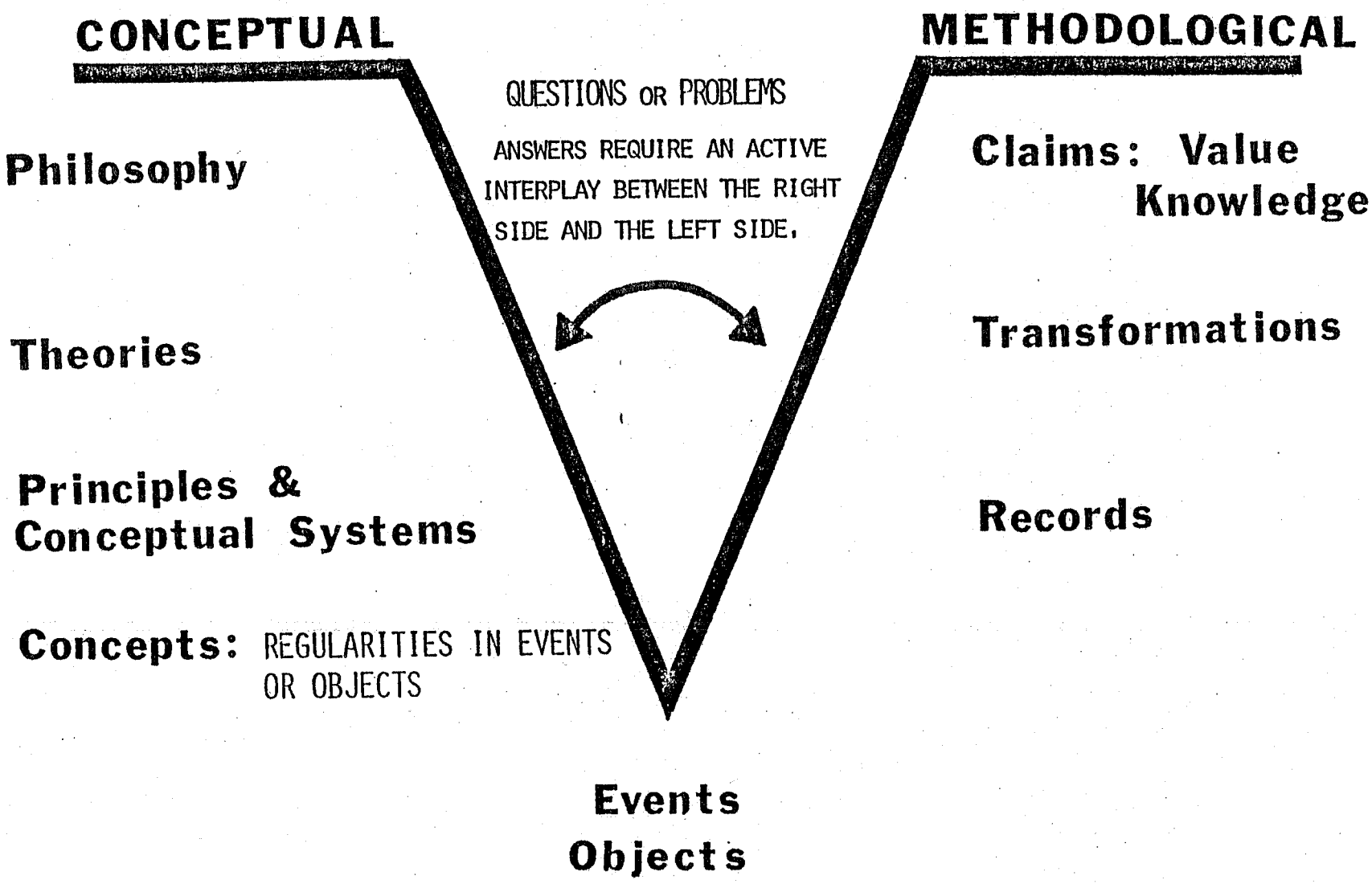
The suggestion outlined above may also have validity for articles submitted to JRST for publication. However, I believe it is wise to gain experience with "open review" of program contributions prior to initiating such a policy with JRST papers.

A second suggestion is to encourage a wider base of membership participation in annual meetings. With travel support becoming increasingly difficult, and often unavailable unless a person is contributing at the meetings, we need to consider increasing the number of simultaneous sessions to include all program proposals that have merit. This proposal is easy to implement and can have significant benefit for members and the Association.

A third proposal is that we move to give additional guidance to reviewers of articles that will encourage careful consideration of the theory and principles guiding a research inquiry or a critical analysis of issues. I would like to suggest to the NARST and JRST board's that we experiment with using Gowin's epistemological V heuristic as a guide to reviewers and contributors to NARST program and publications. The suggested use of this heuristic was presented in my article published in the November issue of JRST. I am appending here a copy of the Gowin epistemological V.

What I am finding in asking all of my graduate students to place their dissertation proposals "on the V" is that it causes them to give very careful consideration of what their focus question (or questions) are, how this focus question helps to select and specify the critical educational events to be observed, what principles and theories are guiding the selection of these events and the collection of appropriate records, and how the transformations are also guided by the focus question and elements on the "left side" of the V. Gowin's V is functional not only for empirical studies where the records and transformations may involve considerable data collection and statistical manipulations, but it is also useful for

GOWIN'S EPISTEMOLOGICAL V



GOWIN'S (1978) EMPISTEMOLOGICAL V CAN BE USED AS A HEURISTIC FOR ANALYZING AND REVIEWING REPORTS OF SCHOLARLY INQUIRY.

philosophical inquiries where it is helpful to make explicit the theoretical position as it relates to the phenomenon to be explained (which may be educational events) and linkages between these and the claims to be constructed. My graduate students find it challenging but very useful to reconsider their research or other constructed arguments in the model of this epistemological V.

If we were to experiment with this proposal, reviewers would then be asked to judge whether or not the proposed contribution not only states the focus question(s) but also whether or not the focus question is clearly identified and clearly linked to the theoretical perspectives and methodological procedures, which should also be clearly and explicitly presented. I believe we would find that many contributions fall short on one or more of these aspects, not always because they are lacking in the inquiry, but because it is difficult to conceptualize research without some helpful guiding heuristic as we have found this V to be.

As my graduate students and I review published studies in education, it is common to find that the focus question is trivial even in cases where elaborate records are obtained and complex statistical data transformations employed. It is rare to find a research report that makes explicit linkages between the principles and theory guiding the inquiry and the specific events observed, records collected or data transformations employed. It is not uncommon to find that the conclusions do not apply to the actual educational events studied or do not follow from the records or record transformations utilized. In some cases, the data obtained does not support the guiding theory or principles, but this is overlooked in stating the "finding" of the research.

To summarize, my proposal is to encourage greater openness, dialogue, and intellectual exchange among the membership and among the individuals responsible for selection of papers and program contributions. I recognize that this will make the work of reviewers increasingly challenging, but I believe that the merits of the proposal far outweigh other issues. It is my expectation that encouraging this kind of openness would result in NARST setting a model for scholarship that could very well be emulated by other organizations. Most of the kinds of concerns I hear expressed about NARST are also commonly expressed (sometimes more vitriolicly) about the American

Educational Research Association and other professional organizations. The hallmark of scholarship is free, uninhibited exchange, and I believe we are entering an era when openness is more supportive of scholarly exchange than policies favoring covert review.

