

1986 Fall Meeting of the Executive Board
National Association for Research in Science Teaching
Indianapolis, IN
October 30, 1986

MINUTES

Board Members in Attendance

Dr. James Barufaldi	Mr. Leroy Lee
Dr. Patricia Blosser	Dr. Glenn Markle
Dr. David Butts	Dr. Michael Padilla
Dr. Jane Bowyer	Dr. John Staver
Dr. Roger Bybee	Dr. Emmett Wright
Dr. Linda DeTure	Dr. Russell Yeany
Dr. Ronald Good	

Others in Attendance:

A. Opening Remarks by the President

B. Approval of Agenda

Motion: Moved approval of the agenda. (Butts, Staver)

Motion carried.

C. Approval of Minutes Describing the 1986 Spring Meetings of the Board, March 28 and March 31

Motion: Moved that the minutes of the March 28 meeting of the Board be approved. (Butts, DeTure)

Motion approved.

Motion: Moved that the minutes of the March 31 meeting be modified or corrected in the following ways:

1. Page 10, F. Delete "and censors" from Barufaldi's caution regarding NSTA's publications.

2. Correct the dates on the program proposal reported on pages three and four. Dates should read Thursday, April 23 through Saturday April 25. (Butts, Staver)

Motion approved.

D. Report

Motion: Moved general acceptance of all submitted committee reports. (Butts, DeTure)

Motion approved.

E. Financial Advisory Committee Report

The Financial Committee Report was presented by John Staver. Four recommendations were considered: increase in dues from \$44.00 to \$54.00 per year effective in 1988; increase annual meeting registration fee by \$10.00 for regular members; establish a life member category; and review our relations with John Wiley and Sons as publishers of JRST.

Motion: Moved an increase in regular membership dues from \$44.00 per year to \$54.00 per year. (Staver, DeTure)

A basic proposition of the FAC was that services NARST should continue to provide the level and personal nature of service provided in the past and that this would not be possible unless there were an increase in dues. The Association has no cushion to fall back upon; in fact, our expenses exceeded our income during the past year.

Discussion centered on the probable increase in costs of the journal and how that would affect the overall cost for membership. Some discussion of even greater increase in annual dues but there was no support for this position.

The consensus that emerged was that the membership needed to be informed of the rationale supporting increase dues. Dave Butts pointed out that increases in dues needed membership approval and that the issue should be placed on the ballot with the upcoming election. The December issue of NARST News needs to provide the rationale for increased dues.

Motion approved.

Motion: Moved that annual meeting registration fees be increased by ten dollars to \$55.00 for preregistration and \$65.00 for on-site registration for regular members. No increases were proposed for student and emeritus members. (Staver)

Butts suggested a modified motion to set a conference fee of \$35.00 plus banquet costs. A single registration fee would be communicated to members (\$35. plus banquet cost), but maintain the registration fee for students and emeritus members at approximately the cost of the awards banquet. Also, keep the \$10.00 differential between pre and on-site registration. (Butts, Staver)

Modified motion approved.

Staver presented the notion of adding a "life membership" category to our dues structure. After discussion, the idea was referred back to the Financial Advisory Committee for further consideration. The committee should prepare a recommendation for the Spring Board Meeting.

The relationship between NARST and John Wiley and Sons, publishers of the JRST was discussed. A representative of Wiley should be invited to the Spring Board meeting to discuss the contract. The advisory group (President, Executive Secretary, and Journal Editor) should meet with a Wiley representative prior to the Spring meeting to clarify our relationship.

Roger Bybee suggested contacting a lawyer to review the current contract and solicit advise concerning our "rights" under the contract. The consensus was that we should follow this suggestion and that the same lawyer we used in 1982 should be contacted.

The Board approved by consensus the recommendation of the Financial Advisory Committee that an annual audit of the books be done by a university fiscal officer with an outside audit toward the end of the five year executive secretary appointment.

F. Budget

Motion: Moved acceptance of the 1987 proposed budget. (DeTure, Butts)

The proposed budget did not reflect the increases in registration fees approved during this meeting and did not include the awards banquet expense.

Motion: Moved to table the original motion until the budget is revised to reflect changes in registration fees and banquet expenses for 1987. Budget would be approved by mail. (Butts, DeTure)

Motion to table approved.

Motion: Moved that questions regarding costs of publishing programs and abstracts be referred to the Publication Advisory Committee for consideration. The PAC should report back at the Spring meeting. (Butts, Bybee)

Motion approved.

D. Report of the Publications Advisory Committee

The report of the Publications Advisory Committee was presented by Ron Good. The proposal for a Handbook by Larry Yore appears to be in limbo at this point in time. The status is unclear. Shymanski et al did not submit a proposal as anticipated.

The committee proposed the following general review process for publications submitted for NARST support:

The NARST Board must review and vote on all special publication projects that require an expenditure of NARST funds and/or require the NARST "stamp of approval". This does not mean that every publication must be reviewed by the Board; the Board may choose to simply accept the recommendations of the Publications Advisory Committee. The Publications Advisory Committee must review all special publication projects and submit recommendations to the Narst Board through the NARST President. The primary purpose for

such review is to ensure that NARST is well-represented by the publications.

Motion: Moved the PUblication Advisory Committee generate a list of "information" needed before proposals are considered by NARST. (Butts, Bowyer)

Padilla proposed a friendly amendment to include a review of the final product. Butts and Bowyer agreed that this should be one of the steps in the review process.

Motion approved.

Motion: Moved that questions concerning advertisements and similar Newsletter content be referred to the Publications Advisory Committee. A report on these matters should be presented at the Spring Board meeting. (Butts, Padilla)

Motion approved.

After much discussion, the idea of a fastback series was referred to the Publications Advisory Committee for consideration. The committee should bring their recommendations concerning a NARST fastback publication to the Board at the Spring meeting.

E. Report of the Policy Advisory Committee

The report of the Policy Advisory Committee was presented by David Butts.

Motion: Moved that the President of NARST be responsible for the negotiations of the site and hotel arrangements for the annual meeting that occurs two years after the presidential year term. The president may designate other members of the Board including the Executive Secretary to assist in these negotiations. Negotiations for a site for the annual meeting must include consideration of:

adequate meeting room space;

arrangement of rooms to facilitate communications;

meal functions and costs which are to be included in the annual meeting registration costs;

**assignment of complimentary rooms as per
established Board policy. (Butts, Staver.)**

Markle suggested that a more efficient approach would be to charge the executive secretary with the responsibility of proposing a minimum of two meeting sites for upcoming conventions at least two years in advance of the meetings. The proposal to the Board should include the estimated costs for each site and the advantages and disadvantages of each. The Board should then decide if enough information is available to make an informed decision and, if so, direct the executive secretary to complete the arrangements with the selected site. He believed this would be more efficient in that it would enable the Association to take advantage of the experience gained by negotiating with numerous potential meeting sites over time.

The advantages and disadvantages of planning procedures were discussed.

Motion: Moved that the original motion be tabled until the Spring meeting to give the Policy Advisory Committee an opportunity to consider the matter. (Padilla, DeTure)

Motion to table approved.

Motion: Moved that beginning with the minutes of the Fall, 1986 meeting, the President and Executive Secretary be directed to generate a policy manual comprising those actions that have been acted upon during the 1986 year and further that this manual be maintained as per of October 1984 Board action. Operating procedures established prior to 1986 will be incorporated only as they may be reviewed and changed by subsequent action of the Board. (Butts, Yeany)

Motion approved.

Motion: Moved that a task force be established consisting of the President of NARST, the JRST editor, and the NARST Executive Secretary to explore with the concerned parties their interest or agreement with the proposal to add JRST to the AETS/Science Education "check off" membership form and to add SCIENCE EDUCATION to the NARST/JRST membership form. The committee should prepare a progress report at the Spring Board meeting. (Butts, Bowyer)

Motion Approved.

I. Report on the 1987 Annual Meeting

Linda DeTure reported on the plans for 1987 annual meeting.

J. Report of the Research Committee

The report of the Research Committee was presented by Roger Bybee.

Markle and Bybee were directed to develop a procedure to print and make available copies of Research Matters for use by the Association.

A general consensus emerged that each issue of the Newsletter should contain one Research Matters paper as a way to distribute these to the general membership.

The question of a procedure for developing a research column for the Journal of College Science Teaching was discussed. The Board was reminded of a previously passed motion that the Research Coordinator be responsible for seeing to it that the column is made available to JCST.

Motion: Moved that an ad be placed in the NARST News for applications from members interested in serving as editor for the Journal of College Science Teaching NARST Research Column. The Research Committee would be responsible for reviewing applications and recommendations to the Board at the Spring meeting. (Bybee, Padilla)

Motion approved.

K. Elections Committee

David Butts reported on the activities of the Elections Committee. The nominees for 1987 were:

President: Patricia Blosser
James Shymansky

Director: Charles Anderson
Marianna Betkowski
James Ellis
Fred Finley

Motion: Moved acceptance of the nominations of the Elections Committee (Butts, Staver)

Motion approved.

The Newsletter editor needs to use a uniform pattern when listing the names and qualifications in the NARST News. The nominations should appear in the December issue of the Newsletter.

L. Awards Committee

Mike Padilla reported on the activities of the Awards Committee.

The criteria for the NARST Award for Distinguished Contributions to Science Education Research presented on page 37 of the Fall Board Meeting Guide and the applications procedures on the same page were discussed. Ron Good raised questions about comparing research contributions in different areas of different kinds. After much discussion, a consensus emerged that the Awards Committee should try the proposed approach this year and report on it at the Spring meeting.

M. JRST

The report was presented by Russell Yeany who distributed manuscript record data. The upcoming special issue, Technology and Cognitive Sciences, which is scheduled for April, 1987 was discussed.

Motion: Moved acceptance of the proposed new members to the JRST Editorial Board (Dale Baker, George Bodner, Eugene Chipetta, Heidi Kass, Robert Shrigley, Michael Waugh). (Butts, Staver)

Motion approved.

N. Executive Secretary Report

Glenn Markle presented the Executive Secretary Report.

Motion: Moved that Herman C. Kranzer and Ralph W. Tyler be granted emeritus status in NARST. (Markle, Butts)

Motion approved.

After discussion, a consensus emerged that the 1988 annual meeting should be held at the Lodge of the Four Seasons, Lake of the Ozarks, MO. Markle will follow through on making arrangements and the president elect for 1987 will be involved in final decision affecting the 1988 program.

O. Investigations in Science Education

Pat Blosser presented the report on ISE.

P. AAAS Report

Jim Barufaldi presented the AAAS report.

Q. Ad Hoc Committee on International Issues

The report of the Ad Hoc Committee on International Issues was presented by Jim Barufaldi.

The proposal to assume responsibility for providing "phantom editors" for JRST articles submitted by non-English speaking members was not supported. All submissions from international members were reported to be reviewed and suggestions for improving submissions are indicated if appropriate. The author is responsible for correcting problems.

The Board was not in favor of providing financial support to send a delegate to seminars in various countries. Members of NARST attending meetings in various countries may be appointed as a NARST delegate by the President.

S. DELTA/NARST Monograph

The report on the DELTA Monograph was presented by David Butts.

T. Triangle Coalition

No information available on the activities of the Triangle Coalition.

U. ICASE

No information available on the activities of ICASE.

V. President Elect Report

Linda DeTure reported on the activities of the President Elect.

W. President's Report

Jim Barufaldi reported on the activities of the President during the past year and thanked Board members for their support and encouragement during his first six months in office.

X. Old Business

Newsletter Editor. Two applications have been received from members interested in being editor of the NARST News. By mid-December the Search Committee will have a recommendation to Barufaldi on which the Board will be polled. The permanent editor should be named by the first of the year.

Y. New Business

None.

Motion to adjourn approved unanimously. The meeting adjourned at 4:00 p.m.

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

PROPOSED BUDGET FOR 1987

RECEIPTS

1.	Balance Brought Forward		\$ 5,548.00
	General Funds	\$ 2675.00	
	Delta Project	2873.00	
2.	Membership Dues		26,390.00
	Regular (550 @ \$44.00)	\$24,200.00	
	Student (70 @ \$30.00)	2,100.00	
	Emeritus (3 @ \$30.00)	90.00	
3.	Annual Meeting		17,600.00
	Preregistration (250 @ \$55.00)	\$13,750.00	
	Late Registration (50 @ \$65.00)	3,250.00	
	Workshop Registration (60 @ \$10.00)	600.00	
4.	Other		52,100.00
	Royalties from Wiley	\$ 1,600.00	
	Contributions from the University of Georgia (Journal Editor)	26,000.00*	
	Contributions from the University of Cincinnati (Exec. Sec.)	24,500.00**	

	TOTAL EXPECTED RECEIPTS		\$101,638.00

* This is the specific contribution of the University of Georgia in support of the Journal.

** This is the specific contribution by the University of Cincinnati in support of the Executive Secretary's office.

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

DISBURSEMENTS

1.	<u>Journal of Research in Science Teaching</u>	\$39,500.00
	Wiley Publishers (625 @ \$20.00)	\$12,500.00
	Journal Editor Salary*	19,000.00
	Journal Secretary*	7,000.00
	Journal Postage and Supplies	1,000.00
2.	Annual Meeting	\$16,603.00
	Programs (650 @ \$4.00)	2,600.00
	Abstracts (650 @ \$2.00)	1,300.00
	Special Aniversary Reception	500.00
	Awards	300.00
	Training Sessions	400.00
	Travel/Hotel	400.00
	Speakers (3 @ \$600.00)	1,800.00
	Travel/Hotel	800.00
	Supplies/AV	503.00
	Travel for Editor and Exec. Sec.	1,000.00
	Travel for 1988 Program Site Review	1,000.00
	Pres. Elect/Exec. Sec.	
	Awards Banquet (300 @ \$20.00)	6,000.00
3.	Officers/Executive Board	\$ 8,550.00
	President Elect	700.00
	President	1,000.00
	Past President	700.00
	Executive Board Meetings	
	Spring - Washington	950.00
	Fall (13 @ \$400.00)	5,200.00
4.	Executive Secretary	\$29,300.00
	Executive Secretary Salary (33%)	\$17,000.00**
	Secretary	7,500.00**
	Supplies/Printing	1,000.00
	Postage	1,500.00
	Telephone	1,800.00
	Miscellaneous	500.00

5. Other

\$ 7685.00

ICASE	60.00
Triangle Coalition	250.00
Newsletter (4 Issues)	4000.00
Research Matters	500.00
Delta Testing Monograph	2875.00

TOTAL DISBURSEMENTS

\$101,638.00

EXECUTIVE SECRETARY

Dr. Glenn Markle
NARST
University of Cincinnati
Cincinnati, OH 45221-0002

Organized to improve science teaching—through research

NARST

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

PRESIDENT

Dr. James P. Barufaldi
Science Education Center
EOB 340
The University of Texas at Austin
Austin, Texas 78712

MEMORANDUM

PRESIDENT-ELECT

Dr. Linda DeTure
Education and Human Development
Rollins College
Winter Park, FL 82789

TO: Members of the Search Committee for Recommending
an Editor for NARST News: Glen S. Aikenhead
(Chair), Pat Blosser, Glen Markle, and Russ Yeany
(advisory member)

IMMEDIATE PAST PRESIDENT

Dr. David Butts
Science Education Department
University of Georgia
Athens, GA 30602

FROM: Jim Barufaldi, President
NARST

RE: Selection of Editor for NARST News

BOARD MEMBERS-AT-LARGE

Dr. Patricia E. Blosser (1987)
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210-1172

Dr. Jane B. Bowyer (1988)
Education Department
Mills College
Oakland, CA 94613

Dr. Ronald Good (1989)
Science Education
Florida State University
Tallahassee, FL 32306

Dr. Michael J. Padilla (1987)
Science Education Department
University of Georgia
Athens, GA 30602

Dr. Gerald Skoog
National Science Teachers Association
1742 Connecticut Avenue N.E.
Washington, D.C. 20009

Dr. John Staver (1988)
College of Education
University of Illinois at Chicago
Chicago, IL 60680

Dr. Emmett Wright (1989)
Dept. of Curriculum and Instruction
Kansas State University
Manhattan, KS 66506

Enclosed are two letters from NARST members interested in
the two year appointment of editor for NARST News. The
committee is charged with recommending an editor for the
position. I would appreciate receiving this recommendation
by December 1, 1986. Thank you for your continued interest
in NARST.

JPB:1a
cc: L. DeTure
Enclosures

JOURNAL EDITOR

Dr. Russell H. Yeany
Science Education Research
an Evaluation Lab
Science Education Department
University of Georgia
Athens, GA 30602

RESEARCH COORDINATOR

Dr. Roger Bybee
B.S.C.S.
Colorado College
Colorado Springs, CO 80903

EXECUTIVE SECRETARY

Dr. Glenn Markle
NARST
University of Cincinnati
Cincinnati, OH 45221-0002

Organized to improve science teaching—through research



NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

PRESIDENT

Dr. James P. Barufaldi
Science Education Center
EOB 340
The University of Texas at Austin
Austin, Texas 78712

National Association for Research in
Science Teaching

PRESIDENT-ELECT

Dr. Linda DeTure
Education and Human Development
Rollins College
Winter Park, FL 82789

Fall Meeting, Executive Board
Indianapolis, Indiana

October 30, 1986

IMMEDIATE PAST PRESIDENT

Dr. David Butts
Science Education Department
University of Georgia
Athens, GA 30602

Proposed Agenda

BOARD MEMBERS-AT-LARGE

Dr. Patricia E. Blosser (1987)
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210-1172

Dr. Jane B. Bowyer (1988)
Education Department
Mills College
Oakland, CA 94613

Ronald Good (1989)
Science Education
Florida State University
Tallahassee, FL 32306

Dr. Michael J. Padilla (1987)
Science Education Department
University of Georgia
Athens, GA 30602

Dr. Gerald Skoog
National Science Teachers Association
1742 Connecticut Avenue N.E.
Washington, D.C. 20009

Dr. John Staver (1988)
College of Education
University of Illinois at Chicago
Chicago, IL 60680

Dr. Emmett Wright (1989)
Dept. of Curriculum and Instruction
Kansas State University
Manhattan, KS 66506

JOURNAL EDITOR

Dr. Russell H. Yeany
Science Education Research
an Evaluation Lab
Science Education Department
University of Georgia
Athens, GA 30602

RESEARCH COORDINATOR

Dr. Roger Bybee
B.S.C.S.
Colorado College
Colorado Springs, CO 80903

Page #

- | | | |
|--|----|--------------|
| 1. Welcome | | J. Barufaldi |
| 2. Approval of Minutes for
March 31, 1986 | 1 | |
| 3. Reports | | |
| a. Financial Advisory Committee | 8 | J. Staver |
| b. Publications Advisory Committee | 11 | R. Good |
| c. Policy Advisory Committee | 16 | D. Butts |
| d. Program Committee | 20 | L. DeTure |
| e. Research Committee | 23 | R. Bybee |
| f. Elections Committee | 25 | D. Butts |
| g. Awards Committee | 35 | M. Padilla |
| h. Editor of Journal | | R. Yeany |
| i. Research Coordinator | | R. Bybee |
| j. Executive Secretary | | G. Markle |
| k. Investigations in Science Education | | P. Blosser |
| l. AAAS Representative | | J. Lockard |
| m. NARST Archivist | 43 | P. Joslin |
| n. Ad Hoc Committee on International
Issues | 45 | G. Aikenhead |
| o. Delta/NARST Monograph | 49 | D. Butts |
| p. Triangle Coalition | 52 | R. Howe, |
| q. ICASE | | J. Penick |
| r. Past President Actions | | D. Butts |
| s. President Elect Actions | | L. DeTure |
| t. President Actions | 55 | J. Barufaldi |
| 4. Other Old Business | | |
| 5. New Business | | |
| 6. Adjourn | | |

1986 Spring Meeting of the Executive Board
NARST Newly Elected Officers
San Francisco, CA
March 31, 1986

A. Opening remarks by President Barufaldi.

B. Agenda

Motion: Moved approval of agenda with addition of comments from Larry Yore regarding his proposed NARST supported publication (Butts, Good).
Passed.

C. Discussion of issues surrounding the Yore proposal. Ron Good described a meeting of several members of the publication committee. The need to involve section editors was widely accepted as was the need to maintain open lines of communications among all members working on the project.

Good asserted that the "idea" of the handbook had good support.

Yore stated that the idea of a Handbook of Research in Science Education as proposed originated with James Shymanski. Yore's proposal was based upon the math and reading teaching handbooks. He outlined the following:

Section I James Gallagher

Introduction and History of Science Teaching
Policy Statement by NARST

Section II Mike Padilla

1980-1987 Current Research

Section III James Shymanski

Alternative Designs for Research

Section IV Ron Good and Ken Tobin

Treatment of Data: Parametric and
Nonparametric

Section V Russell Yeany

The Future: What's Coming Down the Road?

The target population for the Handbook is present and future researchers. A goal was "broad involvement" across NARST,

an international effort.

A second goal was to relate science education research to research in other areas.

Yore sought approval in principle so that he could approach John Wiley as a representative of NARST. He proposed the following time line:

- March, 1986 Approval in principle by the Association.
- October, 1986 Revised outline of sections and Wiley's reactions for Fall Board Meeting.

The time line calls for no front money from NARST. Copy would include existing articles and some new copy. Sources would be JRST, Science Education, and related journals. Proposed copy would be circulated through the publications committee in the Fall, 1986.

If approved, draft copy would be ready in November, 1987 and book would have a 1988 copyright date.

Motion: Moved acceptance in principle of the proposed Handbook of Research in Science Education (Bybee and Padilla).

The motion was discussed. Proposed product was compared to NSTA proposed research publication. NSTA would be practitioner oriented - NARST's would researcher oriented.

Padilla pointed out that much groundwork had been done but a full-blown plan would not be available until the Fall meeting.

Bybee pointed to the need for a full "financial plan" for the project. Yore agreed.

The specific role of the Publications Committee with this project was discussed. There was general agreement the committee needed to approve the product.

Padilla noted that NARST has no procedure for reviewing publications other the JRST articles. The Publications Committee may need to consider policies regarding publications like these.

The question on the motion was called.
Motion carried with one abstention.

D. Policy Advisory Committee

Butts reported that the Policy Advisory Committee had not had anything referred to it and no action had been taken.

E. Program Committee

Linda DeTure reported on the proposed program for next year. The meeting is tentatively scheduled for April 24³ to 26⁵, 1987. There may be a tentative agreement with the Washington Hilton Hotel but more needs to be learned about the status of the agreement.

The AERA meeting will overlap NARST (AERA, April 20 to 24, NARST, April 24 to 26).

The following tentative schedule was reported:

Thursday, April 24³, 1987

- 9-11:30 Training Sessions
Spring Board Meeting
- 1-2:30 Concurrent Sessions
- 2:45-4 Concurrent Sessions
- 4:30-6 General Session
- 6:00 Dinner
- 7:30-8:30 Committee Meetings
- 8:30-9:30 Committee Meetings
- 9:30 NARST Reception for new members and Board members.

Friday, April 25⁴, 1987

- 8-9:30 Concurrent Sessions
- 9:45-10:15 Concurrent Sessions
- 10:30-11:30 Concurrent Sessions
- 11:30-1:00 Second General Session
- 1-2:30 Lunch
- 2:30-4:00 Concurrent Sessions
- 4:15-5:45 Concurrent Sessions

6:00-? Anniversary session to meet with past presidents, elder statesmen. Presentations by past presidents --- wine and cheese, maybe music.

Saturday, April 25, 1987

- 8:30-10:00 Concurrent Sessions
- 10-10:30 Coffee
- 10:30-12 General Session Three
- 12:15 NARST Awards Luncheon
- 2:15-3:45 Concurrent Sessions
- 4-5:30 Concurrent Sessions
- 5:30-6 Business Meeting
- 6:30-9 Board meeting with dinner.

The Board discussed the relationship between NARST and AERA for the '87 meeting. Ideas included symposia presented by NARST/AERA members on topics that cut across the interests of both organizations. The notion of an "invitational type symposia" on Thursday afternoon was discussed.

Proposed deadline for papers before the Fall Board meeting in Indianapolis (with NSTA area convention). September was offered as a possible deadline. The first call for papers would be in the June NARST Newsletter. The proposed time line for reviewing papers was:

- 10/1 Papers due to review committee members.
- 10/30 Program committee meets.
- 11/15 Notification of acceptance of papers.
Forwarding to ERIC of abstracts -- some of which may later be withdrawn.

Discussed criteria for general session speakers.

For the first general session, the criteria discussed included a broad perspective on science education research with research credentials. Should have a perspective on the direction of science education research in the future as well as an understanding of our history.

Names mentioned during the discussion included Mary Budd Rowe, Gene Glass, Sternberger at Yale, Larkin at Pittsburgh, Glaser, and Berliner.

Training Sessions

Roger Bybee will be in charge of identifying topics and presenters.

Motion: Moved prior registration of \$10.00 for regular members and \$5.00 for student members to attend the training sessions (Butts, Bowyer).

The registration fees would provide a budget to cover expenses related to the training sessions. Also, there is a perceived need to know how many will likely show up for the sessions.

Question called. Motion passed.

F. Research Committee

Roger Bybee reported on the activities of the Research Committee. "Research Matters" will continue. Policy and procedures regarding Research Matters will be discussed by the committee. Distribution procedures were also discussed including possibilities of printing them in other journals.

The NSTA research committee, NSTA publications committee, NARST research committee have focussed on a fastback. Could these be done jointly? Barufaldi cautioned that NSTA controls and censors NSTA publications.

Blosser reported that NSTA special publications committee had considered fastbacks. NSTA planned to seek state or regional financial support for fastbacks, like PDK.

Again, the need for a policy concerning publications and review procedures for various types of publications other than JRST was identified.

Butts stated that the Publications Advisory Committee recommends the types of publications NARST will sponsor. The Research Committee implements the policy as directed by the Board. The Publication Committee should consider issues and provide advice to the Board. The task of the Research Committee is to identify research topics for collaborative, international research and practitioner-oriented research that teachers need.

Motion: Moved acceptance of the REsearch Committee Report (Bowyer, Padilla).

Motion passed.

6

G. Elections Committee

Butts reported on the Elections Committee.

Motion: Moved acceptance of the Election Committee report (Bowyer, Padilla).
Motion passed.

H. Award Committee

The Advisory Committee report was presented by Padilla.

Motion: Moved that practical applications awards should not have a second-class rating. They need to look as good as other NARST awards. Give only one award, but identify three or four designated papers for presentation at NSTA (Padilla, Butts).

Questions were raised about what happens to runners-up. Some recognition was perceived as needed. The idea of designated papers for presentation was to meet this need.

Question called. Motion carried.

Questions about the special award for Distinguished Contributions were raised by Ron Good. He strongly supported the award but believed that a less quantitative approach should be used to identify the winner.

Padilla stated that the committee would consider the criteria for the award. The proposed criteria will be circulated through the Awards Committee and to the Board for review. The "scoring sheet" will contain quantitative and qualitative assessment procedures. Also will ass question of "threshold" quality" -- ie., are any of the nominees worthy of the award?

The committee was not in favor of Board review of nominations or of keeping papers in an active file from year to year.

The idea of using sources outside the awards committee as evaluators or sources of evidence was suggested.

Also suggested that more thought go into the award presentation -- give some of the background that built the case for the recipient. The awards committee may consider a "whereas" type statement to support the selection of the recipient.

Publicity for awards? Discussed how we can encourage more recognition for winners. JRST publications; posters behind; session at earlier time, not at the end of the

meeting; list of past winners in the program; insert in program with pictures.

Responsibility for plaques and awards - who is responsible. The Awards Committee is willing to assume this task. Butts agreed that this was a good idea.

Motion: Moved acceptance of Awards Committee Report (Butts, Blosser).
Motion passed.

I. New Business

1. Newsletter recognition for local arrangement committee, especially the graduate students who worked so hard: Dennis, Sue, and Mary.

2. Motion: Moved that DeTure, Barufaldi, and Markle be empowered to negotiate hotel arrangements for 1987 meeting (Butts, Bowyer).

Motion passed.

3. Discussed interim newsletter editor. Ted Fowler recommended and his appointment was endorsed by the Board. Barufaldi will officially appoint him as interim editor.

4. Fall meeting of the Board. Meeting with NSTA area convention in Indianapolis.

Motion: Moved that the Board meet on Thursday, October 30, 1986 with NSTA area convention (Padilla, DeTure).

Motion passed.

Meeting was adjourned.

FINANCIAL ADVISORY COMMITTEE

Chairman:

John Staver (1989)
University of Illinois at Chicago
School of Education
Chicago, Illinois 60655
312-996-5630

Members:

Carl Berger (1988)
School of Education
University of Michigan
Ann Arbor, Michigan 48109
313-764-9470

Ertle Thompson (1988)
University of Virginia
Ruffner Hall
Charlottesville, Virginia 22903
804-924-3738

Emmett L. Wright (1989)
Kansas State University
Education
Manhattan, Kansas 66502
913-532-5550

William G. Holliday (1989)
Science Teaching Center
The University of Maryland
College Park, Maryland 20742
301-454-7346

Glenn Markle, ex officio
401 Teacher's College
University of Cincinnati
Cincinnati, Ohio 45221
513-475-2335

COMMITTEE CHARGE

The Financial Advisory Committee is responsible for considering 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.

The members include a chairman (three-year term), three members (with three-year rotating terms), and the Executive Secretary (ex-officio).

FINANCIAL ADVISORY COMMITTEE
Specific Items

John Staver

1. Proposed Budget

As per the policy of the Board (11/79), on August 1, 1986, Jim Barufaldi will forward a proposed budget for 1987 which will be developed in consultation with Glenn Markle, Jim Barufaldi, and Linda DeTure.

The recommendation for approval of the proposed budget should come in your committee's report.

2. Budget Review

As per the policy of the Board (11/78), this review will continue as follows:

September 15 - Glenn Markle will forward financial report for January - August 1986. This report will be in format as listed in Minutes of Executive Board Meeting (3/86)

October 15 - Financial Advisory Committee reports to Fall Board meeting.

3. Generate guidelines as to the actual cost of Annual Meeting (honoraria for guest speakers and training session presentors, budget for program, plan for reimbursement of speakers)

4. Budget Priorities

Budget is a perennial problem. What priorities as to how funds are to be distributed should be set, when, and by whom?

5. Other Considerations

Please be assured that you are not limited to the above items.

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

PROPOSED BUDGET FOR 1987

RECEIPTS

1.	Balance Brought Forward		\$ 4,873.00
	General Funds	\$ 2000.00	
	Delta Project	2873.00	
2.	Membership Dues		26,390.00
	Regular (550 @ \$44.00)	\$24,200.00	
	Student (70 @ \$30.00)	2,100.00	
	Emeritus (3 @ \$30.00)	90.00	
3.	Annual Meeting		13,325.00
	Preregistration (225 @ \$45.00)	\$10,125.00	
	Late Registration (50 @ \$56.00)	2,800.00	
	Workshop Registration (80 @ \$5.00)	400.00	
4.	Other		48,100.00
	Royalties from Wiley	\$ 1,600.00	
	Contributions from the University of Georgia (Journal Editor)	22,000.00*	
	Contributions from the University of Cincinnati (Exec. Sec.)	24,500.00**	
TOTAL EXPECTED RECEIPTS			\$92,688.00 ←

* This is the specific contribution of the University of Georgia in support of the Journal.