Respectfully submitted,

Joseph D. Novak
Professor of Science Education and
Professor of Biological Sciences

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Education
Stone Hall
Ithaca, N. Y. 14853

January 18, 1980

Jack Renner
National Association for Research
in Science Teaching
Memorial Hall
Drake University
Des Moines, Iowa 50311

Dear Jack:

I am also concerned with the methods that are being used to screen papers for NARST programs. For a number of years I have maintained that we should make every effort to provide a platform for young researchers to present their work and to have it criticized. Once again I am hearing from a number of people that their abstracts were not accepted. I believe this is a serious problem and I hope to speak with the NARST Board about it at the meetings in April.

Best wishes to you.

Cordially,

Joe

Joseph D. Novak
Professor of Science Education and
Professor of Biological Sciences

JDN/sa

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Education
Stone Hall
Ithaca, N. Y. 14853

March 5, 1980

Professor John W. Renner
Physical Sciences Ctr. Room 323
University of Oklahoma
Norman, Oklahoma 73019

Dear Jack:

I was pleased to receive your letter of February 19 and to see that we share some of the same concerns relative to directions that NARST is taking.

Part of my concern with the selection of papers to JRST and for the program is what I regard as an inordinate concern with statistical procedures and an inadequate concern for the significance of the research questions dealt with. Consequently, we see papers presented, and papers published in JRST, that may represent relatively adequate qualitative treatment, but which have little or no significance to science education.

There is also a question in my mind as to what purposes are served by the supposedly objective procedures of "blind" reviews. As a frequent reviewer of NSF research proposals, I cannot imagine how I could render a respectable review if copies of VITA's, relevant prior publications, and similar "identifying" information was not provided. No research proposal, and certainly no single paper, can present the full backdrop of research and thinking that characterizes an investigator or an investigative research group. The most comprehensive indication of the background framework for a given project <u>is</u> the identification of the research group. While I recognize that biases exist toward or against certain theoretical positions and styles of research, the approach to objectivity should be to have competing views represented, and not to mask the identity of the theoretical framework.

If you think it would be appropriate, I would be happy to speak to these issues at both the JRST editorial board meeting and the NARST board meeting. I do not expect to be staying in Boston past Sunday morning, but I should be arriving in Boston on Wednesday.

Best wishes to you.

Sincerely,

Joseph D. Novak
Professor of Science Education and
Professor or Biological Sciences

JDN/sa

cc: Dr. James Shymanski

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Affiliated with NSTA, AAAS and ICASE

Memorial Hall, Drake University, Des Moines, Iowa 50311

March 18, 1980

Dr. Joseph D. Novak
Stone Hall
Cornell University
Ithaca, NY 14853

Dear Joe:

I have delayed responding to your letter in the event that there was a late development which would permit fitting in your presentation. Such an event did not occur. In any case, this would not be a solution to the problem that exists with respect to selecting presentations for the program.

In an attempt to make the selection process more appropriate, particularly for the newer research approaches and the "non-classical" techniques, I am going to charge the Program Committee with modifying, adapting, or developing a technique with this concern to be specifically dealt with. I recognize that this does not solve the immediate problems for this year's meeting. On the other hand, it is an attempt to deal with the problem in such a way as to minimize, if not to eliminate, it in the future.

In addition, Jack Renner and I have discussed your suggestion that you present the possibility of open ratings of proposals to the Executive Board. We are agreed that this is an important consideration and we have placed you on the agenda for the Sunday, April 13, meeting of the Board. The meeting will convene at 7:30 AM, in Room 410.

While I do not have a solution that will meet both the short and long term problems, I am wholeheartedly in agreement that the problem must be dealt with. I very much appreciate your concern and your willingness to devote time to a discussion and potential solution.

Sincerely,

Stanley L. Helgeson
President Elect

cc. Jack Renner

11. Miscellaneous Information From the President

Editorial

Duality problem

At our annual meeting in Chicago there were symposia and talks on colliding particle beams and on superconductors. There were also sessions on learning theories and teaching techniques. It was our standard mix of topics on physics and teaching, but this time the sessions on learning theories and teaching drew overflow crowds. Apparently a lot of us are concerned and curious about the mysterious processes that occur when we teach.

What are we anyway? Teachers or physicists? All good teachers must have split personalities, dual allegiances. The English teacher should love literature, but must also enjoy correcting themes. The music teacher should know when music is superb, but must tolerate youthful discords with good grace. The physics teacher must maintain enthusiasm for research or personal study and still be willing to explain vectors, over and over again. Teachers are expected to be experts in two quite different fields – their own subject specialty, and applications of psychology to the learning process. Traditionally, elementary school teachers don't have to know much about any particular subject but are supposed to know a lot about children. Also, traditionally, college professors need know only their specialized subject. There are no education-course requirements for university tenure. It is well known that teaching skill automatically descends like a mantle on the shoulders of new Ph.D.s. It is in the nether regions of high school or two-year college, that the physics teacher is expected to be a dual expert in both science and psychology, with some coaching experience on the side.

During the curriculum revision projects of the '60s, college physicists assumed the missionary task of trying to upgrade the physics expertise of high school teachers. The trouble then, we were told, was that school teachers had to take too many methods courses and not enough subject matter courses. Summer institutes were formed to redress the balance. Now, in these latter years, we hear prophets crying a different message. "Professor," they say, "know your student." And they have either new ways to describe the students, or new words to describe the old ways. In either case, F = ma is not at issue. Instead, the question is – teacher, O.K., student O.K.?

As a matter of record, physics teachers have always been concerned with the teaching and learning process. At the beginning of the nineteenth century, Joseph Henry was very articulate in describing the development of learning capacity. Henry modeled his instruction to fit his theory. At the end of that century, Edwin Hall appealed to the faculty theory of learning as the justification for his emphasis on laboratory instruction. In recent decades we have taught physics based on relevance to youthful interests, have Kellerized the curriculum, and have produced a thousand Blooms of tiny mastery.

All these educational cults contain a seed of common sense or observation, an elaborate foliage of fad definitions, and a hull of theory absolutely impervious to controlled testing in the classroom. A century before Piaget was discovered, Henry described learning stages in adolescents. What's new are the code names of the stages and the theory of equilibriation. Fifty years before Keller, Washburne was individualizing instruction. What's new is Bloom's mastery theory. Thirty years before the relevant curriculum, Progressive educators concerned themselves with the needs of the student. What's new is transactional analysis. Like Moliere's *Bourgeois Gentilhomme*, we keep discovering that for forty years we have been speaking prose without knowing it.

Does that mean that I am against research into the learning process or that I think teaching methods can't be taught? Heaven forfend! Some of my best friends are in the business. I have even taught a methods course myself. There are sound techniques to be taught – such as breaking a new piece of chalk in half before using it. All teachers should periodically be humbled by videotaping themselves while teaching, and then watching it afterward. Through journals and meetings, our professional organizations should spur us to reexamine our teaching methods every year. We need to be reminded of the obvious characteristics and problems of students. Perhaps new fad words help us to see old truths.

Don't forget the physics, though. It keeps changing, and we physics teachers must continually renew our knowledge of it. As for the other half of our dual lives, trust those theories or methods that maximize direct student contact with an enthusiastic teacher. All else can be forgiven – stuttering, poor organization, baldness, even squeaking chalk. For what does a physics student require of a teacher, but to grade justly, love teaching, and to work enthusiastically with physics.

Cliff Swartz

WINTER MEETING

CHICAGO



Winter Meeting--Chicago

Unquestionably, the outstanding impression remaining from our annual winter meeting in Chicago is one of AAPT members crowding around doorways of small meeting rooms filled to overflowing, straining to hear speakers while the few APS members attending sessions in much larger rooms across the hall wonder what the commotion is all about.

Three facets of the meeting were unqualified successes. As usual, the pre-meeting workshops and commerical workshops were filled to capacity. Especially popular were the "Developing Student Confidence in Physics,.. Microcomputers," "Digital Electronics," and "AIM 65 Microcomputer" workshops.

Microcomputers formed an area of high interest on Tuesday, as over 600 people attended the hands-on session: "The Use of Personal Computers in Learning Physics." Amazingly enough, at the same time that this session was being held, an overflow crowd was attending a joint AAPT-NARST session, "Research in Physics Education." This session, together with a related contributed papers session, showed that physics educators are very interested in determining how students learn.

Edward C. Stone delivered an informative Richtmyer lecture, "The Voyager Encounters with Jupiter," following an inspirational response by Oersted Medalist Gerald Holton. The other primary AAPT formal session was highlighted by the presentation of Distinguished Service Citations to Janet Guernsey, Earl Pinkston, Rod Riggs, Gerry Wheeler, and Earl Zwicker.

Evening activities featured popular sessions on the Three-Mile Island incident and on science and public policy, as well as successful visits to the Museum of Science and Industry and the Adler Planetarium.

The Chicago Marriott lived up to its advance billing as Chicago's newest and most luxurious hotel; howver, its location one mile north of the Palmer House (site of past Chicago meetings) didn't deter most people from visiting their favorite Chicago restaurant, Bergoff's, across from the Palmer House. All things considered, the Chicago meeting turned out to be one of the most successful ever.

Tim Ingoldsby

New "Computers in Physics Education" Committee Formed

The newly-established Area Committee on Computers in Physics Education got off to a great start (even before it had been officially established by the Executive Board) by sponsoring four of the most popular events at the Chicago Meeting:

1. A workshop on the computer language *Pascal;*
2. A workshop on microcomputers as laboratory instruments;
3. The hands-on session: "The Use of Personal Computers in Learning Physics;"
4. A panel discussion on computer software.

Activities the committee has planned for the summer meeting in Troy include:

1. A repeat of the workshop "Introduction to Microcomputers as Laboratory Instruments;"
2. An invited paper session on the software clearinghouse CONDUIT;
3. Parallel users-group sessions for Terak, Pet, Apple, and TRS-80 microcomputers, featuring demonstrations of physics software on each machine;
4. An invited paper session on computer aspects of NSF CAUSE projects.

In addition, the physics department at RPI will have a TERC networking computer system functioning by this summer, which may be available for inspection and interaction.

Since the committee has just been formed, we need to receive input from AAPT members who have suggestions for future projects and meeting sessions. Send your ideas to:

Professor Alfred Bork
Department of Physics
University of California
Irvine, CA 92717

(A complete listing of committee members can be found on page. 65.)

Conversation overheard in the Marriott Lobby:

Guest: *"Is this place always this quiet late at night?"*
Desk Clerk: *"Well, this week we have the American Physical Society here, and you know how it is with these athletes--they have to get to sleep early."*

MAILGRAM SERVICE CENTER
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:-133026U017041 01/17/80 ICS WA15969 OKCE
00045 MLTN VA 01/17/80

JOHN W RENNER, PRES
NATL ASSN FOR RES IN SCI TEACH
UNIVERSITY OF OKLAHOMA
NORMAN OK 73019

AS BOARD CHAIRMAN AND PRESIDENT OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, WE WOULD LIKE TO MEET WITH YOU AND OTHER CHIEF ELECTED OFFICERS OF MEMBER ORGANIZATIONS IN THE AAAS CONSORTIUM OF AFFILIATES FOR INTERNATIONAL PROGRAMS. THE PURPOSE IS A JOINT CONSULTATION AND EXCHANGE OF VIEWS ON POLICIES TOWARDS RELATIONS WITH THE SOVIET SCIENTIFIC AND ENGINEERING COMMUNITIES DURING THE PRESENT INTERNATIONAL TENSIONS. IT IS NOT INTENDED THAT ANY VOTES BE TAKEN NOR RESOLUTIONS ADOPTED, BUT RATHER THAT WE HAVE AN INFORMED EXCHANGE OF VIEWS. THE MATTER IS VERY SERIOUS AND WARRANTS COMBINED CONSULTATIONS. WE PROPOSE TO MEET AT THE DUPONT PLAZA HOTEL IN WASHINGTON AT 10:00 A.M. ON FRIDAY, FEBRUARY 8 AND CONCLUDE BY 4:00 P.M. YOUR CONSORTIUM REPRESENTATIVE AND/OR CHIEF EXECUTIVE OFFICER ARE ALSO BEING INVITED, BUT WE STRONGLY URGE YOUR PERSONAL PARTICIPATION. TIME IS SHORT AND WE REQUEST RESPONSE BY TELEGRAM OR TELEPHONE 202-467-5230.

KENNETH E. BOULDING, CHAIRMAN
FREDERICK MOSTELLER, PRESIDENT
AAAS
1776 MASSCHUSETTS AVE., N.W.
WASHINGTON, D.C. 20036
2313 EST

MGMCOMP MGM

TO REPLY BY MAILGRAM, SEE REVERSE SIDE FOR WESTERN UNION'S TOLL - FREE PHONE NUMBERS

NATIONAL SCIENCE FOUNDATION
WASHINGTON, D.C. 20550

Directorate for Science Education
Division of Science Education Resources Improvement

March 17, 1980

Dr. John Renner
Department of Science Education
University of Oklahoma
Norman, Oklahoma 73069

Dear John:

I'm enclosing the report from the AAAS meeting on relationships with the U.S.S.R. The meeting was an interesting and informative one but no decisions were made with respect to how individuals or associations might behave in this time of tension. There did seem to be a fair consensus among participants that individual exchanges should continue in order to keep the bridges of communication open but that official delegations and participation in seminars or any official functions should be postponed or suspended for the present. There is an effort being made to keep the machinery for U.S./U.S.S.R. exchanges in place since it would be so difficult to rebuild these structures if they were cancelled.