** This is the specific contribution by the University of Cincinnati in support of the Executive Secretary's office.

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

DISBURSEMENTS

1.	<u>Journal of Research in Science Teaching</u>	\$35,000.00
	Wiley Publishers (600 @ \$20.00)	\$12,000.00
	Journal Editor Salary*	19 16,000.00
	Journal Secretary*	78,000.00
	Journal Postage and Supplies	1,000.00
2.	Annual Meeting	\$11,903.00
	Banquet	5,000.00
	Programs (650 @ \$5.00)	3,250.00
	Abstracts (650 @ \$3.00)	1,950.00
	Special Aniversary Reception	500.00
	Awards	300.00
	Training Sessions	400.00
	Speakers (3 @ \$600.00)	1,800.00
	Travel/Hotel	1,200.00
	Supplies/AV	503.00
	Travel for Editor and Exec. Sec.	1,000.00
	Travel for 1988 Program Site Review	1,000.00
	Pres. Elect/Exec. Sec.	
3.	Officers/Executive Board	\$ 8,550.00
	President Elect	700.00
	President	1,000.00
	Past President	700.00
	Executive Board Meetings	
	Spring - Washington	950.00
	Fall (13 @ \$400.00)	5,200.00
4.	Executive Secretary	\$29,300.00
	Executive Secretary Salary (33%)	\$17,000.00**
	Secretary	7,500.00**
	Supplies/Printing	1,000.00
	Postage	1,500.00
	Telephone	1,800.00
	Miscellaneous	500.00

5. Other

\$ 7935.00

ICASE
Triangle Coalition

Newsletter (4 Issues)
Research Matters
Delta Testing Monograph

60.00
500.00

4000.00
500.00
2875.00

may increase \$2500

TOTAL DISBURSEMENTS

\$92,688.00

PUBLICATIONS ADVISORY COMMITTEE

Chairman:

Ronald G. Good (1989)
 Science Education
 Florida State University
 Tallahassee, Florida 32306
 904-644-1537

Members:

William H. Leonard (1987)
 Louisiana State University
 219A Peabody Hall
 Baton Rouge, Louisiana 70803
 504-388-2333

Dan L. McKenzie (1988)
 University of South Carolina
 Department of Instruction & Teacher Education
 Columbus, South Carolina 29200
 803-777-6400

Charles W. Anderson (1989)
 327 Erickson Hall
 Michigan State University
 East Lansing, Michigan 48864
 517-355-1725

Russell Yeany, ex officio
 Department of Science Education
 The University of Georgia
 Athens, Georgia 30602
 404-542-1763

COMMITTEE CHARGE

The Publication Advisory Committee is responsible for establishing policy concerning the NEWSLETTER, the JOURNAL, and special publication ventures of the Association; reviewing arrangements with editors of publications; and suggesting changes in yearly publication practices to the Executive Board.

The members include a chairman (three-year term), three members (with three-year rotating terms), and the Editor (ex-officio).

PUBLICATIONS ADVISORY COMMITTEE
Specific Items

Ron Good

1. Review process for NARST-sponsored publications

NARST receives many requests for its support and endorsement of various anticipated publications and proposals by its members. At times negotiations and financial and publication arrangements proceed with minimum communication of and intervention by Board members. What policy should be established for this type of venture? (arrangements, procedures, plan for review of proposals, royalty arrangements, etc.)

2. Review of proposals

The Board supported the "intent" of the April 7 version of the Yore proposal: Handbook of Research in Science Education. The Board will give the proposal further consideration at its Fall, 1986 meeting. What is the Publications Committee's recommendation concerning the April 7 version of the proposal?

Note: I am also requesting reactions from the Research Committee concerning the proposal.

3. New proposal

Shymansky, Hedges, and Woodworth are preparing a new manual on "theoretical considerations and practical applications of modern meta-analysis" and wishes to print the manual in conjunction with NARST. Tentative arrangements have been made between the authors and ERIC in regards to the printing and distribution. Shymansky will prepare a proposal for the fall Board meeting.

What is the committee's reaction concerning the intent of this proposal?

Note: I am also requesting reactions from the Research Committee concerning this proposal.

4. The Board supports the suggestion to develop a NARST-endorsed fast back series.

What recommendation does the committee wish to make concerning this suggestion?



The Florida State University
Tallahassee, Florida 32306

Institute for Cognitive Sciences

October 1, 1986

Dr. James Barufaldi
Science Education Center
EOB 340
University of Texas
Austin, TX 78712

Dear Jim:

On June 11, 1986 I sent a letter to Anderson, Leonard, McKenzie, and Yeany asking them to respond to my thoughts on issues you had raised in your May 23, 1986 correspondence to me. Enclosed is a copy of what was sent to the members of the Publications Committee. Replies were received from Anderson, Leonard, and McKenzie. Leonard and McKenzie were in basic agreement with my thoughts about your specific items. Anderson agreed with item 1 but disagreed with 2, 3, and 4. For item 2 he said Wiley's reluctance to publish the handbook should be seen as a lack of an adequate market and he questioned ERIC's ability adequately produce and market such a book. For item 3 he questioned what would be added to other publications already available. For item 4 he also wanted more specifics but thought NARST could have more impact by publishing in established journals such as Science Teacher, Instructor, or Educational Leadership.

For the two items under B, there was agreement that current policies should be continued. For C, Anderson wanted discussion on limited-circulation NARST publications versus efforts to support and encourage publication by NARST members in larger-circulation books and journals.

Jim, I would like to clarify the role of the Publications Committee relative to the Research Committee. Perhaps there must be a "fuzzy overlap" but we should spend some time at the Board meeting discussing the issue.

I look forward to our October 30 meeting in Indianapolis. My congratulations to you for a job well done to this point into your year as President of NARST.

Sincerely,

Ron Good, Professor of Science Education &
Co-Director, Cognitive Science Institute

A. GOOD'S THOUGHTS ABOUT BARUFALDI'S SPECIFIC ITEMS

- 1. General Review Process. The NARST Board must review and vote on all special publication projects that require an expenditure of NARST funds and/or require the NARST "stamp of approval". This does not mean that every publication must be reviewed by the Board; the Board may choose to simply accept the recommendations of the Publications Advisory Committee. The Publications Advisory Committee must review all special publication projects and submit recommendations to the NARST Board through the NARST President. The primary purpose for such review is to ensure that NARST is well-represented by the publications.

_____agree _____disagree Comments:

- 2. Review of Proposed Handbook. (See enclosure)

With Glen Aikenhead as chairman, the previous Publications Advisory Committee supported Yore's proposal for the Handbook. I support the idea, although as a co-editor of the Analysis section, my position is a bit biased. Wiley Publishers apparently is not interested in publishing the Handbook and as of now, I do not know whether Bob Howe has replied to Larry Yore's letter inviting ERIC to act as publisher.

_____agree _____disagree Comments:

- 3. New Proposal. The Shymansky, Hedges, Woodworth manual on meta-analysis is a worthwhile project and should be good for NARST. Larry Hedges is a leading authority on the topic.

_____agree _____disagree Comments:

Barufaldi
"dead issue"

4. Fast-Back series. I like the general idea of a "fast-back series, but need more specifics. The series should accurately represent important research concerns of the science education community. The Publication Advisory Committee should review proposals and submit recommendations to the NARST Board.

_____agree _____disagree Comments:

B. WHAT POLICY SHOULD GOVERN THE NEWSLETTER AND JRST?

Newsletter. Currently, the Executive Secretary (Glenn Markle) is responsible for seeing that the Newsletter is published. What polices should govern this process?

Comments:

JRST. Currently, the Editor (Russ Yeany) and the JRST Board decide on the content of JRST.

Comments:

C. OTHER POLICY CONCERNS

Comments:

POLICY ADVISORY COMMITTEE

Chairman:

David P. Butts (1987)
Department of Science Education
University of Georgia
Athens, Georgia 30602
404-542-1763

Members:

James P. Barufaldi (1987)
Science Education Center EDB 340
The University of Texas at Austin
Austin, Texas 78712
512-471-7354

Burton E. Voss (1988)
School of Education
University of Michigan
Ann Arbor, Michigan 48109
313-764-8420

Ann C. Howe (1987)
North Carolina State University
Department of Science and Mathematics Education
Raleigh, North Carolina 27650
919-737-2238

Glenn Markle, ex officio
401 Teacher's College
University of Cincinnati
Cincinnati, Ohio 45221
513-475-2335

COMMITTEE CHARGE

The Policy Advisory Committee is responsible for annually reviewing the Bylaws, changes in structure or orientation of the Association, and reviewing of new activities or ventures of the Association.

POLICY ADVISORY COMMITTEE
Specific Items

Dave Butts

1. The Executive Board strongly supports the establishment of a policy when dealing with site and hotel negotiations for Annual Meeting. The charge to the Committee is to develop a policy for NARST negotiations with hotels and functions for the annual meeting.

2. NARST Operating Policy

The Board has moved that NARST establish an operating policy manual. What action has been taken to implement this motion?

3. The Board supports the suggestion to add JRST to the AETS/Science Education "check-off" membership form and to add Science Education to the NARST/JRST membership form.

What recommendation does the committee wish to make regarding this suggestion?

*Reviewed
Revised?*

Lawrence - 88
J. Shaw - 89

MEMO

TO Jim

FROM Burt
Ann
Jim
Glen
Dave

DATE September 26, 1986

SUBJECT Report of the NARST Policy Advisory Committee

As per your request of May 23, 1986, the Policy Advisory Committee wishes to propose these motions for consideration of the NARST Board.

1. Whereas the Board has supported the establishment of a policy for dealing with the site and hotel negotiations for the Annual Meeting, and whereas the policy should include the identification of individuals responsible for these negotiations plus the critical elements of those negotiations, whereas the board has already established some of these considerations and further that these negotiations must be done in advance of the actual meeting dates

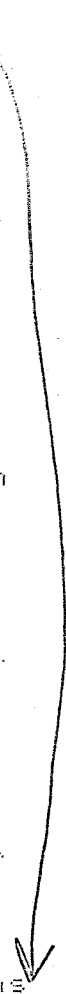
WE MOVE that the Board approve the following policy for dealing with the site and hotel negotiations for the Annual Meeting.

reject?

--The President of NARST is responsible for the negotiations of the site and hotel arrangements for the annual meeting that occurs two years after the presidential year term. The President may designate other members of the Board including the Executive Secretary to assist in these negotiations.

- Negotiations for a site for the annual meeting must include consideration of
 - adequate meeting room space.
 - arrangement of meeting rooms to facilitate communication.
 - meal functions and costs which are to be included in the annual meeting registration cost.
 - assignment of complimentary rooms as per established board policy--President, President-Elect, Executive Secretary, and Immediate Retiring President in that order.

2. Whereas the Board has previously acted to establish an operating policy manual in July 1984 and again in October



1984 "to establish a MANUAL OF POLICIES AND PROCEDURES OF THE ASSOCIATION after each Board meeting and each Annual Business Meeting, the President and Executive Secretary will identify actions that affect the operations of the Association and will identify any items in the Manual that are no longer applicable and should be deleted. Proposed additions and deletions will be circulated to Board Members who will indicate agreement or disagreement with the interpretations of the President and Executive Secretary. Items that are approved by a majority of Board Members will be added to or deleted from the Manual as appropriate. The Executive Secretary will maintain the Manual.", and whereas this activity is assigned to the President and Executive Secretary,

WE MOVE that beginning with the minutes of Fall 1986, the President and Executive Secretary be directed to generate a policy manual comprising those action that have been acted upon during the 1986 year and further that this manual be maintained as per of October 1984 Board Action. Operating procedures established prior to 1986 will be incorporated only as they may be reviewed and changed by subsequent action of the Board.

3. Whereas the NARST Board supports the suggestion to add JRST to the AETS Science Education "check-off" membership form and to add SCIENCE EDUCATION to the NARST/JRST membership form and whereas this action will need approval of the partners involved including Wiley, SCIENCE EDUCATION Editor, Editor of JRST and the Boards of both NARST and AETS,

~~\$~~ ~~\$~~

WE MOVE that a task force be established consisting of the President of NARST, the JRST editor, and the NARST Executive Secretary to explore with the concerned parties their interest or agreement with this change. We further MOVE that a progress report of this task force be requested at the spring 1987 NARST board meeting.

*Whose?
Rationale?*

PROGRAM COMMITTEE

Chairman:

Linda R. DeTure
Education/Human Development
Box 2726
Rollins College
Winter Park, Florida 32789

Members:

F. Gerald Dillashaw (1987)
Bradley University
College of Education
Peoria, Illinois 61625
309-676-7611, ext. 267

Thomas R. Koballa, Jr. (1987)
Science Education Center EDB 340
The University of Texas at Austin
Austin, Texas 78712
512-471-7354

Joseph P. Riley (1987)
University of Georgia
Department of Science Education
Athens, Georgia 30602
404-542-1763

Linda Crow (1988)
Houston Community College System
Houston, Texas 77007
713-868-0758

Joel E. Bass (1988)
Sam Houston State University
Huntsville, Texas 77340
409-294-1111

Robert L. Shrigley (1988)
168 Chambers Bldg.
The Pennsylvania State University
University Park, Pennsylvania 16802
814-865-5433

Roger W. Bybee, ex officio
Biological Sciences Curriculum Study
Colorado College
Colorado Springs, Colorado 80903
303-473-2233

Glenn Markle, ex officio
401 Teacher's College
University of Cincinnati
Cincinnati, Ohio 45221
513-475-2335

COMMITTEE CHARGE

The program committee is responsible for establishing the theme and format for the Annual Meeting, arranging for special speakers and symposia, and evaluating abstracts for contributed papers, and the evaluation of Annual Meeting. (A local arrangement committee may be established if desired.)

The membership of this committee consists of the President-Elect as chairman, six members on two year rotating terms and as ex-officio members, the Research Coordinator and the Executive Secretary.

PROGRAM COMMITTEE
Specific Items

Linda DeTure

1. The Board supports the idea that the NARST Program Chairman should be in contact with other Program Chairs of NABT, NSTA, SSMA, AAAS, ASCO, etc, to have NARST research and applications of research sections at their conventions. NARST members should be encouraged to serve on research panels at state science conventions. NARST should also increase efforts to be on programs where principals, superintendents, directors of curriculum and other administrators attend.

The Board realizes the numerous, challenging, time consuming tasks associated with the chairing of the Program Committee. It would be difficult for the Program Chair to fulfill additional tasks.

What recommendation does the committee wish to make to formalize the above suggestions?

RESEARCH COMMITTEE

Chairman:

Roger W. Bybee (1989)
 Biological Sciences Curriculum Study
 Colorado College
 Colorado Springs, Colorado 80903
 303-473-2233

Members:

Jane Bowyer (1988)
 Mills College
 Education
 Oakland, California 94613
 415-430-2118

Thomas R. Koballa, Jr. (1988)
 Science Education Center EDB 340
 The University of Texas at Austin
 Austin, Texas 78712
 512-471-7354

Joseph D. Novak (1987)
 Cornell University
 103 Stone Hall
 Ithaca, New York 14853
 607-256-2267

Glenn Markle, ex officio
 401 Teacher's College
 University of Cincinnati
 Cincinnati, Ohio 45221
 513-475-2335

COMMITTEE CHARGE

The Research Committee is responsible for preparing yearly reviews of research in science education, working closely with ERIC Center and recommending needed areas of research, research symposia, and training programs.

The membership of this committee consists of chairman and three members with two year rotating terms. The Executive Secretary is an ex-officio member of the committee.

RESEARCH COMMITTEE
Specific Items

Roger Bybee

1. Research Matters...To the Science Teacher

Formalize procedures for the solicitation of manuscripts for the publication, Research Matters...To the Science Teacher.

What recommendation does the committee wish to make for the dissemination of Research Matters?

2. Identify additional research topics of interest to science teachers.

3. Identify ways to initiate international collaboration of research projects in science education.

4. NSTA Research Coordinator

Develop strategies to enhance the liaison relationship between the NSTA Research Division Coordinator and the NARST Research Chair.


5. Assist the Program Chairman in soliciting presentors for the training sessions of the 1987 Annual Meeting.

6. Review of proposals

The Board supported the "intent" of the April 7 version of the Yore proposal: Handbook of Research in Science Education. The Board will give the proposal further consideration at its Fall, 1986 meeting. What is the Publications Committee's recommendation concerning the April 7 version of the proposal?

Note: I am also requesting reactions from the Publications Advisory Committee concerning the proposal.

7. New proposal

Shymansky, Hedges, and Woodworth are preparing a new manual on "theoretical considerations and practical applications of modern meta-analysis" and wishes to print the manual in conjunction with NARST. Tentative arrangements have been made between the authors and ERIC in regards to the printing and distribution. Shymansky will prepare a proposal for the fall Board meeting. 

What is the committee's reaction concerning the intent of this proposal?

Note: I am also requesting reactions from the Publications Advisory Committee concerning this proposal.

ELECTION COMMITTEE

Chairman:

David P. Butts (1987)
Department of Science Education
University of Georgia
Athens, Georgia 30602
404-542-1763

Members:

Ronald D. Anderson (1987)
C.B. 249
School of Education
University of Colorado
Boulder, Colorado 80309
303-492-7738

Lowell J. Bethel (1987)
Science Education Center EDB 340
The University of Texas at Austin
Austin, Texas 78712
512-471-7354

COMMITTEE CHARGE

The nomination committee is responsible for establishing the slate of officers for each election four months prior to the date of the Annual Meeting, making arrangements for preparation and distribution of ballots three months prior to the date of the Annual meeting, tabulating election results, notify candidates of the outcome of the election a month prior to their assuming office, announcing 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.

The membership of this committee shall consist of the immediate Past President as chairman and two members with one year terms.

ELECTION COMMITTEE
Specific Items

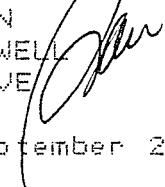
Dave Butts

1. Election Nominees

Provide suggestions and strategies that encourage greater input from NARST members in the establishment of the slate of officers.

MEMO

TO JIM

FROM RON
LOWELL
DAVE 

DATE September 26, 1986

SUBJECT Report of the Nomination Committee

As per your request of May 23, 1986, the Nomination Committee is pleased to share this proposed ballot for the 1987 election. Each of the individuals have been contacted and have agreed to have their name placed in nomination and have agreed to serve if elected. Attached to this report is a biographical sketch for each one which has also been forwarded to Glen for consideration in the Newsletter.

For President:	Patricia Blosser	Ohio State
	James Shymansky	University of Iowa

For Director:	Charles Anderson	Michigan State
	Marianna Betkowski	N. Florida State
	Jim Ellis	Colorado State
	Fred Finley	Univ. of Minn.

RECOMMENDED ACTION OF THE BOARD:

We move that the report of the Nominating Committee be accepted.

PATRICIA E. BLOSSER

Ph.D., The Ohio State University, Columbus, Ohio, 1970. Present position: Professor of Science Education, Department of Educational Theory and Practice, College of Education, The Ohio State University, and Associate Director for User Services, ERIC Clearinghouse for Science, Mathematics, and Environmental Education, The Ohio State University.

Dr. Blosser holds degrees in biology from The College of Wooster, in science education from the University of Northern Colorado, and in liberal studies from Wesleyan University, Connecticut, in addition to her doctorate in science education. She spent 13 years as a biology and junior high school science teacher in Ohio and Illinois prior to beginning her doctoral work. Since 1970 she has been a faculty member at Ohio State where she teaches general methods in science education as well as graduate courses in science curriculum and science supervision, and advises masters and doctoral students. For the past 11 years she has coordinated a program in science and mathematics education designed to enable post-baccalaureate students to acquire certification while working toward a graduate degree in science or mathematics education.

Her research interests include work on questioning skills, curriculum development, teacher behavior, and follow-up studies of graduates of the OSU science education preservice programs. She is also interested in middle school science education, both preservice and inservice.

Dr. Blosser has served NARST as a member of the Publications Advisory Committee, 1973-76; the Elections Committee, 1972-73; Program Committee, 1977-79; Financial Advisory Committee, 1980-83; the Outstanding Paper Awards Committee, 1985-87; the Awards Steering Committee, 1985-87. She served as chair of the ad hoc committee on International Members in 1985-86 as well as chair of the Outstanding Paper Awards Committee in 1985-87. Dr. Blosser is currently serving as a member of the Board of Directors of NARST.

Dr. Blosser serves as editor for Investigations in Science Education, a cooperative effort of NARST and the ERIC Clearinghouse for Science, Mathematics, and Environmental Education. She edits the science education information analysis products produced by ERIC-SMEAC, has served as ERIC editor for the annual publication of NARST abstracts, and writes the science education information bulletins and digests produced by the Clearinghouse as well as editing those in mathematics education and environmental education. She also serves as editor of Science Education in Ohio, the state science teachers' journal, and is a member of the editorial board of Science Education. Journal articles she has written have been published in Science Education, Science and Children, The Science Teacher, and School Science and Mathematics.

She served twice as Regional Director of Region VI of the National Science Teachers Association, has been president of the Association for the Education of Teachers in Science, and recently completed a term as Director at Large of AETS.

James A. Shymansky

Biographical Brief

- Present Position:** Professor of Science Education
University of Iowa
- Degrees:** Ph.D. in Science Education, Florida State University
M.S. in Physics, Indiana State University
B.S. in Education, Bloomsburg State College
- Experience:** Director, Science Education, University of Iowa (1983-86)
Assistant Professor, Science Education, Florida State University (1972-73)
Instructor, Physics, Indiana State University (1968-69)
Physics/Math Teacher, Hellertown High School, PA (1965-66)
Math Teacher, Watchung Hills Regional High School, NJ
Math Teacher, Indiana State University Laboratory School (Jr. High) (1967-68)
Math Teacher, New Providence H.S., NJ (1969-70)
Math/Science Teacher, Florida Laboratory School (5th-6th grade) (1971-72)
- Service:** Editor, Journal of Research in Science Teaching (1980-85)
Editorial Board, Science and Children (1981-84), Science Education (1976-79)
Director of Research, National Science Teachers Association (1985-87)
Outstanding Research Paper - AERA (Southwest Region) (1983)
Outstanding Research Paper - NARST meeting (1982)
Outstanding Science Educator - AETS (1982)
Outstanding AETS Paper - (1978)
NSTA-Ohaus Awards (1975, 1982)
NARST Program Committee (1978-81)
NARST Funding for Special Projects Committee (1985-86)
- Publications:** Over 50 published journal articles (10 in Journal of Research in Science Teaching)
Over 40 presentations at national and regional meetings

Charles W. (Andy) Anderson

Michigan State University

Dr. Anderson received his B.A. in Chemistry from Rice University and two degrees in science education from the University of Texas at Austin, including his Ph.D. in 1979. He has served as a Peace Corps volunteer in Korea and as a middle school science teacher. Since 1980, he has been co-director of the Science Teaching Project at MSU's Institute for Research on Teaching.

Dr. Anderson has been an active member of NARST and other professional organizations since 1979. He has served on the JRST Award Committee and is currently a member of the Publications Advisory Committee. He was the editor of the 1984 AETS Yearbook, Observing Science Classrooms: Perspectives from Research and Practice. Dr. Anderson has published articles in JRST, Science and Children, the American Educational Research Journal, and the Elementary School Journal, as well as chapters in several books. Since 1979 he has authored or co-authored 32 papers presented at national conventions, including those of NARST, AERA, and other organizations. In 1983, he won the Michigan State University Teacher-Scholar Award for excellence in scholarship and undergraduate teaching.

Dr. Anderson's research has focused on the classroom teaching of science and science teacher education. In particular, he has been interested in the problems posed for classroom teachers by student misconceptions and the need for conceptual change in science learning. Dr. Anderson and his colleagues on the Science Teaching Project have investigated the dynamics of normal classroom teaching using both commercial and NSF produced-science programs, revealing their failure to produce conceptual change in most students and explaining why

that failure occurs. They have developed teaching materials that enable teachers to greatly enhance their effectiveness in teaching for conceptual change at the elementary, middle school, and college levels.

Dr. Anderson has also focused in his research on understanding the nature of the knowledge base, both in individual teachers and in the profession as a whole, that forms the basis for successful teaching practice. He has been one of the primary developers and instructors in the Academic Learning Program at Michigan State University, a teacher education program devoted to building in prospective teachers the knowledge they will need to teach successfully for understanding of academic subjects and to continue learning from their teaching experience.

CURRICULUM VITA

Marianne B. Betkouski is Professor of Science Education at the University of North Florida and Co-director of the Northeast Florida Institute for Science, Mathematics, and Computer Education. She is currently a member of the Editorial Review Board of The Journal of Research in Science Teaching. She has presented papers on learning and memory mechanisms and formal reasoning abilities of students at NARST meetings since 1979. In 1983, she was invited to represent NARST by presenting a two-hour session "What Learning and Memory Research Says to the Science Teacher" at the regional meeting of the National Science Teachers Association in Biloxi, Mississippi. She has been published in JRST, The Science Teacher, The 1983 AETS Yearbook, among other journals. Her book, Meaningful Learning in Elementary Science, is in press with Kendall/Hunt Publishing Company. She is a past President of the Southeastern Association for the Education of Teachers in Science (SAETS) and the Florida Association for the Education of Teachers in Science (FAETS). Her current research interests are memory systems and student and teacher alternative frameworks.

JAMES D. ELLIS
THE BIOLOGICAL SCIENCES CURRICULUM STUDY

James D. Ellis is staff associate and a project director at the Biological Sciences Curriculum Study (BSCS) at the Colorado College. He received his bachelor's degree in zoology, his master's degree in education and his Ph.D. in curriculum and instruction from the University of Kansas. Prior to his appointment to the BSCS in 1982, Ellis was an assistant professor at the Science Education Center at the University of Texas at Austin. He has directed numerous funded research and development projects in science education such as summer institutes on energy education for science teachers, and curriculum development projects for energy education, health education, and educational computing in science.

Ellis, who serves on the NARST awards committee, has presented several papers at NARST conventions and has been a member of the organization for nearly a decade. Ellis is currently director of the Southwest Region of the Association for the Education of Teachers of Science (AETS), was program chairman for 1983 national AETS meeting, and is editor for the 1988 yearbook for AETS. He is an active member of American Association for the Advancement of Science (AAAS), American Education Research Association (AERA), Phi Delta Kappa (PDK), National Association of Science Teachers (NSTA), School Science and Mathematics Association (SSMA), and National Association of Biology Teachers (NABT).

Ellis has authored papers published in journals such as Science Education and American Biology Teacher, in yearbooks for NSTA and AETS, and in a UNESCO monograph with the education commission of the International Union of Biological Scientists. Over the years he has presented more than 25 papers at professional meetings of NARST, AETS, NSTA, SSMA, and NABT. He has presented shortcourses on educational computing in science at meetings of NSTA and NABT. Ellis has been a contributing author or editor for more than 20 instructional modules for science education. Recently, Ellis presented an invited address at an international symposium in Helsinki, Finland on "Computers in Biology Education." His research interests are in educational computing, curriculum development, and educational evaluation.

Fred N. Finley is an Associate Professor at the University of Minnesota having served previously on the faculties of University of Maryland and the University of Wisconsin. His research goals are to understand how students' knowledge of scientific content and methods change as a result of instruction and how their prior knowledge influences those changes. The research is based on recent developments in cognitive psychology and the philosophy of science and has resulted in papers critiquing conceptions of the nature of science used in science education, presenting research methods for assessing and representing scientific knowledge, and empirical studies to determine changes in knowledge associated with a variety of types of instruction. He has served on the JRST Editorial Board and the Placement Committee for NARST, chaired the Program Committee for the AERA Cognitive Structure/Conceptual Change SIG, coordinated the NSTA Audiovisual Materials Review Committee, and served on the NSTA Task Force on Assessing Computer Augmented Science Instructional Materials, and is participating on the Technology Panel of the AAAS/Carnegie Mellon Project 2061.

He believes that NARST is the primary research organization in science education and should facilitate the development and publication of outstanding theoretical and empirical research that has the potential of making a significant contribution to practice. NARST should also significantly influence the formulation of public policies related to science education by federal and state agencies. This can be accomplished by extending the tradition of providing intellectual leadership in theory and practice, by setting high standards for publications and awards that include requiring theory and methods that are current, further developing relationships with AERA, NSTA, NSF, DOE and other groups concerned with science education.

AWARDS STEERING COMMITTEE
Specific Items

Michael Padilla

1. Distinguished Research Service Award

Clarify procedures and criteria for the Award.

2. New Award

Clarify procedures and criteria for the Outstanding Dissertation Award.
Procedures and criteria should be available for Board approval.

EXECUTIVE SECRETARY

Dr. Glenn Markle
NARST
University of Cincinnati
Cincinnati, OH 45221-0002

Organized to improve science teaching—through research



NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

PRESIDENT

Dr. James P. Barufaldi
Science Education Center
EOB 340
The University of Texas at Austin
Austin, Texas 78712

PRESIDENT-ELECT

Dr. Linda DeTure
Education and Human Development
Rollins College
Winter Park, FL 82789

IMMEDIATE PAST PRESIDENT

Dr. David Butts
Science Education Department
University of Georgia
Athens, GA 30602

BOARD MEMBERS-AT-LARGE

Dr. Patricia E. Blosser (1987)
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210-1172

Dr. Jane B. Bowyer (1988)
Education Department
Mills College
Oakland, CA 94613

Dr. Ronald Good (1989)
Science Education
Florida State University
Tallahassee, FL 32306

Dr. Michael J. Padilla (1987)
Science Education Department
University of Georgia
Athens, GA 30602

Dr. Gerald Skoog
National Science Teachers Association
1742 Connecticut Avenue N.E.
Washington, D.C. 20009

Dr. John Staver (1988)
College of Education
University of Illinois at Chicago
Chicago, IL 60680

Dr. Emmett Wright (1989)
Dept. of Curriculum and Instruction
Kansas State University
Manhattan, KS 66506

JOURNAL EDITOR

Dr. Russell H. Yeany
Science Education Research
an Evaluation Lab
Science Education Department
University of Georgia
Athens, GA 30602

RESEARCH COORDINATOR

Dr. Roger Bybee
B.S.C.S.
Colorado College
Colorado Springs, CO 80903

TO: NARST Board Members
FROM: Michael Padilla, Awards Committee Chairman
DATE: October 1, 1986
RE: Committee action since April, 1986

The awards committee charge was two-fold:

1. to clarify procedures and criteria for the Distinguished Contributions to Science Education through Research Award
2. to clarify procedures and criteria for the Outstanding Dissertation Award.

In late spring copies of an award announcement and rating sheets for the Distinguished Contributions Award were circulated to all committee members and all NARST board members. From the responses received, updated copies of the award criteria were created.

Two rating forms were completed: one quantitative, another qualitative (see attached). Each of the sheets attempts to incorporate the criteria established in the award announcement.

Regarding the Outstanding Dissertation Award, the awards committee felt that movement toward setting up criteria and giving this award was presently premature. The committee agreed that continued work on these criteria should await the full acceptance of the Distinguished Service Award.

Announcement for all NARST Awards were contained in the Summer Newsletter.

MJP/js

NARST Award for
Distinguished Contributions to Science Education Research

The National Association for Research in Science Teaching seeks to improve Science Education through research. To this end the Association desires to recognize and reward individual(s) who have made significant contributions to Science Education through research. Contributions may be of several types, including but not limited to empirical, philosophical or historical research, evaluative studies, policy related research and studies reflecting new techniques to be applied in research. To be considered an individual should have contributed over a period of many years (at least 15) and should be considered at the pinnacle of his/her career.