I hope this information will be of value to you and that you will use it in any way you wish in reporting to the membership at the NARST meeting in Boston. I regret that I will not be able to participate this year. I am curtailing travel as much as possible in order to carry out my responsibilities here at the Foundation. I am enjoying my work with NSF. Thanks for inviting me to represent NARST at the AAAS meeting.

Cordially,

Marge

Marjorie Gardner
Division Director

Enclosure

DECLASS
3/10/80

Consortium Notes

American Association for the Advancement of Science, 1776 Massachusetts Avenue, NW, Washington, DC 20036

SPECIAL ISSUE March 7, 1980

In keeping with the goals of the Consortium of Affiliates for International Programs, the Office of International Science (OIS) issues periodic Notes to representatives of the 80 member organizations. They summarize information on current projects, future meetings and publications, and items of general interest. Contributions from Consortium members are welcome.

REPORT ON SPECIAL MEETING HELD FEBRUARY 8, 1980

DUPONT PLAZA HOTEL, WASHINGTON, D.C.

This special meeting of the Consortium was convened by Kenneth E. Boulding, AAAS Chairman of the Board, and Frederick Mosteller, AAAS President. The purpose was a joint consultation and exchange of views on policies towards relations with the Soviet scientific and engineering communities during the present international tensions. Invited were the presidents of the member societies of the Consortium, the respective executive officers and representatives to the Consortium. 58 societies were represented. Total attendance was 95, including 7 observers. Attached is an attendance list.

Frederick Mosteller opened the meeting at 10:10 am.

William D. Carey, Executive Officer of AAAS, was the first speaker. He gave a brief summary of the scientific exchanges which have been going on for the past 21 years between the U.S. and the Soviet Union. The initial agreement was between the U.S. and Soviet Academies and called for an exchange of lecturers, survey type visits, some longer duration visits to do research, and symposia. A second dimension of scientific exchange was initiated in 1972 at the government-to-government level; during the past 8 years, 11 bilateral agreements have been signed: 1) a catch-all agreement for scientific and technical cooperation; area-specific agreements dealing with 2) environmental protection, 3) medical science and public health, 4) space, 5) energy, 6) artificial heart R&D, 7) housing, 8) agriculture, 9) oceans, 10) peaceful uses of atomic energy, and 11) transportation. These agreements have covered some 150 projects, some successful, some less so. Whereas other country-to-country agreements were often not long-lived, the U.S.-U.S.S.R. efforts were taken seriousley. Their foreign policy aims were to pursue detente, relax tensions, advance mutual understanding, and replace confrontation with negotiation. The experience, nevertheless, was not without its ups and downs. Questions have been raised as to reciprocity and equivalency. In the past 2-3 years the human rights issue has substantially reduced the effectiveness of the exchanges. The recent invasion of Afghanistan and the exile of Sakharov have further cooled the relations, but agreements have not been cancelled. The door remains open--if only slightly--for dialogue.

Philip Handler, President of the National Academy of Sciences next reviewed the situation from the Academy's point of view. Exchanges have gone on for 21 years, and the Academy has reviewed all the U.S.-U.S.S.R. official scientific exchange programs at the request of the White House. With regard to the U.S.-U.S.S.R. exchanges, the pattern has been variable, with both successes and failures. There are difficulties with off-limits sites, such as Gorki; so San Diego, for instance, is also off-limits. The human rights issue has complicated the scientific exchanges. Many laboratories and scientists have refused to host Soviet scientists. The U.S. government and the Academy cannot make the exchanges happen; they depend ultimately on the good will of individual scientists and of the scientific community. The Academy has so far resisted pressures to cancel exchange agreements in retaliation for violations of human rights. It took many years to establish working relations with the Soviets; the exchanges benefit both countries as well as the advancement of science. It would be regrettable to completely close the door to dialogue. Nevertheless, it should be made clear to the Soviets that there are penalties for aggression.

In the present situation, the Academy agrees with the U.S. government position that all highly visible, high-level exchanges should be postponed, while lower-level working relations would be left to the individual scientists' conscience. Technological exchanges, on the other hand, should be markedly slowed down or postponed. Care should be taken that the framework for the exchanges remains in place.

Handler will lead the U.S. delegation to the Scientific Forum in Hamburg. This is a meeting involving scientists from 35 nations. The Soviet Union views the Forum as a meeting of governments and will send a select team. The U.S. government views it as a meeting of scientists with the aim of discussing scientific topics and exchange programs within the framework of the Helsinki Accords. This meeting will be an opportunity for the American delegation to convey to the Soviet delegation the feelings of the American scientific community in the face of the invasion of Afghanistan and the exile of Sakharov, as well as to gauge the reactions from the other participating countries. In conclusion, we must keep talking, no matter how much we dislike what they do.

There followed a question and answer period.

Sidney Borowitz, New York Academy of Sciences: How large is the exchange program?

Handler: 100 man-months each year. This covers about 30 people each way per year.

Jean Simmons, Sigma Delta Epsilon: Has the U.S.S.R. reciprocated to the voicing of our concerns by slapping our wrists on some projects?

H.: There has been no such reaction so far.

Nancie Gonzales, AAAS Board: Is there any information from U.S. scientists now in the Soviet Union that the situation has changed there?

H.: There hasn't been any reaction.

Robert Acker, American Society for Microbiology: Is there an advantage to discontinue programs to maximize impact on the Soviet Union, or is there a greater advantage to continue one-to-one exchanges?

H.: We are unwilling to completely close the communication channels. It is not a one-way exchange; both countries are gaining.

Ken Seidelman, Institute of Navigation: How about other Communist countries in Eastern Europe?

H.: There are exchange agreements with each country. They are small and still go on.

Leo Young, Institute of Electrical and Electronics Engineers: Do engineering exchanges exist?

H.: Yes, there are engineering exchanges. There are no objection in continuing exchanges in engineering science. But there are objections to real technology exchanges, unless a clear benefit to the U.S. is demonstrated.

The third speaker was Edward S. Hurwitz, Deputy Director for Exchanges, Office of Soviet Union Affairs, U.S. Department of State, who replaced Marshall D. Shulman, Special Advisor on Soviet Affairs to the Secretary of State, unable to come because of illness. Mr. Hurwitz reviewed the official position of the U.S.: high-visibility programs should be postponed, but the overall structure should be kept intact. Working level arrangements should be left to the decision of individual scientists and institutions. The Department of State is working closely with the scientific community and the various government agencies involved in re-examining each activity on a case-by-case basis. Certain humanitarian programs will not be cut back substantially because they benefit the U.S., such as health, the environment, or artificial heart research. Initial reactions in the press to the invasion of Afghanistan and the exile of Sakharov were very strong: the cut-off of all exchanges was advocated; the opinions voiced now are that both sides would suffer if exchanges were cancelled.

There followed a question and answer period.

Q.: Was the reaction triggered by the invasion of Afghanistan or the exile of Sakharov?

Hurwitz: The initial reaction was in response to the invasion of Afghanistan; the Sakharov incident exacerbated the situation.

Edward Gerjuoy, American Physical Society: What about exchanges with other countries? Do we maintain agreements regardless of human rights issues (e.g. with Argentina)?

Hur.: To my knowledge, no exchange agreements have been cancelled outright because of human rights issues. With respect to US-Soviet exchanges, many visits and activities have been indefinitely postponed, but there has been no cancellation of programs or agreements.

Jean Simmons: What is the role of the individual scientist in the present situation?

Hur.: We are now weighing the whole program of exchange, not the individual exchanges. Access to the Soviet scientific establishment is important, and difficult to quantify.

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Statements from three persons who were unable to attend the meeting were read:

Beatrice M. Sweeney, President, American Institute of Biological Sciences:
"My personal opinion is that scientists form an international community which transcends politics and that individual scientists should not be penalized for actions of their government in which they have no part."

Norman D. Levine, President, American Society of Parasitologists:
"I think that the United States should do its utmost to attempt to discourage the Russian government from undertaking any further similar actions. This should include boycotting the Olympic games in Russia and discontinuing scientific exchanges with that country. We are at war with Russia, and the fact should be recognized."

M.D.F. Udvardy, Representative of the American Ornithological Union (AOU):
"I favor suspending exchanges with the Soviets, hoping they can be resumed as soon as possible. AOU is involved in a 1982 Congress scheduled to be held in Moscow. This is not cancelled yet; if it were scheduled for 1980, I would favor withdrawal."

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The last speaker in the morning session was the Honorable Frank Press, Director of the Office of Science and Technology Policy. He began by reviewing the need for scientific cooperation between the two countries. Access to the work of scientists of a large nation with world level capability is important for the advancement of science. From the U.S. point of view, the major goal in establishing scientific cooperation was to build bridges. The Soviet point of view has been narrower and reflects the need to modernize their industry.

The human rights issue has been a key one and has kept bilateral cooperation on a plateau. Access to certain labs and scientists is difficult, or impossible. The emphasis of the program has been on improving its quality, rather than on its growth.

The sudden invasion of Afghanistan has forced a reevaluation of the contacts with the Soviet Union, in the area of science and technology as well as in other areas. It is believed that taking steps to slow or postpone these relations is effective: it hurts the Soviet economy; it may also bring home to the Soviet citizens that their government has done something horrible.

Government-sponsored official contacts have been halted: highly visible senior officials will not be going to the Soviet Union. Decisions will be made on a case-by-case basis in areas of cooperation which have involved humanitarian questions. The exile of Sakharov is of very great concern. He is a symbol. It is necessary that repercussions be felt in the area of scientific and technological cooperation, on a governmental level, as well as on an individual level. On the other hand, many people believe that science is universal; that contacts are important regardless of politics; and that the connections should be maintained for the sake of those Soviet scientists who cannot express their opinions freely. This creates a dilemma, to be resolved on an individual level.

The U.S. government looks favorably upon the continuation of individual contacts. But all official contacts must be curtailed to show that the Soviet Union has gone too far. At the same time, the framework (mechanisms, budget, etc.) should be preserved, so that exchanges can be resumed in the event that the atmosphere changes. It took 10-15 years to build up the program. There is a feeling within the government that the scientific community would like that framework to be preserved and to be able to make their own decisions.

There followed a question and answer period.

Edward Gerjuoy: 1) Is it clear how much is cut? 2) Would it be suitable to utilize the funds budgeted for exchanges with the Soviet Union to build up exchange program with China for instance?

Press: The situation is evolving; not all possible steps have been taken yet. The govern-

ment needs more input from the scientific community. With respect to the exchange program with the People's Republic of China, its budget is already fixed. The program has been growing rapidly, and should remain independent of the Soviet program.

Daniel McCracken, Association of Computing Machinery: I subscribe to the idea that science is an international activity. But there are no absolutes. For instance, would anyone have maintained scientific cooperation with Nazi Germany in 1942? The Association of Computing Machinery made the symbolic gesture to stop formal exchanges with its Soviet counterpart. The association has continued to help their many colleagues in the Soviet Union. One of them is now teaching at CUNY; when asked how much should exchanges be cut back, he replied that it was important to cut half way, so as to keep some possible measures in reserve to continue to apply pressure.

P.: I agree.

William D. Carey: What has been lately the quality of the conversations with the Soviet ambassador? What has been the reaction to our position?

P.: The Soviet embassy fully knows what our position is. Their position has been to listen, without any comment.

Q.: How are other countries reacting?

P.: Over all, reactions have been similar to those of the U.S. None of the grain producing countries have stepped in to replace the U.S. shipments. With respect to scientific and technological cooperation, Australia, Great Britain and Canada have taken positive steps. Reactions from other countries will be better known after the Hamburg meeting.

Ellis Page, American Education Research Association: It is more difficult now to get good scientists into defense research than during the cold war period. At the same time, the intent of the Soviet Union has never varied even during detente, and we should not be surprised by their present actions. Is it sufficient to curtail scientific exchanges and boycott the Olympic Games?

P.: This is a difficult question. The contacts between the Department of Defense and the scientific community were reduced because of the Mansfield Amendment, when the research budget of the Department of Defense was cut. It is believed that the dangerous turn taken by Soviet policy needs to be responded to by the steps taken so far.

Edward Gerjuoy: To take a specific example: if the Soviet Union invited an American seismologist for a visit, would you let him go?

P.: In this case, yes, because we can learn from the Soviet seismologists.

William Lester, chairman of the International Council of the newly formed American Association of Engineering Societies (AAES), was asked to give the AAES perspective. AAES is in the process of developing a policy on relations with the Soviet engineering societies. Each of the 52 societies member of AAES, and each council, has been asked to forward their recommendations to the AAES Board. To date, several engineering societies (e.g. the American Association of Civil Engineers) have decided to defer exchanges to a later date. The recommendation of the International Council is that exchanges and visits are inconvenient at the present time, and should be postponed.

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The meeting was suspended for lunch, and resumed at 1:30 pm.

Kenneth E. Boulding spoke on the nature of the international system and the role of the scientific community. The international system in its present form is one of the greatest dangers which the human race faces; its basic organizing principle is threat, modified by taboo, social and political convention, and international institutions. Four phases can be distinguished: stable war (as in Southeast Asia), unstable war (Middle East), changing over to unstable peace (U.S.-U.S.S.R. relations), and stable peace. We can detect a long, unsteady historical movement from stable war towards stable peace. The unstable peace situation between the U.S. and the Soviet Union is based on the use of deterrents, with the inherent probability of nuclear war. The scientific community has some responsibility in the development of nuclear weapons. This is complicated by its particular ethic, which puts a high value on curiosity, veracity, and testing. It also functions under the principle that people should be convinced by evidence and not by threat. There is therefore a deep tension between the respective cultures of the scientific community and of the international system.

The behavioral patterns of the international system strongly resemble those of a schoolyard. We are facing an outbreak of political childishness, with the danger of reciprocating in kind. The scientific community cannot do very much, except to preserve the common ethos shared by all its members. It falls victim only too easily to politics. It appears therefore very important to sustain whatever contacts we can with the scientific community of the Soviet Union. We can certainly express our dismay and anxiety about what has happened, but we must endeavor to maintain whatever connections possible. We must remember that we are members of the world scientific community and the human race as well as citizens of our own country, and we must do what we can to hold the world together.