The award will be made to an individual who has over a period of many years (at least 15):

1. made a continuing contribution(s) to Science Education through research;
2. provided notable leadership in Science Education through research; and
3. had a substantial impact on Science Education through research.

This award is intended to be the highest recognition NARST can bestow for contributions to Science Education through research. The award will be bestowed only when a superior candidate has been identified by the awards committee.

To apply, a nominator or candidate should submit 10 copies of the following:

1. a cover letter, not to exceed 5 pages in length, describing the nature of the contributions of the individual, including specific documentation as to why these contributions are considered outstanding and substantive;
2. up to five letters of support, each not to exceed two pages in length, which provide evidence of extraordinary contributions of the individual; and
3. a curriculum vita including a complete list of publications and accomplishments.

Dr. Michael J. Padilla, Chairperson, NARST Awards Committee
Department of Science Education
University of Georgia
Athens, GA 30602
Deadline: January 15, 1987

DISTINGUISHED CONTRIBUTIONS
QUANTITATIVE RATING SHEET
(To be filled out for each candidate)

Name of Nominee _____

Reviewer _____

Please rate each individual using this numerical rating scale.

Good				Excellent			Few Peers		Without Peer
1	2	3	4	5	6	7	8	9	10

Specific Criteria

- 1. Science Education research contributions have been substantial (10 points) _____
 - 2. Science Education research contributions have continued over many years (at least 15) (10 points) _____
 - 3. The individual has provided leadership in Science Education through research (10 points) _____
 - 4. The individual has had a significant impact on Science Education through research (20 points) _____
 - 5. Unique research attributes or contributions of the candidate (10 points) _____
- Total Points _____

If this candidate were the only one to be considered, would he/she deserve to be given this prestigious award? _____ yes _____ no

SAMPLE LETTER

Dear:

As a member of the NARST Awards steering committee, you have the privilege of rating those nominated for our Distinguished Contributions to Science Education through Research Award. As you know this is a serious and important component of NARST's endeavor to stimulate and reward excellence in Science Education Research.

The enclosed package contains all award submissions, and quantitative as well as qualitative forms. Please read the sets of papers, then

1. fill out a quantitative rating form for each submission.
2. once all papers are read and evaluated, fill out a qualitative rating form on the entire pool of candidates.

Data sources for rating candidates are many and varied. Specific ones include:

- impact through quantity, quality and significance of publications,
- contributions of former graduate students,
- work on an continued line of research,
- previous awards and recognition,
- contributions to NARST and other associations relative to research,
- affect on policy relative to Science Education,
- number of continuous years of contribution, and
- others as appropriate.

Your final ratings should be sent back to me by February __, 1987. If you have questions about the process, please feel free to call.

Sincerely,

Michael J. Padilla
Chairman, Awards Committee

MJP/js

Encl.

NARST AWARD
FOR
DISTINGUISHED CONTRIBUTIONS TO SCIENCE EDUCATION RESEARCH
QUALITATIVE RATING SHEET

(Complete once only for all candidates after reviewing all applications)

Reviewer _____

I. Please rank order the top four candidates on each of the criteria listed below.

- 1. Research contributions^A have been substantial

1. _____	2. _____
3. _____	4. _____

- 2. Research contributions have continued over many years (at least 15)

1. _____	2. _____
3. _____	4. _____

- 3. The individual has provided leadership in Science Education through research

1. _____	2. _____
3. _____	4. _____

- 4. The individual has had a significant impact on Science Education through research

1. _____	2. _____
3. _____	4. _____

II. Please rank order the two candidates you believe to be most worthy of the Distinguished Contributions Award. (If none is worthy, write "none".

- 1. _____
- 2. _____

III. List three or more specific reasons why your two top rated candidates should be considered for the Distinguished Contributions Award.

First Ranked Person

- 1. _____

- 2. _____

- 3. _____

- 4. _____

Second Ranked Person

- 1. _____

- 2. _____

- 3. _____

- 4. _____



Founded in 1928
Organized to improve science teaching - through research
Sponsoring the Journal of Research in Science Teaching
Affiliated with AAAS, ASE, ICASE and NSTA.

EXECUTIVE SECRETARY
Dr. William G. Holliday
NARST
The University of Calgary
Calgary, Alberta
Canada T2N 1N4

October 8, 1986

NARST AWARDS COMMITTEE (Subcommittee of AWARDS Committee)

PRESIDENT
Dr. David Butts
Science Education Department
University of Georgia
Athens, GA 30602

Committee Membership

Patricia E. Blosser, chair
The Ohio State University
Ed. T&P: Science & Mathematics Education
Columbus, OH 43210

PRESIDENT-ELECT
Dr. James P. Barufaldi
Science Education Center
EOB 340
The University of Texas at Austin
Austin, Texas 78712

Rodney L. Doran
553 Baldy Hall
SUNY at Buffalo
Amherst, NY 14260

William B. McIlwaine
Millersville State College
Millersville, PA 17551

IMMEDIATE PAST PRESIDENT
Dr. Ertle Thompson
Ruffner Hall
University of Virginia
Charlottesville, VA 22903

Peter A. Rubba Jr.
Pennsylvania State University
Rm. 160 Chambers Bldg.
University Park, PA 16802

BOARD MEMBERS-AT-LARGE
Dr. Glen Aikenhead (1986)
Faculty of Education
University of Saskatchewan
Saskatoon, Sask. S7N 0W0

Mary M. Atwater
Atlanta University
223 Chestnut St. SW
Atlanta, GA 30314

Mary Westerback
54 Smith Street
Glen Head, NY 11545

Dr. Patricia E. Blosser (1987)
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210-1172

Lowell J. Bethel
Science Education Center EDB 340
The University of Texas at Austin
Austin, TX 78712

Richard L. Williams
University of Victoria
Faculty of Education
Victoria, B.C.
Canada V8W 2Y2

Dr. Jane B. Bowyer (1988)
Education Department
Mills College
Oakland, CA 94613

Dr. Marcia C. Linn (1986)
Lawrence Hall of Science
University of California
Berkeley, CA 94720

Dr. Michael J. Padilla (1987)
Science Education Department
University of Georgia
Athens, GA 30602

Dr. Gerald Skoog
National Science Teachers Association
1742 Connecticut Avenue N.W.
Washington, D.C. 20009

John Staver (1988)
College of Education
University of Illinois at Chicago
Chicago, IL 60680

JOURNAL EDITOR
Dr. Russell H. Yeany
Science Education Research
an Evaluation Lab
Science Education Department
University of Georgia
Athens, GA 30602

RESEARCH COORDINATOR
Dr. Rodney L. Doran (1986)
553 Baldy Hall
SUNY at Buffalo
Amherst, NY 14260

Committee Charge

To select the recipient of the Outstanding Paper Award and the recipient of the Practical Applications Award from papers presented at the previous year's meeting of the National Association for Research in Science Teaching. All NARST presenters are eligible to compete but they must submit their papers for consideration.

Committee Actions

A call for papers appeared in the NARST newsletter. The September 12 deadline for receipt of papers apparently was a factor in number received in that 17 sets were received as compared to 25 in 1985. Papers are being processed for mailing to committee members for evaluation.

Dr. James Barufaldi
Austin, TX

Many of the records of value are at Teachers College in New York. Perhaps we should make a move to designate a NARST/Science Education Archives there. There is also a gold mine in a Brighton, Colorado Retirement Home. It's the personal library of Gerald Craig, the over 90 year old patriarch of our profession. I'd like to have the Board request of him that these be willed to NARST to be placed in a repository here or at Teachers College. As we find other treasures we'd make similar requests of their owners.

I really don't need much of the Board except advice, guidance and support in this endeavor. I would like opinions on how best to preserve valuable records -- methods of soliciting, best storage, places, etc. Also, I could use the names and addresses of science education history researchers.

Please ask Board members to send me such names. I'll also make a solicitation in the Newsletter.

Any direction or advice you can give me either by Board action or advice, shall be appreciated.

INTERNATIONAL ISSUES
Specific Items

Glen Aikenhead

Committee Charge

To continue examining how NARST can better respond to international issues in science education.

MEMO TO: AD HOC COMMITTEE ON INTERNATIONAL ISSUES
Pamela Fraser-Abder, Barry Fraser, Karl Frey, Art White,
John Penick, Deyanira Barnett.

FROM: CHAIR -- Glen Aikenhead

DATE: SEPTEMBER 15, 1986

Enclosed is a report to the NARST Executive concerning the activity of this committee. Could you please: (1) send me any comments you have on the report, and/or (2) send me information that you think belongs in the NARST News, and/or (3) advise me on an issue that should be brought to the attention of the Executive. I am grateful to Art White and John Penick for sending me NARST News items.

The report to the Executive is being sent to the people who attended our meeting in San Francisco last March, but who are not on the Committee.

Because of the Newsletter, I heard from John Koran, Associate Dean of the Graduate School and International Studies and Programs, University of Florida, Gainesville, 32611, U.S.A., and long time NARST member. He writes, "In my new role here ... I oversee international studies and programs as well as work as a faculty member on scientific literacy and museum studies in both the Latin American Studies Center and the African Studies Center." If any of you have reason to find out more about how John might be able to help you or anyone you know, I know he would be most pleased to hear from you.

We shall have our next meeting at NARST in Washington. Date, time and place will be printed in the conference program. I look forward to hearing from you in the meantime.



Glen Aikenhead

enclosure

cc: Jim Barufaldi, NARST Pres.

A Report to the NARST Executive from the

Ad Hoc Committee on International Issues

Chaired by Glen Aikenhead
Canada

A most productive and informative meeting was held at San Francisco in March with: Pamela Abder (Trinidad, West Indies), Juan Esquivel (Costa Rica), Barry Fraser (Australia), Karl Frey (Federal Republic of Germany), John Penick (U.S.A.), Art White (U.S.A.), and Uri Zoller (Israel).

A wide range of topics were discussed, and much information was exchanged. On the one hand, the committee noted the low attendance at NARST sessions related to international work. On the other hand, the committee recognized the wealth of research and development taking place internationally by NARST members, and the committee wanted to communicate this activity to other NARST members -- either to involve more U.S. researchers in the international scene, or to act as a network for those NARST members already in the international community of researchers. In short, NARST could act as a broker for international cooperation.

Specifically, the following ideas are proposed for Executive action:

1. That the Newsletter continue its "International Issues" column initiated last year by Pat Blosser. The column's objectives would include: announcing upcoming international meetings and funding for research projects; reporting on recent international meetings and current projects; and inviting or announcing international collaborative research projects and visits.

The following action was taken in June 1986:

Requests for specific contributions to the "International Issues" column were made to committee members. The July and ensuing issues of NARST News contain these items (e.g. a description of the February 1986 Caribbean Research Conference, the upcoming Kiel International Symposium, the International Consortium for Research in Science & Mathematics, and advance information on the annual meeting of the Australian Science Education Research Association).

The following actions are proposed to the Executive:

- a. That the "International Issues" column include a bulletin board for international exchanges for researchers, instructors and students. First an invitation must be made in the Newsletter promoting the bulletin board and promising to print: (i) opportunities submitted by institutions, and (ii) offers by individual NARST members to participate in such exchanges (e.g. those looking ahead to a sabbatical).
- b. That the Chair of the Ad Hoc Committee on International Issues be responsible for supplying (either directly or indirectly) the Newsletter editor with news worthy information.

2. To assist NARST members, for whom English is not a first language, in polishing manuscripts acceptable to JRST but which require reworking stylistically and/or grammatically.

The following actions are proposed to the Executive:

- a. That the Editor of JRST appoint a cadre of NARST members who would play the role of "phantom editor" in polishing an acceptable manuscript for purposes of publication. (The author would certainly have to approve the changes.)
- b. That this service be advertised yearly in the Newsletter.

3. To encourage international cooperation and exchange of ideas.

The following actions are proposed to the Executive:

- a. That NARST support efforts to hold research and development seminars in various countries, by (i) giving the organizers permission to use the NARST auspices to obtain grants from other institutions; and when financially feasible (ii) sending an official NARST delegate to the seminar.
- b. That JRST print a set of abstracts (perhaps in a section called "International Review") which originates from one part of the world and which has been refereed by an international ad hoc committee established by the Executive as the need arises.

Submitted September 1986

Glen Aikenhead

MEMO

TO Jim

FROM Dave

DATE September 26, 1986

SUBJECT Report of progress of the DELTA/NARST Monographs

The project which Delta has provided NARST with funds to develop and publish monographs that would help teachers strengthen the science tests used in their classrooms is on target. The Editorial Committee (Rod Doran, Bob Howe, Jim Shymansky and Dave Butts) have met on two occasions.

First: The time line and the tasks for the two monographs are now scheduled as follows:

Task	Elementary Monograph	Secondary Monograph
Draft the Manuscript	November 1	December 1
Editorial Review by Committee	December 1	January 1
by ERIC		
Mms modification	February 1	April 1
ERIC Production	March 1	May 1
MMS Proof	March 15	May 15

Second: A number of tasks need to be done that involve each of the Editorial Committee and authors:

Editorial Review of the MMs, (Dave, Jim & Bob with the teachers they select.)

Requesting releases will be done by Bob after he receives a copy of the item and its exact source from Rod.

Art work will be done at ERIC

Third: We agreed on these as the titles:

SCIENCE TESTING, AN ELEMENTARY TEACHERS GUIDE TO ASSESSMENT AND EVALUATION

SCIENCE TESTING, A SECONDARY TEACHERS GUIDE TO ASSESSMENT AND EVALUATION

Fourth: We agreed to this general outline for both monographs:

Prologue--tests provide data useful in answering questions.

What questions?

Who is asking them?

- Chapter 1 A model of Science
- Chapter 2 Processes and their Examples
- Chapter 3 Concepts and their Examples
- Chapter 4 Problem Solving and its Examples
- Chapter 5 Format Alternatives for Science Test Questions
- Chapter 6 Linking Answers to the Questions--how to make sense of the data.

Fifth: We reviewed the expenditures thus far and those that are scheduled. These include:

Rod	\$308.00
Meeting on elementary Monograph in New York.	
Dave	
Columbus Meeting	589.47
Rod	200.00
Estimate, Columbus Mtg.	
Joe	300.00
Estimate, Columbus Mtg.	
Sonny	120.00
Estimate, Columbus Mtg.	
Honoraria	2400.00
	3947.47

Sixth: We discussed the expected price for the monograph. Bob estimates that if we print it in a 8 x 11 spiral bound

book, the cost will be about \$16.00, with a price of \$12.00 to Narst members, for both volumes. The price of \$8.00 per book will include a \$1. royalty to NARST on the sales of the books which are expected to be 500 to 700 for each book in the first year. ?

RECOMMENDED ACTION BY BOARD:

NONE

TRIANGLE COALITION COMMITTEE
Specific Items

Robert Howe

NARST is an affiliated member of the Triangle Coalition. The charge to the committee is to delineate NARST's relationship with the Triangle Coalition.



Chairpersons

Education

Mary Hatwood Futrell
National Education Association

Industry

Robert C. Forney
E.I. du Pont de Nemours & Company

Science & Engineering

Glenn T. Seaborg
University of California-Berkeley

Steering Committee

Joseph Blanding
United Auto Workers

Barbara E. Bontemps
Chevron U.S.A., Inc.

Joanne Capper
Council of Chief State School Officers

Audrey B. Champagne
*American Association for the
Advancement of Science*

Kenneth Chapman
American Chemical Society

Joe Crosswhite
*National Council of Teachers
in Mathematics*

Kenneth D. Fisher
*Federation of American Societies
for Experimental Biology*

Richard Gowen
*Institute of Electrical and
Electronics Engineers*

Marjorie King
*National Association of
Biology Teachers*

Alan McClelland
E.I. du Pont de Nemours & Company

Phyllis McGrath
General Electric Company

E. Joe Piel
SUNY-Stony Brook

Walter Purdy
Edison Electric Institute

Gerald Skoog
Texas Tech University

Jack Wilson
*American Association of
Physics Teachers*

M E M O R A N D U M

TO: Triangle Coalition Member Representatives
FROM: John M. Fowler
SUBJECT: Update

This memo is a potpourri of news etc. So far the occasional memo is the only mechanism we have for getting news out to Triangle organizations and we count on you to pass it along to your newsletters. It has occurred to us that this may not be efficient, so we enclose in this mailing a return form which asks for direct contact with your group's newsletter.

Other Items:

1. Conference on elementary science: A news release is enclosed which summarizes the output of the conference at Spring Hill. Please pass this along to your newsletters if you feel it appropriate.

We are working on a conference statement and rationale along the lines suggested in the release. This will be circulated to Triangle Coalition member organizations for ratification.

2. The 1986 Triangle Coalition membership meeting is scheduled for November 1986 in Washington, the day before the AAAS forum meeting. We will send a time, place, and agenda to you by the end of September.
3. We offer, in our all purpose return form, to send you two recent reports on education described below.

"A Nation Prepared: Teachers for the 21st Century", the report of the Task Force on Teaching as a Profession of the Carnegie Forum on Education and the Economy.

This report is probably the most influential and controversial report for action yet and deserves study. It could inform Triangle Coalition activities as well as those of the local alliances.

First Lessons, a report on elementary education by Department of Education Secretary Bennett.

There are only a few pages of discussion of science education but what is there is right on target.

4. We include, FYI, a brochure on the upcoming National Metric Council conference and a description of the Mathematical Sciences Education Board. We consider this Board a companion organization and are working to establish strong linkages.
5. Second Call: We would like to establish the two task forces mentioned in the memorandum of July 9, 1986:
 - A. A Congressional Liaison task force (this is a working title only) of Triangle Coalition organizational representatives who will follow action on science and technology education at the Federal level and keep the Triangle Coalition informed. There is work for this task force this fall.
 - B. A task force on educational technology which will well guide the Triangle Coalition in this important area.

Please send us recommendations for members if you have not done so. We'll set a deadline of 1 October before we circulate the list of task force members.

Report of NARST President
October, 1986

This past year has been a very active, productive time for NARST. Membership is growing, new policies are being generated, new images are emerging, and a renewed interest in NARST activities is providing the impetus in making NARST the organization for research in science teaching. I deeply appreciate the work from chairmen and their committee members in helping NARST fulfill its goal of improving science education at all levels.

Recommendations of the President:

1. Recommend approval of the proposed budget for 1987 (ref. Financial Advisory).
2. Recommend approval of the policy dealing with the site and hotel negotiations for the Annual Meeting (ref. Policy Advisory).
3. Recommend approval to generate a policy manual comprising those actions that have been acted upon (ref. Policy Advisory).
4. Recommend the establishment of a task force to explore the JRST/AETS check-off membership form (ref. Policy Advisory).
5. Recommend actions proposed by the ad hoc Committee on International Issues.

Actions

1. Appointed Ted Fowler, University of Cincinnati as interim NARST News editor.
2. Appointed Roger Bybee, BSCS, as editor of research column for NARST News.

Activities

1. Attended the NSTA sponsored meeting to assess the Science Education Programs of the NSF Directorate for Science and Engineering Education June 20-22, 1986, Milwaukee, Wisconsin.
2. Attended the CAG/Board of Directors Meeting of NSTA, July 20-24, 1986, St. Louis, Missouri.
3. Presented a concurrent session, "Developing and Writing Grant Proposals," CAG's meeting of NSTA, July 21, 1986, St. Louis, Missouri.

Conferences

1. Proposed the following NARST Component of the NSTA Annual Meeting, Washington, D.C., 1987:

Session 1

"The Role of Cognitive Factors in Chemistry Achievement"

Kenneth Tobin
Western Australia Institute of Technology
Bentley, Western Australia 6102
Australia

Sarah Chandran
24 Leymar Way
Willetton, Western Australia 6155
Australia

David F. Treagast
Western Australia Institute of Technology
Bentley, Western Australia 6102
Australia

Session 2

"The Development and Validation of a Test of Basic Process Skills"

Michael J. Padilla
212 Aderhold Hall
Science Education
University of Georgia
Athens, Georgia 30602

Linda Cronin
Route 2 Box 196
Commerce, Georgia 30529

Meghan Twiest
Science Education
University of Georgia
Athens, Georgia 30602

Session 3

"Using Short Forms of Several Classroom Environment Scales to Assess and Improve Classroom Psychosocial Environment"

Barry J. Fraser
Western Australia Institute of Technology
Bentley, Western Australia 6102
Australia

Darrell L. Fisher
Tasmanian College of Advanced Education

Kenneth Tobin
Western Australia Institute of Technology
Bentley, Western Australia 6102
Australia

Session 4

"Research Interests of Secondary Science Teachers"

Dorothy Gabel
School of Education
Indiana University
Bloomington, Indiana 47405

Stanley L. Helgeson
ERIC
The Ohio State University
Columbus, Ohio 43212

Joseph Novak
Department of Education
404 Roberts Hall
Cornell University
Ithaca, New York 14853-5901

Session 5

"Research Matters...To the Science Teacher: Assessing Science at the Secondary School Level"

David P. Butts
212 Aderhold Hall
Science Education
University of Georgia
Athens, Georgia 30602

Session 6

"Research Matters...To the Science Teacher: Examining the Impact of the 'New' Science Curricula"

James A. Shymansky
Science Education Center
The University of Iowa
Iowa City, Iowa 52242

Session 7

"Research Matters...To the Science Teacher: Computer Use in Science Instruction"

John Layman
Science Teaching Center
University of Maryland
College Park, Maryland 20742

Session 8

"Research Matters...To the Science Teacher: Assessing Science at the Elementary School Level"

Rodney Doran
553 Baldy Hall
SUNY at Buffalo
Amherst, New York 14260

Session 9

"Research Matters...To the Science Teacher: Integrating Science with Other Elementary School Subjects"

Lowell J. Bethel
Science Education Center, EDB 340
The University of Texas at Austin
Austin, Texas 78712

Session 10

"Research Matters...To the Science Teacher: Selecting and Using Science Textbooks"

William Holliday
Science Teaching Center
University of Maryland
College Park, Maryland 20742

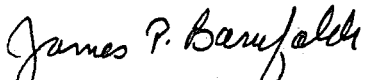
2. Proposed the following NARST component of the NSTA Area Meeting, Fall, 1986:
 - a. Las Vegas Area Convention (November 21-23)
Contributed, one hour, paper session
Research Matters...To the Science Teacher
"Selecting and Using Science Textbooks," William G. Holliday

Contributed, one hour, paper session
Research Matters...To the Science Teacher
"Integrating Science with Other Elementary School Subjects," Lowell J. Bethel
 - b. Indianapolis Area Convention (October 30-November 1)
Contributed, one hour, paper session
Research Matters...To the Science Teacher
"The Role of the Laboratory in Science Teaching," Patricia Blosser

Contributed, one hour, paper session
Research Matters...To the Science Teacher
"Computer Use in Science Instruction," Robert D. Sherwood

- c. Anchorage Area Convention (December 4-6)
Contributed, one hour, paper session
Research Matters...To the Science Teacher
"The Role of Manipulative Experiences in the Elementary School
Classroom," James P. Barufaldi
- Contributed, one hour, paper session
Research Matters...To the Science Teacher
"Improving Students' Attitudes Toward Science," Thomas R. Koballa, Jr.

Respectfully submitted,



James P. Barufaldi
President

JPB:1a



Medical Center of Central Georgia

777 Hemlock Street P.O. Box 6000 Macon, Georgia 31208 (912) 744-1000

August 4, 1986

Dr. James Barufaldi
Science Education Center, EDB 340
The University of Texas at Austin
Austin, TX 78712

Dear Dr. Barufaldi:

It was good to speak with you on the phone last week. I was glad to learn that several competent people have expressed interest in the Newsletter editor position. As we discussed, I would also like to be considered for that position. In the near future you should receive a formal letter from Dr. Ron Good placing my name in nomination.

As we discussed, a newsletter editor should 1) be able to work closely with the Board members, 2) present ideas for consideration which help to advance both the Newsletter and the organization, and 3) be able to effectively manage the details of preparing final copy. ← *Print & mail*

My vision for the Newsletter is that it should serve two principal functions: to inform NARST members and to present the organization effectively to non-members. (i.e., "public relations"). The Newsletter could also address our current emphases on membership and enhancing relationships with other organizations. Toward these ends, I would suggest the following columns for possible inclusion:

- Guest Editor's column (William Bennett, Donald Woods, etc.)
- Calendar of meetings and events of interest
- International column
- Collaboration corner
- Congressional update
- Grants available
- JRST editor's column
- Column from other organization president (revolving among AERA, NSTA, etc.)
- Synopses of award-winning papers from last convention
- Colleague news--recent appointments, grants awarded, etc.
- "How I Do It" column
- Elections
- Job openings and requests
- Committee reports

...leading the way in health care

Mike U. Smith
August 4, 1986
Page 2

Beyond content, I share your concern that the Newsletter should continue to be a quality publication which is visually appealing. I have had some experience with doing the layouts for a number of project such as publicity flyers and curriculum materials (e.g., as a part of the Minicourse Development Project, S. N. Postlethwait, Purdue University). In addition, we have a fully staffed and excellently equipped media productions facility which is at my disposal.

*old he
print + mail
cost?
cost*

Of course, an editor must also have adequate time to invest in such a project. As I discussed with you by phone, the 20% free time which is provided by my current grant position makes this an excellent time for me to make my services available to the organization.

*1-3
length of
what
happens
when
grant
expires.*

Although I have not edited a newsletter per se, I have served for the last two years as member/editor of the Alverno Critical Thinking Network in the Natural Sciences (a FIPSE project). During the past year, I was also the supervising editor responsible for the development and production of the Curriculum Manual for Family Practice Residency Training (Medical Center of Central Georgia). (Copies of these materials are available.)

For your information, I have enclosed a copy of my curriculum vita. If you would like to discuss this further, I can be reached at 912-744-1536. If you need further references, I am sure that Dr. Dorothy Gable would be happy to discuss my capabilities.

Good luck with filling the editor's position and best wishes for your year as president. If I can be of any service to you and the organization--on the Newsletter, committees, etc.--please feel free to call.

Sincerely,



Mike U. Smith, Ph.D.
Associate Professor
Department of Family & Community
Medicine
Mercer University School of Medicine

2 yr term

MICHAEL U. SMITH

EDUCATIONAL HISTORY

Date	Degree/Certificate	Institution	Specialization
1983	Doctor of Philosophy	Florida State University Tallahassee, Florida	Science Education Content Area: Genetics Research Tool: Statistics and Measurement
1975	Master of Science	Purdue University West Lafayette, Indiana	Major: Molecular Genetics Minor: Biochemistry
1972	Bachelor of Science	Union University Jackson, Tennessee	Major: Biology Minor: Education
1972	Teaching Certificate (Secondary)	State of Tennessee	Area: Biology

EXPERIENCE

- 1984 - present **Assistant Professor of Clinical Education**
Science Instructor, University High School (U High)
Southeast Missouri State University (SEMO), Cape Girardeau, Missouri
- Teaching Activities:
Designed and taught activity-oriented courses at all high school levels: biology, general science, physical science, and pre-college science (chemistry, physics, advanced biology).
Supervised clinical experience for college students enrolled in Science Teaching Techniques course.
- Faculty Service:
Advised U-High Sophomore Class
Advised U-High Science Club
Served on Department of Education Committee for Review of Human Subjects Research
Judged University Homecoming Parade
Judged All-Greek Games Day
Co-led "Dating and Human Relationships in the Eighties" Workshops for University Student Affairs
- 1983 **Assistant Professor of Biology** (Sabbatical replacement)
Southeast Missouri State University, Cape Girardeau, Missouri
- Teaching Activities:
Taught courses in general genetics (lecture and lab), advanced genetics (graduate lecture), fundamentals of genetics (graduate tutorial), human heredity and society (lecture for non-majors), and general biology (lab for non-majors).
Directed graduate independent study: "Development of a Research-Based Rationale for College Science Teaching."
Supervised student laboratory assistants.
Received "Very Good" rating from both peer and student evaluation.

HONORS AND ACTIVITIES

1983	Member, Phi Delta Kappa	Florida State University
1982	Outstanding Young Men of America	
1980-1981	Fellow, College of Education	Florida State University
1980	Featured Faculty Member, NGC yearbook	North Greenville College
1979	Outstanding Male Faculty Member (NGC student newspaper)	North Greenville College
1978	Invited lecturer, Union University Science Alumni Day	Union University
1976, 1971	Nominee for Danforth Fellowship	Union University
1972	Graduated magna cum laude	Union University
1972	Who's Who in American Colleges and Universities	Union University
1972	Outstanding Senior Biology Student Award	Union University
1971-1972	Member, Alpha Chi National Honor Society	Union University
1971-1972	Student Foundation, Charter Member, Officer	Union University
1968-1972	Scholastic Scholarship Awardee	Union University
1968	Valedictorian	Riverside High School (Parsons, Tennessee)

PUBLICATIONS AND PROFESSIONAL ACTIVITIES

- 1984 "Problem Solving and Classical Genetics: Successful vs. Unsuccessful Performance," *Journal of Research in Science Teaching*, 21:895-912.
- "Implications for Teachers from Research on Problem Solving in Biology," Solicited chapter to appear in *What Research Says to the Science Teacher, Volume IV*. Manuscript in preparation. Published by the National Science Teachers Association; tentative publication date, 1985.
- "A Proposed Developmental Sequence for Problem-Solving Ability in Classical Genetics: The Trial-and-Error to Deductive Logic Continuum," Paper presented to the National Association for Research in Science Teaching, New Orleans, Louisiana, 1984.
- Invited to present a paper at the 1985 national convention of the American Association for the Advancement of Science, Los Angeles, California. Tentative title: "Status report on research in successful/unsuccessful problem solving in classical genetics."
- Invited to present a paper at the 1985 national convention of the National Science Teachers Association, Cincinnati, Ohio. Tentative title: "Lessons from expert/novice research for enhancing student success in classical genetics problem solving."
- Invited to become a member of the National Critical Thinking Network in the Sciences of Alverno College, Milwaukee, Wisconsin.
- Participated in the first workshop of the National Critical Thinking Network, Alverno College, Milwaukee, Wisconsin.
- Participated in "Genetic Defects: Adulthood" workshop, St. Louis University, St. Louis, Missouri.
- Served on national membership committee of the National Association for Research in Science Teaching.
- 1983 "Strategies Used by Experts and Novices While Solving Selected Classical Genetics Problems," Paper presented to the National Association for Research in Science Teaching, Dallas, Texas.
- "A Comparative Analysis of the Performance of Experts and Novices While Solving Selected Classical Genetics Problems," Doctoral dissertation, The Florida State University, Tallahassee, Florida.
- 1979 "IMMA: The Independent Motivational Mastery Approach to Individualizing on a Shoestring Budget," Paper presented to the International Congress for Individualized Instruction, University of Georgia, Athens, Georgia.

Faculty Service:

Co-sponsored Biology Club

Served on Science Fair Committee.

Served as member of Resource Personnel of the Center for Science and Math Education.

1981-1983

Administrative Assistant, Center for Intensive English Studies (part-time)

Florida State University, Tallahassee, Florida.

Responsibilities: Interacting with U.S. Dept. of Immigration, embassies, and granting agencies; billing; typist/receptionist.

1979-1980

Chairman, Division of Natural and Social Sciences

North Greenville College (NGC), Greenville, South Carolina

Activities/Responsibilities: Hiring division faculty members, budget planning, evaluation of faculty performance, long range planning.

1975-1980

Instructor, Head of Biology Section (NGC)

Teaching Activities:

Designed and implemented new courses: problem-solving skills (for low achievers), "Independent Motivational Mastery Approach Biology", human anatomy and physiology.

Reorganized general biology course from phylogenetic approach to conceptual/molecular approach.