The floor was now given to the participants.

Neil W. Stuart, American Society of Horticulturalists: It is necessary to consider the global problems faced by the world, such as food production. The solutions to those problems require the cooperation of all scientists. We must think seriously before cutting relations.

Jean Simmons: Politicizing scientific organizations is a dangerous thing. Whatever will be done will be an example, and we must exercise great caution, to avoid mistakes.

William Leveque, American Mathematical Society (AMS): AMS has an ongoing program of translating journals from the Soviet Union, and would like some information from other societies on the way their own programs have fared. AMS would like to continue this translation program, but faces problems from its Soviet counterpart. After two years of negotiations, and the preparation of a draft agreement, everything suddenly became impossible or illegal last fall. There is pressure from the AMS membership to use the translation program as a means to respond to human rights situations. What is the experience of other societies?

Edward Gerjuoy: The American Physical Society has a translation program for its own self interest. No one has ever suggested refusing a manuscript on grounds of human rights. We should avoid the danger of imitating autocratic behavior. In scientific research, scientists know better than governments and therefore decisions should be left to the scientists.

Thomas Dutro, American Geological Institute: The Institute does not have any experience with a translation program. However, the group should be aware of the fact that it would be easy for the Soviet Union to cut off our own translation programs by simply cutting off printing when they see fit. This would be to our disadvantage.

Margaret Martin, American Statistical Association (ASA): ASA has no specific activities related to Russia. There are two committees: one on human rights, and one on International Relations; the aim of the latter is to inform ASA members, and exchange statistical know-how. ASA has had a successful program in South America.

Conrad Arensberg, American Anthropological Association (AAA): Research collaboration with the Soviet Union has been confined to innocuous subjects (e.g. the languages of very small ethnic groups), and the issue of human rights has been avoided. There is currently an effort to objectivize the data.

Daniel McCracken: The concept of science as an international enterprise should not override all dangers. The appeals to keep windows open, build bridges and continue one-to-one relations should be balanced by the consideration of the fact that the people who are suffering are also decent people, and that they need to be helped. One of the ways to help is to show the Soviet government that the violation of human rights will have wide ranging consequences. Recalling Nazi Germany, there are times when science is not neutral. Some major steps should be taken by the societies to apply pressure, without completely cutting off relations.

Chauncey ALexander, National Association of Social Workers (NASW): There is no equivalent counterpart to NASW in the Soviet Union. In view of American actions in Viet Nam and Chile, we cannot be too moralistic about the invasion of Afghanistan. We must develop an alternative attitude, which is not defensive. The scientific community could set an example of human and intellectual interaction, by maintaining a rational approach in an irrational world.

Leo Young: There are two aspects to the difficulty: we must consider what our conscience dictates, and what politics dictates. No action is easier than some action, but would be wrong. Something must be done. We must not confuse the office and the office holder: when dealing with an official, we must let him know what we think; but since we also deal with individual scientists who may need help, we cannot afford to burn the existing bridges. We must oppose the policy and the people who are responsible for it, but not the individuals who are against this policy. Therefore cutting back on official visits and exchanges is recommended, while allowing individual contacts to continue.

Robert Wedgeworth, American Library Society: The association has a modest program of exchange with the Soviet Union. The present situation was discussed at the last Board meeting. A seminar is scheduled for October 1980. Relations have been generally cordial; but the association has always attempted to speak in favor of the free flow of information. The course of action remains to be planned but it is probable that activities will continue at a low level, and that high level exchanges will be postponed.

Fred Leone, American Statistical Association: The membership of the societies should be allowed to voice their opinion. We must distinguish between the office and the office-holder and between individual feelings and professional feelings as scientists.

Michael Murtha, Association for the Study of Man-Environmental Relations: A product should emerge from this meeting, if only a decision to go to each society's membership. We need to develop a position to be communicated to the Soviet Union. The two issues of Afghanistan and human rights need to be separated. The human rights issue will last for a long time and the answers must be of a kind that can endure. A give and take approach is reasonable in this case. The invasion of Afghanistan is a major event, requiring on our part a response of equal magnitude. A graduate approach is not necessarily best, or strong enough.

William D. Carey provided some final remarks. The group should be reminded that it took a long time to build up confidence; it took 5 years and a lot of patience to overcome the initial stage where answers given came out of a book, and to be able to visit institutions. Candor in the exchanges is something that is obtained only over a long time. The outcome of the government/government working group on Soviet exchanges is not clear; we must follow signals from the government. It is important to keep the door from closing. When on official visit to the Soviet Union, it is not necessary to toast the Soviet government; toast instead the reason for the visit.

This meeting has been a sensible exercise of the Consortium, namely a consultation. AAAS does not propose to tell Consortium members what to do. This is an organization of a federative nature. We hope to have the opportunity to meet again on issues of vital interest, when needed and useful.

The meeting adjourned at 3:30 pm.

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Inquiries on the Consortium, requests for past issues of the Consortium Notes, etc. should be addressed to:

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1776 Massachusetts Avenue, NW
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ATTENDANCE OF FEB. 8, 1980 MEETING OF

THE CONSORTIUM OF AFFILIATES

1. American Anthropological Association

   Conrad Arensberg, President
   Edward Lehman, Executive Director

2. American Association of University Professors

   Jonathan Knight, Associate Secretary

3. American Association of Engineering Societies (by special invitation)

   William Lester, Chairman, International Council

4. American Chemical Society

   James D'Ianni, President
   Raymond P. Mariella, Executive Director
   Gordon Bixler, Representative to the Consortium

5. American Eduational Research Association

   Ellis Page, President

6. American Geological Institute

   A.G. Unklesbay, Executive Director
   J.T. Dutro, Representative to the Consortium

7. American Geophysical Union

   Fred Spilhaus, Representative to the Consortium

8. American Institute of Biological Sciences

   A.C. Gentile, Executive Officer

9. American Institute of Chemical Engineers

   Phil Hamilton

10. American Institute of Chemists

    Robert L. Patrick
    David Roethel, Executive Officer

11. American Library Association

    Robert Wedgeworth, Executive Director

12. American Mathematical Society

    William J. Leveque, Executive Director
    Everett Pitcher, Secretary

13. American Meteorological Society

    R.M. White, President-Elect
    Kenneth Spengler, Representative to the Consortium

14. American Nuclear Society

    Corwin Rickard, Board of Directors, NAS

15. American Oil Chemists Society

    David Firestone, Past President

16. American Physical Society

    Edward Gerjuoy, Chairman APS-CIFS

17. American Phytopathological Society

    Howard Waterworth, U.S.D.A.

18. American Psychological Association

    Florence Denmark, President
    Michael S. Pallak, Executive Officer
    Robert Lowman, Director , International Affairs Office
    Karen Scharr

19. American Society of Plant Physiologists

    G. Ray Noggle, Executive Officer

20. American Society for Horticultural Science

    Neil Stuart, Past President

21. American Society for Information Science

    Madeline Henderson, Secretary, Section T

22. American Society for Metals

    Raymond Smith, President

23. American Society for Microbiology

    Robert Acker, Executive Officer

24. American Society of Agricultural Engineers

    J.L. Butt, Executive Vice President
    Roy Harrington, Representative to the Consortium

25. American Society of Animal Science

    Paul Putnam

26. American Society of Mechanical Engineers

    M.H. Bradley

27. American Society of Pharmacology and Experimental Therapeutics

    Sydney Spector, President
    William West

28. American Society of Zoologists

    Bruce Umminger, Secretary

29. American Sociological Association

    Russell Dynes, Executive Officer

30. American Speech and Hearing Association

    Barbara Reiner

31. American Statistical Association

    Margaret Martin, President
    Fred Leone, Representative to the Consortium

32. Association for Computing Machinery (by special invitation)

    Daniel McCracken, President

33. Association for the Study of Man-Environmental Relations

    D. Michael Murtha

34. Association of American Geographers

    Patricia McWethy, Representative to the Consortium

35. Association of Southeastern Biologists

    Ray Peterson

36. Biophysical Society

    Winona Barker, Secretary

37. Conference Board of the Mathematical Sciences

    Truman Botts, Executive Director

38. Council of Scientific Society Presidents

    James D'Ianni, Vice Chairman

39. Entomological Society of America

    H.T. Reynolds, President
    W.D. Hansen, Executive Director

40. Gerontological Society

    Carol DeVita

41. Institute of Electrical and Electronics Engineers

    Leo Young, President

42. Institute of Navigation

    P.K. Seidelmann, President

43. International Studies Association

    James Kuhlman, Executive Director

44. Marine Technology Society

    Edith McKee, Representative to the Consortium
    Harry Irwin, Executive Officer
    Joseph Vadus

45. Medical Library Association

    Naomi Broering, Representative to the Consortium

46. National Association for Research in Science and Teaching

    Marjorie Gardner, National Science Foundation

47. National Association of Social Workers

    Chauncey Alexander, Representative to the Consortium
    Mary Catherine Jennings

48. National Council of Teachers of Mathematics

    Jim Gates, Representative to the Consortium

49. National Speleological Society, Inc.

    Janet McCormick, Administrative Vice President

50. Optical Society of America

    Jarus Quinn, Executive Director

51. Population Association of America

    Murray Feshbach, DOC, Woodrow Wilson Fellow

52. Potato Association of America

    Robert Goth

53. Rural Sociological Society

    Edward Moe, President
    Archibold Haller, Representative to the Consortium

54. Sigma Delta Epsilon

    Jean Simmons, Representative to the Consortium
    Catherine Quigley, National Secretary

55. Society for Research in Child Development

    Karen Fischer

56. Society of American Foresters

    John Barber, Executive Vice President
    Stan Krugman, Representative to the Consortium

57. Speech Communications Association

    William Work, Representative to the Consortium

58. Volunteers in Technical Association

    Henry Norman, Executive Director

Observers attended the meeting from:
- Department of State
- Engineering Times
- National Academy of Sciences
- National Science Foundation
- New York Academy of Sciences

Statement for the meeting of the American Association for the Advancement of Science International Consortium, February 8, 1980

by Kenneth E. Boulding, Chairman of the AAAS Board of Directors

These notes are offered as a purely personal contribution to the discussion and are in no sense an official statement. I have devoted a fair part of my life to the study of international systems and conflict resolution. I was one of the founders of the Journal of Conflict Resolution and am a past president of the International Studies Association. These remarks, however, have no authority other than the truth that might be in them.

The international system in its present form is perhaps the greatest danger which the human race faces. Everything else that might get us into trouble--population pressure, resource exhaustion, pollution, corruption, alienation, and so on--are an order of magnitude less dangerous than the international system, and particularly the world war industry with its nuclear weapons poised for destruction. Something on the order of 6 percent of the gross world product is devoted to armed forces, weapons, and plans for destroying other human beings and their artifacts. The basic organizing principle of the international system is threat, modified by taboo, social and political convention, and international institutions like the United Nations and international law.

Four phases of the international system can be distinguished, all of which are present in the world today. There is stable war, such as we have had in Southeast Asia for over 30 years and is still going on. Then there is unstable war, in which war is regarded as the norm but is interrupted by periods of peace, in which the parties recuperate from the last war and prepare for the next. Israel has been in this situation for the last 30 years, but is now perhaps moving out of it. As the intervals of peace get longer, this passes over almost imperceptibly into unstable peace, which has been characteristic of the central international system for a large part of its history. It characterizes the relations of the United States and the Soviet Union today, even though they have never actually been at war with each other. This is the situation in which peace is regarded as the norm but has some probability of being interrupted by periods of war, which, however, are expected to reestablish peace on terms more favorable to one party or the other. The most prominent characteristic of unstable peace is deterrence, that is, a threat-counterthreat system--"If you do something nasty to me, I will do something nasty to you."

Then, in the last 100 years or so we have seen the development of areas of stable peace in Scandinavia, North America, now I think Western Europe, in which national boundaries are taken off the agenda and in which there is disarmament of frontiers and the probability of war is so low that it does not enter into any usual calculations. This fourfold taxonomy characterizes threat systems of all kinds--among tribes, feudal barons, unions and management, even husbands and wives. We can detect a long, unsteady historical movement from stable war towards stable peace. But this requires a long learning process subject to many upsets.

Relations between the United States and the Soviet Union fall into the category of unstable peace of a very peculiar kind as a result of the development of the long-range missile and the nuclear warhead. This is deterrence based on mutually assured destruction (M.A.D.) rather than on confrontation across frontiers. There is an extraordinary illusion in both countries that deterrence can be stable. In fact, it can be stable over short periods, but it cannot be stable indefinitely. There must be a positive probability of its breaking down; it is hard to estimate what this probability is, but it must be a positive number or the deterrent would cease to deter. If the probability of nuclear weapons going off were zero, it would be the same as not having them. As long as we have them, there must be some positive probability that they will go off. The size of this probability is anybody's guess. My own guess is that it has been of the order of 1 percent per annum or less, rising perhaps to 20 percent at the time of the Cuban crisis, rising perhaps to 3 or 5 percent in the last few weeks. The probability of nuclear war is of the order of magnitude of a 100-year flood, the probability of which is an uncomfortable 63 percent at some unknown time within 100 years, and a terrifying 98.4 percent over 400 years. We live in a system under indeterminate sentence of death.

The scientific community cannot avoid some responsibility for this situation. War and weapons long predate science, and even gunpowder may have been produced by folk technology, but without science the nuclear weapon would have been impossible. There is some probability--though I think a small one--that science might lead to the "doomsday machine" of Herman Kahn and the extinction of life on earth. There is no point in inculcating a fruitless guilt, but the scientific community has an inescapable responsibility for the present state of affairs, and this has been reflected indeed in such movements as Pugwash and in the Bulletin of Atomic Scientists.