Lectured (introductory biology, human anatomy and physiology).

Supervised introductory and A & P laboratories and field trips.

Supervised student teaching assistants.

Received "Excellent" rating from division chairman (1979-1980).

Faculty Service:

Served as: faculty-elected representative to NGC Administrative Council, local chapter president of AAUP, sponsor of student Outdoor Club and Pep Club.

Initiated: NGC Visiting Professor Program (lectures to local high school classes), Outstanding Biology Student Award, NGC Biology Film and Lecture Series.

Provided extensive personal and academic counseling.

Served on various college committees, including the Professional Development and Standards Committee responsible for administering a professional development ACTION Consortium grant.

1973-1975

Teaching Intern, Purdue University, West Lafayette, Indiana

Dr. S.N. Postlethwait

Assisted in an audio-tutorial biology lab.

Designed and produced audio-tutorial materials.

Research Assistant, Purdue University, West Lafayette, Indiana

Drs. Irwin and Ethel Tessman

Conducted independent research: mutagenesis and mutant isolation, polyacrylamide gel electrophoresis, electron microscopy, purification of macromolecules.

1972-1973

Teaching Assistant, Purdue University, West Lafayette, Indiana

Mrs. J. Littrell

Assisted in graduate cell biology laboratory.

1969-1972

Teaching Assistant, Union University, Jackson, Tennessee

Dr. H.A. Sierk, Mrs. Elsie Y. Smith

Assisted in undergraduate biology laboratories.

Orderly/Emergency Room Assistant (summers only)

Decatur County General Hospital, Parsons, Tennessee

PROFESSIONAL AFFILIATIONS

American Association for the Advancement of Science (AAAS)
National Association for Research in Science Teaching (NARST)
American Educational Research Association (AERA)
Society of College Science Teachers, Charter Member (SCST)
National Science Teachers Association (NSTA)

PERSONAL DATA

Birth December 25, 1950
Parsons, Tennessee

Marital Status: Married

Avocations: Hiking, canoeing, cross-stitch, vocal ensembles and choral directing.

REFERENCES

Dr. Robert Johnson	Department of Biology Southeast Missouri State University	Cape Girardeau, Missouri 63701
Dr. Ron Good	423 Education Building, Florida State University	Tallahassee, Florida 32306
Dr. Herbert Sierk	Academic Dean, North Greenville College	Tigerville, South Carolina 29688

OTHER DATA AVAILABLE

Transcripts, letters of reference, etc. are available upon request.

MIKE U. SMITH

CURRICULUM VITA ADDENDUM
1986

EXPERIENCE

1985 - present Curriculum and Research Specialist
Family Practice Residency Training Program and
Assistant Professor
Department of Family Practice
Medical Center of Central Georgia
Macon, Georgia 31201

Assistant Professor
Department of Family and Community Medicine
Mercer University School of Medicine
Macon, Georgia 31208

Activities:

Designed the residency training curriculum and prepared the curriculum manual.

Supervised the regular review and revision of the curriculum, including writing final reports.

Planned and coordinated the departmental faculty development program.

Assisted in the planning and writing of grant applications.

Coordinated the activities of the National Critical Thinking Network, Alverno College, Milwaukee, WI.

Consulted departmental faculty members on educational issues, including testing and measurement.

Consulted on the experimental design (including statistical analysis) for various departmental research projects.

Coached residents and faculty physicians on making effective formal presentations.

Designed and taught departmental staff word-processing workshops.

Designed and implemented a computer-based resident experience documentation program.

Participated in the MCCG Genetics Clinic, providing genetic counseling to patients and their families and teaching residents and MUSM students.

Co-led a bi-monthly departmental "Rap Session" designed to assist interns in dealing with the pressures of the residency.

Actively pursued personal research.

HONORS AND ACTIVITIES

1985 Outstanding Young Men of America

PUBLICATIONS AND PROFESSIONAL ACTIVITIES

Invited contributions:

Smith, Mike U. (in press). Problem solving in biology. In D. Gabel (Ed.), What Research Says to the Science Teacher Vol. IV. Washington, DC: National Science Teachers Association.

Smith, Mike U., & Good, R. (in press). Problem-solving research projects for the classroom teacher. The Science Teacher.

Good, R., & Smith, Mike U. Teaching science as problem solving. New York: Macmillan Publishing Company. (Manuscript in initial preparation).

Defining, assessing, and teaching critical thinking: Report of the Alverno Critical Thinking Network in the Sciences. Milwaukee, WI: Alverno Press. (Manuscript in final preparation).

Smith, Mike U. (April, 1985). A proposed developmental sequence for problem-solving ability in classical genetics: The trial-and-error to deductive logic continuum. Paper presented at the meeting of the National Science Teachers Association, Cincinnati, OH.

Smith, Mike U. (April, 1985). Problem solving and the naturalistic research paradigm. Seminar presentation to the Florida State University Science Education and Computer Science Departments.

OTHER PUBLICATIONS

Smith, Mike U. (1986). Curriculum Manual for the Residency Training Program. Macon, GA: Medical Center of Central Georgia.

Submitted for publication:

Alverno Critical Thinking Network in the Sciences. Teaching and assessing critical thinking in the natural sciences: A critical thinking network in science. Journal for College Science Teaching.

Manuscript in final preparation:

Smith, Mike U. Teaching and studying problem solving in biology. The American Biology Teacher.

OTHER PRESENTATIONS

Smith, Mike U. (October, 1985). Classroom-tested recommendations for teaching problem solving within a traditional college course: Genetics. Paper presented at the meeting of the International Society for Individualized Instruction, Newark, N.J. (Accepted for inclusion in ERIC).

Smith, Mike U. (March, 1986). Is formal operational thought required for solving classical genetics problems? Paper presented at the meeting of the Society for College Science Teaching, San Francisco, CA. (Accepted for inclusion in ERIC).

Smith, Mike U. (March, 1986). Categorization of genetics problems by successful and unsuccessful problem solvers. Paper presented at the meeting of the National Association for Research in Science Teaching, San Francisco, CA. (Accepted for inclusion in ERIC).

Smith, Mike U. (March, 1986). Problem solving in classical genetics: Successful and unsuccessful pedigree analysis. Paper presented at the meeting of the American Educational Research Association, San Francisco, CA. (Accepted for inclusion in ERIC).

Submitted for publication or presentation:

Smith, Mike U. How to's for successful genetics teaching. Workshop presentation to be presented at the annual convention of the National Science Teachers Association, Washington, D.C.

Smith, Mike U. Mental representation of textbook problems: Is the distinction deep/surface or mode of daily use? Paper to be presented at the meeting of the National Association for Research in Science Teaching, Washington, D.C.

Alverno Critical Thinking Network in the Sciences. The Alverno Critical Thinking Network in the Sciences. Panel discussion to be presented at the meeting of the American Educational Research Association, Washington, D.C.

Smith, Mike U., & Good, R. Advances in the use of computer technology in scientific problem-solving research, theory, and application. Symposium to be presented at the meeting of the American Educational Research Association, Washington, D.C.

Smith, Mike U. (December, 1985). Diagnostic problem solving. Paper presented at Grand Rounds, Department of Family Practice, Medical Center of Central Georgia.

GRANTS FUNDED

Department of Family and Community Medicine, Mercer University.
(January, 1986). Grants for establishment of departments of Family Medicine. Department of Health and Human Resources.

Buckley, B., Henderson A., Katner, H., Smith, M. U. (December, 1985). Risk of transmission of AIDS from flexible sigmoidoscopy. Funded by American Academy of Family Practice Project on Research in Family Practice.

GRANT PROPOSALS SUBMITTED

Smith, Mike U. (January, 1985). Development of a comprehensive model of problem solving in classical genetics. Office of Naval Research, Information Services Program.

Also submitted (February, 1985) to the National Science Foundation, Memory and Cognitive Processes Program.

Treadwell, T. Walter, Jr., & Smith, Mike U. (June, 1986). A study of the effect of a proposed training intervention on the enhancement of group functioning and problem solving. Army Research Institute.

Good, R., & Smith, Mike U. (June, 1986). Development of an artificial intelligence program for solving classical genetics problems. Army Research Institute.

Research in planning

Miller, V., & Smith, Mike U. A questionnaire study of preferences of Georgia family physicians for time, place, and format for continuing medical education activities.

Shellenberger, S., Couch, K., Armour, M. A., Denny, M., & Smith, Mike U. A cohort study of the relationships between personality and familial characteristics and performance in a problem-based medical school curriculum.

Katner, H., & Smith, M. U. A survey study of the changes in sexual practices of homosexuals since the appearance of AIDS.

University of Cincinnati



Curriculum and Instruction
and Vocational Education

Science and Environmental
Education Center

Teachers College (#2)
Cincinnati, Ohio 45221
Phone (513) 475-3561

September 28, 1986

James P. Barufaldi
President, NARST
Science Education Center
EOB 340
The University of Texas at Austin
Austin, TX 78712

Dear Jim,

I am interested in the position of editor of the NARST newsletter. The NARST News is I believe the most important mechanism for further developing the organization, attracting and holding members, and diminishing an underlying regionalism held by some members of the organization.

In order for an organization to be successful it is necessary for there to be a spirit of camaraderie and free communication. Each member needs to feel he or she is a part of the organization and in communication with the other members and the leaders. Except for the national meeting the only way to communicate opportunities, developments and happenings is through an effective newsletter.

An effective newsletter is one which attracts the reader's attention with an attractive format and contains articles and features of interest. The newsletter should be printed in two colors on good quality paper with each article clearly delineated. Important photographs should be published. Each issue of the newsletter should report the activities of each of standing committees and other units of the organization. The four issues should additionally each be devoted to a different theme: December - features on the up-coming national meeting with the intent of selling attendance; March - announcements concerning the national meeting and emphasis on recruiting new and renewal members; June - report on the national meeting, first call for proposals for the next meeting, and publication of the Leadership Directory; and September - second call for proposals, an emphasis on committee activities and a run-down of research funding sources.

Committee chairs should be contacted to solicit articles prior to each issue with the intent of developing a habit of communicating through the newsletter. The NARST News editor needs to be in direct communication with the officers and the executive secretary. Each issue needs to be published on schedule. The budget for the newsletter should be increased to about \$4500. Sponsors should be sought.

In short the image of the organization is projected primarily through the journal and NARST News year-round for the majority of the NARST members. NARST News should be of as high quality as JRST and should attract attention. For every 50 members that are recruited or kept in the organization, an additional \$1000 is available for projects and endeavors. An effective newsletter should help members feel a continuing commitment to NARST. Additionally, the newsletter might become a catalyst for establishing even more personal communications among members by way of computer bulletin boards or special interest groups to encourage research collaboration and the continual sharing of research findings. Increased communication within the organization would, I think, go far in reducing regional tensions and competition in favor of universal interest and collaboration.

I am deeply committed to NARST and want very much to see the organization continue to succeed. I believe I have the skills, insight, and institutional support to be an effective NARST News editor.

Sincerely yours,

A handwritten signature in cursive script that reads "Ted Fowler".

Thaddeus W. Fowler, Ed.D.
Associate Professor

1985 Spring Meeting of the
National Association for Research in Science Teaching
French Lick Springs, Indiana
April 14, 1985

MINUTES

A. Opening Remarks by the President

The 1985 spring meeting of the National Association for Research in Science Teaching was held at the French Lick Springs Tennis and Golf Resort, Indiana, April 15-18, 1985. Dr. Ertle Thompson welcomed everybody to the meeting. It was announced at this time that an unofficial meeting of the board would be held in Dave Butts' suite, 9:15 p.m., Wednesday, April 17, 1985.

B. Board Members (Old and New) in Attendance

Dr. Patricia Blosser	Dr. Ann Howe
Dr. Jane Bowyer	Dr. Michael Padilla
Dr. David Butts	Dr. John Staver
Dr. Linda DeTure	Dr. Ertle Thompson
Dr. Rodney Doran	Dr. Russell Yeany
Dr. William Holliday	

C. Approval of Minutes Describing the 1984 Spring Meeting of the Board

Motion: Moved that the minutes for the 1984 fall board meeting, with minor corrections, be approved. Yeany, Doran. Motion carried.

D. Report of the President

Dave Butts described the highlights of the 1985 program. He announced that 114 papers were accepted with only two cancellations. In addition, eleven symposiums and four paper sets were accepted for this meeting. Moreover, he expressed his pleasure with the fact that only three of the 45 discussants had not received their papers by the March deadline described in his letter to participants at the meeting. A discussion about the program followed with a general sense of approval and appreciation from other board members focusing on the efforts of Dave Butts and his program committee.

E. Policy Advisory Committee

Ann Howe described her committee's further work on the policy and procedures manual. She announced that Jack Renner and Stan Helgeson will be working on this project. Second, she announced that Dave Butts made a number of recommendations concerning our current committee structure and reported to the board that the policy advisory committee would be examining his recommendations in the next few days and reporting back at the unofficial meeting on Wednesday evening.

F. Report of the Executive Secretary1. Spouse-Membership Option

Motion: Moved that the spouse-membership option be available to the membership beginning in 1986. The charge imposed for this option for 1986 will be \$14. Howe, DeTure. Motion carried.

2. American Heritage Publishing

Motion: Moved that NARST cooperate with the American Heritage Publishing Corporation in this one venture concerning their request for six sets of labels as described in their letter of January 30, 1985, without prejudice to further decisions concerning the distribution of our address labels to outside people. Aikenhead, Padilla. Motion carried.

Motion: Moved that policy concerning the distribution of our address labels be referred to the policy advisory committee for their consideration. Butts, Doran. Motion carried.

3. Placement Information for Members

It was generally decided that no change in our policy concerning the distribution of placement information and materials should be made at this time.

4. Rolling Subscription System

The option of having a rolling subscription system used by the executive secretary was discussed in conjunction with our general policy of recommending such issues to the policy advisory committee. Ann Howe had recommended to Bill Holliday that this issue be brought directly forward to the board without attention by the policy advisory committee.

Motion: Moved that future boards have the option to use: (1) a calendar-year subscription system, or (2) a rolling, or evergreen, subscription system. In addition, it was recommended that a by-law be put forward by the board to the membership concerning this matter. Holliday, Yeany. Motion carried.

5. Washington, D.C. in 1987

Motion: Moved that the 1987 annual meeting of NARST be held subsequent to the NSTA meeting, providing that NSTA meets in Washington, D.C. on, or about, March 26-29, 1987. Butts, Doran. Motion carried.

6. Fall Board Meeting

Linda DeTure requested that a 1985 fall board meeting be a high priority for the Association. Once again, the entire matter of the board meeting in the fall was discussed. A general consensus of the board at this time was to meet in New Orleans on, or about, December 12-14, at the site of the NSTA area meeting.

7. Financial Report

Motion: Moved that the 1984 financial report prepared by Bill Holliday be accepted by the board. Holliday, Aikenhead. Motion carried.

G. Special Business

Motion: Moved that a proposal informally submitted by Bob Yager be referred to the research committee for their deliberation. Butts, Blosser. Motion carried.

H. Report from the Editor

1. Russ Yeany reported that Joe Riley, of The University of Georgia, would be the Journal's associate editor. In addition, The University of Georgia is now providing Russ with a one-half time secretary and one-third release time from course work.
2. Jonas Rosenthal, associate publisher, journals, John Wiley & Sons, welcomed the opportunity to visit with the board members and participate at the annual meeting.

I. Committee Reports

1. JRST Award Committee

Mike Padilla requested that the titles and authors of the winners of the JRST award be published in the program booklet and be published in the newsletter. In addition, Mike indicated that his committee was considering requests of the board to establish two additional awards, Best Dissertation and Distinguished Researcher awards.

2. NARST Awards

Linda DeTure also recommended that winners of awards be published in the newsletter. In addition, she provided Pat Blosser, the new chairperson of the NARST awards committee, with a complete record of DeTure's committee's work during the last three years.

3. Publications Advisory Committee

Glen Aikenhead indicated that no business had come to his advisory committee's attention. In addition, Glen indicated that more contributions to the newsletter were needed and that Larry Yore's proposal should be considered at a subsequent meeting of the board.

4. Research Committee

Rod Doran questioned the need for a research coordinator. He encouraged people to consider the usefulness of such a position in the future. In addition, he recommended that the board examine Bob Yager's proposal in the near future and that the board continue to present training sessions prior to annual meetings. Finally, Rod

reported his work with Dorothy Gabel and Jim Shymansky in the research division of NSTA.

Ann Howe recommended that NARST's name appear on a prominent part of the documents being distributed at the NARST booth in Cincinnati. She reported enthusiastic responses from readers of the research matters series.

5. Financial Advisory Committee Report

Marcia Linn's committee's work on the financial advisory committee was presented to the board. Motion: Moved that the program committee examine the cost effectiveness of producing different kinds of program booklets for our 1986 annual meeting. Butts, Padilla. Motion carried.

J. New Business

1. Committee Membership - 1985 and 1986

Motion: Moved that the committee composition and structure submitted by Dave Butts for the year 1985-1986 be approved. Butts, Padilla. Motion carried.

2. Closing Words by Ertle Thompson

Ertle thanked everybody for their help during his presidency. Specifically, he recognized the contribution of Linda DeTure for her fine work on the NARST awards committee and also the fine work of Glen Aikenhead and his contribution to the publication advisory committee during the last three years. Ertle reminded the board that 380 members of NARST participated at the annual meeting and encouraged subsequent presidents to continue the policy of including as many people as possible on the program and in committees during future annual meetings.

K. Informal Meeting of The Board, April 16, 9:15 p.m.

An informal meeting of the board was held in Dave Butt's suite, April 16, 9:15 p.m. Dave recorded the discussion and promised to send a ballot describing informal motions to each board member for the board's inspection and decision. Dave sent a letter to the executive secretary on May 24, 1985 containing the "list of motions". He reported that all motions were supported by the board "via their mail ballot as of 5/25/85".

BALLOT FOR NARST EXECUTIVE BOARD

Please circle your VOTE

<p><u>MOVED</u> that NARST authorize the proceeding of plans to publish a Handbook for Research in Science Education as outlined by Larry Yore. The Publication Advisory Committee is to develop a full plan to include authors and budget.</p>	<p>Support</p>	<p>Do Not Support</p>
---	----------------	---------------------------

<p><u>MOVED</u> that membership labels be rented at the discretion of the Executive Secretary</p>	<p>Support</p>	<p>Do Not Support</p>
---	----------------	---------------------------

<p><u>MOVED</u> that NARST endorse the study proposed by Iris Weis and that Ertle Thompson be requested to so respond to her request.</p>	<p>Support</p>	<p>Do Not Support</p>
---	----------------	---------------------------

<p><u>MOVED</u> that NARST cooperate with ERIC in developing the "Retrospective Reviews: 1972-1985".</p>	<p>Support</p>	<p>Do Not Support</p>
--	----------------	---------------------------

<p><u>MOVED</u> that NARST establish a distinguished service award for 1986 and an outstanding dissertation in science education award to begin in 1987.</p>	<p>Support</p>	<p>Do Not Support</p>
--	----------------	---------------------------

<p><u>MOVED</u> that the international committee be reappointed for this year.</p>	<p>Support</p>	<p>Do Not Support</p>
--	----------------	---------------------------

<p><u>MOVED</u> that an international column be added to the <u>Newsletter</u> with Pat Blosser coordinating its submission.</p>	<p>Support</p>	<p>Do Not Support</p>
--	----------------	---------------------------

<p><u>Moved</u> that the following guidelines for <u>Journal</u> advertisement be established and communicated to Wiley through the <u>Journal</u> Editor, Russ Yeany:</p>	<p>Support</p>	<p>Do Not Support</p>
--	----------------	---------------------------

A. Journal advertisements will be restricted to:

1. Books and publications dealing with research methods, teaching practices, instructional design and technology, and research-related topics in science education.
2. Conferences, workshops, and special educational opportunities for science educators.
3. Job placement information in science education and related fields.

BALLOT (continued)

4. Special technology related to science education research and instruction.

- B. Number and Location of Advertisements: Space for advertisements will not be counted against editorial page allocations. It is recommended that limits a paid advertisement pages be mutually determined by Wiley and the Journal Editor.
- C. Responsibilities: It is the responsibility of the publisher to establish advertisement rates and transact all advertisement business at no expense to NARST. However, it is recommended that the Journal Editor retain the power to approve/reject any advertisement which does not fall clearly within the categories established by the Executive Board.
- D. Revenues: The contractual agreement between NARST and John Wiley & Sons, Inc. call for NARST to receive 20% of the gross advertisement revenues generated.

MOVED that the Executive Secretary be authorized to add an "invitation to make a \$10.00 donation to NARST" to the 1986 dues notice.

Support

Do Not Support

MOVED that NARST endorse the NSTA-NARST study of the selection process of science instructional materials as proposed by Ron Good.

Support

Do Not Support

1984 Spring Meeting of the
National Association for Research in Science Teaching
The Monteleone Hotel, New Orleans
April 27 and 29, 1984

MINUTES

A. Opening Comments by the President

The 1984 spring meeting of the National Association for Research in Science Teaching was held at the Monteleone Hotel, New Orleans, April 27 and 29, 1983. Dr. Howe welcomed everyone to the meeting.

Board Members in Attendance:

Dr. Glen Aikenhead	Dr. Jane B. Kahle
Dr. Carl F. Berger	Dr. Marcia C. Linn
Dr. Patricia Blosser	Dr. Michael Padilla
Dr. David Butts	Dr. James Shymansky
Dr. Linda R. DeTure	Dr. Robert Sigda
Dr. Rodney Doran	Dr. Ertle Thompson
Dr. William G. Holliday	Dr. Robert Yager
Dr. Ann C. Howe	Dr. Russell H. Yeany

B. Brief Announcements

No major announcements were made.

C. Approval of Minutes Describing the 1983 Fall Meeting of the Board

A casual discussion of "extra" charges required of foreign members lead to a request by the board to the executive secretary for clarification of Wiley's position regarding this issue.

Motion: Moved that the minutes of the 1983 fall board meeting be approved. Doran, Yeany. Motion carried.

D. Report from Program Committee

Minor announcements were made regarding the program being held at the Monteleone including room changes and people who would be unable to attend this year's conference.

Ertle Thompson made a number of remarks regarding this year's program. First, the program committee did an excellent job reviewing the submitted papers. Second, most proposed papers arrived at the University of Virginia a day or two before the deadline. He noted that future people in his position of president-elect should be aware of this fact. Third, an operational calendar is needed to help the members of NARST plan their schedules and to increase efficiency within the association.

Glen Aikenhead requested that the program committees in the future be particularly careful in their communications with proposers who's programs are not considered acceptable.

A number of board members encouraged the idea of designing a symposium where classroom teachers would interact with research people. Ertle Thompson described plans to improve teacher interactions with NARST during his tenure as president.

Marcia Linn encouraged the future use of lapel ribbons identifying the officers of NARST to conference participants.

A second board meeting was scheduled for Sunday, April 29, 7:30-8:30 a.m.

Bob Sigda encouraged the involvement of teachers at future NSTA booths publicizing NARST.

E. Executive Secretary's Report

1. Promotional Activities

Motion: Moved that NARST continue to support promotional activities during the remainder of 1984 and 1985 - including the mailing of the program and printing of the booklets to all members and to other selected people (e.g., potential members, some past-presidents of NARST), and the operation of a promotional booth at the 1985 NSTA meeting in Cincinnati and possibly at other selected meeting sites with the president's approval. Holliday, Aikenhead. Motion carried.

Motion: Moved that NARST continue to support promotional activities during the remainder of 1984 and during 1985 - including the advertising of NARST in publications, providing required fees are quite low and providing president's approval. Holliday, Aikenhead. Motion defeated.

Motion: Moved that the president establish a committee to explore advertising of NARST in publications requiring fees. Berger, Yeany. Motion carried.

Motion: Moved that we actively seek to advertise about NARST in publications, newsletters and other places where there is no charge. Linn, Sigda. Motion carried.

2. Site for 1985 NARST Annual Meeting

Motion: Moved that the board support the executive secretary's selection of French Lick Springs, Indiana, as the site for the 1985 annual meeting. Yeany, Berger. Motion carried (2 abstentions).

Ertle Thompson described travel problems of presidents wishing to attend NSTA board meetings when NARST annual meetings occur on the day before NSTA national conventions. Ertle reminded the board that this situation prevents presidents from interacting with NSTA board members and reduces the influence of NARST in NSTA - a serious problem for NARST from his perspective.

3. Information/Registration Desk

The executive secretary indicated that volunteers from the board, as requested in the March letter to the board, were requested to sit at the desk from 8:30-10:00 that evening. A number of board members volunteered for this task, as requested along with other people from the association. The executive secretary noted that he was arranging for a local committee from the University of Cincinnati to do a number of the tasks required at the next annual meeting, French Lick Springs. However, he reminded the board that often competent and reliable people are unavailable (e.g. the 1983 Dallas experience).

4. International Council of Associations for Science Education (ICASE)

The board was informed about Dr. Renner's disappointed in ICASE's contribution to NARST.

5. Emeritus Status

Motion: Moved that Drs. Herman Ruoff and H. Seymour Fowler be awarded the status, emeritus. Berger, Doran. Motion carried.

Motion: Moved that Dr. Jerry J. Nisbet be awarded the status, emeritus. Holliday, Linn. Motion carried.

6. By-Law Changes

The executive secretary brought to the attention of the board the need to change by-laws and to pass motions that were consistent with the current procedures of the association. The board enthusiastically agreed.

7. Leadership Advisory Committee

Motion: Moved that the executive secretary and other officers, with the help of Dr. Stanley Helgeson, explore the possibilities of forming a leadership advisory committee composed of prominent people in NARST. The duties of this committee would include advising the board on an ad hoc basis and promoting the acquisition of funds to facilitate the goal of NARST - to improve science teaching through research. Holliday, Aikenhead. Motion withdrawn.

8. Relationship with other Professional Organizations

Motion: Moved that the executive secretary and other officers be authorized to work with selected associations such as International Reading Association (IRA), with the goal of science through research. In this regard, board approval of major actions would be required. Holliday, Doran. Motion withdrawn.

9. International Consultant

Motion: Moved that the executive secretary and other officers explore the possibility of appointing an international consultant in a way similar to that of the International Reading Association. This consultant, at first, would be advisory in nature and would not be a member of the board nor a legal officer of our association. Holliday. Motion withdrawn.

Motion: Moved that the position of international consultant be established as an ad hoc position, that is, to identify a person on the board to chair a committee of international members with a goal to examine how NARST can better respond to international issues in science education. Yeany, DeTure. Motion carried.

10. Consulting Service

No action taken.

11. Newsletter

The executive secretary expressed concern about placement information published in the newsletter not reaching members of NARST. In addition, he encouraged board members to contribute to the newsletter. The board expressed concern about the the placement issue but seemed to approve of the contents and quality of the newsletter as stands.

12. Sonnenberg and Dart, Chartered Accountants, Report of 1983

The executive secretary informed the board that the recommendations of Sonnenberg and Dart were being implemented, except for the signing of the minutes by the president and the executive secretary and the specification of funds spent as they relate to budgeted funds for the year 1983. The executive secretary promised to attend to these issues.

F. Report of the Editors of the Journal of Research in Science Teaching

Dr. Shymansky's report to the board was discussed.

Motion: Moved that the board commend Jim Shymansky for his excellent stewardship during his term of office with the Journal of Research in Science Teaching. Berger, Doran. Motion carried.

G. Other Committee Reports

1. JRST Award

Russ Yeany commented on his report.

2. NARST Award

Linda DeTure noted that two of the four winners of the application award were members living outside of the United States.

Motion: Moved that chairpersons of the JRST award committee and NARST award committee notify the winners of the awards in advance of the annual meetings. Holliday, Shymansky. Motion carried.

3. Policy Advisory Committee Report

No report.

4. Publication Advisory Committee Report

No report.

5. Research Committee Report

Rod Doran commented on the work of his committee during the last year.

6. Financial Advisory Committee Report

(Reports appeared under new business, point 3.)

H. Dr. Ron Good's Proposal - A Response from NARST

Motion: Moved that the board instruct the president to respond to Ron Good's proposal and provide reasons why NARST is unable to act on Dr. Good's request, that is, because procedures do not currently exist in NARST for such action. Berger, Aikenhead. Motion carried.

I. Executive Secretary (1986-1990)

Bill Holliday reminded the board that action regarding the appointment of an executive secretary for the term, 1986-1990, should begin at this time in a way similar to the action taken last year in seeking an editor for the journal for a term, 1985-1989.

Bill Holliday indicated that he and his University were willing to continue to serve the association from 1986-1990 (term two) in a manner similar to their current arrangement from 1981-1985 (term one). Bill Holliday excused himself from subsequent discussions while Ann Howe took minutes describing the board's intentions and reactions.

The following notes were recorded by Ann Howe:

A discussion was conducted regarding whether the association should continue to work with Bill Holliday or strike a search committee. The by-laws of the association apparently allows for an executive secretary to have more than one term.

Russ Yeany pointed out the problem of finding both a high caliber person and an institution that would support a person as executive secretary.

General board discussion was in favor of Bill and his tenure. In addition, a need for continuity in the office was expressed by many people.

Motion: Moved that we extend another term of office as executive secretary to William G. Holliday. Berger, Shymansky. Motion carried.

The board conducted a discussion concerning the general responsibilities of the executive secretary and the ability of Bill to work within the structure of the association. Further, Bill was commended for identifying problems areas and working towards solving them (Berger).

Caution was expressed regarding the responsibilities of the executive secretary as well as switching the title and the responsibilities from executive secretary to executive director. (Bill requested the board to consider at some time changing the title to executive officer - WGH.) It was urged that the board develop a policy concerning the length of the office of executive secretary (Thompson).

Bill's enthusiasm was praised (Aikenhead) as well as his solution of the journal problem (Shymansky). Unanimous approval of extending Bill's tenure as executive secretary was expressed by the board with no abstentions.

Motion: Moved that the board offer a vote of appreciation to Bill for his fine service. Berger (no second record). Motion carried.

April 29, 1984 Continuation of Annual Meeting,
National Association for Research in Science Teaching

New Business

1. NARST Committee Personnel, 1984-1985

Motion: Moved that the members of the NARST committees, submitted by Ertle Thompson, be approved. Padilla, Shymansky. Motion carried.

(Final list will follow, as agreed to by the board.)

2. Interorganizational Liaison Committee and Membership Services Committee

Motion: Moved that the president is authorized to appoint to the interorganizational liaison committee and membership services committee, to define the duties and functions of this committee and to give charge to the committee. Howe, Doran.

3. Financial Committee Report

Motion: Moved that the financial committee report, submitted by Marcia Linn, be excepted by the board. Holliday, Butts.

The major points in her report included: (1) the NARST financial matters should be audited every five years, (2) a comparison should be made between funds spent and budget allocations for each year, (3) new ways of accumulating funds including donations from corporate people should be explored, (4) the board should consider redistributing funds identified in annual budgets at its fall board meeting.

4. Fall Board Meeting - 1984

Motion: Moved that the entire board attend the fall meeting of NARST if at all possible. Butts, Howe. Motion carried.

Ertle Thompson reminded the board that a number of issues have to be discussed at the fall board meeting and that members of the board should prepare for a productive session this fall.

5. Investigations in Science Education, Pat Blosser

Pat Blosser submitted a report on the status of investigations in science education (ISC^(c)). The board discussed her report.

6. Arrangements at French Lick Springs, April 1984

Motion: Moved that the 1985 annual meeting begin on the eve of April 15 and end on April 18. Aikenhead, DeTure. Motion carried.

7. Annual Meeting in San Francisco, 1986

Motion: Moved that the 1986 annual meeting meet in San Francisco beginning on March 28, continuing the full day of March 29, meeting on March 30 (Easter) except during the morning, and ending its meeting on March 31 at approximately noon. Butts, Yeany. Motion carried.

8. Meeting adjourned at 8:30 a.m.

NATIONAL ASSOCIATION FOR RESEARCH
IN SCIENCE TEACHING

1984 Spring Meeting of the Executive Board
The Monteleone Hotel, New Orleans
April 27, 1984

AGENDA

1. Opening comments by the president
 2. Brief announcements
 3. Approval of minutes describing the 1983 fall meeting of the board
 4. Report from the program committee
 5. Executive secretary's report
 6. Report from the editor (1980-1984) and associate editor (1985-1989)
of the Journal of Research in Science Teaching
 7. Other committee reports
 - a. JRST award
 - b. NARST award
 - c. Policy advisory
 - d. Publications advisory
 - e. Research
 - f. Financial advisory
 8. Dr. Ron Good's Proposal - a response from NARST
 9. New Business
- > notify winners so can decide to attend or not*



Founded in 1928

Organized to improve science teaching - through research

Sponsoring the Journal of Research in Science Teaching

Affiliated with AAAS, ASE, ICASE and NSTA.

EXECUTIVE SECRETARY
Dr. William G. Holliday
NARST-EDCI
The University of Calgary
Calgary, Alberta
Canada T2N 1N4

PRESIDENT
Dr. Ann C. Howe
101 Heroy Building
Syracuse, NY 13210

PRESIDENT-ELECT
Dr. Erle Thompson
Ruffner Hall
University of Virginia
Charlottesville, VA 22903

IMMEDIATE PAST PRESIDENT
Dr. Carl F. Berger
School of Education
University of Michigan
Ann Arbor, MI 48109

BOARD MEMBERS
Dr. Glen Aikenhead (1986)
Education
University of Saskatchewan
Saskatoon, Sask. S7N 0W0

Dr. Rodger Bybee (1984)
Education Department
Carleton College
Northfield, MN 55057

Dr. Linda R. DeTure (1985)
School of Education
Rollins College
Winter Park, FL 32789

Dr. Jane B. Kahle (1984)
Department of Biological Sciences
Purdue University
West Lafayette, IN 47907

Dr. Marsha C. Linn (1986)
ARP, LH, University of California
Berkeley, CA 94720

Dr. Russell H. Yeany (1985)
Science Education Department
University of Georgia
Athens, GA 30602

JOURNAL EDITOR
Dr. James Shymansky (1985)
Science Education - Physics Bldg.
University of Iowa
Iowa City, IA 52242

RESEARCH COORDINATOR
Dr. Rodney L. Doran
553 Baldy Hall
SUNY at Buffalo
Amherst, NY 14260

NSTA REPRESENTATIVE
Mr. Robert B. Sigda
National Science Teachers Association
1742 Connecticut Avenue, N.W.
Washington, DC 20009

REPORT OF THE PRESIDENT 1983-84

During the past year I have had the privilege of representing NARST on a number of occasions. I have used all available opportunities to put forward our point of view that research in science education is useful and necessary and that it deserves the support of all those who are interested in improving science teaching. I have not been overwhelmed by the response to this idea; in fact I might say that I have been underwhelmed but I believe in the idea and will continue to try to persuade others.

One encouraging sign is that science education is becoming an area of interest to researchers in other fields and articles in science education are now being cited more often than before. We have sometimes been too isolated and insular and can only benefit from interchange with scholars from other disciplines.

The work of the president is made immensely easier, in fact it is made possible, by the capable work of the Executive Secretary, Bill Holliday, and by all the others who give their time and energy to serve the organization. I thank you all for your cooperation and your goodwill during the past year.

Ann C. Howe,
President

Meetings attended as representative of NARST

- NSTA Board of Directors meeting, Charlotte, North Carolina. July 23-25, 1983.
- Reception for Winners of Excellence in Teaching Awards National Academy of Science Washington, D.C., October 18, 1983.
- North Carolina Science Teachers Association meeting, Winston-Salem, North Carolina, November 11, 1983.
- AAAS Consultation of Presidents of Affiliated Societies Washington, D.C., March 28, 1984.
- NSTA Board of Directors meeting, Boston, April 4, 1984.
- AERA-IRA-NARST Symposium, New Orleans, April 26, 1984

57TH ANNUAL MEETING IN NEW ORLEANS, APRIL 1984

SEND OFFICIAL CORRESPONDENCE TO THE EXECUTIVE SECRETARY (TELEPHONE 403-284-7485)

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: JRST Editorial Board Members
FROM: James A. Shymansky
DATE: March 29, 1984
RE: Board Meeting in New Orleans

It doesn't seem possible, but about five years ago I was named editor of the Journal at the NARST meeting in Atlanta--that was 635 manuscripts ago! I will be chairing my last Editorial Board meeting in New Orleans this month before turning over that duty to the new editor, Russ Yeany. I sincerely hope all of you are able to attend the meeting so that I may thank each of you personally for the outstanding support you have provided during my tenure.

It appears that Saturday, April 28, 4:30-5:30 p.m. may be the best time for our meeting this year. Please check at the NARST registration table for the exact location of the meeting.

As in the past years, I will be hosting an open house that Saturday evening as a small token of my appreciation for all your hard work. Please be sure to leave your schedule open Saturday evening for the Board party. The festivities will begin at 9:00 p.m. in my suite at the Monteleone.

The Journal seems to be operating very smoothly at this point. Your reviews this past year have been excellent. By now most of you will have received manuscripts from Russ, as he is processing all new manuscripts submitted prior to January 1, 1984.

I'm enclosing herewith a copy of my report to the NARST Executive Board and a brief agenda. Within a few weeks following our Board meeting in New Orleans, you will receive a report summarizing our meeting and any other NARST Board decisions which might affect the operation of the Journal.

Thanks again for your fine reviews. I look forward to seeing you in New Orleans.

kag

Enclosures

JOURNAL OF RESEARCH IN SCIENCE TEACHING

EDITORIAL BOARD MEETING
April 28, 1984

* * * *

AGENDA

- I. Introduction of Board Members
- II. Review of Editor's Report to the NARST Executive Board
 - A. Manuscript flow
 - B. Author Profiles
- III. Review Procedures: Problems/Suggestions
- IV. Comments from New Editor, Russ Yeany
- V. Other Business

M E M O R A N D U M

TO: NARST Executive Board
 FROM: James A. Shymansky
 DATE: April 28, 1984
 RE: Annual Report of the Journal Editor for 1983

I. Area of Concern and Presidential Charge

- A. Execute policies recommended by the Publication Advisory Committee and approved by the NARST Board of Directors
- B. Continue working relationships with Editorial Board
- C. Work with Wiley to facilitate the printing and distribution of the Journal
- D. Recommend changes to the Publication Advisory Committee for their approval prior to submission to NARST Board of Directors

II. Activities

A. Working Relationship with Editorial Board

The 1983 Editorial Board is to be commended for their prompt, thorough reviews. Their hard work is reflected in the improved quality of manuscripts published in the Journal. Also to be commended are the outside reviewers who were called upon to provide reviews when manuscript loads exceeded levels that could be handled easily by regular Board members. Thirty-five outside reviewers were used in 1983. (Please see Table 1 for the 1983 Board membership, Table 2 for the outside reviewers used in 1983, Table 3 for the 1984 Board membership, Table 4 for manuscript activity during 1983, and Table 5 for author data for 1979-1983.)

B. Working Relationship with Wiley

The staff at John Wiley and Sons, Inc. continue to provide excellent service in processing and publishing accepted manuscripts. Ms. Mary Curtis, publisher of the Journal, is to be commended for her expert guidance in Journal matters. A special thanks is also due Mr. Ed Barnas and Ms. Carol McNeillis for their work in processing accepted manuscripts.

C. Working Relationship with Publications Advisory Committee

The Publications Advisory Committee under the leadership of Rodger Bybee has been most helpful in providing direction and support in Journal matters.

D. Royalty Earnings

Based on non-member subscriptions in 1983 (N=1253), the NARST will receive a royalty check for \$1,635 from John Wiley and Sons, Inc.

TABLE 1

1983 JOURNAL EDITORIAL BOARD

Michael R. Abraham	Mary Lou Koran
Anthony J. D. Blake	Frances Lawrenz
Rodger W. Bybee	Anton E. Lawson
George W. Cossman	Marcia C. Linn
Linda R. Deture	Lawrence F. Lowery
Rosiland Driver	Ronald Raven
Fred N. Finley	John W. Renner
Robert A. Forsyth	Douglas A. Roberts
Barry J. Fraser	Michael Shayer
Dorothy Gabel	Robert L. Shrigley
Ronald G. Good	Elizabeth Stage
Avi Hofstein	Paul Westmeyer
Roger Johnson	Victor L. Willson
Jane Kahle	Warren T. Wollman
	Russell H. Yeany, Jr.

TABLE 2
1983 JOURNAL REVIEWERS (OUTSIDE)

James Barufaldi	Melvin Novick
Marianne Betkouski	Dale Phillips
Howard Birnie	Mary Quinn
William Capie	Thomas Russell
Linda Crow	Walter Saunders
George Davis	Linda Scott
Robert Fronk	George Schrimper
Lynn Glass	John Staver
William Holliday	David Stronck
Thomas Koballa	Kenneth Tobin
John Koran	Ruth Wellman
William Kyle, Jr.	Mary Westerback
Sylvia Leith	Robert Yager
Vincent Lunetta	Larry Yore

TABLE 3
1984 JOURNAL EDITORIAL BOARD

Michael R. Abraham	Thomas R. Koballa, Jr.
Marianne B. Betkouski	William C. Kyle, Jr.
Anthony J. D. Blake	Frances Lawrenz
George W. Cossman	Graham W. F. Orpwood
George DeBoer	John W. Renner
Linda R. DeTure	Douglas A. Roberts
Rosiland Driver	Doris A. Simonis
Richard A. Duschl	Michael Shayer
Fred N. Finley	Robert D. Sherwood
Barry J. Fraser	Elizabeth K. Stage
Dorothy Gabel	Pinchas Tamir
John K. Gilbert	Euwe van den Berg
Ronald G. Good	Paul H. Westmeyer
Roger T. Johnson	Victor L. Willson
Jane B. Kahle	Warren T. Wollman

TABLE 4
 MANUSCRIPT RECORD VOLUME 20 (1983)

DESCRIPTION	1978	1979	1980	1981	1982	1983	TOTAL
A. Manuscripts Received	130	159	160	149	142	132	583
B. Manuscript Pages Received	NR	NR	NR	NR	2410	2675	5085
C. Comments and Criticisms	8	5	4	7	14	11	36
D. Book Reviews	0	0	0	2	5	0	7
E. Manuscripts Accepted	116	130	55	63	69	81	268
F. Manuscript Pages Accepted	NR	NR	1050	1465	1716	1915	6146
G. Manuscripts Rejected	5	7	44	59	64	75	242
H. Manuscripts Deactivated	42	45	6	4	4	8	22
I. Manuscripts in Revision	9	22	34	36	36	29	*
J. Manuscripts in Review	9	22	36	17	7	9	*
K. Acceptance Rate (%)	71	71	54	50	50	49	50
L. Rejection Rate (%)	29	29	46	50	50	51	50

*Totals for years 1980-1983 only

TABLE 5
 JOURNAL OF RESEARCH IN SCIENCE TEACHING
 AUTHOR PROFILES: 1979-1983

A. Manuscripts Submitted	590
B. Manuscripts Accepted	268
C. Manuscripts Rejected	264
D. Overall Acceptance Rate	50%
E. Manuscripts with One or More Male Authors	
1. Submitted	492
2. Accepted	238
3. Rejected	225
4. Acceptance Rate	51%
F. Manuscripts with One or More Female Authors	
1. Submitted	136
2. Accepted	67
3. Rejected	63
4. Acceptance Rate	52%
G. *Manuscripts with One or More Foreign Authors	
1. Submitted	115
2. Accepted	53
3. Rejected	59
4. Acceptance Rate	47%
H. Manuscripts with One or More Canadian Authors	
1. Submitted	28
2. Accepted	21
3. Rejected	5
4. Acceptance Rate	81%

*Excludes U.S. and Canadian authors



Founded in 1928

Organized to improve science teaching - through research

Sponsoring the Journal of Research in Science Teaching

Affiliated with AAAS, ASE, ICASE and NSTA.

EXECUTIVE SECRETARY

Dr. William G. Holliday
NARST-EDCI
The University of Calgary
Calgary, Alberta
Canada T2N 1N4

March 29, 1984

PRESIDENT

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

Dr. William G. Holliday
NARST-EDCI
The University of Calgary
Calgary, Alberta
Canada T2N 1N4

PRESIDENT-ELECT

Dr. Ertle Thompson
Ruffner Hall
University of Virginia
Charlottesville, VA 22903

Dr. Ertle Thompson
Ruffner Hall
University of Virginia
Charlottesville, VA 22903

IMMEDIATE PAST PRESIDENT

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

BOARD MEMBERS

Dr. Glen Aikenhead (1986)
Education
University of Saskatchewan
Saskatoon, Sask. S7N 0W0

Dr. Rodger Bybee (1984)
Education Department
Carleton College
Northfield, MN 55057

Dr. Linda R. DeTure (1985)
School of Education
Rollins College
Winter Park, FL 32789

Dr. Jane B. Kahle (1984)
Department of Biological Sciences
Purdue University
West Lafayette, IN 47907

Dr. Marsha C. Linn (1986)
ARP, LH, University of California
Berkeley, CA 94720

Dr. Russell H. Yeany (1985)
Science Education Department
University of Georgia
Athens, GA 30602

Dear Ertle and Bill:

Please consider this letter as my report for the JRST Award Committee for Volume 20. My report for the Fall Board Meeting in Washington, D.C. spelled out the procedures for the selection of the best article. I have enclosed copies of these materials.

These procedures were followed and resulted in the selection of the following article:

Linn, Marcia C., Clement, Cathy & Pulos, Steven. Is It Formal If It's Not Physics? (The Influence of Content on Formal Reasoning). Journal of Research in Science Teaching, 20(8), 1983, 755-770.

I have phoned Paul Joslin and provided him with the information for the plaques. He will send them to New Orleans with Carey or Shymansky; Pual will not attend.

My hope this year is that all NARST awards be presented with a little more style and recognition for the research than was afforded last year. These awards are a major event of the National Meeting and need to maintain some paramount existence.

In regard to the JRST Award Committee, I have enjoyed this years work as Chairman but don't think that I should continue because of my new editorial involvement with JRST.

JOURNAL EDITOR

Dr. James Shymansky (1985)
Science Education - Physics Bldg.
University of Iowa
Iowa City, IA 52242

RESEARCH COORDINATOR

Dr. Rodney L. Doran (1986)
553 Baldy Hall
SUNY at Buffalo
Amherst, NY 14260

NSTA REPRESENTATIVE

Mr. Robert B. Sigda
National Science Teachers Association
1742 Connecticut Avenue, N.W.
Washington, DC 20009

Dr. William G. Holliday
Dr. Ertle Thompson
March 29, 1984
Page 2

On the other hand, the work of the Committee needs to maintain stability from year to year. As you know, a Board Member must chair this committee. I would like to suggest that Mike Padilla be appointed as Chair of the JRST Award Committee. He was very involved in this years selection process and has some good ideas for improving and maintaining quality of the procedures.

Sincerely,

A handwritten signature in cursive script, appearing to read "Russ", written in dark ink.

Russell H. Yeany
JRST Award Committee Chair

RHY/lr

Enclosure

Criteria and Instructions for Ranking the
Articles in an Issue of the Journal of
Research in Science Teaching

You should scan all articles in the Issue before you begin the reading and rating process and then rate all articles in the issue in the shortest time span possible by using the following criteria. After all articles are rated you should review the ratings across articles to insure objectivity and reliability.

- | | |
|---------------------------------------|---|
| 1. Significance of Problem (10 pts.) | How important or critical is the problem being addressed by the author(s)? Timelines, relevance and scope are all aspects of this concept. |
| 2. Background (10 pts.) | Is there adequate presentation of related theory and relevant literature. |
| 3. Approach (10 pts.) | How adequate and sound is the approach to the problem? In a research article this will include design and data analysis; In a position paper this includes the logic and nature of argument used. |
| 4. Significance of Outcomes (10 pts.) | What is the potential to influence thinking and practices in science education? Will the outcomes have an impact? |
| 5. Conclusions (10 pts.) | Are they based on the evidence and then presented in such a way as to address relevant concerns in science education? |
| 6. Uniqueness (10 pts.) | How new is the approach and or ideas presented in the article? |
| 7. Communication (10 pts.) | Is the article well written? |
| 8. Overall (10 pts.) | What is your general opinion of the article from a broad perspective? |

Record your ratings for each article on a separate rating sheet along with the necessary descriptive information about the article. You should also include comments related to your overall rating.

JRST AWARD ARTICLE EVALUATION FORM

JRST Volume 20, Number _____TITLE _____

REVIEWER _____

<u>Reviewer's Rating</u>	<u>Criterion</u>	<u>Comments</u>
1. _____	Significance of Problem	
2. _____	Background	
3. _____	Approach	
4. _____	Significance of Outcomes	
5. _____	Significane of Conclusions	
6. _____	Uniqueness	
7. _____	Communication	
8. _____	Overall	
TOTAL _____		

Return to:
 Dr. Russell H. Yeany
 212 Aderhold Hall
 University of Georgia
 Athens, Georgia 30602



Founded in 1928

Organized to improve science teaching - through research

Sponsoring the Journal of Research in Science Teaching

Affiliated with AAAS, ASE, ICASE and NSTA.

EXECUTIVE SECRETARY
Dr. William G. Holliday
NARST-EDCI
The University of Calgary
Calgary, Alberta
Canada T2N 1N4

Example Letter

PRESIDENT
Dr. Ann C. Howe
101 Heroy Building
Syracuse University
Syracuse, NY 13210

February 29, 1984

PRESIDENT-ELECT
Dr. Ertle Thompson
Ruffner Hall
University of Virginia
Charlottesville, VA 22903

Dr. Michael J. Padilla
University of Georgia
Science Education Department
Athens, GA 30602

IMMEDIATE PAST PRESIDENT
Dr. Carl F. Berger
School of Education
University of Michigan
Ann Arbor, MI 48109

Dear Dr. Padilla:

BOARD MEMBERS
Dr. Glen Aikenhead (1986)
Education
University of Saskatchewan
Saskatoon, Sask. S7N 0W0

Dr. Rodger Bybee (1984)
Education Department
Carleton College
Northfield, MN 55057

Dr. Linda R. DeTure (1985)
School of Education
Rollins College
Winter Park, FL 32789

Dr. Jane B. Kahle (1984)
Department of Biological Sciences
Purdue University
West Lafayette, IN 47907

Dr. Marsha C. Linn (1986)
ARP, LH, University of California
Berkeley, CA 94720

Dr. Russell H. Yeany (1985)
Science Education Department
University of Georgia
Athens, GA 30602

JOURNAL EDITOR
Dr. James Shymansky (1985)
Science Education - Physics Bldg.
University of Iowa
Iowa City, IA 52242

RESEARCH COORDINATOR
Dr. Rodney L. Doran (1986)
553 Baldy Hall
SUNY at Buffalo
Amherst, NY 14260

NSTA REPRESENTATIVE
Mr. Robert B. Sigda
National Science Teachers Association
1742 Connecticut Avenue, N.W.
Washington, DC 20009

We have compiled all the ratings for the best article in each of the nine issues of Vol. 20 of the Journal of Research in Science Teaching. As you will recall each article was rated by three different committee members. On many articles the overall ratings were close. Two criteria were considered in determining the best article from each issue: (1) the sum of the individual ratings; and, (2) the ranking in relation to other articles. In only one case did this procedure create a discrepancy of choice. I resolved that by disqualifying the one article because I was the senior author and want to avoid any conflict of interest.

Now we need to proceed with some haste in selecting the best article from the Volume. Use the same scale to rate the nine articles listed on the attached sheet and forward me your conclusions before March 16, 1984. We have enclosed your previous ratings of articles which made it to the present list. They may help you reestablish the rating criteria for your final rating.

Thanks for your help on this worthwhile effort.

Sincerely,

Russell H. Yeany
Professor

RHY/lr
Attachment

57TH ANNUAL MEETING IN NEW ORLEANS, APRIL 1984
SEND OFFICIAL CORRESPONDENCE TO THE EXECUTIVE SECRETARY (TELEPHONE 403-284-7485)



Founded in 1928

Organized to improve science teaching - through research

Sponsoring the Journal of Research in Science Teaching

Affiliated with AAAS, ASE, ICASE and NSTA.

EXECUTIVE SECRETARY

Dr. William G. Holliday
NARST-EDCI
The University of Calgary
Calgary, Alberta
Canada T2N 1N4

PRESIDENT

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

PRESIDENT-ELECT

Dr. Ertle Thompson
Ruffner Hall
University of Virginia
Charlottesville, VA 22903

IMMEDIATE PAST PRESIDENT

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

BOARD MEMBERS

Dr. Glen Aikenhead (1986)
Education
University of Saskatchewan
Saskatoon, Sask. S7N 0W0

Dr. Rodger Bybee (1984)
Education Department
Carleton College
Northfield, MN 55057

Dr. Linda R. DeTure (1985)
School of Education
Rollins College
Winter Park, FL 32789

Dr. Jane B. Kahle (1984)
Department of Biological Sciences
Purdue University
West Lafayette, IN 47907

Dr. Marsha C. Linn (1986)
ARP, LH, University of California
Berkeley, CA 94720

Dr. Russell H. Yeany (1985)
Science Education Department
University of Georgia
Athens, GA 30602

JOURNAL EDITOR

Dr. James Shymansky (1985)
Science Education - Physics Bldg.
University of Iowa
Iowa City, IA 52242

RESEARCH COORDINATOR

Dr. Rodney L. Doran (1986)
553 Baldy Hall
SUNY at Buffalo
Amherst, NY 14260

NSTA REPRESENTATIVE

Mr. Robert B. Sigda
National Science Teachers Association
1742 Connecticut Avenue, N.W.
Washington, DC 20009

TO: Drs. Anne Howe, Bill Holliday

FROM: Dr. Linda DeTure *L. DeTure*

DATE: March 22, 1984

RE: Spring Report from the NARST Awards Committee

1. The task of reviewing the award entry papers has been completed for 1983-1984.
2. The outstanding paper has been selected. Practical application papers, to be presented at the 1985 NSTA convention, have also been identified. A list of the winners is enclosed.
3. Announcements and letters of congratulations to each of the winners are being mailed this week.
4. The list of winners is being sent to Paul Joslin who will make up the award certificates. I will plan to make the presentations at the 1984 NARST luncheon.
5. The members of the committee worked diligently on their task and were very prompt in returning results by the deadline. I would like to recognize and thank these members.
6. Four members were unable to complete the task, one resigned in early fall, another had a lengthy illness and I have not received any correspondence from the others. While some attrition is expected due to circumstances beyond control, prospective members should be alerted to the amount of work involved in this committee's task.
7. Four new members will need to be appointed next year. Carol Waring and Ramona Ansohutz's terms expire this year.
8. The kind of paper being submitted seems to vary from year to year. Several position/theoretical papers were submitted that did not adhere to the selection criteria which had been revised last year to incorporate meta-analyses and case studies. If these papers are going to continue to be presented, the board may wish to consider adding a new category.

57TH ANNUAL MEETING IN NEW ORLEANS, APRIL 1984

SEND OFFICIAL CORRESPONDENCE TO THE EXECUTIVE SECRETARY (TELEPHONE 403-284-7485)

NARST
Page 2

9. I would like to have a committee meeting at the 1984 convention.
10. That concludes our activities thus far this year. I look forward to seeing you in New Orleans.

LRD/mg



Founded in 1928

Organized to improve science teaching - through research

Sponsoring the Journal of Research in Science Teaching

Affiliated with AAAS, ASE, ICASE and NSTA.

EXECUTIVE SECRETARY

Dr. William G. Holliday
NARST-EDCI
The University of Calgary
Calgary, Alberta
Canada T2N 1N4

PRESIDENT

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

March 23, 1984

PRESIDENT-ELECT

Dr. Ertle Thompson
Ruffner Hall
University of Virginia
Charlottesville, VA 22903

1983 NARST OUTSTANDING PAPER

Use of Classroom Environment Scale in Investigating Effects
or Psychosocial Milieu on Science Students' Outcomes

IMMEDIATE PAST PRESIDENT

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

By:

Darrell L. Fisher
Tasmania College of Advanced Education
Launceston, Australia

BOARD MEMBERS

Dr. Glen Aikenhead (1986)
Education
University of Saskatchewan
Saskatoon, Sask. S7N 0W0

Dr. Rodger Bybee (1984)
Education Department
Carleton College
Northfield, MN 55057

Dr. Linda R. DeTure (1985)
School of Education
Rollins College
Winter Park, FL 32789

Dr. Jane B. Kahle (1984)
Department of Biological Sciences
Purdue University
West Lafayette, IN 47907

Dr. Marsha C. Linn (1986)
ARP, LH, University of California
Berkeley, CA 94720

Dr. Russell H. Yeany (1985)
Science Education Department
University of Georgia
Athens, GA 30602

Barry J. Fraser
Western Australian Institute of Technology
Perth, Australia

PRACTICAL APPLICATION

AWARD PAPERS

(in alphabetical order)

Continuity - A Trigger for Retroactive Facilitation of
Long-Term Retention

By:

Hanna J. Arzi
Ruth Ben-Zvi
Uri Ganiel
Department of Science Teaching
The Weizmann Institute of Science
Rehovot 76100
Israel

JOURNAL EDITOR

Dr. James Shymansky (1985)
Science Education - Physics Bldg.
University of Iowa
Iowa City, IA 52242

RESEARCH COORDINATOR

Dr. Rodney L. Doran (1986)
553 Baldy Hall
SUNY at Buffalo
Amherst, NY 14260

NSTA REPRESENTATIVE

Mr. Robert B. Sigda
National Science Teachers Association
1742 Connecticut Avenue, N.W.
Washington, DC 20009

The Effects of Using Two and Three Dimensional Models on
Science Achievement of Students with Varying Levels of
Spatial Ability, Cognitive Development and Gender

By:

Charles F. Porter
Russell H. Yeany
University of Georgia
Athens, Georgia 30602

57TH ANNUAL MEETING IN NEW ORLEANS, APRIL 1984
SEND OFFICIAL CORRESPONDENCE TO THE EXECUTIVE SECRETARY (TELEPHONE 403-284-7485)

NARST AWARDS

Page 2

Discourse Patterns Associated with the Use of Extended Wait Time
in Whole Class Settings

By:

Kenneth Tobin
Western Australian College of Advanced Education
Mount Lawley, Western Australia 6050

Comparison of Preservice Elementary Teachers Anxiety About Teaching
Students to Identify Minerals and Rocks and Geology Students Anxiety
About Identification of Minerals and Rocks

By:

Mary E. Westerback
Clemencia Gonzalez
Department of Geology-Geography
Greenvale, New York 11548

Louis H. Primavera
St. John's University
Department of Psychology
Jamaica, New York 11439

LRD/mg

UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO



SANTA BARBARA • SANTA CRUZ

LAWRENCE HALL OF SCIENCE
 A RESEARCH CENTER IN SCIENCE EDUCATION
 (415-642-3679)

BERKELEY, CALIFORNIA 94720

DATE: March 19, 1984
 TO: NARST BOARD
 FROM: Marcia C. Linn *mcl*
 RE: FINANCE ADVISORY COMMITTEE MEETING

The Finance Advisory Committee will meet on April 29, 1984 at 7:15 PM.
 An annual report describing the work of this committee during the past
 year will follow.

Distribution:

William Holliday	- Executive Secretary
Carl F. Berger	- Policy Advisory Committee
	- Election Committee
Rodger Bybee	- Publications Advisory Committee
	- Representatives to Advisory Board for Investigations in Science Education
Ertle Thompson	- Program Committee
Rodney L. Doran	- Research Committee
Russell L. Yeany	- JRST Award Committee
Linda R. DeTure	- NARST Award Committee
Ann C. Howe	- Interorganization Liaison Committee

MEMORANDUM

To: William Holliday, Executive Secretary

Date: March 30, 1984

From: Rodger Bybee, Chair

Topic: Publication Advisory Committee Report

The main item of work for the year has been the selection of a new editor for the Journal of Science Teaching. This task has been completed.

The Publication Advisory Committee has had no other tasks during the academic year.



The Ohio State University



Clearinghouse for Science,
Mathematics and Environmental
Education

Room 310
1200 Chambers Road
Columbus, Ohio 43212

Phone 614 422-6717

April 25, 1984

To: Rodger Bybee, NARST Publications Committee

From: Patricia E. Blosser, Editor, INVESTIGATIONS IN SCIENCE EDUCATION

Re: Status Report on ISE

Copy is being readied for use in producing the four issues that will make up Volume 10.

INVESTIGATIONS IN SCIENCE EDUCATION copies are distributed to 750 college and university libraries on microfiche as part of the materials they receive as ERIC Standing Order Customers. Five hundred copies of each issue are sold, in addition to the Standing Order Customers, in subscription orders or sales of back issues. The SMEAC Information Reference Center sells about 1200 copies of each issue of ISE a year.

Present plans are to continue the production of ISE, through funding from the SMEAC Information Reference Center, The Ohio State University.

INVESTIGATIONS IN SCIENCE EDUCATION has been listed in the Directory of Educational Research Information Sources 1983 published by the Foundation for Educational Research, Council of Europe, as one of about 40 United States publications. ISE was selected because it provides readers with critical reviews of research.

ISE sells well overseas and is sent to science educators in Japan, Korea, Australia, Germany, and France. ISE also sells well during special sales that the Information Reference Center holds from time to time. ISE differs from its companion publication, INVESTIGATIONS IN MATHEMATICS EDUCATION, in that IME has more subscriptions and fewer sales of single copies.

MEMORANDUM

To: William Holliday, Executive Secretary

Date: March 30, 1984

From: Rodger Bybee

Topic: Report on Advisory Board for Investigations in Science Education

I have not been contacted by Pat Blosser concerning the status of Investigations in Science Education (ISE). The last I heard ERIC was reviewing budgets and funding rlated to ISE.

RB/ng



APR 09 1984 Founded in 1928
 Organized to improve science teaching - through research
 Sponsoring the Journal of Research in Science Teaching
 Affiliated with AAAS, ASE, ICASE and NSTA.