The situation is complicated by the fact that the scientific community itself has a very peculiar ethic, which is largely responsbile for its success, but which is in considerable tension with the ethic of the political and social system which increasingly supports science. The ethos of the scientific community puts a high value on curiosity, veracity, and testing. It also, however, has a very fundamental principle, that people should be convinced by evidence and not by threat. The renunciation of the threat system, indeed, is fundamental to the development of science. It is this which differentiates science from ideologies, whether political or religious. There is no room in the scientific community for an inquisition or for forced conformity, even though we have to admit that this principle is not adhered to perfectly, especially in science education, where students have to learn to accommodate the threat system of their teachers and to respect authority as well as evidence. In the last analysis, however, in the scientific community it is evidence that wins out, something oddly enough which it shares with the legal tradition, especially of the common law, which, again, is that decisions should be based on evidence and not on threat. There is a deep tension, therefore, between the culture of the scientific community and the culture of the international system, particularly of the defense establishments of the world, in spite of the fact that a considerable proportion of scientists are employed by defense establishments and that science has made important contributions to the development of weaponry, that is, to instruments of threat.

What does all this mean for the present situation? In the last few months we have seen a severe worsening in the relations of the United States, first with Iran, now with the Russians as a result of their military intervention in Afghanistan. In Iran the reaction from the Shah's regime of modernization, coupled with personal terror, into Islamic revival and revenge, has deeply shaken the fragile structure of international diplomacy, which rests so much on the convention of diplomatic immunity. The young Iranians who are holding the hostages are imposing a very high cost on the whole human race. The Russian invasion of Afghanistan is a violation of the status quo frontiers which have been fairly stable since the end of the Second World War, in a way that the invasions of Hungary and Czechoslovakia were not, as the shift in the position of the "Iron Curtain" threatens the whole stability of the international system.

I have no more clues to what went on in the minds of the people who made these decisions than anybody else who reads the newspapers. In the Soviet case, I suspect, though I cannot prove, fear of the impact of this extraordinary upsurgence of Islam on the large Islamic minorities in the Soviet Union, which itself is a potentially fragile leftover from nineteenth-century empires, may well have inspired a decision the consequences of which were by no means carefully considered.

What we are facing here is an infectious outbreak of political childishness. The behavioral patterns of the international system strongly resemble those of a schoolyard. We constantly find ourselves in "prisoner's dilemmas," in which everybody gets worse off. The international system, indeed, is a prize example of a negative-sum game. Unfortunately, childish behavior in one produces childish behavior in others, and the mood of the United States today is a good example of it. At the moment it is a highly ambiguous and ambivalent mood, but we are in grave danger of slipping over into a war mood, as Lewis Richardson called it, as a child can be provoked to catastrophic aggression by a sufficient number of pinpricks.

Can the scientific community do anything in this situation? Perhaps not very much, but we do at least represent a world community united by a strong ethos. It is a weak integrative structure, and yet is one of the few things that does potentially hold the world together. It would be utterly tragic if we allowed the pathologies of international politics to break the bonds of the world scientific community. In the visit of the AAAS Board to China, I think we all felt more strongly than ever before that there is indeed a world scientific community. The joy of the Chinese scientists in recovering contact with it after they had been deprived of these contacts for so long was something that moved us all. The scientific community, indeed, easily becomes the victim of politics, and has suffered many times in the past. But if it can sustain its basic identity and its ethic, and if it can maintain its own maturity and not fall into this infectious childishness which is all around us, with patience it can weary out of the childishness of political life.

It seems to me of great importance, therefore, to sustain whatever contacts we can with the scientific community of the Soviet Union, especially with the Russians. We can certainly express our dismay and anxiety about what

has happened, but we must endeavor to maintain whatever connections we can. The scientific community in the Soviet Union, as in China, has itself suffered severely in times past from the threat system of the political order; for instance, in the Lysenko case. We may see something like this arising again. We must support and sustain them as much as we can. We must be sensitive also to the fact that we ourselves are not immune to political pressure. If we are true to our scientific commitment, we must remember that much as we love our own country--and we have every reason to do so, for it does stand for something very important in the world--we are also members of the world scientific community and of the human race, and we must do what we can to hold the world together and prevent its sliding down the slippery slope towards destruction on which we now find ourselves.

American Association for the Advancement of Science
1776 Massachusetts Avenue, N.W., Washington, D.C. 20036
Meetings and Publications • 202/467-

MEMORANDUM: 29 January 1980

TO: Presidents and Executive Officers, *AAAS Affiliated Societies and Academies*

FROM: Arthur Herschman, *Head, Meetings and Publications*

SUBJECT: Participation in the 147th National Meeting of AAAS, *3-8 January 1981, Toronto, Ontario*

We invite your organization to participate in the 1981 AAAS Annual Meeting in Toronto (3-8 January). Although the theme for this Meeting has not yet been specified, we encourage quality symposia for the Meeting which present:

The recent developments in science and engineering of interest to the practitioners in several disciplines, as well as to the educated public at large; those public-policy questions where science and engineering can make a contribution or which involve developments in science and engineering. Topics which are of interest to only a narrow group of specialists should be avoided.

It is of advantage to you, and more convenient for us, if you would participate, *through the AAAS Section to which you are affiliated*, by returning a copy of the attached form, when completed, to the Section Secretary, as well as to me. For symposia jointly sponored by a AAAS Section, there will be no charge to your organization for equipment used in your session or for publication in the Meeting Program. However, if you choose to present a symposium as part of the AAAS Annual Meeting without Section sponsorship, *charges will be made;* our best estimates indicate that the following rates will prevail:

Printing in AAAS Program: full page rate = $150; audio-visual equipment operator: 4-hr min. = $48; audio-visual equipment rental: 35 mm (2x2) slide, full day = $15; overhead, full day = $15; 16mm film, full day = $15; 8mm film, full day = $15.

PLEASE NOTE: All symposium proposals will be reviewed; none are automatically accepted.

To be considered for acceptance, it is most important that proposals be received before the deadline of *15 March 1980;* information as to acceptability will be sent in early May. Individual contributed papers for poster session presentation only, *if submitted by a AAAS member,* are acceptable until early September; further information will appear in *SCIENCE* later in the spring.

If you choose to hold a meeting of your organization in parallel with the AAAS Annual Meeting, there are other hotels in the vicinity of the AAAS Meeting Hotels (Sheraton Centre, Royal York, and Hotel Toronto) which you can use. It will be necessary for you to make your own hotel and equipment arrangements; however, AAAS will gladly publish the *epitome* of your meeting program in its Meeting Program at the rate quoted above. Please contact the AAAS Meetings Office for further information.

We also request your cooperation in publicizing the AAAS Meeting, your contribution to it, and other symposia of interest to your members, in your various journals and newsletters (general information will be available in September), and to encourage your membership to register at the Meeting.

NARST SESSION PLANNING GROUP Will be Chaired BY DR. Douglas ROBERTS 252 Bloor St. W. OISE TORONTO, CANADA M5S 1V6 416 923 6641

PROGRAM SUGGESTION DEADLINE: 15 MARCH 1980

PLEASE FORWARD IMMEDIATELY TO APPROPRIATE PROGRAM OFFICER

SEE ATTACHED SPECIAL EXHIBIT OFFER