EXECUTIVE SECRETARY
 Dr. William G. Holliday
 NARST-EDCI
 The University of Calgary
 Calgary, Alberta
 Canada T2N 1N4

March 26, 1984

PRESIDENT
 Dr. Ann C. Howe
 101 Heroy Building
 Syracuse University
 Syracuse, NY 13210

PRESIDENT-ELECT
 Dr. Ertle Thompson
 Ruffner Hall
 University of Virginia
 Charlottesville, VA 22903

IMMEDIATE PAST PRESIDENT
 Dr. Carl F. Berger
 School of Education
 University of Michigan
 Ann Arbor, MI 48109

BOARD MEMBERS
 Dr. Glen Aikenhead (1986)
 Education
 University of Saskatchewan
 Saskatoon, Sask. S7N 0W0

Dr. Rodger Bybee (1984)
 Education Department
 Carleton College
 Northfield, MN 55057

Dr. Linda R. DeTure (1985)
 School of Education
 Rollins College
 Winter Park, FL 32789

Dr. Jane B. Kahle (1984)
 Department of Biological Sciences
 Purdue University
 West Lafayette, IN 47907

Dr. Marsha C. Linn (1986)
 ARP, LH, University of California
 Berkeley, CA 94720

Dr. Russell H. Yeany (1985)
 Science Education Department
 University of Georgia
 Athens, GA 30602

JOURNAL EDITOR
 Dr. James Shymansky (1985)
 Science Education - Physics Bldg.
 University of Iowa
 Iowa City, IA 52242

RESEARCH COORDINATOR
 Dr. Rodney L. Doran (1986)
 553 Baldy Hall
 SUNY at Buffalo
 Amherst, NY 14260

NSTA REPRESENTATIVE
 Mr. Robert B. Sigda
 National Science Teachers Association
 1742 Connecticut Avenue, N.W.
 Washington, DC 20009

Dr. William Holliday
 Executive Secretary
 NARST-EDCI
 The Univ. of Calgary
 Calgary, Alberta
 CANADA, T2N 1N4

Dear Bill:

Thanks for the reminder about committee reports.
 Use the information below as you think appropriate.

Since the Fall Board meeting, I have been in touch with the members of the Research Committee several times, both by mail and telephone. We reacted to Stan Helgeson's question about possible editors for the up-coming "Research Reviews". The other major issue of concern has been the "Research Findings Promotional Material". From the response of the committee on this latter issue, it is clear that this should not be resolved quickly and superficially. This and other issues will be discussed in detail at our Committee Meeting at 1:30 PM on Sunday, April 29, in New Orleans.

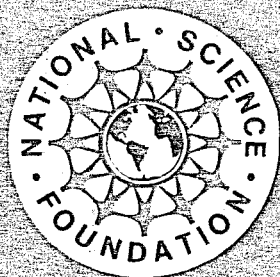
See you soon.

Yours truly,

Rodney L. Doran
 Professor of Science Education

RLD:dc
 c.c. Dr. Ertle Thompson
 Dr. Ann Howe
 Research Committee

AIR MAIL



bulletin

Vol. 11, No. 8 April 1984

NATIONAL
SCIENCE
FOUNDATION
WASHINGTON, D. C. 20550

NSF Announcements for April

The April issue of the *NSF Bulletin* contains information on programs, deadline dates, meetings, publications, and sources for more detailed information. Publications listed may be obtained on the Publications Order Form. The area code of all telephone numbers listed is 202, unless otherwise indicated.

The address of the National Science Foundation is 1800 G St., N.W., Washington, D.C. 20550.

NSF Fiscal Year 1985 Budget Request

The National Science Foundation's budget request for fiscal year 1985 is \$1,501.8 million.

This is an increase of \$179.8 million or 13.6 percent above the fiscal year 1984 level of \$1,322.0 million. The total includes \$1,308.2 million for research and related activities, a 14.6 percent increase over fiscal year 1984; \$75.7 million for science and engineering education; \$115.1 million for the U.S. Antarctic program; and \$2.8 million for foreign currency.

The NSF program for fiscal year 1985 will highlight the following:

- Additional support of basic research in such areas as mathematics and computer science, chemistry, physics, engineering, and molecular and cellular biology.
- A new \$10 million program of centers for cross-disciplinary research in engineering to foster excellence in engineering as applied to industrial needs.
- Continued efforts to address the needs of researchers in all disciplines for access to the most advanced computer systems. Funding is provided for networking

capability, local user support, and local facilities upgrading.

- In radio astronomy, construction to begin on the Very Long Baseline Array (VLBA) radio telescope.
- The second group of 200 Presidential Young Investigators awards to be made to help increase the attractiveness of academic careers and to help develop stronger ties between universities and industry.
- Increased support for graduate students on research awards throughout the research directorates. Support for research at predominately undergraduate institutions to be strongly emphasized.
- Maintenance of strong programs in precollege science and mathematics education.
- Continued growth of research instrumentation support for individual research projects and at multi-user centers at universities and at national centers.

The following list shows the proposed funding for research and related activities for NSF Directorates and Programs.

NSF Obligations by Budget Activity, FY 1984-1985

(Dollars in Millions)

Budget Activity	FY 1984	FY 1985	Change FY 85/84
Mathematical and Physical Sciences	\$ 358.8	\$ 416.7	16.1%
Engineering	120.7	147.1	21.8
Biological Behavioral and Social Sciences	224.7	253.1	12.7
Astronomical, Atmospheric, Earth and Ocean Sciences	330.0	373.5	13.2
Scientific, Technological and International Affairs	40.8	46.9	14.9
Program Development and Management	66.6	70.9	6.5
Subtotal, Research & Related Activities	\$1,141.6	\$1,308.2	14.6%
U.S. Antarctic Program	102.5	115.1	12.3
Science and Engineering Education	75.0*	75.7	0.9
Special Foreign Currency	2.9	2.8	-3.9
Total	\$1,322.0	\$1,501.8	13.6%

*An additional \$13.9 million will be available as a result of carryover from fiscal year 1983. Dollar amounts have been rounded; percent change has been calculated on actual dollar amounts.

For further information request News Release PR84-8 on the Publications Order Form.

The *NSF Bulletin* is issued monthly (except July and August) to disseminate information on NSF programs, policies, and activities. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through March 31, 1984. Editor: Doris Merida, Public Affairs and Publications

Program Deadlines and Target Dates for Proposals

The following listing gives the dates on which proposals for grants are due at NSF for the next three months. Further information may be obtained by contacting the NSF staff members listed for each entry. Brochures indicated in parentheses may be requested on the Publications Order Form unless otherwise indicated. These dates are subject to change.

The number and letter codes after some announcements refer to listings in the *Keyword Thesaurus*. They will be used by the research management offices of participating colleges and universities in an attempt to achieve more complete and efficient distribution of *NSF Bulletin* information to potential users.

Program Deadlines for Proposals

Proposals received after these cutoff dates generally will be returned to the proposer.

- April 1, 1984. U.S.-Australia Cooperative Science.** (Brochure NSF 81-49 - as revised in Jan. 1982). All proposals for individual visits in 1985 and for other projects with requested effective dates falling between Jan. 1 and June 30, 1985. Contact Mr. Alan Milsap, Division of International Programs (357-9537). [P.T. 34, 42, 48; Loc. 0112006; K.W. 1000000, 0400000, 0600000].
- April 1, 1984. U.S.-New Zealand Cooperative Science.** (Brochure NSF 81-50). All proposals for projects with requested effective date falling between Jan. 1 and June 30, 1985. Contact Mr. Alan Milsap, Division of International Programs (357-9537). [P.T. 34, 42, 48; Loc. 0112097; K.W. 1000000].
- April 1, 1984. U.S.-Japan Cooperative Science.** Cooperative Research. (Brochure NSF 81-58). Proposals for cooperative research and joint seminar activities are due prior to deadline dates; proposals for long-term visits (6-12 months) are accepted throughout the year. Contact Dr. Charles Wallace, Division of International Programs (357-9537). [P.T. 34, 42, 48; Loc. 0112070; K.W. 0400000, 0600000, 1000000].
- April 1, 1984. U.S.-Scandinavia and The Netherlands Cooperative Science.** Semi-annual deadline for proposals for joint research, seminars, and long-term research visits. Contact Dr. Warren Thompson, Division of International Programs (357-9700). [P.T. 34, 42, 48; Loc. 2104004, 0112096; K.W. 1000000, 0400000, 0600000].
- April 20, 1984. Interdisciplinary Research Leading to Instrument Development.** Priority areas are biotechnology and bioprocessing engineering, biotechnological information acquisition systems, lightwave technology, and hazardous waste management. Principal investigator or co-principal investigator must be an engineer. For program document, contact Mr. Richard Goulet, Office of Interdisciplinary Research (357-9707).
- May 1, 1984. U.S.-France Cooperative Science.** Proposals for cooperative research projects and joint workshops/seminars with requested effective dates in calendar year 1985. Contact Dr. Kenneth Hancock, Division of International Programs (357-7554). [P.T. 34, 42, 48; Loc. 0112045; K.W. 1000000, 0400000].
- May 1, 1984. Ethics and Values in Science and Technology (EVIST).** Preliminary proposals (Brochure NSF 83-62). Contact Dr. Rachelle Hollander, Division of Research Initiation and Improvement (357-7552).
- May 1, 1984. U.S.-Latin America and The Caribbean Region.** (Brochure NSF 80-52). Cooperative research (partial support), research-oriented workshops and scientific visits with scientists from any independent country of the region. Contact Ms. Christine French (north of the Equator), and Dr. Harold Stolberg (south of the Equator), Division of International Programs (357-9563). [P.T. 34, 42, 48; Loc. 0107000, 0110007; K.W. 1000000].
- May 1, 1984. U.S.-Argentina Cooperative Science.** (Brochure NSF 80-52). Cooperative research (partial support), research-oriented workshops and scientific visits. Contact Dr. Harold Stolberg, Division of International Programs (357-9563). [P.T. 34, 42, 48; Loc. 01-12005; K.W. 0400000, 0600000, 1000000].
- May 1, 1984. U.S.-Brazil Cooperative Science.** (Brochure NSF 80-52). Cooperative research (partial support), research-oriented workshops and scientific visits. Contact Dr. Harold Stolberg, Division of International Programs (357-9563). [P.T. 34, 42, 48; Loc. 0112017, K.W. 0400000, 0600000, 1000000].
- May 1, 1984. U.S.-Mexico Cooperative Science.** (Brochure NSF 80-52). Cooperative research (partial support), research-oriented workshops and scientific visits. Contact Ms. Christine French, Division of International Programs (357-9563). [P.T. 34, 42, 48; Loc. 0112089; K.W. 0400000, 0600000, 1000000].
- May 1, 1984. U.S.-Venezuela Cooperative Science.** (Brochure NSF 80-52). Cooperative research (partial support), research-oriented workshops and scientific visits. Contact Ms. Christine French, Division of International Programs (357-9563). [P.T. 34, 42, 48; Loc. 0112147; K.W. 0400000, 0600000, 1000000].
- June 1, 1984. U.S.-Federal Republic of Germany Cooperative Science.** Joint research, seminars and long-term research visits. Contact Dr. Warren Thompson, Division of International Programs (357-9700). [P.T. 34, 42, 48; Loc. 0112050; K.W. 0400000, 0600000, 1000000].
- June 1, 1984. U.S.-Italy Cooperative Science.** Joint research projects, workshops and long-term research visits. Contact Mr. Henryk Uznanski, Division of International Programs (357-7554). [P.T. 34, 42, 48, Loc. 0112067; K.W. 0400000, 0600000, 1000000].
- June 1, 1984. U.S.-Switzerland Cooperative Science.** Joint research projects, workshops and long-term research

Continued Next Page

Program Deadlines—Continued

- visits. Contact Mr. Henryk Uznanski, Division of International Programs (357-7554). [P.T. 34, 42, 48; Loc. 0112131; K.W. 0400000, 0600000, 1000000].
- June 1, 1984. U.S.-Japan Cooperative Science.** (Brochure NSF 81-58). Proposals for both joint seminar and cooperative research activities will be accepted up to the June 1, deadline date; proposals for long-term visits (6-12 months) are accepted throughout the year. Contact Dr. Charles Wallace, Division of International Programs (357-9537). [P.T. 34, 42, 48; Loc. 0112070; K.W. 0400000, 0600000, 1000000].
- June 1, 1984. U.S.-India International Travel Support.** (Brochure NSF 82-86). Scientists of both U.S. and India are eligible. Contact Dr. Jean Johnson or Dr. Osman Shinaishin, Division of International Programs (357-9402). [P.T. 34, 42, 48; Loc. 0112061, K.W. 1000000].
- June 1, 1984. U.S.-Pakistan International Travel Support.** (Brochure NSF 80-49). Scientists of both U.S. and Pakistan are eligible. Contact Dr. Jean Johnson or Dr. Osman Shinaishin, Division of International Programs (357-9402). [P.T. 34, 42, 48; Loc. 0112103; K.W. 1000000].

Target Dates for Proposals

Proposals received after these cutoff dates will be reviewed although they may miss a particular panel meeting.

- April 30, 1984. Biological Instrumentation. Multi-user instrument or instrument development.** (Brochure NSF 83-19). Contact Dr. John Wooley, Division of Physiology, Cellular and Molecular Biology (357-7652). [P.T. 18; K.W. 1002024].
- May 1, 1984. Doctoral Dissertation Research.** Contact Dr. James Edwards, Division of Biotic Systems and Resources (357-9588).
- May 1, 1984. Climate Dynamics.** Contact Dr. Thomas Crowley, Division of Atmospheric Sciences (357-9892). [P.T. 34; K.W. 1001000].
- May 1, 1984. U.S.-Eastern Europe Cooperative Science.** Proposals for short-term developmental visits, cooperative research, and bilateral seminars. Contact Ms. Deborah Wince, Division of International Programs (357-9516).
- June 1, 1984. U.S. Antarctic Research.** Request special proposal kit. Contact Mr. Guy Guthridge, Division of Polar Programs (357-7817). [P.T. 34; Loc. 0102000; K.W. 1000000, 0600000].
- June 1, 1984. Metabolic Biology.** Contact Dr. William van Robertson or Ms. Carter Kimsey, Division of Physiology, Cellular and Molecular Biology (357-7987). [P.T. 34; K.W. 1002007].
- June 15, 1984. Ocean Sciences Research.** Contact Dr. Robert Wall, Division of Ocean Sciences (357-7924). [P.T. 34; K.W. 1008000].
- June 15, 1984. Ecology.** Contact Dr. Nancy Stanton, Division of Biotic Systems and Resources (357-9734). [P.T. 34; K.W. 1002016].
- June 15, 1984. Systematic Biology.** Contact Dr. Lloyd Knutson, Division of Biotic Systems and Resources (357-9588). [P.T. 34; K.W. 1002011].
- June 15, 1984. Population Biology and Physiological Ecology.** Contact Dr. Louis Pitelka, Division of Biotic Systems and Resources (357-9728). [P.T. 34; K.W. 1007001, 0413004].

Proposals may be submitted for the following programs (and for many NSF programs not listed above) at any time of the year. It takes approximately six to nine months to process a proposal. Brochures indicated in parentheses may be ordered on the Publications Order Form.

Division of Biotic Systems and Resources

- Biological Research Resources.** Contact Dr. James Tyler (357-7475).
- Ecosystem Studies.** Contact Dr. Robert Woodmansee (357-9596).

Division of International Programs

- U.S.-China Cooperative Science.** (Brochure NSF 82-50). Contact Dr. Pierre Perrolle or Mr. Alexander De-Angelis (357-7393).
- U.S.-India Cooperative Science.** (Brochure NSF 82-86). Contact Dr. Osman Shinaishin or Dr. Jean Johnson (357-9402).
- U.S.-Pakistan Cooperative Science.** (Brochure NSF 80-49). Contact Dr. Osman Shinaishin or Dr. Jean Johnson (357-9402).

U.S.-Sub-Saharan Africa Cooperative Science. (Brochure NSF 83-58). Contact Mr. Robert Bell (357-9550).

U.S.-New Zealand Cooperative Science. Letter-proposals for short-term visits (limited to airfare and three week per diem) to develop cooperative research in physical oceanography, air/sea interaction, marine geology, geophysics or biology (marine productivity). Contact Mr. Alan Milsap (357-9558).

Division of Materials Research

- Metallurgy.** Contact Dr. Robert Reynik or Dr. Joseph Thomas (357-9789).
- Polymers.** Contact Dr. Paul Painter (357-9789).
- Ceramics.** Contact Dr. Louis Toth (357-9789).

Continued Next Page

Division of Physics

Atomic, Molecular, and Plasma Physics. Contact Dr. Rolf Sinclair (357-7997).

Elementary Particle Physics. Contact Dr. David Berley (357-9575).

Gravitational Physics. Contact Dr. Richard Isaacson (357-7979).

Intermediate Energy Nuclear Physics. Contact Dr. Hall Crannell (357-7992).

Nuclear Physics. Contact Dr. William Rodney (357-7992).

Theoretical Physics. Contact Dr. Boris Kayser (357-7979).

Mathematical Sciences Section

Classical Analysis. Contact Dr. John Ryff (357-9764).

Modern Analysis. Contact Dr. Harvey Keynes (357-9764).

Geometric Analysis. Contact Dr. Zbigniew Nitecki (357-9764).

Topology and Foundations. Contact Dr. Ralph Krause (357-9764).

Algebra and Number Theory. Contact Dr. Judith Sunley (357-9764).

Applied Mathematics. Contact Dr. Victor Barcion or Dr. George Cybenko (357-9764).

Statistics and Probability. Contact Dr. Prem Goel (357-9764).

Alternative Biological Resources. Contact Dr. H. Huang, Division of Physiology, Cellular and Molecular Biology (357-9782).

Industry/University Cooperative Research Projects. (Brochure NSF 82-56). Contact Dr. Frederick Betz (357-7785) or Mr. Alex Schwarzkopf (357-7527), Division of Industrial Science and Technological Innovation.

Industry/University Cooperative Research Centers. Contact Mr. Robert Colton or Mr. Alex Schwarzkopf, Division of Industrial Science and Technological Innovation (357-7527).

Minority Research Initiation. (Brochure NSF 80-42). Contact Dr. Roosevelt Calbert, Division of Research Initiation and Improvement (357-7350).

Research in Information Science and Technology. (Brochure NSF 81-34). Contact the Division of Information Science and Technology (357-9572).

Research in Undergraduate Institutions (RUI). (Brochure NSF 83-79). Contact appropriate disciplinary program in NSF for more specific target dates and number of copies of proposals needed, or contact Dr. Joseph Danek, RUI Coordinator, Division of Research Initiation and Improvement (357-7456).



Advisory Committee for Chemistry

The Advisory Committee for Chemistry will hold its spring meeting May 3 and 4, 1984, in Room 540, NSF. For further information, contact Dr. Arthur Findeis, Division of Chemistry (357-7947).

NCAR Research Aviation Facility

The Advisory Panel for the Research Aviation Facility of the National Center for Atmospheric Research will meet in Boulder, Colo. in Oct. 1984 to consider requests for flight support using NCAR's five aircraft instrumented for atmospheric research during the period April 1985 through March 1986. Programs requesting NCAR flight support within the context of NSF grants should include the NCAR aircraft requirements in the total proposal submitted to NSF.

NCAR operates five aircraft in support of field projects in the areas of air chemistry, cloud physics, air motion (including mass flow and turbulent flux measurements), radiation, physical oceanography and air/sea interaction and other programs within the atmospheric sciences. The five aircraft are: two twin-engined supercharged unpresurized Queen Airls; a low-wing, twin jet Sabreliner pressurized for high altitude flight; a large, low-wing, long-range, four-engine turboprop Electra; and a newly acquired twin turboprop pressurized Super King Air.

The Advisory Panel, composed of atmospheric scientists from universities, government agencies, and NCAR, meets twice each year, in April and Oct., to consider the scheduling of NCAR aircraft.

In order to be considered by the Panel at the 1984 Oct. meeting, requests must be submitted in completed form not later than Aug. 13, 1984 to the Manager, Research Aviation Facility, NCAR, P.O. Box 3000, Boulder, Colo. 80307. For additional information, contact the office at (303) 497-1036.

Results from EVIST-Supported Projects 1976 - 1980

A report entitled *Results from EVIST-Supported Projects 1976 - 1980* is now available. The report contains summaries of results and publications from 70 projects, grouped by fiscal year of award. There are two indexes, an alphabetical index of principal investigators and a reference code index indicating issues or areas of study that relate to particular projects. The report can be ordered from the program Ethics and Values in Science and Technology, Division of Research Initiation and Improvement (357-7552).

Subcommittee for Ocean Sciences Research

The Subcommittee for Ocean Sciences Research will meet April 10, 11, and 12, 1984 to evaluate proposals in the areas of physical, chemical, and biological oceanography and submarine geology and geophysics. For further information, contact Dr. Robert Wall, Division of Ocean Sciences (357-7924).

NSF Information Booth at American Association for the Advancement of Science Meeting

The American Association for the Advancement of Science (AAAS) will hold its annual meeting May 24 through 29, 1984 at the Sheraton Centre, New York, N.Y. A NSF information booth and representative will be present. For further information, contact Ms. Shirley Day, Office of Legislative and Public Affairs (357-9498).

Establishment of Post Doctoral Fellowships for U.S. Junior and Senior Scientists for Tenures in Industrialized Countries.

The Division of International Programs announces the establishment of a fellowship program for U.S. junior and senior scientists interested in conducting research at foreign institutions of excellence in industrialized countries. Tenure abroad may range from four to twelve months. In the case of junior scientists, fellowships may include additional time at the home institution after return to the U.S. Application forms will be available in June 1984. The annual submission deadline will be Oct. 1 of each year. Awards will be announced in March of the following year. For more information, contact Mr. Henryk Uznanski, Division of International Programs (357-7554).

Establishment of NSF-NATO Fellowships for Academic and Industrial Based U.S. Scientists

The Division of International Programs announces the establishment of fellowships designed for U.S. scientists affiliated with U.S. academic institutions wishing to conduct research at industrial laboratories in NATO countries as well as for U.S. industrial based scientists wishing to conduct research at academic institutions in NATO countries. Tenures range from six to twelve months.

Awards are jointly reviewed and funded by NSF and NATO. The maximum amount awarded will not exceed \$20,000 per award and includes only international travel and a cost of living allowance while abroad. There are no deadlines for the current fiscal year. For more information contact Mr. Henryk Uznanski, Division of International Programs (357-7554).

Construction Engineering and Building Research

The Division of Civil and Environmental Engineering announced, effective Jan. 5, 1984, the establishment of a new program entitled, Construction Engineering and Building Research.

This program supports research to enhance the development of knowledge basic to the construction of engineered facilities and basic to the design, construction, and efficient operation of buildings as well as research fundamental to the process of construction. The program supports basic research directed toward developing a better understanding of fundamental principles used in programming, design, construction, operation, and utilization of buildings. Within this program, a limited amount of research is supported dealing with fundamental topics in transportation engineering. For further information, contact Mr. Gifford Albright, Division of Civil and Environmental Engineering (357-7710).

Guidelines for Preparing Multi-Investigator Multi-Disciplinary Proposals for Ecosystem Studies

Researchers submitting proposals for the Ecosystem Studies program, Division of Biotic Systems and Resources, should write or call for copies of guidelines as discussed in the brochure, *Grants for Scientific and Engineering Research* (NSF 83-57).

Doctoral Dissertation Research Proposals for the Division of Biotic Systems and Resources

Doctoral Dissertation proposals submitted to NSF's Division of Biotic Systems and Resources by May 1 will be considered for start date of Oct. 15 or later in 1984. Each proposal should be submitted through regular university channels by the dissertation advisor acting on behalf of a graduate student. Academic departments should limit the applications submitted to outstanding dissertation proposals with unusual financial requirements that cannot be met by the university.

The proposal should follow the format for individual research grants as described in the brochure, *Grants for Scientific and Engineering Research* (NSF 83-57), except that the body of the proposal is limited to eight single-spaced pages.

For further information, contact Dr. James Edwards, Division of Biotic Systems and Resources (357-9588).

New Vessel for the Ocean Drilling Program

The SEDCO/BP 471 has been selected as the new drilling vessel for the Ocean Drilling program.

Culminating a three month evaluation, a team of experts picked the SEDCO vessel from a field of six. The evaluation team consisted of scientists, engineers, and administrators at Texas A&M University, the designated science operator of the Ocean Drilling program.

The SEDCO/BP 471 is owned jointly by SEDCO Inc., of Dallas, and British Petroleum. The ship is 470 feet long, 70 feet wide and has a displacement of 16,596 long tons.

The SEDCO/BP 471 is one of the world's most modern and best equipped drillships. It will have a crew of 52 and can accommodate 50 scientists.

For further information, contact the Ocean Drilling Program (357-9849).

Cooperative Science Activities with Latin America and the Caribbean

Through its Division of International Programs, NSF supports U.S. investigators in cooperative scientific activities with colleagues in Latin America and the Caribbean. Collaborative research project support is ordinarily on a supplemental basis. Seminars/workshops on a specific topic and scientific visits of short duration are also supported. Cooperating foreign scientists must obtain support from other sources, and must submit a parallel proposal to their own national science council.

To obtain a copy of the program guidelines, *Cooperative Science Programs with Latin America and the Caribbean* (NSF 80-52), use the Publications Order Form. The semi-annual deadline dates for submission of proposals are May 1 and Nov. 1.

For additional information, contact the U.S.-Latin America Cooperative Science Programs, Division of International Programs (357-9563).

Proposals not adhering to these guidelines will be returned. For further information, contact Dr. James Callahan, Ecosystem Studies (357-9596).

Positions Open in NSF
(NSF is an Equal Opportunity Employer)

Applicants for the following positions should submit resumes including current salary to NSF, Personnel Administration Branch, Room 212, 1800 G Street, N.W., Washington, D.C. 20550. Attn: Timothy Connelly, 357-7840. Hearing impaired individuals should use TDD 357-7492.

Specific years of successful scientific research experience beyond the Ph.D. are required for the following positions in all fields:

- Program Director, six to eight years, per annum salary ranges from \$40,000 to \$65,000.
- Associate Program Director, four to six years, per annum salary ranges from \$35,000 to \$55,000.
- Assistant Program Director, three to four years, per annum salary ranges from \$30,000 to \$45,000.
- NSF's Division of Electrical, Computer and Systems Engineering is seeking qualified applicants for the position of program director in the Bioengineering and Research for the Handicapped program. The position is open until filled and will be filled on a one- or two-year rotational basis. It is excepted from the competitive civil service. This program provides support for research on scientific and engineering principles as applied to living systems through the Bioengineering and Research for the Handicapped subprograms.
- NSF's Division of Electrical, Computer and Systems Engineering is seeking qualified applicants for the position of program director, Automation, Instrumentation and Sensing Systems program. This position will be filled on a one- or two-year rotational basis and is excepted from the competitive civil service. The program supports research in the areas of robotics, advanced automation, computer vision, sensing systems, micro-sensors and novel measurement systems. Some administrative and management experience is desired.
- NSF's Division of Ocean Sciences is seeking qualified applicants for assistant/associate program director for Oceanic Biology. The position is excepted from the competitive civil service. The position will be filled by Sept. 1984 on a two-year rotational basis. The program supports fundamental research into the biology of the oceans. The incumbent will provide technical expertise in proposal evaluation, administration of research grants, program planning and budgeting. Applicants should have a Ph.D. in oceanography or marine biology, or equivalent training in a related discipline. Experience in an academic research institution is highly desirable, as is at-sea and/or laboratory experience in biological research.
- NSF's Division of Atmospheric Sciences is seeking qualified applicants for various positions of assistant program director, associate program director, and program director in the areas of aeronomy, atmospheric chemistry, climate, fluid dynamics, meteorology, magnetospheric/ionospheric physics, paleoclimatology, solar physics, and solar-terrestrial physics. The positions will be filled on a one- or two-year rotational basis and

are excepted from the competitive civil service. Typical duties will involve proposal review, advising applicants, budget development, site visits, program development and other administrative chores. The incumbent of each position will also be responsible for the review evaluation and recommendation for support of the most scientifically meritorious proposals.

- NSF's Division of Social and Economic Science is seeking qualified candidates for the position of program director in geography and regional science. This position is rotational and will be filled on a one- or two-year rotational basis. Typical duties will involve proposal review and evaluation, advising applicants, program development, budget development and other administrative activities. Other duties include representing NSF at conferences and professional meetings and maintaining a continuing review of available information on current research development in political and policy sciences.
- NSF's Division of Computer Research is seeking qualified applicants for the positions of assistant program director, associate program director, and program director for intelligent systems and for theoretical computer science. These positions will be filled on a one- or two-year rotational basis and are excepted from the competitive civil service. A broad general knowledge of computer research and some administrative experience are required. For technical information about these positions, contact Mr. Kent Curtis, Acting Division Director, Division of Computer Research, (357-9747) or by net mail to: curtis.nsf-c5csnet-relay (CSNET/ARPANET).
- NSF's Division of Mathematical Sciences is seeking qualified applicants for positions which periodically become available. The positions will be filled on a one- or two-year rotational basis and are excepted from the competitive civil service. Applicants should have a Ph.D. or equivalent experience and training in an appropriate field. A broad, general knowledge of the field and some administrative experience are required.
- NSF's Division of Polar Programs is seeking qualified applicants for the position of facilities engineering projects manager, Polar Operations Section. This position is excepted from the competitive civil service at the GH-14 grade level. The per annum salary ranges from \$42,227 to \$55,538. Candidates should have a M.S. or equivalent experience in engineering. Experience in support projects in remote locations is desirable. Experience in the design, construction and maintenance of facilities is required. Medical screening is also required.



Advisory Committee for Atmospheric Sciences

The Advisory Committee for Atmospheric Sciences will hold its spring meeting April 25 through 27, 1984, in Room 543, NSF. For further information, contact Dr. Eugene Bierly, Division of Atmospheric Sciences (357-9874).

Organizational Changes

The Directorate for Science and Engineering Education has been newly organized as follows:

- **Office of Research Career Development (ORCD).** This Office will administer the following ongoing graduate and postdoctoral programs: graduate research fellowships, NATO postdoctoral fellowships, and NATO travel grants. ORCD will also coordinate the Presidential Young Investigator Awards for which funds are provided by the research Directorates. For further information, phone 357-7536.
- **Office of Special Activities (OSA).** This Office will be responsible for the following science education activities: informal science education, information in science and mathematics education, and studies and analyses. In addition, OSA will carry special responsibilities for government and private sector liaison and for program impact assessment. For further information, phone 357-7425.
- **Division of Precollege Education in Science and Mathematics (PESM).** The Division will be responsible for the following precollege activities: improved instructional materials, improved methods of teacher development, applications of new technologies, research in teaching and learning, local and regional teacher development, honors workshops for precollege teachers of science and mathematics, and the Presidential Awards for Excellence in Science and Mathematics Teaching. For further information, phone 357-7539.



The names of Sections within the Division of Policy Research and Analysis have been changed to reflect expanded policy analysis functions assigned to the Division:

- **The Science and Innovation Policy Section** (formerly Socio-economic Effects of Science and Technology Group) has been broadened to include the field of national science policy analysis, and to increase its studies of policies to enhance innovation and increase industrial productivity. The Section Head is Dr. Rolf Piekarz (357-9800).
- **The Technology and Resource Policy Section** (formerly Advanced Technologies and Resources Policy Group) has expanded its coverage of information policy issues, critical mineral analyses, and technological progress in specific industries. The Section Head is Dr. Frank Huband (357-7829).
- **The Policy Sciences Section** (formerly Technology Assessment and Risk Analysis Group) has been broadened to cover all fields of policy sciences, including the economics, psychology, political science, and public administration disciplines as well as the technology assessment and risk analysis discipline. The Section Head is Dr. Joshua Menkes (357-9828).



Staff Changes

Henry Blount to Program Director, Chemical Analysis Program, Division of Chemistry (357-7960)

Maryanna Henkart to Program Director, Cellular Physiology Program, Division of Physiology, Cellular and Molecular Biology (357-7377).

Lillian C. McDermott to Division Director, Division of Precollege Education in Science and Mathematics, Directorate for Science and Engineering Education (357-7452).

April 1984 Publications Order Form

Single copies of the following publications are available by checking appropriate boxes. Only those publications listed below can be ordered on this form. Requests for NSF publications listed in previous *Bulletins* must be made separately and will be honored only if the publications are available. This Order Form and requests for other publications should be sent to Forms and Publications Unit, Room 233, National Science Foundation, 1800 G St., NW, Washington, DC 20550.

Check:

- NSF 80-42. Minority Research Initiation.
- NSF 80-49. U.S.-Pakistan Cooperative Science.
- NSF 80-52. U.S.-Latin America and Caribbean Cooperative Science.
- NSF 81-34. Research in Information Science.
- NSF 81-49. U.S.-Australia Cooperative Research. (Revised Jan. 1982).
- NSF 81-50. U.S.-New Zealand Cooperative Science.
- NSF 81-58. U.S.-Japan Cooperative Science.
- NSF 82-50. U.S.-China Cooperative Science.
- NSF 82-56. Industry/University Cooperative Research.
- NSF 82-86. U.S.-India Cooperative Science.
- NSF 83-19. Biological Instrumentation.

- NSF 83-57. Grants for Scientific and Engineering Research.
- NSF 83-58. Science in Developing Countries.
- NSF 83-62. Ethics and Values in Science and Technology.
- NSF 83-79. Research in Undergraduate Institutions.
- NSF 83-90. Biotechnology and NSF.
- NSF PR84-8. Statement of FY 1985 Budget National Science Foundation.

Name: _____

Title: _____

Address: _____

New Publications of Science Resources Studies

Copies of the following reports are available free from NSF's Division of Science Resources Studies (634-4622).

Highlights:

- "Industry Reports Shortages of Scientists and Engineers Down Substantially From 1982 to 1983" (NSF 84-303)

Detailed Statistical Tables:

- *Federal Funds for Research and Development, Fiscal Years 1982, 1983, and 1984, Volume XXXII* (NSF 83-319)
- *Scientists, Engineers, and Technicians in Manufacturing and Nonmanufacturing Industries: 1980-81* (NSF 83-324)
- *Science and Engineering Doctorates: 1960-82* (NSF 83-328)

Reports:

- *Federal Funds for Research and Development, Fiscal Years 1981, 1982, and 1983, Volume XXXI* (NSF 83-320)
- *Women and Minorities in Science and Engineering* (NSF 84-300)
- *A Guide to NSF Science/Engineering Resources Data* (NSF 84-301).

Science Indicators—1982: NSB's 15th Annual Report

The 15th annual report of the National Science Board, *Science Indicators—1982*, is the sixth in a series in which important aspects of American science and engineering are examined. The report analyzes science and technology activities in the U.S. and their relationship to the efforts of other major industrialized countries. It provides for the first time a separate treatment of academic science and engineering. The report also presents information on public attitudes toward science and technology and recent accomplishments in research and development.

Copies of the 344-page report, *Science Indicators—1982* (NSB 83-1), may be purchased from the U.S. Government Printing Office (GPO), Wash., D.C. 20402. Requests for price and order may be made by mail or phone to GPO (783-3238).

Biotechnology Research Brochure

NSF has released a brochure outlining opportunities for support of biotechnology research and related activities. The brochure represents interests of programs in biology, chemistry, marine biology, and engineering. Copies of *Biotechnology and NSF* (NSF 83-90) are available and may be obtained by request on the Publication's Order Form. For further information, contact Dr. Lynn Preston, Office of Interdisciplinary Research (357-9707).

National Science Foundation

Washington, D.C. 20550

Official Business

PENALTY FOR PRIVATE USE, \$300

RETURN THIS COVER SHEET TO ROOM 233, IF YOU DO NOT WISH TO RECEIVE THIS MATERIAL , OR IF CHANGE OF ADDRESS IS NEEDED (INDICATE CHANGE, INCLUDING ZIP CODE).

Postage and Fees Paid
National Science Foundation



BULK RATE
U.S. POSTAGE PAID
PERMIT NO. G69
WASHINGTON, D.C.



Founded in 1928

Organized to improve science teaching - through research

Sponsoring the Journal of Research in Science Teaching

Affiliated with AAAS, ASE, ICASE and NSTA.

EXECUTIVE SECRETARY

Dr. William G. Holliday
NARST-EDCI
The University of Calgary
Calgary, Alberta
Canada T2N 1N4

PRESIDENT

Dr. Ertle Thompson
Ruffner Hall
University of Virginia
Charlottesville, VA 22903

PRESIDENT-ELECT

Dr. David Butts
Science Education Department
University of Georgia
Athens, GA 30602

IMMEDIATE PAST PRESIDENT

Dr. Ann C. Howe
Dept. of Mathematics & Science Education
North Carolina State University
Raleigh, NC 27650

BOARD MEMBERS-AT-LARGE

Dr. Glen Aikenhead (1986)
Faculty of Education
University of Saskatchewan
Saskatoon, Sask. S7N 0W0

Dr. Patricia E. Blosser (1987)
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210-1172

Dr. Linda R. DeFure (1985)
School of Education
Rollins College
Winter Park, FL 32789

Dr. Marcia C. Linn (1986)
Lawrence Hall of Science
University of California
Berkeley, CA 94720

Ms. Alice J. Moess
National Science Teachers Association
1742 Connecticut Avenue N.W.
Washington, D.C. 20009

Dr. Michael J. Padilla (1987)
Science Education Department
University of Georgia
Athens, GA 30602

Dr. Russell H. Yeany (1985)
Science Education Department
University of Georgia
Athens, GA 30602

JOURNAL EDITOR

Dr. James Shymansky (1984)
Science Education - Physics Bldg.
University of Iowa
Iowa City, IA 52242

RESEARCH COORDINATOR

Dr. Rodney L. Doran (1986)
553 Baldy Hall
SUNY at Buffalo
Amherst, NY 14260

1984 Fall Meeting of the Executive Board

Day's Inn at 300 Spring Street, Atlanta
1:00 p.m., November 27, 1984

A G E N D A

1. Opening comments by president
2. Brief announcements by other members
3. Approval of minutes (mailed in July, 1984)
4. Business arising
5. Report from the president
6. Report from program chairperson
7. Report from executive secretary (including interim reports and supplements mailed in July and September, 1984. Please bring your copies to our meeting.)
8. Report from policy advisory committee
9. Report from the editors of the Journal of Research in Science Teaching
10. Other committees and representatives' reports
 - a. JRST award
 - b. NARST award
 - c. Publication Advisory
 - d. Research
 - e. Financial Advisory
 - f. Archives
 - g. Election
11. New Business

58TH ANNUAL MEETING IN FRENCH LICK SPRING, INDIANA, APRIL 15-18, 1985
SEND OFFICIAL CORRESPONDENCE TO THE EXECUTIVE SECRETARY (TELEPHONE 403-284-7485)



Founded in 1928

Organized to improve science teaching - through research

Sponsoring the Journal of Research in Science Teaching

Affiliated with AAAS, ASE, ICASE and NSTA.

EXECUTIVE SECRETARY

Dr. William G. Holliday
NARST-EDCI
The University of Calgary
Calgary, Alberta
Canada T2N 1N4

PRESIDENT

Dr. Ertle Thompson
Ruffner Hall
University of Virginia
Charlottesville, VA 22903

PRESIDENT-ELECT

Dr. David Butts
Science Education Department
University of Georgia
Athens, GA 30602

IMMEDIATE PAST PRESIDENT

Dr. Ann C. Howe
Dept. of Mathematics & Science Education
North Carolina State University
Raleigh, NC 27650

BOARD MEMBERS-AT-LARGE

Dr. Glen Aikenhead (1986)
Faculty of Education
University of Saskatchewan
Saskatoon, Sask. S7N 0W0

Dr. Patricia E. Blosser (1987)
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210-1172

Dr. Linda R. DeTora (1988)
School of Education
Rollins College
Winter Park, FL 32789

Dr. Marcia C. Linn (1986)
Lawrence Hall of Science
University of California
Berkeley, CA 94720

Ms. Alice J. Moses
National Science Teachers Association
1742 Connecticut Avenue N.W.
Washington, D.C. 20036

Dr. Michael J. Padilla (1987)
Science Education Department
University of Georgia
Athens, GA 30602

Dr. Russell H. Yeany (1985)
Science Education Department
University of Georgia
Athens, GA 30602

JOURNAL EDITOR

Dr. James Shymansky (1984)
Science Education - Physics Bldg.
University of Iowa
Iowa City, IA 52242

RESEARCH COORDINATOR

Dr. Rodney L. Doran (1986)
553 Baldy Hall
SUNY at Buffalo
Amherst, NY 14260

Outline of Report from the President

Ertle Thompson

1. Membership turnaround - our recruiting efforts are now paying dividends
2. Thanks to Glen Markle and his colleagues at the University of Cincinnati for their efforts in planning for the upcoming convention at French Lick Springs, Indiana
3. Increasing interest and response of members relative to research applications and classroom practices
4. Meeting with NSF personnel
5. NSTA Summer Board Meeting
6. Ad hoc committee appointments
7. Policy Advisory Committee Report and Recommendations
8. Concerns - operational policies and processes
 - a) Convention scheduling, local arrangements committees, site selection process, calendar, etc.
 - b) Committees
 - c) Budget priorities
 - d) Need for Executive Committee
9. Other items.

58TH ANNUAL MEETING IN FRENCH LICK SPRING, INDIANA, APRIL 15-18, 1985
SEND OFFICIAL CORRESPONDENCE TO THE EXECUTIVE SECRETARY (TELEPHONE 403-284-7485)

October 15, 1984

ACTIVITIES OF NARST PROGRAM COMMITTEE

Based on our meeting in New Orleans and the followup, we are on the way for an outstanding 1985 NARST Annual Meeting. Thus far we have:

- 1) Confirmed three general session speakers
 - a. John Bransford -- "Linking Problem Solving and Science Education Research"
 - b. Alphonse Buccino -- "Linking Analysis to Science Education Advocacy"
 - c. ^{one} Dudley Shapiro -- "Linking Contemporary Science Research Paradigm to Science Teaching Research" N.C.
- 2) Circulated the call for papers to be submitted by October 22.
- 3) Scheduled a meeting of our committee for Monday, November 26 in Atlanta to complete the details of the 1985 program.

Proposed contributions to the program have been arriving daily. Thus far we have 21. These are already being circulated for review. Before the end of the month the balance will be sent for screening.

In addition to the meeting in Atlanta to complete the details of the program, the committee will be considering ideas relative to:

- a) the meeting theme,
- b) the format for each day (our initial suggestion is attached),
- c) people who can serve as session moderator/critiquers,
- d) other idea to strengthen the program.

Submitted by: David P. Butts, Chairman
NARST Program Committee

SUGGESTED PROGRAM FORMAT

	<u>Monday</u> <u>April 15</u>	<u>Tuesday</u> <u>April 16</u>	<u>Wednesday</u> <u>April 17</u>	<u>Thursday</u> <u>April 18</u>
8:00 - 9:45	Registration	Concurrent Session	Poster Session	Concurrent Session
9:45	INFORMAL DISCUSSION WITH COFFEE			
10:00 - 11:30		General Session	General Session	Concurrent Session
11:30 - 1:00	Lunch	Luncheon Awards	Lunch	Adjourn
1:00 - 2:30		Concurrent Session	Concurrent Session	
2:45 - 4:00		Concurrent Session	Concurrent Session	
4:15 - 5:45		Concurrent Session	Concurrent Session	
6:00	Dinner			
7:30	Springboard Session "Key Problems in Science Teaching As Seen By -- Teacher -- Superintendent -- Scientist -- Researcher	General Session	General Session	



Founded in 1928

Organized to improve science teaching - through research

Sponsoring the Journal of Research in Science Teaching

Affiliated with AAAS, ASE, ICASE and NSTA.

EXECUTIVE SECRETARY

Dr. William G. Holliday
NARST-EDCI
The University of Calgary
Calgary, Alberta
Canada T2N 1N4

Report of the Executive Secretary

William G. Holliday

November 27, 1984

PRESIDENT

Dr. Ertle Thompson
Ruffner Hall
University of Virginia
Charlottesville, VA 22903

1. "Revenue Enhancement" - 1987

Attached is a copy of our agreement with Wiley Publishers. We need to begin discussions concerning our negotiations with Wiley and our investigations of other ways of publishing JRST. In this regard, I also attached a summary statement ("NARST vs. Wiley") from our newsletter describing the events and circumstances leading to our settlement with Wiley in 1982.

PRESIDENT-ELECT

Dr. David Butts
Science Education Department
University of Georgia
Athens, GA 30602

Currently our relationship with the Wiley staff is excellent. For example, NARST is conforming to the special and numerous requests and routines of their subscription department. We are considered a "trouble-free" association. On the other hand, Wiley will provide us with free advertising in each JRST issue and a modified "rolling subscription" option next year and reasonable subscription service, contrary to many other publishers. However, NARST pays a high price for this service, as reflected by the \$1600 royalty cheque on the 2000 subscriptions sold to institutions at a gross cost of \$68 each.

IMMEDIATE PAST PRESIDENT

Dr. Ann C. Howe
Dept. of Mathematics & Science Education
North Carolina State University
Raleigh, NC 27650

2. Emeritus Status Applications

Drs. Herman J. Ruoff, now of Temple Hills, MD, and Robert Karplus, of the University of California - Berkeley, "apparently" want to be considered for emeritus status.

BOARD MEMBERS-AT-LARGE

Dr. Glen Aikenhead (1986)
Faculty of Education
University of Saskatchewan
Saskatoon, Sask. S7N 0W0

Dr. Patricia E. Blosser (1987)
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210-1172

Dr. Linda R. DeTure (1985)
School of Education
Rollins College
Winter Park, FL 32789

Dr. Marcia C. Linn (1986)
Lawrence Hall of Science
University of California
Berkeley, CA 94720

Ms. Alice J. Moses
National Science Teachers Association
1742 Connecticut Avenue N.W.
Washington, D.C. 20009

Dr. Michael J. Padilla (1987)
Science Education Department
University of Georgia
Athens, GA 30602

Dr. Russell H. Yeany (1985)
Science Education Department
University of Georgia
Athens, GA 30602

JOURNAL EDITOR

Dr. James Shymansky (1984)
Science Education - Physics Bldg.
University of Iowa
Iowa City, IA 52242

3. Policy Advisory Committee - Executive Secretary's Input

Ann Howe's work as chairperson is to be lauded. My written input to the committee is attached.

RESEARCH COORDINATOR

Dr. Rodney L. Doran (1986)
553 Baldy Hall
SUNY at Buffalo
Amherst, NY 14260

4. Interim Report to the Board, July, 1984

5. Interim Report to the Board, September, 1984

6. Proposed Budget - 1985

58TH ANNUAL MEETING IN FRENCH LICK SPRING, INDIANA, APRIL 15-18, 1985

SEND OFFICIAL CORRESPONDENCE TO THE EXECUTIVE SECRETARY (TELEPHONE 403-284-7485)

Agreement

This agreement made as of the 1st day of July, 1982, by and between NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING, a non-profit educational corporation, hereinafter referred to as the "Association" and JOHN WILEY & SONS, INC., a New York corporation having its principal office at 605 Third Avenue, New York, New York, hereinafter referred to as "Wiley."

Whereas, Wiley has for many years published and distributed the official Journal of the Association pursuant to the agreement made as of the 1st day of January 1967, by and between the Association and Wiley ("the 1967 Agreement"); and

Whereas, the Association and Wiley desire to continue their relationship pursuant to the terms and conditions of the 1967 Agreement until December 31, 1982; and

Whereas, thereafter the Association desires to continue the publication of a Journal which shall be the sole official Journal of the Association and Wiley desires to publish and distribute such Journal on the terms and conditions hereinafter contained, which terms and conditions modify and supersede those of the 1967 Agreement.

Now, therefore, in consideration of the premises, the parties agree as follows:

1. The Journal. The title of the Journal is to be Journal of Research in Science Teaching or some similar name agreeable to the parties. For the years 1983 through 1987,

2.

inclusive, it shall be published one Volume per year, about 900 pages per Volume, nine issues per Volume, in format of 7 x 10, 96 pages per issue, or an equivalent amount of material in other formats, subject to availability of sufficient articles acceptable in content and form to the Editor. Should advertising be carried, the suitability of advertising will be determined by the Editorial Board of the Association and Wiley. The Executive Board of the Association and representatives of Wiley will meet annually to review the prior year's publication and circulation, and discuss future plans, including the desirability of carrying advertising, and promotional activities.

Authors will receive 25 free reprints per article. Additional reprints will be made available at Wiley's regular price schedule.

2. Editorial Policies. The Journal shall be the sole official Journal of the Association. ^{The} Editor-in-Chief and his replacement, if and when he can no longer serve, shall be selected from the membership of the Association by mutual agreement between the Association and Wiley. The Editor-in-Chief shall be assisted by an Editorial Advisory Board to be selected from the membership by the Executive Committee of the Association. A representative of Wiley, to be appointed by Wiley, shall be a member of such a Board. Responsibility for the solicitation of manuscripts, editorial control and directions, and approval of copy for submissions to Wiley shall be vested in the Editor-in-Chief. General editorial policy shall

3.

be based on criteria established by the Editorial Board and mutually agreed upon by the Association and Wiley. Wiley may refuse to print any material which appears to it to be defamatory, an invasion of privacy, a violation of copyright, or otherwise objectionable in terms of the agreed-upon criteria.

3. Title and Copyright. The title of the Journal shall be the property of the Association. Copyright and reprint rights shall belong to Wiley, but on termination of the agreement shall be transferred to the Association as hereinafter provided, subject to the provisions of Section 7 below. Wiley shall not refuse reasonable requests from third parties for reprint articles. It is understood that reprint permission fees, if any, are not substantial, and may be retained by the Publisher to cover administrative expenses.

4. Publication and Sale. Manuscripts shall be delivered to Wiley double spaced on 8-1/2 by 11 paging, one side, ready for composition but before copy editing at least sixteen weeks before a publishing deadline which is to be fixed by Wiley. Wiley will supply the paper and will print, bind and mail.

The printed issues shall be Wiley's property, and may be sold by Wiley for its own account by subscription or back volume or single copy sale. During the term of the agreement, the Association shall provide special subscriptions for each of its members at a special subscription price which shall be \$20 per Volume (with no additional charge to

4.

either the Association or any such special subscribers for Canadian or United States surface postage), to be paid by the Association to Wiley in February of each year.

5. Royalties to be Paid by Wiley to the Association.

A. Special Subscriptions:

To members of the Association ~~and of the Association for Education of Teachers in Science~~ - no royalty

RJD

B. Regular Subscriptions:

1-1,000 copies - no royalty
 1,001-1,500 " - 10% of net receipts
 1,500 and above - 15% " " "

C. Single Copy Sales:

- no royalty

The royalty on net advertising receipts, if any, shall be 20%. Agency discounts, if any, shall be deducted in determining "net receipts" from subscriptions.

Notwithstanding the above, the minimum royalty to be paid in any year shall be not less than the amount paid in 1982 for 1981 sales, \$1,600.00.

6. Duration of Contract. This agreement shall commence as of January 1, 1983, and shall continue until December 31, 1987, subject however to any changes and adjustments mutually agreed upon at the annual reviews provided for in Section 1.

7. Termination. Unless the agreement is extended as provided below, on December 31, 1987, copyrights on the materials published in the Journal shall be assigned by Wiley to the Association, and on March 31, 1987, the circulation list shall

5.

be turned over by Wiley to the Association. The agreement shall be automatically renewed on January 1, 1988 for an additional five-year period, unless either party gives the other six months written notice of cancellation. The special price to members may be increased during the renewal period, only with the Association's consent, not to be unreasonably withheld. Notwithstanding termination, Wiley shall have the right to retain fees for reprints, permission, and subsidiary rights on Volumes published by Wiley before termination.

The Association shall have the right but shall not be required (except as set forth below) to purchase from Wiley as much of its inventory of Back Volumes and single issues of the Journal as the Association desires, at a price of \$1.75 per issue. Notwithstanding the foregoing, the Association shall purchase 100 Volumes for each of the last four Volumes preceding termination, from Wiley's inventory of Back Volumes, at a price of \$15.75 per volume.

After termination, if the Journal continues to be published, no royalty shall be payable by the Association to Wiley on receipts from special subscriptions. The Association however, shall pay royalties on net receipts (whenever and by whomever received) from subscriptions to non-members during the four years following termination as follows: from subscriptions in excess of 1,000 and up to 1,500, 10%, and from subscriptions in excess of 1,500, 15%. No royalties shall be payable on any subscriptions in excess of the number of sub-

6.

scriptions in Wiley's last year of publication. Notwithstanding the foregoing, annual royalties shall be not less than the royalty payment made by Wiley to the Association in 1982 for 1981 subscriptions. No royalties shall be payable on the sale of single copies.

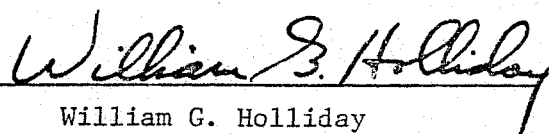
8. Payments. Royalties to be paid by Wiley to the Association or by the Association to Wiley shall be accounted for and paid on an annual basis not later than April 30 for the year ending the previous December 31. The party to whom the royalties are owing shall have the right to examine the other party's books and records insofar as they relate to payments due hereunder. Payment for Back Volumes shall be made on delivery.

9. Notices. Notices or other communications to the parties shall be by registered mail; if to the Association c/o Executive Secretary; if to Wiley at 605 Third Avenue, New York, New York 10158, or at such other address as either party may furnish to the other in writing. The Executive Secretary will notify Wiley annually as to the names and addresses of the Association officers and the Editor of the Journal.

10. Miscellaneous. This agreement constitutes the entire agreement between the parties and may not be modified except by a written instrument, signed by the party against whom enforcement is sought. This agreement shall be construed under the laws of the State of New York.

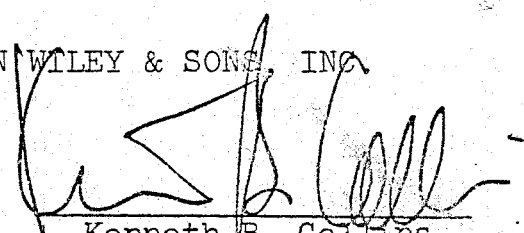
NATIONAL ASSOCIATION FOR RESEARCH
IN SCIENCE TEACHING

By:


William G. Holliday
Executive Secretary

JOHN WILEY & SONS, INC.

By:


Kenneth B. Collins
Vice President

NARST Newsletter

Vol. 24(3)

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

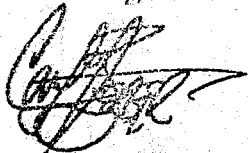
September 1982

President's Column

As we enter into the new school year, it is important that we pay attention to one of the crucial concerns of NARST. We need new members and we need to encourage the participation of all our present members. The current economic climate has meant, in many instances, that each of us has had to re-examine our membership in professional organizations and it is important that NARST be included by all of us as a high priority organization to which we ascribe both our dollars and participation.

Participation by all members is crucial to the success of any organization. NARST is no exception. If each of us as members would accept an obligation of the recruitment of one new member to our organization, our roles would double. I'm sure that each of us is aware of an active science educator interested in research who would make a good member of NARST. We need to encourage new members from community colleges, industry, and public schools not only to help our membership to double, but also to diversify. As this year's president, I encourage all of us to accept the challenge for our organization. In this way, NARST can grow and prosper.

Sincerely,



Carl F. Berger
President, NARST

NARST vs. Wiley Publishers

NARST spent a great deal of time and effort during the first half of 1982 negotiating a new contract with John Wiley & Sons, Inc. Publishers, publishers of the *Journal of Research in Science Teaching (JRST)*.

Two problems were apparent to the officers of NARST. First, Wiley was charging NARST \$30.00 per member for mailed copies of *JRST* based on vague contractual guidelines agreed to by NARST in 1967. (The remaining revenues from membership fees have not been covering the expenses of the Association, as indicated in the June Newsletter.) Second, Wiley essentially "owned" *JRST* because of the termination penalties outlined in our 1967 contract were so severe (e.g., apparently over \$34,000 for the year 1982 and as much as \$100,000 for the year 1987) that NARST realistically was at the mercy of Wiley. Indeed, as one official at Wiley put it, the termination penalties in our contract were severe and were there for a good reason. Fortunately, Wiley has never exercised its full power over NARST. Nevertheless, it was considered a poor business practice to permit an external corporation to be in such a powerful position, especially considering the fact that Wiley currently owns and controls the other research journal in our area, *Science Education*.

To solve these crucial problems, the officers of NARST gave the executive secretary authority either to negotiate a new contract or to terminate our current contract with Wiley, to establish our own mechanisms for publishing *JRST* and to prepare for a legal battle in the New York State courts. Because of the potential impact of this matter on the future of science education and NARST, these problems constituted the major issue at our recent board meetings.

The solution to these problems required NARST to employ an excellent litigation lawyer, Robert J. Dwyer (100 Park Avenue, New York, NY 10017 - a recommendation from a NARST board member, Dr. Jane Kahle), to prepare to publish nine issues of *JRST* for 1983 and to coordinate the negotiations on both of these fronts. Incidentally, Mr. Dwyer's price for his professional services reasonably could have ranged from \$4,000-\$7,000. His fee to us totalled \$500.

The executive secretary would like to thank the NARST board for their confidence and cooperation

in resolving these problems. The work of Dr. Jim Shymansky, editor of *JRST*, was particularly helpful throughout these negotiations.

After hundreds of phone calls and many letters to Mr. Dwyer, other counsel, the NARST board, publishing houses, other professional associations and printing-circulation agents, the executive secretary is pleased to report that NARST is independent of any corporation (or professional association) and will continue to have Wiley publish *JRST* for at least five more years. In the end, Wiley agreed to drop its current price to members from \$30 per year (1982) to \$20 per year for each year of the new contract - 1983, 1984, 1985, 1986 and 1987. Furthermore, Wiley agreed that the \$20 price may be increased for the renewal period of the new five-year contract (1988, 1989, 1990, 1991 and 1992) only with NARST's "consent, not to be unreasonably withheld." Furthermore, Wiley clearly agreed to provide NARST with our institutional subscription list for *JRST* far in advance of our termination with Wiley at some possible future date. (In the old contract, we would not have been able to acquire our circulation list in time to invoice institutions renewing their subscription to *JRST*.)

In addition, the termination penalties described in the new contract are dramatically reduced to \$6,300 for which NARST will receive 100 volumes (nine issues per year) of back issues of *JRST* for the previous four years. Moreover, an attractive (to NARST) royalty plan was negotiated for our last year with Wiley rather than on successive years following our last year with Wiley. Furthermore, Wiley will keep us abreast of their promotional efforts - a real concern of the NARST board during 1981-1982. A number of other minor points were negotiated, including an additional \$1,000 to the NARST treasury for the next five to ten years and a rational and clearly-worded contract - fair to both Wiley and NARST.

How did NARST do this so well at the bargaining table? Mr. Dwyer contended that NARST illustrated an awareness of the complexities involved in such negotiations and a willingness to keep pressing the case with the people at Wiley often on a day-to-day basis at crucial times during the negotiations. Wiley knew we meant business and they responded in a polite, businesslike manner.

Finally, Wiley's representatives, Mr. Allan Wittman, publishers, Wiley-Interscience Journals, Mr. Richard Rudick, general counsel and secretary of

Wiley, and Mr. Kenneth B. Collins, vice-president of Wiley, truly bargained in good faith. They are to be commended for their professionalism and sincere interest in maintaining a good relationship with NARST. NARST, on the other hand, is looking forward to a continued, excellent working relationship with the people at Wiley.

Status Report on NARST

NARST is in good shape. First, we have resolved our differences with Wiley Publishers and anticipate a continued healthy relationship with them. Second, our conference attendance is exceptionally high, considering the size of our membership, and attendees seemed to be pleased with the quality of presented papers and the many informal opportunities to meet and discuss issues of common interest. Third, many of these attendees have informed the officers of NARST that the general quality of *JRST* articles has significantly increased during the past year and that the editorial board seemingly is evaluating submitted manuscripts using record-high standards, yet with an increasingly open mind to non-traditional works of high quality.

NARST's only major problem is a decreasing membership, especially during the last year. As the economy improves and our membership rates remain stable over the next few years, undoubtedly things will turn around. Nevertheless, the most important contribution members of NARST can make at this time is to encourage everyone concerned about better science teaching through research - to join NARST. Drop us a line or phone us and we'll send you some membership forms.

School Science: Recent Reactions from Washington

(A General News Article)

Identifying school systems where students are lucky enough to have competent science teachers is becoming increasingly more difficult, according to a copyrighted article in *Science* by Frank Press, president, National Academy of Sciences in Washington, D.C. 20418. For example, only half of the students in the United States have enrolled in science courses beyond the tenth grade. (Compared with other industrialized countries, this statistic is most unimpressive.) To make a bad situation worse, only half of the science teachers hired last year were fully



Founded in 1928
Organized to improve science teaching - through research
Sponsoring the Journal of Research in Science Teaching
Affiliated with AAAS, ASE, ICASE and NSTA.

EXECUTIVE SECRETARY

Dr. William G. Holliday
NARST-EDCI
The University of Calgary
Calgary, Alberta
Canada T2N 1N4

PRESIDENT

Dr. Ertle Thompson
Ruffner Hall
University of Virginia
Charlottesville, VA 22903

PRESIDENT-ELECT

Dr. David Butts
Science Education Department
University of Georgia
Athens, GA 30602

IMMEDIATE PAST PRESIDENT

Dr. Ann C. Howe
Dept. of Mathematics & Science Education
North Carolina State University
Raleigh, NC 27650

BOARD MEMBERS-AT-LARGE

Dr. Glen Aikenhead (1986)
Faculty of Education
University of Saskatchewan
Saskatoon, Sask. S7N 0W0

Dr. Patricia E. Blosser (1987)
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210-1172

Dr. Linda R. DeTure (1985)
School of Education
Rollins College
Winter Park, FL 32789

Dr. Marcia C. Linn (1986)
Lawrence Hall of Science
University of California
Berkeley, CA 94720

Ms. Alice J. Moses
National Science Teachers Association
1742 Connecticut Avenue N.W.
Washington, D.C. 20009

Dr. Michael J. Pacilla (1987)
Science Education Department
University of Georgia
Athens, GA 30602

Dr. Russell H. Yeary (1985)
Science Education Department
University of Georgia
Athens, GA 30602

JOURNAL EDITOR

Dr. James Shymansky (1984)
Science Education - Physics Bldg.
University of Iowa
Iowa City, IA 52242

RESEARCH COORDINATOR

Dr. Rodney L. Doran (1986)
553 Baldy Hall
SUNY at Buffalo
Amherst, NY 14260

MEMORANDUM

TO: Ann C. Howe, Chairperson
FROM: William G. Holliday
RE: Policy Advisory Committee
DATE: July 30, 1984

Thank you for your letters of July 16 and 18, 1984, regarding the business matters of the policy advisory committee. I appreciate the time and energy that you have put into guiding our committee. Here, I have reacted to your many excellent recommendations while articulating some of my own thoughts on these topics.

I agree with your first and second recommendations in your letter of July 18 concerning "Amendments to By-laws" and "Inconsistency in Policy", respectively. Your fourth recommendation is also good. However, I would replace the verb "establish" with the word "edit" with the goal of clarifying the point that the executive secretary must receive substantive assistance from other officers in the creation of a Manual of Policies and Procedures of the association. Without such assistance, I personally am not prepared, as a part-time volunteer of NARST, to create this manual.

Your third recommendation ("Budget Preparation and Reporting") is a good thought but I do not believe it is necessary to bring the proposed motion forward for two reasons. (Your third recommendation reads: "That the Board request the Executive Secretary to present to the Board and to the membership at the Annual Meeting a Budget report of the following form: Budget Items, Budgeted 1984-5, Spent 1984-5, Budgeted 1985-86.")

First, the board at it's fall meeting in 1983 passed an explicit motion fully endorsing the external auditor's report including your third recommendation, as requested in my report to the board. Moreover, I assured the board at our recent spring meeting that I would adhere to the auditor's report (your third recommendation), as soon as practical. Indeed, the board has received a complete financial report in keeping with my promise at the 1984 spring meeting, as outlined in the auditor's report submitted to the board last fall and as stated in your third recommendation.

58TH ANNUAL MEETING IN FRENCH LICK SPRING, INDIANA, APRIL 15-18, 1985
SEND OFFICIAL CORRESPONDENCE TO THE EXECUTIVE SECRETARY (TELEPHONE 403-284-7485)

Second, I believe that NARST should continue to provide it's board and members with an audited report of revenues and expenditures on an annual basis, as has been the practice since the financial year of 1981. This information is annually included in the second newsletter. In addition, the elected board needs additional information including a budget and a subsequent report on the "success" of each budget. However, none of the professional organizations I am familiar with distribute these latter budgetary documents directly to it's members for a variety of reasons, unless requested. Personally, I would discourage such general distribution to our members at annual members meetings because budgetary issues are seldom understood by the uninitiated and would likely divert the discussion at these meetings to immaterial operational issues rather than to the more important policy matters of NARST. (Of course, members who are interested in budgetary and other operational issues can seek information from officers or attend the annual board meetings held by their elected board.) At any rate, I believe that the board needs to help the membership focus their attention on the tougher and more pressing matters of NARST, such as "What can we do to improve science teaching through research" or "What projects can NARST coordinate that will have an effect in teacher education and science classrooms?" It seems to me that NARST seldom has "enough time" to examine these larger questions.

Formation of Executive Committee

I recommend that the policy advisory committee consider recommending the formation of an executive committee composed of the three "presidents", the research coordinator, the executive secretary, and an "elected" board member-at-large. This committee might be empowered to act on matters annually assigned to it by the officers of NARST at their spring board meetings, except as limited by our by-laws. A similar group was formed to help me with my negotiations with Wiley publishing in 1982. Stan Helgeson was part of our team (so was Jack Renner) and was satisfied with the team's performance. Stan supports the idea of creating an executive committee (of some to-be-determined composition), now. One goal would be to increase our operational efficiency while reducing the cost of transporting, housing, and feeding officers at our fall board meetings. Of course, providing the board with full support to our fall meetings and allocating authority to the executive committee would remain an annual option to the entire board under this by-law addition.

Creation of an executive committee would require board approval followed by a by-law change approved by the membership. Please consider the following recommendation to our board: "Move that Article VI, Section 6.09 read as follows: Section 6.09 Executive Committee. The members include the president as chairperson, the president elect, the past president, the research coordinator, the executive secretary, and one board member-at-large (elected by that latter group every year at the

spring board meeting). This committee shall be empowered to act during the following twelve months on matters annually assigned to it by the officers at the previous spring board meeting, except as limited by other provisions in the by-laws."

I see this executive committee acting in a way similar to the executive committees of NSTA and NABT, except our committee would need an annual mandate from the full board. In addition, the executive committee might take on some of the duties of other standing committees such as the financial advisory committee--a group that has generally not functioned well in the past and will probably not improve it's performance substantially in the near future. Perhaps, such committees as now structured are more effective and more suited to larger organizations. At any rate, most of our budgetary questions are often best dealt with by officers familiar with the details of our organization, in my opinion. However, I do not believe that we should alter the mandate of our financial advisory committee at this time. The board needs to think about the larger issues associated with such alterations.

November 1978 Procedure

Speaking at the financial advisory committee, you reminded some of us of an operational mandate in your letter to Ertle Thompson dated July 16, 1984 and approved by the board in November 1978 and stated as follows:

- a. By September 15, Executive Secretary sends financial report for the first eight months of the year and a proposed budget to the Chair of the Financial Advisory Committee.
- b. By October 15, the Financial Advisory Committee reports to the President and Executive Secretary.
- c. Executive Board Meeting about November 1.
- d. Dues notices mailed by November 5.
- e. Second dues notices mailed by December 15.

No one has followed this policy during my tenure--with the full knowledge of the officers because this policy does not seem to be reasonable nor realistic, considering the limited resources and the size of our association. (Incidentally, I agree with you that this matter should be attended to at this time. I also believe that the Policy Advisory Committee should examine this policy.) Instead, I have sought budgetary recommendations from the previous presidents and designed a budget for discussion by the board at it's fall meeting--a procedure apparently in place during all of Paul Joslin's

tenure. The November-1978 policy sounds great but chances are slim that this policy will be as effective as the present procedure is now because of the required logistics and the inconsistency in the competence of the financial advisory committee. Besides, a "first eight month" report would be of little help to most members of financial advisory committees and would require more time on my part than I am willing to commit to NARST at this point. Perhaps an "executive committee" could handle some budgetary matters using the University of Calgary's teleconferencing system.

Thus, I recommend that the policy advisory committee recommend the following motion to the board: "Move that the president form a special committee to examine the method for developing and approving budgets forwarded to the board, and that the schedule of financial reporting and the action approved in November 1978 be suspended." In this regard, the specified dates for the fall board meeting and distribution of dues notices described in the November 1978 policy make little sense to me because of our annual-meeting proposal deadline of mid-October and because of the cost, time and energy required to mail separately dues notices and other materials to the membership during the busy fall term. If the board wants me to change my current procedure, I will be glad to discuss procedures with them. At the same time, the board must realize that the resources of this executive secretary and any future volunteer for this office is limited.

Finally, I would like to thank you, Ann, for taking the time to stimulate our thinking and to make your many thoughtful and valuable recommendations, and for reading this long letter.

Please telephone me regarding your reaction to my suggestions upon your return.

WGH/WJG

cc: Dr. David Butt
Dr. Ertle Thompson
Dr. John Renner
Dr. Ronald Good



Founded in 1928

Organized to improve science teaching - through research

Sponsoring the Journal of Research in Science Teaching

Affiliated with AAAS, ASE, ICASE and NSTA.

EXECUTIVE SECRETARY

Dr. William G. Holliday
NARST-EDCI
The University of Calgary
Calgary, Alberta
Canada T2N 1N4

1985 Budget (In U.S. Funds)

National Association for Research in Science Teaching

PRESIDENT

Dr. Ertle Thompson
Ruffner Hall
University of Virginia
Charlottesville, VA 22903

William G. Holliday, Executive Secretary

(in consultation with Dr. Ertle Thompson, President)

PRESIDENT-ELECT

Dr. David Butts
Science Education Department
University of Georgia
Athens, GA 30602

IMMEDIATE PAST PRESIDENT

Dr. Ann C. Howe
Dept. of Mathematics & Science Education
North Carolina State University
Raleigh, NC 27650

RECEIPTS**BOARD MEMBERS-AT-LARGE**

Dr. Glen Aikenhead (1986)
Faculty of Education
University of Saskatchewan
Saskatoon, Sask. S7N 0W0

Dr. Patricia E. Blosser (1987)
Science & Mathematics Education
The Ohio State University
Columbus OH 43210-1172

Dr. Linda R. DeTure (1985)
School of Education
Florida College
Winter Park, FL 32789

Dr. Merda C. Linn (1986)
Lawrence Hall of Science
University of California
Berkeley, CA 94720

Ms. Alice J. Moses
National Science Teachers Association
1742 Connecticut Avenue N.W.
Washington, D.C. 20009

Dr. Michael J. Padilla (1987)
Science Education Department
University of Georgia
Athens, GA 30602

Dr. Russell H. Yeany (1985)
Science Education Department
University of Georgia
Athens, GA 30602

JOURNAL EDITOR

Dr. James Shymansky (1984)
Science Education - Physics Bldg.
University of Iowa
Iowa City, IA 52242

RESEARCH COORDINATOR

Dr. Rodney L. Doran (1986)
553 Baldy Hall
SUNY at Buffalo
Amherst, NY 14260

MEMBERSHIP DUES

\$26,920

Regular (550 x \$44)	24,200
Student (70 x \$30) + (20 x \$14)	2,380
Corporate Contribution (1 x \$250)	250
Emeritus (3 x \$30)	90
ASE (1 x 0)	0

ANNUAL MEETING (Registrations) (Est. cost is \$14,530) \$ 7,108

Preregistration (144 x \$35) + (24 x \$7)	5,208
Late registration (37 x \$46) + (11 x \$18)	1,900

OTHER

\$13,600

Royalties from Wiley Publishers	1,600
Contributions from donors	7,000
Carry-over from 1984	4,000
Miscellaneous income	1,000

TOTAL INCOME FROM RECEIPTS

\$47,628

continued...2

58TH ANNUAL MEETING IN FRENCH LICK SPRING, INDIANA, APRIL 15-18, 1985
SEND OFFICIAL CORRESPONDENCE TO THE EXECUTIVE SECRETARY (TELEPHONE 403-284-7485)

DISBURSEMENTS

A.	WILEY PUBLISHING (620 subscribers @ \$20.00)	\$12,400
<hr/>		
B.	EXECUTIVE SECRETARY'S OFFICE	\$15,750
<hr/>		
	1. Printing (newsletters, supplements)	1,600
	2. Promotional printing, advertising & postal costs	1,500
	3. Postage (to membership, large envelopes)	1,200
	4. Regular correspondence - postage (\$350)	- 0 -
	5. Supplies (labels, office materials, publications)	
	Stationary and newsletter paper, envelopes & printing	1,000
	6. Telephone (12 months @ \$250)	3,000
	7. Photocopying (\$600)	100
	8. Courier service	150
	9. Special secretarial and clerical help	300
	10. Computer time & hardware (\$1,000)	- 0 -
	11. Secretarial service (50% of "her" time)	- 0 -
	12. Salary (25 hours per week - 1/3 released time)	- 0 -
	13. Travel and related costs	
	a. NSTA-IRA meetings (Washington - training sessions)	1,300
	b. NSTA-NARST meetings (includes some board expenses and other on-site costs) (French Lick-Cincinnati)	1,600
	c. NSTA Summer meeting (destination unknown)	900
	d. NARST Fall meeting (includes some board expenses and other on-site costs) (perhaps Atlanta)	1,500
	e. NARST Promotion, destinations unknown (\$2,000)	- 0 -
	14. Fund-raising expenses (purchase of materials, teacher and corporate visits, local entertainment)	1,200
	15. Legal assistance, accounting and audit	400
<hr/>		
C.	PRESIDENTS' OFFICE (any reasonable expense)	\$ 2,200
<hr/>		
	1. President	1,000
	2. President-elect	700
	3. Past President	500
<hr/>		
D.	FALL MEETING	7,280
<hr/>		
	12 officers; does not include secretary	
	(4 people serve on board and program committees - 2 days)	
	(travel cost, each \$500; 16 persons hotel-days, \$50;	
	16 persons food-days, \$30)	
	Thus, \$6000 + \$800 + \$480	
<hr/>		
E.	JOURNAL OFFICE	1,900
<hr/>		
	1. Editor's postage	1,000
	2. Travel	900

continued...3

F. ANNUAL MEETING	\$ 5,900
1. Program booklets 900 (construction, printing, mailing)	1,700
2. Abstracts	1,000
3. Awards	200
4. Supplies and operational costs	250
5. Speaker fund (\$200 honorarium, travel, one day of expenses, two/three people)	2,000
6. Entertainment and membership promotion	750
→ 7. Miscellaneous costs related to annual meeting and described in parts B, C and D estimated at one-third of their grosses, or \$8630.	- 0 -
G. COMMITTEES (miscellaneous)	\$ 350
H. OTHER	\$ 280
ICASE dues	80
Miscellaneous	200
TOTAL DISBURSEMENTS	\$46,060



Founded in 1920

Organized to improve science teaching - through research
Sponsoring the Journal of Research in Science Teaching
Affiliated with AAAS, ASE, ICASE and NSTA

EXECUTIVE SECRETARY

Dr. William G. Holliday
NARST EDUC
The University of Calgary
Calgary, Alberta
Canada T2N 1N4

MEMORANDUM

TO: Executive Board

PRESIDENT

Dr. Eric Thompson
Plattner Hall
University of Virginia
Charlottesville, VA 22903

FROM: Policy Advisory Committee

John Renner, Ron Good, William Holliday,
David Butts, Ann Howe (Chair)

PRESIDENT-ELECT

Dr. David Butts
Science Education Department
University of Georgia
Athens, GA 30602

DATE: October 10, 1984

IMMEDIATE PAST PRESIDENT

Dr. Anne H. Hays
Dept. of Mathematics & Science Education
Faculty of Education
University of Alberta
Edmonton, Alberta

REFERENCE: Committee Report

PAST PRESIDENTS

Dr. Eric Thompson (1983)
Faculty of Education
University of Virginia
Charlottesville, VA 22903

Dr. Robert L. Young (1984)
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210-1177

Dr. Robert L. Young (1985)
Science & Mathematics Education
The Ohio State University
Columbus, OH 43210-1177

Dr. Anne H. Hays (1986)
Department of Science
University of Alberta
Edmonton, AB T6G 2G6

Ms. Anne H. Hays
National Science Teachers Association
1712 Connecticut Avenue, N.W.
Washington, D.C. 20036

Dr. Michael J. Reddie (1987)
Science Education Department
University of Georgia
Athens, GA 30602

Dr. Robert L. Young (1988)
Science Education Department
University of Georgia
Athens, GA 30602

JOURNAL EDITOR

Dr. James S. Griesz (1984)
Science Education - Physics Bldg.
University of Iowa
Iowa City, IA 52242

RESEARCH COORDINATOR

Dr. Rodney L. Goran (1986)
553 East Park
SUNY at Buffalo
Amherst, NY 14260

The duties of the Policy Advisory Committee as set forth in the Bylaws are to make an annual review of the Bylaws, changes in structure or orientation of the Association, and to review new activities and ventures. In addition, the President requested that the Committee review past Board actions in order to identify those that may require changes in the Bylaws and to recommend any changes that might be indicated.

The Committee reviewed the Bylaws, the Minutes of the Spring 1983 and Fall 1983 Board Meetings, and the April 1983 Report of the Policy Advisory Committee. The 1983 Committee Report included an updated list of policy decisions made by the Board. As a result of this review the Committee makes the following recommendations:

I. Amendments to Bylaws

- To amend Article VI, Section 6.04 so that the first sentence reads as follows: The members include the President-Elect as chairperson, six members (with two-year rotating terms), the Research Coordinator and the Executive Secretary.

Rationale:

The Bylaws state that the Program Committee will be composed of President-Elect, four members and the Research Coordinator. In April 1980 the Board voted to include the Executive Secretary and in November 1982 The Board voted to increase the number of members to six. (One member of the Committee was not in favor of this recommendation and believes a smaller committee is preferable.)

Memorandum-Executive Board
 October 10, 1984
 page 2

I. Amendments to Bylaws (continued)

2. To amend Article III, Section 3.02B VOTES to read as follows:
 Ex-Officio members of the Executive Board and of all committees
 have the same voting rights as other members.

Rationale:

The Bylaws state that Ex-Officio members are non-voting but at the Board Meeting in October 1980 the Board voted to give Ex-Officio members voting status.

II. Board Actions

1. The Board to rescind the policy of not recruiting members at other professional meetings.

Rationale:

The minutes of the Board Meeting of April 1976 state that NARST will not try to recruit members at other professional meetings but in the minutes of the Board Meeting of November 1979 it is stated that NARST will exhibit at conventions for membership recruitment.

2. To establish a Manual of Policies and Procedures of the Association. After each Board meeting and each Annual Business Meeting the President and Executive Secretary will identify actions that affect the operations of the Association and will identify any items in the Manual that are no longer applicable and should be deleted. Proposed additions and deletions will be circulated to Board Members who will indicate agreement or disagreement with the interpretations of the President and Executive Secretary. Items that are approved by a majority of Board Members will be added to or deleted from the Manual as appropriate. The Executive Secretary will maintain the Manual.

Rationale:

The Policy Advisory Committee under Jack Renner proposed that a Policy and Procedures Manual be established, but this proposal was apparently not acted upon. The Committee under Stan Helgeson again put forward this proposal with the same result. The present Committee sees a need for this Manual and recommends that it be established.

ACH:bm

cc: Committee Members
 Dr. Ertle Thompson, President

M E M O R A N D U M

TO: NARST EXECUTIVE BOARD

FROM: James A. Shymansky, Editor

RE: Annual Report of the Journal Editor

DATE: October 8, 1984

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 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

a. Working Relationship with Editorial Board

The Editorial Board (Attachment A) did an outstanding job this past year. Their reviews continue to provide the critical, constructive feedback needed to ensure the highest quality of manuscripts. Numerous authors have expressed their appreciation for the extended comments routinely offered by reviewers. I am certain that the quality of manuscripts published has improved dramatically due to the efforts of our Editorial Board. The Board should be commended for their hard work.

Also to be commended are the outside reviewers who were called upon to provide reviews when loads exceeded levels that could be handled by regular Board members or when special expertise was required in reviews. (Please see Attachment B for a listing of additional reviewers).

A summary of manuscript flow is shown in Attachment C.

The following Editorial Board members will complete their terms on the Board December 31, 1984:

George Cossman	Dorothy Gabel
Linda DeTure	* Ronald Good
* Rosalind Driver	Frances Laurenz
Fred Finley	John Renner
* Barry Fraser	* Douglas Roberts

*Two Year Term

The following persons have been recommended for membership on the Editorial Board:

Bill Capie
Linda Crow
Rosalind Driver
Barry Frazier -
Ron Good

Willis Horak
Tony Mendez
Doug Roberts
Ken Tobin
Dana Zeidler

b. Working Relationship with Wiley

The staff at Wiley has been very cooperative this past year and continues to provide excellent support and services. Ms. Carol McNellis in her role as Production Editor for the Journal has been especially helpful as has been Ms. Mary Curtis, Publisher.

The member rate for the Journal for 1984 is \$20.00 and will remain at that price through 1987 as per our new contract with Wiley. The cost of postage and handling outside the United States will be \$29.00 for 1984.

c. Working Relationship with Publications Advisory Committee

No business affecting Journal policy was transacted by the Publications Advisory Board this past year.

The list of nominees to the Editorial Board was discussed with the Publication Advisory Committee Chair prior to submission to the NARST Board.

ATTACHMENT C*

INTERIM REPORT OF MANUSCRIPT ACTIVITY

October 1, 1982 - September 30, 1983

Manuscripts Received	148
Comments & Criticisms	11
Manuscripts Accepted	56
Manuscripts Rejected	67
Acceptance Rate	45%
Rejection Rate	55%

*A completed report showing data for calendar years 1978-1983 will be presented at the Spring meeting of the NARST Executive Board.

III. Recommendations for Board Action

- a. Letters of commendation be sent from the President to each of the Editorial Board members and the additional reviewers in recognition of their contribution to the Journal.
- b. Nominations to the Editorial Board be confirmed.
- c. The following budget for the Journal for 1984 be approved:

Volume 21 (650 @ \$20.00)	\$13000
Editorial Staff	\$20000
Office Supplies/Telephone	\$1500
Postage	\$1000
Editor's Travel	
Spring Annual Meeting	\$600
Editorial Board Meeting	\$150

do not deduct NARST reimburse

TOTAL	36250
Contributed by University of Georgia	21500
<hr/>	
Balance in NARST Budget	14750

University furnished stationery, envelope

UPDATE ON THE JRST AWARD
Michael J. Padilla

The NARST Committee responsible for selecting the best article in the Journal of Research in Science Teaching is working hard reading and evaluating articles in each issue of the Journal. As in past years the award will be presented at the annual meeting in the spring.

How does this committee go about its work? What are the JRST Award criteria? What procedures are used in deciding the winner?

Criteria for the JRST Award

In general the task is to select the best article using rigorous and fair criteria, carefully applied. One of the biggest problems is selecting criteria which do not unduly penalize or reward any particular kind of article. The research synthesis, experimental study, philosophical paper and case study all need to be compared as fairly as possible. After much consideration and interaction the following criteria were selected.

CRITERIA AND INSTRUCTIONS FOR JRST AWARD

- | | |
|---|---|
| 1. Significance of Problem
(10 Points) | How important or critical is the problem being addressed by the author(s)? Timeliness, relevance and scope are all aspects of this concept. |
| 2. Background (10 Points) | Is there adequate presentation of related theory and relevant literature? |

- | | |
|---|---|
| 3. Approach (10 Points) | How adequate and sound is the approach to the problem? In a research article this will include design and data analysis; in a position paper this includes the logic and nature of the argument used. |
| 4. Significance of Outcomes (10 Points) | What is the potential to influence thinking and practices in science education? Will the outcomes have an impact? |
| 5. Conclusions (10 Points) | Are they based on the evidence and then presented in such a way as to address relevant concerns in science education? |
| 6. Uniqueness (10 Points) | How new is the approach and/or ideas presented in the article? |
| 7. Communication (10 Points) | Is the article well written? |
| 8. Overall (10 Points) | What is your general opinion of the article from a broad perspective? |

Procedure for Rating Articles

The procedure for implementing these criteria is simple enough. All articles in each issue are rated independently by three committee members. A likert type scale (1 = poor, 10 = excellent) is used with each of the above criteria and a total score for each article is obtained. The top rated article is thus chosen from each issue. Additional raters are used to break ties.

During the second round each top rated from the nine JRST issues is rated again by all 14 members of the committee. The article with the highest point total is given the JRST Award.

I hope this summary helps to inform members about the JRST Award. The JRST Award Committee Members work hard over the year.

This work ensures a worthwhile and important award of which the members can be proud.

National Association for Research in Science Teaching

EXECUTIVE SECRETARY

Dr. William G. Holliday
NARST-EDCI
The University of Calgary
Calgary, Alberta
Canada T2N 1N4

TO: Drs. Ertle Thompson and Bill Holliday

FROM: Linda R. DeTure

PRESIDENT-ELECT

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

DATE: 10.8.84

RE: Fall Report from the NARST Awards Committee

PRESIDENT

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

IMMEDIATE PAST PRESIDENT

Dr. Stanley L. Helgeson
Science & Mathematics Education
The Ohio State University
Columbia, OH 43210

BOARD MEMBERS

Dr. James P. Barufaldi (1983)
Science Education Center
Education Building 340
University of Texas at Austin
Austin, TX 78712

Dr. Fodger Byrse (1984)
Education Department
Carleton College
Northfield, MN 55057

Dr. Linda R. DeTure (1985)
School of Education
Rollins College
Winter Park, FL 32783

Dr. J. Dudley Herron (1983)
Department of Chemistry
Purdue University
West Lafayette, IN 47907

Dr. Jane B. Kable (1984)
Department of Biological Sciences
Purdue University
West Lafayette, IN 47907

Dr. Russell H. Yeany (1985)
Science Education Department
University of Georgia
Athens, GA 30602

JOURNAL EDITOR

Dr. James Shymansky (1985)
Science Education - Physics Bldg.
University of Iowa
Iowa City, IA 52242

RESEARCH COORDINATOR

Dr. Arthur White (1983)
Science & Mathematics Education
The Ohio State University
Columbus OH 43210

NSTA REPRESENTATIVE

Dr. Robert Yager
National Science Teachers Association
1742 Connecticut Avenue, NW
Washington, DC 20009

1. The committee met at the spring convention in Dallas and decided to update the evaluation form to cover the range of papers being submitted.
2. I talked with Michael Padilla, Chairman of the JRST Awards Committee, in regard to some way coordinating our efforts. We agreed to exchange information over the summer.
3. Committee members were alerted to send in ideas for the new evaluation form. As a result the enclosed evaluation forms were developed as a blend of our old form developed by John Welton and the JRST evaluation form. Hopefully, it will be broader and more useful than the previous criteria.
4. Twenty ~~two~~^{three} papers were submitted for the outstanding and/or practical application award.
5. All papers have been coded, collated and mailed out to the committee members for review. New evaluation forms and a summary score sheet was also forwarded.
6. One committee member, Howard Jones, resigned because of other commitments.
7. That concludes the committees' activities to date. I look forward to seeing you in Atlanta for the fall meeting.

/mg

MAY 11 1984

Memo to: NARST Board
From: Marcia C. Linn
RE: Financial Advisory Committee Report

The Financial Advisory Committee of NARST met on Saturday, April 28, during the NARST annual meeting.

The committee reviewed the financial report provided by Bill Halliday and then considered all the topics suggested by members of the committee.

The committee thanked Bill for the informative report of accounting provided to the Board and the Financial Committee.

The board made the following four recommendations:

1. That the financial report be linked to the budget passed by the board. Thus, the annual report of expenditures would be accompanied by a statement of the amount of funds allocated for each category.
2. That the NARST organization secure an audit of the NARST financial affairs every fifth year or less often as deemed appropriate by the board. The committee noted with appreciation the report of the auditors, for the audit conducted last year. The committee also noted that the procedures used by NARST are those required by the University of Calvary and therefore that regular accounting of the NARST financial affairs is actually already provided.
3. That the past presidents of the NARST organization be asked to serve as members of the Development Advisory Committee. This committee would be charged with coming up with a plan to increase the number of corporate memberships in NARST and to encourage corporate sponsors to participate at several different levels, with memberships being \$100 and perhaps patrons being \$500, or some other arrangement. It is anticipated that the past presidents would guide this committee, although other members of the organization may be enlisted to actually assist in securing corporate memberships.
4. That the organization reallocate its priorities in order to make every effort to ensure that the full board of the organization participates in the fall meeting. It is anticipated that it would be necessary to offset travel expenses in order for board members to attend the meeting. Creative solutions to the cost of bringing the board together include

having the fall meeting in conjunction with another meeting which some board members attend, offering to pay some percentage of the travel expenses of board members, and offering to pay airfares but not accommodation expenses for those attending the meeting. It seems especially important that the full board attend the fall meeting because so much important business is normally conducted at this time, because normally the board meetings in conjunction with the annual meetings are rushed and inconvenient for some members and because this would enable the board to have greater input into the program for the annual meeting.

The financial advisory committee was informed that the organization is now tax exempt and could therefore accept grants, that the members contribute approximately \$24,000 to the cost of the organization and that considerably lower costs are supplied by the University of Calgary, and that the new agreement with Wiley is working well and need not be reconsidered at the present time. Halliday also informed the financial advisory committee that, although the organization is currently in a good cash flow situation, the situation is sufficiently fluid that it is important to keep close attention on the financial affairs of the organization.

The financial advisory committee focused its attention this year on the costs directly associated with the board and on the financial affairs of the organization in general. It was generally agreed that it might be appropriate for the financial advisory committee to gain additional information about the financial situation with regard to the annual meeting at its next meeting, and to make that an area of focus for the next year.

In summary, the financial advisory committee finds the financial state of the organization to be in good hands. The committee was able to offer some suggestions which it is hoped will facilitate effective financial policies for the organization and the committee hopes in the future to provide additional assistance in ensuring sound financial practice. As is perennially the case in most organizations, the real financial issue is a lack of funds, and the main work of the financial advisory committee is to come up with creative ideas to help alleviate this problem.

TO: William Holliday, Executive Secretary
NARST-EDCI
The University of Calgary
Calgary, Alberta
CANADA T2N1N4

FROM: Paul Joslin
Reading-Learning Center
Drake University
Des Moines, IA 50311

RE: NARST Archives
Report to Executive Board.

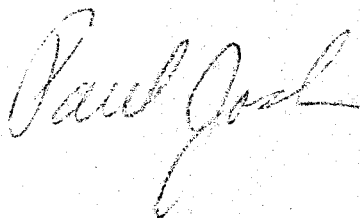
The records and materials I have on hand are quite incomplete. I have had no success at all in soliciting needed records by use of a blanket request in the Newsletter.

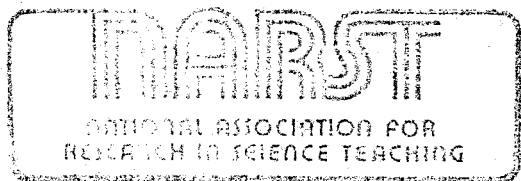
I now have a doctoral student who wants to write a history of NARST. She enjoys doing oral interviews of, and corresponding with, the "old timers".

We have identified gaps in essential records and are working on a plan to fill these in. We'll use a combination of oral interviews by phone, and in person, at the next annual meeting. We'll make requests personally and directly with members whom we believe have the information we need.

While the costs should not be great, we will have expenses for phone and postage. Some travel funds to visit with "old timers" who can't attend the annual meetings and who may have records we should look at, would be nice. If you know of someone who might underwrite, maybe \$500.00, for this project please let me know.

This is to solicit your support and encouragement.





Founded in 1926
Organized to improve science teaching - through research
Sponsoring the Journal of Research in Science Teaching
Affiliated with AAAS, ASE, ICASE and NSTA.

EXECUTIVE SECRETARY

Dr. William G. Holliday
553 E. 4th St.
Iowa City, IA 52241
Cedar Rapids, IA 52402
Cedar Rapids, IA 52402

PRESIDENT

Dr. Ertle Thompson
Ruffner Hall
University of Georgia
Athens, GA 30602

PRESIDENT-ELECT

Dr. David Butts
Science Education Department
University of Georgia
Athens, GA 30602

IMMEDIATE PAST PRESIDENT

Dr. Ertle Thompson
School of Mathematics & Science Education
Iowa State University
Ames, IA 50010

RESEARCH SECRETARY

Dr. Robert James
553 E. 4th St.
Iowa City, IA 52241
Cedar Rapids, IA 52402
Saskatoon, Saskatchewan, Canada S7N 0A0

Dr. Robert James
553 E. 4th St.
Iowa City, IA 52241
Cedar Rapids, IA 52402
Saskatoon, Saskatchewan, Canada S7N 0A0

Dr. Robert James
553 E. 4th St.
Iowa City, IA 52241
Cedar Rapids, IA 52402
Saskatoon, Saskatchewan, Canada S7N 0A0

Dr. Robert James
553 E. 4th St.
Iowa City, IA 52241
Cedar Rapids, IA 52402
Saskatoon, Saskatchewan, Canada S7N 0A0

Mr. William G. Holliday
National Science Teachers Association
1740 Connecticut Avenue, N.W.
Washington, D.C. 20009

Dr. Ertle Thompson
Science Education Department
University of Georgia
Athens, GA 30602

Dr. Ertle Thompson
Science Education Department
University of Georgia
Athens, GA 30602

JOURNAL EDITOR

Dr. Charles G. Hanks
Science Education - Physics Bldg.
University of Iowa
Iowa City, IA 52241

RESEARCH SOCIETY EDITOR

Dr. Robert James
553 E. 4th St.
Iowa City, IA 52241
Cedar Rapids, IA 52402
Saskatoon, Saskatchewan, Canada S7N 0A0

M E M O R A N D U M

TO: Executive Board

FROM: Election Committee
Paul Joslin, Robert James, Ann Howe (Chair)

DATE: October 16, 1984

REFERENCE: 1985 Slate

The following have agreed to have their names placed in nomination for the offices listed:

President-Elect - Anton Lawson
James Barufaldi

Members of Executive Board - Jane Bowyer
Victor Willson
John Staver
Robert Shrigley

ACH:bm

cc: William G. Holliday
Ertle Thompson
David Butts
Paul Joslin
Robert James